

**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): 25 February 2022**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: NAO-2009-02389**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: VA County/parish/borough: City: Chesapeake  
Center coordinates of site (lat/long in degree decimal format): Lat. 363848° N, Long. 761544° W.  
Universal Transverse Mercator:

Name of nearest waterbody: St. Brides Ditch

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

Name of watershed or Hydrologic Unit Code (HUC): 03010205

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: 6/27/12, 2/7/13, 2/27/14, 6/22/15, 7/21/15, 8/19/15, 25 February 2022

Field Determination. Date(s): 6/27/12, 2/7/13, 3/13/13, 3/27/13, 7/10/13, 7/25/13, 9/23/13, 2/27/14, 3/11/14, 3/19/14, 4/22/14, 7/16/14, 3/18/15 and 6/23/15; 15 December 2020, 11 February 2021, and 25 March 2021

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.  
Explain: .

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Non-wetland waters: 8260 linear feet: width (ft) and/or acres.

Wetlands: 21.62 acres.

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

Elevation of established OHWM (if known): .

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

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

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

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

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

**SECTION III: CWA ANALYSIS**

**A. TNWs AND WETLANDS ADJACENT TO TNWs**

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

**1. TNW**

Identify TNW: .

Summarize rationale supporting determination: .

**2. Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

**(i) General Area Conditions:**

Watershed size: 31142 acres

Drainage area: 2260 acres

Average annual rainfall: 48 inches

Average annual snowfall: 7 inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 2-5 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

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

Project waters are 1 (or less) aerial (straight) miles from RPW.

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

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

Identify flow route to TNW<sup>5</sup>: There are 2 RPW ditches on the property that flow into St. Brides Ditch (see Figure 1B attached showing RPW tributaries in green). One man-made ditch starts along the western property boundary, flows south to the southwest corner of the property where it joins with a natural drainage feature that flows to the east and flows into the St. Brides Ditch at the southeast corner of the property. A different man-made channel starting along the western property boundary and flowing north, turning east at the northwest property corner and flowing southeast then south where it intersects with St. Brides Ditch along the eastern property boundary. St. Brides Ditch, a man excavated drainage channel that was dug from a naturally occurring stream and wetland system, flows south along the eastern property boundary to the Northwest River, approximately 4.2 miles from the site.  
Tributary stream order, if known: 1.

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

Tributary is:  Natural

Artificial (man-made). Explain: Two ditches are found along the western property boundary.

These ditches do not connect with each other. One ditch flows north to the northwest corner of the property then turns to the southeast along the northern property boundary then turns in a southerly direction following the northeast property boundary and finally intersects with the St. Brides ditch. The other ditch runs south along the western property boundary, turns to the east and runs along the southern property boundary, intersecting with St. Brides Ditch at the southeastern property boundary. These ditches were dug from areas that were historically wetlands. This conclusion is based on the fact that hydric soils are mapped on either side of the ditch and little elevation changes exists over a broad area. The portion of the ditch running along the southern property boundary is located within a topographically low area and evidence supports the conclusion that historically the head of a stream was located within this feature.

Manipulated (man-altered). Explain: The St. Brides Ditch was excavated in its entirety from from a natural topographically defined drainage feature. The upper portion of the St. Brides Ditch was excavated from wetlands and further downstream from a stream channel and wetlands. Historic topographic maps (USGS Historical Topographic Map Explorer maps including Lake Drumond 1940, Lake Drummond 1945, Norfolk 1953, Deep Creek 1954, Deep Creek 1971, Deep Creek 1977, Norfolk 1985 all show a stream channel present where St. Brides Ditch runs along the eastern property boundary of this site).

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

Average width: 10-25 feet

Average depth: 7-10 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: stable, no serious erosion of the banks of any of the RPW tributaries was noted.

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

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): unknown %

(c) Flow:

Tributary provides for: **Seasonal flow**

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

Describe flow regime: St. Brides Ditch has perennial flow. Evidence of this is the observation of an OHWM, bed and bank, observations of flow on every visit to the site over numerous years during different seasons, photographs 1-5 in the attachment show the presence of water and flow in the ditch, the presence of a blue line channel on the USGS topographic map which indicates a perennial channel and stormwater flow data from the City of Chesapeake. More on the St. Brides Ditch can be found in the jurisdictional determination for NAO-2007-240. The other two RPW ditches on the site that begin on the western property boundary have at least seasonal flow. The ditch that flows to the south has seasonal flow. The ditch that flows to the north has at least seasonal flow and maybe perennial flow. Flow was observed during numerous site visits in these tributary channels. The presence of an OHWM, bed and bank, debris dams in the channel as well as sediment deposition in these channels (see photograph 6 on the attachment) also provide evidence of flow.

Other information on duration and volume: .

Surface flow is: **Confined**. Characteristics: These tributaries have been excavated and contain flow within their banks.

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

Dye (or other) test performed: .

Tributary has (check all that apply):

<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.

- Bed and banks
  - OHWM<sup>6</sup> (check all indicators that apply):
    - clear, natural line impressed on the bank
    - changes in the character of soil
    - shelving
    - vegetation matted down, bent, or absent
    - leaf litter disturbed or washed away
    - sediment deposition
    - water staining
    - other (list):
  - the presence of litter and debris
  - destruction of terrestrial vegetation
  - the presence of wrack line
  - sediment sorting
  - scour
  - multiple observed or predicted flow events
  - abrupt change in plant community
- Discontinuous OHWM.<sup>7</sup> Explain: .

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

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

**(iii) Chemical Characteristics:**

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

Explain: .

Identify specific pollutants, if known: No known or observed pollutants. The watershed is predominantly residential and forested lands with some agricultural fields.

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

- Riparian corridor. Characteristics (type, average width): 0-100 feet.
- 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: While aquatic/wildlife species were not directly observed using the

tributary, the wetlands and ditches provide suitable habitat for a variety of species common to the area including deer, squirrel, birds and amphibians. In addition, the wetland and ditches are structurally different from the surrounding uplands and clearly contribute to the overall habitat diversity of the site. Deer tracks were observed on the site.

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: 62.02 acres

Wetland type. Explain: Forested mineral flat.

Wetland quality. Explain: mixed pine hardwood forested wetland, the site was logged in the past and the property owner cleared approximately 7.22 acres of forested wetlands in 2012.

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: Primarily dependent on rainfall, however, groundwater in the late winter into spring and following heavy precipitation other times of the year provides some flow in the RPW tributaries.

Surface flow is: **Overland sheetflow**

Characteristics: Hummocky wetland terrain associated with a mineral flat wetland. There are three wetland areas present on the property. One area is located in the western portion of the property adjacent to a ditch along the western property boundary, one in the eastern portion of the property west of St. Brides Ditch and one area east of St. Brides Ditch near the cul-de-sac of Kathleen Lane.

The wetland area along the western property boundary is adjacent and not abutting the ditch along the western property line that flows south. The ditch was dug from an area of hydric soils and likely was historically wetlands. However, the ditch excavation has acted to remove wetland hydrology from an area adjacent to the ditch. As a result, the wetland delineation boundary varies in distance from the ditch edge between 15 to 40 feet. Using LiDAR data (NRCS 2013) it was observed that the wetland delineation line where it is closest to the ditch had a slope from the wetland to the ditch which allows for overland sheetflow of water from the wetland to the ditch (see A attached). Per City of Chesapeake topographic data and LiDAR, the eastern portion of the property is one of the lowest elevation areas on the property. This also shows that the St. Brides Ditch was dug from a lower elevation area to better move water downstream to the Northwest River, this supports our conclusion in the jurisdictional determination for NAO-2007-240 that St. Brides Ditch was dug from natural low elevation wetland areas.

In the northern portion of the wetland area located along the eastern portion of the property, three man excavated ditches are present (see B attached). Two of these are within the northern portion of this wetland area and both of these ditches have been blocked/plugged with soil where the ditches originally intersected with the large ditch flowing along the northern property boundary. A drained wetland area exists along the St. Brides Ditch with the wetland line approximately 20 to 35 feet from the edge of the ditch.

A wetland area located east of St. Brides Ditch just off the cul-de-sac of Kathleen Lane was identified on this parcel and extends onto an adjoining parcel to the north. The wetland line in this area is approximately 30 to 40 feet from the edge of the ditch. On the property in question, the berm used to be present in this area so it was not called wetlands. This entire wetland area is adjacent to the St. Brides Ditch. The wetland complex has a discrete connection with St. Brides Ditch via a break in the berm to the north of the property which provides a surface connection to the St. Brides Ditch (see D attached).

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: The wetland area along the western property boundary has a discrete connection via a topographic slope to the RPW tributary ditch, see A on the attachment showing location of a transect and corresponding topography at the location where the wetland comes closest to the ditch.

The wetland area along the eastern property boundary is adjacent to both the St. Brides Ditch and the ditch running along the northern property line. At the northern end of the wetland area are three ditches that were excavated in the past and that previously connected to the ditch running along the northern property line. The wetland area encompasses two of these three ditches, see B on the attachment. Both of those ditches no longer have a direct surface connection to the RPW tributary ditch running along the northern property boundary as a dirt plug was installed at some point and the ditches no longer flow into the tributary ditch. In addition, the wetland

boundary is located varying distances from St. Brides Ditch channel due to the drainage effect the ditch has had on groundwater in the areas adjacent to the ditch. For both of these reasons these wetlands are adjacent and not abutting St. Brides Ditch. The wetland area off the cul-de-sac at Kathleen Lane has a discrete surface connection via a break in the berm along the east side of St. Brides Ditch that is north of this parcel. The wetlands extend off this property to the north and this wetland is contiguous with the berm break, see D on the attachment showing LiDAR mapping of the berm break.

Ecological connection. Explain: These wetlands have a high degree of connectivity to the RPW's as there are no berms present on the site between the wetlands and the RPW's, the berm along St. Brides Ditch is on the side of the ditch opposite the site. Animals can transit from the wetland areas to the ditch with no barriers to movement too.

Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **2-5** river miles from TNW.

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

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

Estimate approximate location of wetland as within the **100 - 500-year** 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 pollutants were observed.

Identify specific pollutants, if known: .

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

Riparian buffer. Characteristics (type, average width):100-300 feet, northern portion of the site is forested wetlands while the central portion was forested wetlands that have been mechanically cleared and are now emergent wetlands.

Vegetation type/percent cover. Explain:Forested wetlands in the undisturbed areas and emergent wetlands in the wetland recently cleared areas. In general, cover is 100%.

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings:While aquatic/wildlife species were not directly observed using these habitat types, the wetland and ditches provide suitable habitat for a variety of species common to the area such as deer, squirrels, rabbits, racoons, birds/migratory birds and amphibians. In addition, the wetland and ditches are structurally different from the surrounding uplands and provide functionally different benefits to wildlife. Habitat provided by the site is similar to other large wetland complexes present in southern portions of the City of Chesapeake.

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

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

Approximately ( 62.02 ) 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>
	N	35.12		
	Y		17.3	
	Y	2.9		
	N	2.1		
	N	4.6		

Summarize overall biological, chemical and physical functions being performed:

### 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: See attached addendum and exhibits.

### 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: St. Brides Ditch was previously determined to be perennial in the Precon jurisdictional determination and this site is within the relevant reach of that determination. Flow has been observed in St. Brides Ditch where it borders

this site each time this site has been visited, 14 site visits starting on 6/27/12 and until 6/23/15, in different seasons of the year and in varying rainfall conditions. This channel is shown as a solid blue line on USGS topographic maps which generally means it is a perennial tributary. An OHWM and bed and bank is present in the channel which has formed due to flow.

Photographs of the channel support these indicators, see photographs 1-5 on the attachment which show an OHWM and flow.

- 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 other two RPW ditches on the property that begin along the western property boundary, one flows to the north and the other flows to the south, both have an OHWM, bed and bank, and indicators of flow such as debris dams and sediment sorting and blackened leaves below the OHWM (see photograph 6 on the attachment which shows these indicators in the channel flowing to the south).

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

- Tributary waters: **8260** 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.**

- 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **62.02** acres.

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area:      acres.

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or  
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  
 Demonstrate that water is isolated with a nexus to commerce (see E below).

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

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



**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):<sup>10</sup>**

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

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

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

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

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

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
  - Prior to the Jan 2001 Supreme Court decision in “*SWANCC*,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

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

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

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

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

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
- 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:Corpsmap.
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name:Corpsmap, historic maps dating back to 1907.
- USDA Natural Resources Conservation Service Soil Survey. Citation:Websoil survey.

<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.

- National wetlands inventory map(s). Cite name:Corpsmap.
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date):Corpsmap 1994-2014, GIS 2009-2014 and LiDAR.  
or  Other (Name & Date):Google Earth Pro 1990-2014.
- Previous determination(s). File no. and date of response letter:7/9/12 NAO-2007-240.
- Applicable/supporting case law:Precon Development Corp. v. United States Army Corps of Engineers.
- Applicable/supporting scientific literature: .
- Other information (please specify): .

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** See attached addendum and exhibits.

This property is within the relevant reach used in an approved jurisdictional determination (JD), NAO-2007-240. That JD was recently upheld by the United States Court of Appeals for the Fourth Circuit. As the subject site is within the relevant reach of NAO-2007-240, the wetlands on the subject site were considered similarly situated in that significant nexus determination. Many of the data and other information that the Fourth Circuit found supported our NAO-2007-240 JD are relevant as support for jurisdiction over the wetlands on the subject site. Regardless, the Corps conducted an independent significant nexus determination for this site and concluded that the functions performed by the wetlands and tributary ditches on this property have a significant nexus with the Northwest River.

This is a copy of the Rapanos form done by Robert Berg in 2015, with the exception that dates for 2020 and 2021 field visits done by David Knepper (USACE, NAO) with Amy Conley and Olivia Cacciatore (Bay Environmental, Inc.) have been added. Also, the extent of onsite PEM wetlands was slightly increased in the southwestern portion of the site. Otherwise, the additional fieldwork, which was done during normal antecedent precip conditions in the early growing season did not conflict with the original 2015 determination of the extent of wetlands..