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): January 22, 2020.

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: NAB-2020-00030 (Virginia Road Kent Island Estates/ JD)

PROJECT LOCATION AND BACKGROUND INFORMATION: A 1.4-acre "review area" located at the intersection of 102 Virginia Road and Maryland Route 8 in a residential subdivision community known as the Kent Island Estates.

State: Maryland County/parish/borough: Queen Anne's County City: Stevensville
Center coordinates of site (lat/long in degree decimal format): Lat. 38.888179, Long. -76.350834
Name of nearest waterbody: unnamed tributaries to Kent Island Bay
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Craney Creek-Upper Chesapeake Bay Name of watershed or Hydrologic Unit Code (HUC): 020600020504 (12-digit Federal HUC)
☒ 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: 22 July 2019
☒ Field Determination. Date(s): 24 July 2019

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **are not** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.
☐ 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.

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:
   Wetlands: Wetland 2 is approximately 0.01 acres in size.

   c. **Limits (boundaries) of jurisdiction based on:** 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual and the Atlantic & Gulf Coastal Plain Regional Supplement (Version 2.0) to '87 Manual.
   Elevation of established OHWM (if known): The OHWM is highly variable, and thus is unknown.

2. **Non-regulated waters/wetlands (check if applicable):**[3]

[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.

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined not to be jurisdictional. Explain: Wetland 1 (0.03 acres) is a depression located along the northern property boundary of the review area with no surface water connection on aerial maps, ground photos, topographic/landscape position, or LiDAR. Defined in Section 3C below.

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:
Drainage area:
Average annual rainfall:
Average annual snowfall:

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☒ Tributary flows through 2 tributaries before entering TNW.

Project waters are 1.5-2 (or less) river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project waters are 1 aerial (straight) miles from TNW.
Project waters are 1 aerial (straight) miles from RPW.

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

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

Identify flow route to TNW[5]: Waters leave project site flowing south via a non-RPW artificial waterway vegetated in warm seasonal perennial grass species ending 0.792 linear miles from Wetland 2 along the northern property boundary into Wetland 1 at the southeastern corner of the property boundary beneath Virginia Road via a culvert beneath the 40-foot wide right-of-way easement and becomes an open intermittent stream, the non-RPW which both wetlands drain to. The non-RPW waterway then connects off-site with a RPW approximately 0.77 miles downstream before the waterway connects to Carter Creek, roughly 0.46 miles, which is a tidal tributary to the larger Chesapeake Bay, a TNW.

Tributary stream order, if known:

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

Tributary is: ☐ Natural
☒ Artificial (man-made). Explain: the non-RPW that the waters are conveyed through is a grassed waterway exiting the site via a culvert beneath Virginia Road.
☒ Manipulated (man-altered). Explain: The open stream non-RPW is located immediately downstream of the outlet beneath Virginia Road.

Tributary properties with respect to top of bank (estimate):
Average width:
Average depth:
Average side slopes:

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:
Tributary geometry:
Tributary gradient (approximate average slope):

(c) Flow:
Tributary provides for: intermittent, but not seasonal flow.

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

Describe flow regime: intermittent.

Other information on duration and volume:

Surface flow is: discrete and confined. Characteristics: channelized and visible.

Subsurface flow:

☐ Dye (or other) test performed: N/A.

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):

[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.
[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

☐ Discontinuous OHWM.[7] Explain: N/A.

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:

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

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ Wetland fringe. Characteristics:
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings:
  - ☐ Fish/spawn areas. Explain findings:
  - ☐ Other environmentally-sensitive species. Explain findings:
  - ☐ Aquatic/wildlife diversity. Explain findings:

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: 0.01 (cumulative) acres.

Wetland type. Explain: paulustrine emegent nontidal (PEM1A).

Wetland quality. Explain: Not defined in delineation. Wetland 1-2 are located adjacent to man-made roadside drainage ditches in mapped hydric soils series (Whitemarsh) and meeting F3 depleted matrix soil indicator.

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: Ephemeral Explain: Seasonal flow.

Surface flow is: Ephemeral

Characteristics: Surface water connections can be seen on county level LiDAR and aerial imagery extending from the identified wetlands into the grassed waterway, which terminate in a RPW, unnamed tributary to Carter Creek, which connects with the Chesapeake Bay, a TNW.

Subsurface flow: 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 2 has unbroken surface or shallow subsurface connection to jurisdictional waters observed during the 24 July 2019 site visit. Wetland 2 surface water was observed exiting the site via a series of man-made conveyances including an on-site roadside drainage ditch and culvert crossing, both of which were excavated/installed in hydric soils and drain headwater wetland features.

☐ Ecological connection. Explain:

☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are 1-2 river miles from TNW.

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

Flow is from: wetland to navigable waters.

[7]Ibid.

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 clarity was not described however residential activities occur in the neighboring vicinity of the review area along the suburban to urban land-use gradient so the presence of silt and other potential contaminants is presumed present in the wetlands as well. The immediate areas that drain to Wetland 1-2 are single family dwellings, perennial lawn areas, and imperious roadway cover. Identify specific pollutants, if known: None identified in the delineation, however this area should be expected to exhibit moderate levels of pesticide, herbicide, phosphorus, nitrogen, oils and silt from suburban to urban land-uses.

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: Wetland 1 is a dominated by switchgrass (*Panicum virgatum*) and panicled bulrish (*Scirpus microcarpus*). Wetland 2 is dominated by Festuca sp., small carpetgrass (*Arthraxon hispidus*) and Virginia buttonweed as documented in the 12 July 2019 JD report and the 24 July 2019 site visit to inspect flagged limits and corresponding wetland delineation data points (DP-1 and DP-4). Percent of dominant species that are OBL, FACW, or FAC is 100% cover in wetlands.

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☐ Other environmentally-sensitive species. Explain findings:

☒ Aquatic/wildlife diversity. Explain findings: Aquatic wildlife not described in the delineation however the location of the project site should be expected to be suitable habitat for small vertebrates including amphibians and invertebrates such as crawfish and insects since the both features are headwater waters.

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

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

Approximately 0.01 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	Y	0.01 acres		

Summarize overall biological, chemical and physical functions being performed: **Refer to Section IV.B.**

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:

   a. The Corps identified a non-relatively permanent waterway (grassed waterway) that travels from the identified wetlands and into the unnamed tributary of Carter Creek. Once the grassed waterway leaves the property it directly connect with the unnamed tributary to Carter Creek. This terminates into the Carter Creek, which thereafter empties into Chesapeake Bay, a TNW. The wetlands identified as Wetland 2 in the wetland delineation report provided by Wetland Studies and Solutions, Inc. totals 0.01 acres in area.

   b. The relevant reach for this wetland complex extends from the wetlands through the grassed waterway which connect with the non-navigable, permanent waterway identified as an unnamed tributary to Carter Creek. The Corps has determined that the point where the non-relatively permanent waterway connects with relatively permanent waterway unnamed tributary to Camp Creek, defines the extent of our review area since similar conditions. In researching historical aerial photography, topo maps, and LiDAR, the Corps has found that the non-RPW identified on-site has a direct connection to the off-site RPW, an unnamed tributary to Carter creek since 1943.

   c. The Corps has determined that the evaluated nontidal wetlands, and any other wetlands similarly situated in the watershed, possess minor flood storage capacity due to the relatively small size of their drainage area (approximately 6.87 acres cumulatively). They do have a significant nexus due to the fact that they are the only wetlands present in their immediate drainage area of the review area and there are very few present in the immediate watershed of the unnamed tributary to the Carter Creek. This area of Kent Island within the Craney Creek-Upper Chesapeake Bay watershed has seen an increase to the frequency of flooding in the area due to a lack of riparian corridors in the TNW watershed and in-land migration of tidal estuarine waters from tidal ditches.

   d. The physical hydrological connection between Wetland 2 and the downstream TNW are dependent on the amount of precipitation that accumulates on the drainage area, as overland flow into the neighboring grassed waterway is the primary form of hydrologic connection. The Corps has calculated that the drainage area for the wetlands is about 1.4 acres using the USGS topographic map and the reported conditions in the delineation by Wetland Studies and Solutions, Inc. The flow characteristics were not identified in connection with the grassed waterway however the connection to the RPW at the outlet of the grassed waterway can be clearly seen on aerial photography and LiDAR as a defined bed and bank representing an intermittent flow regime. The overland hydrologic connection between the relatively permanent waterways and eventually the downstream TNW identified as the Chesapeake Bay is discrete. Wetland 1 area is connected to the off-site grassed waterway through overland flow such as the outlet of the culvert flowing off-site beneath Virginia Road to a mapped PFO1A wetland system, approximately 0.03 acres in size. The wetlands would only be expected to exhibit a direct connection during seasonal precipitation events including contributed flow of a much larger wetland system adjacent to Wetland 1, but separated by Kent Island South Trail and Maryland Route 8 to the West and Utah Road to the North.

   e. Contaminants (nitrogen, pesticides, herbicides, oils and soil) entering the evaluated wetlands due to the neighboring suburban and urban land-use activities (49% low intensity residential development), and from overland flow in the drainage area, are filtered out by the wetlands prior to reaching the non-RPW in which it flows for less than 1 mile before emptying into the unnamed tributary to camp creek which eventually disperses into Carter Creek, and then the Chesapeake Bay which is a TNW. A general function of any such wetland is the filtration of contaminants which are present due to the neighboring land-use activities. It can be reasonably assumed that the contaminants attached to the sediment particles released by erosion and impervious land-use cover activities are being filtered. Wetland 1 is a linear PEM wetland system and provides a much needed filter to prevent contaminants and sediments from entering the watershed. Due to its proximity to the roadside drainage features and surround residential impervious cover activities, the non-rpw stream leaving the project site provides a direct pathway for pollutants such as oil, pesticide, herbicide, nitrogen and suspended sediment downstream to the RPW, which empties into Carter Creek to the larger Chesapeake Bay, a TNW.

   f. In reference to the same reasons just cited, organic carbon derived from detritus decomposition, and nutrients within the evaluated wetlands are likely to reach the off-site RPW, and in turn the down slope TNW. These organic carbons are used by downstream organisms as a source of food which increases the overall food chain in the Kent Island Bay area off the Chesapeake Bay. Due to the hydrologic connection, this provides a benefit to the biological food webs

within the RPW and TNW. It has been identified by the EPA Waters GeoViewer that the Carter Creek is listed as a 303(d) impaired water. There creek has a biological impairment and must be monitored due to high TMDL values associated with fecal coliform, nutrients, and suspended sediment as of 2002. State and Federal endangered mussel habitat is known to occur downstream of where the RPW discharges into the TNW, an estuarine bay. Two water monitoring stations document They are specifically vulnerable to an increase of sediment in the water and the chemicals that they ingest while filtering the water they live in. The wetlands provide a biological significant nexus to the TNW by filtering out these contaminants that would otherwise enter the TNW and adversely affect the biological integrity of downstream TNW's.

g. Based on the above, the Corps has determined that the wetland identified as Wetland 2 (totaling 0.01 acres) as described in the wetland delineation report possess more than a speculative capacity to provide a substantial or measurable effect on the biological, chemical and physical integrity of the proximate TNW.

h. The wetlands identified as Wetland 1 (totaling 0.03 acres) does not exhibit a significant nexus to downstream TNW. It is a natural depression in the lot. The rim of the wetlands appear (pictures provided by applicant and on LIDAR) to be higher than the surrounding area and no discrete connections could be observed when looking on-site by the consultant, at historical aerial photographs nor on LiDAR maps, it is therefore non-jurisdictional as it does not possess a significant nexus to the downstream TNW.

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs:
   - ☐ Wetlands adjacent to TNWs:

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:

     Provide estimates for jurisdictional waters in the review area (check all that apply):
     - ☐ Tributary waters:
     - ☐ 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:
   - ☐ Other non-wetland waters:
     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:

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
   - ☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

   Provide acreage estimates for jurisdictional wetlands in the review area:

[8]See Footnote # 3.

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: Wetland 2 is approximately 0.01 acres in size.

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:
☐ Other non-wetland waters:
   Identify type(s) of waters:
☐ Wetlands:

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:** Wetland 1

☐ 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):
☐ Lakes/ponds:
☐ Other non-wetland waters: List type of aquatic resource:
☐ Wetlands:

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):
☐ Lakes/ponds:
☐ Other non-wetland waters: acres. List type of aquatic resource:
☒ Wetlands: 0.02 acres

SECTION IV: DATA SOURCES.

[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.***

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: JD Report prepared by Wetland Studies and Solutions Inc., dated July 12, 2019.
- ☒ 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: 1:24,000; Kent Island (7.5-Minute Series)
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Queen Anne's County Soil Survey.
- ☒ National wetlands inventory map(s). Cite name: NWI Wetland Mapper
- ☒ State/Local wetland inventory map(s): Maryland Department of Natural Resources State Wetland Inventory GIS data layer.
- ☒ FEMA/FIRM maps: Panel 24035C0315D.
- ☐ 100-year Floodplain Elevation is: _ (National Geodectic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): Google Earth Pro images years 2013 to 2018 or ☒ Other (Name & Date): Photographs included with the Wetland Studies and Solutions Inc., JD Report taken 5 July 2019. Delineation site photos by obtained during the Corps' site visit dated 24 July 2019.
- ☐ Previous determination(s). File no. and date of response letter:
- ☐ Applicable/supporting case law:
- ☐ Applicable/supporting scientific literature:
- ☒ Other information (please specify): Attachment 1: Map of wetlands; Attachment 2: LiDAR of relative reach

B. ADDITIONAL COMMENTS TO SUPPORT JD: All three indicators were present for each of the two delineated nontidal wetland features (Wetlands 1-2) located within the approximately 1.4-acre review area in accordance with the 1987 Manual and the AGCP Regional Supplement. Each wetland is fully document in the JD submitted by Wetland Studies and Solutions Inc., on 12 July 2019. The Rapanos JD data sheets include general area conditions addressing physical characteristic, chemical characteristics, and biological characteristics of each wetland evaluated so the responses provided in Section D of this document should be considered averages. Both wetlands are adjacent to PFO1B mapped wetlands with intermittent flow beneath Virginia Road downstream to Carter Creek, a tidal tributary to the larger Chesapeake Bay, a TNW.

References:

U.S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0),* ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-20. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

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Cowardin, Lewis M., V. Carter, F.C. Golet, and E. T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish & Wildlife Service - Biological
Services Program. FWS/OBS-79/31.

Reed, P.B., Jr. 1988. *National List of Plant Species that Occur in Wetlands: 1988 National Summary*. Biological Report 88(24), U.S. Fish and Wildlife Service, Washington D.C.