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): December 6, 2013

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: NAB-2013-02018-M32 (GWU, W. ST GATE/JD)
PROJECT LOCATION AND BACKGROUND INFORMATION: Reaches: two reaches of a single stream channel on a 1-acre portion of the George Washington University Mount Vernon Campus.
State: **Washington D.C.** County/parish/borough: City:
Center coordinates of site (lat/long in degree decimal format): Lat. **N38°55'08.10"**, Long. **W 77°05'31.82"**.

Name of nearest waterbody: **Maddox Branch**
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Potomac River and C&O Canal**
The site is located within an approximately 1-acre portion at the northern border of the Mount Vernon campus of George Washington University (GWU) with W Street NW, located south of the intersection of W Street and 46th Street NW, east of 48th Street and west of Foxhall Road NW, in Washington, D.C. The area of review is bisected by an unnamed tributary to Maddox Branch, which is a perennial non-tidal tributary to the C&O canal, part of which is a traditional navigable tributary of the Potomac River, a tidal, navigable, interstate tributary of the Chesapeake Bay, a traditional navigable waterway.
Name of watershed or Hydrologic Unit Code (HUC): **Potomac River - 02070010**
☒ 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: **N/A**
☒ Field Determination. Date(s): **27 September 2013**

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. [*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: The project site consists of a non-tidal stream. Total area of waters is approximately 444 square feet of 222 linear feet of jurisdictional waters.**
   The project impact area is indicated below.

   Wetlands:

[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).

Streams: **non-RPW = 282 square feet along 141 linear feet (ephemeral non-RPW)**
RPW = 162 square feet along 81 linear feet (seasonally intermittent RPW)

c. **Limits (boundaries) of jurisdiction based on: 1987 U.S. Army Corps of Engineers Wetlands Delineation 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]

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

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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: **190 square miles (Middle Potomac-Anacostia-Occoquan Subbasin).**
Drainage area: **drainage area of site unknown.**
Average annual rainfall: **unknown**
Average annual snowfall: **unknown.**

(ii) **Physical Characteristics:**

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☒ Tributary flows through **1** tributaries before entering TNW.

Project waters are **approximately 1.4** river miles from TNW.
Project waters are **less than 1** river miles from RPW.
Project waters are **approximately 1** aerial (straight) miles from TNW.
Project waters are **less than 1** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .
Identify flow route to TNW[5]: **the upstream reach flows directly into the downstream reach, which flows into Maddox Branch, which flows directly into the C&O Canal, a historically navigable water, and the Potomac River, a 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: 2 feet
Average depth: 5 feet, low flow channel in RPW reach was approximately 3-inches to 6-inches deep
Average side slopes: 60%

Primary tributary substrate composition (check all that apply):
☐ Silts (C) ☒ Sands (A,C, D) ☐ Concrete
☐ Cobbles (A,D) ☒ Gravel (A,D) ☐ Muck
☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **Although the banks were steep, for the lower RPW portion of the stream, the banks were also vegetated appeared to be fairly stable. The downstream portion of the channel also had developed small point bars and meanders, indicating a moderate level of stability. The upstream non-RPW portion of the channel had equally steep banks, but the banks and bed consisted primarily of bare soil, indicating scour and instability.**
Presence of run/riffle/pool complexes. **Yes** Explain: **Small riffles and pools in the lower RPW portion of the channel; the upper non-RPW portion of the channel was not flowing at the time of the site visit.**
Tributary geometry: **the low-flow channel within the lower RPW portion of the channel was slightly sinuous; the upper non-RPW portion of the channel was confined by the steep banks**
Tributary gradient (approximate average slope): **approximately 10%**

(c) Flow:
Tributary provides for: **seasonally intermittent flow (lower RPW portion of the channel)**
Ephemeral flow (upper non-RPW portion of the channel)

Estimate average number of flow events in review area/year: **the upper non-RPW portion of the channel flows during every moderate to major storm event, approximately 50 times per year. The lower RPW portion of the channel flows during the "wet" season, typically from late October to early May, and during moderate to major storm events during the "dry" season from mid May to early October**.

Describe flow regime: **lower RPW portion of the channel – seasonal intermittent (RPW)**
upper non-RPW portion of the channel - ephemeral

Other information on duration and volume: **less than 24 hours following storm events (all channels); barring a drought, the lower RPW portion of the channel flows continuously from at least early November to late March.**

Surface flow is: **discrete and confined** Characteristics:

Subsurface flow: **some component of groundwater present in lower RPW portion of the channel: no rain had fallen in the area for six days prior to the site visit and the site visit was conducted at the end of the "dry" season, yet water was still flowing in the portion of the channel downstream of flag A11, indicating groundwater flow providing base flow.**

[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.

☐ Dye (or other) test performed: N/A.

Tributary has (check all that apply):
☒ Bed and banks (all)
☒ OHWM[6] (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 **(lower portion only)**
- ☒ scour **(mostly upper portion)**
- ☐ multiple observed or predicted flow events
- ☐ abrupt change in plant community

☐ 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: **There was no water flowing in upper non-RPW portion of the channel, with the exception of standing water in a small pool immediately downstream of the culvert pipe at the upstream terminus of the channel. The water flowing through lower RPW portion of the channel was clear.**
Identify specific pollutants, if known: **due to proximity of channel to nearby roads and the adjacent parking lot, possible pollutants from those sources could include motor oil and coolant; due to the proximity of the playing field nearby, possible pollutants from that source could include fertilizer and pesticides**

(iv) Biological Characteristics. Channel supports (check all that apply):
☒ Riparian corridor. Characteristics (type, average width): **The stream on site is located within an approximately 49 foot wide forested riparian zone for the upper non-RPW portion and 144-foot wide forested riparian buffer for lower RPW reach**
☐ 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: **the lower seasonally-intermittent portion of the channel likely has sufficiently frequent flow to support more tolerant species of benthic macro-invertebrates**

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

(i) Physical Characteristics:
(a) General Wetland Characteristics:
Properties:
Wetland size:
Wetland type.
Wetland quality. Explain: **Refer to Section IV.B.**
Project wetlands cross or serve as state boundaries. Explain: **N/A**.

(b) General Flow Relationship with Non-TNW:
Flow is: Explain:

Surface flow is:
Characteristics:

Subsurface flow: Explain findings:

[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.

☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:
☐ Directly abutting
☐ Not directly abutting
☐ Discrete wetland hydrologic connection. Explain:
☐ Ecological connection. Explain:
☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW
Project wetlands are approximately river miles from TNW.
Project waters are approximately aerial (straight) miles from TNW.
Flow is from:
Estimate approximate location of wetland as within the 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:
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:
☐ 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:
Approximately__ 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)

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:

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: **The upper portion of the channel on site is an ephemeral stream and non-RPW, with no adjacent wetlands, that flows indirectly into a TNW by way of two other stream reaches. The non-RPW is a 141-foot long channel with well-defined bed and bank, rack lines, and evidence of scouring along the bed and banks. The following stream geomorphology was absent: riffle-pool sequence; depositional bars or benches; braided channels; and sediment sorting. No aquatic fauna or wetland vegetation was observed to be within the channel. There is a culvert pipe at the upstream terminus of the channel that conducts flow directly to this ephemeral stream. There is no evidence that this ephemeral reach is fed by groundwater and there is some erosion with leaf litter and some exposed sediment in the stream bed. The OHWM and bank and bed were observed for the non-RPW reach. The ephemeral channel has jurisdictional stream characteristics. There are no associated wetlands and the non-RPW portion of the reach does not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.**

* Aquatic Life (Organisms): **Due to the ephemeral nature of the flow in the channel, large aquatic organisms, such as fish, or aquatic organisms that require a constant state of moisture would not be expected to be present. However, more opportunistic organisms that only require a short period of time to develop, such as some tolerant species of benthic macro-invertebrates, could potentially be expected to be present in the channel. The Corps' site visit on 27 September 2013 took place toward the end of the dry season, but the downstream RPW reach was flowing, while the upstream non-RPW reach did not have flow.**

* Habitat for Wildlife: **A detailed assessment of the quality of wildlife habitat was not performed. The ephemeral stream's corridor and adjacent upland areas may provide habitat for a variety of upland wildlife species.**

* Support Nutrient Cycling: **The opportunity to perform this function is adequate for the channel as the abutting riparian area is a thin strip of deciduous forest which adds detritus. Additionally, the conveyance of the detritus downstream may provide soil nutrition and a food source for fish and other aquatic organisms downstream.**

* Sediment Transport: **The opportunity to perform this function is adequate for this channel because within the area of review there are no major blockages, such as a beaver dam or road crossing, to arrest the transport of sediment.**

* Pollutant Trapping: **The channel likely receives un-channelized overland flow from the surrounding upland areas that include roads, a parking lot, and playing fields. Flow from the roads and parking lot may convey pollutants such as motor oil and coolant and overland or subsurface flow from the playing fields may convey pollutants such as fertilizer or pesticides. The upper portion of the stream channel has little to no connection to the floodplain and the gradient of the channel allows only for minimal pollutant trapping.**

* WQ Improvement: **The upper portion of the stream has limited opportunity to improve the chemical and physical aspects of water quality because the channel has limited connection to its floodplain. However, the trees in the riparian buffer would be expected to contribute shade which would moderate temperature fluctuations in the channels, thereby moderating fluctuations of the concentration of dissolved oxygen (DO) and improving biological water quality. Moreover, this forested site is one of the few remaining natural areas in a highly disturbed and increasingly urban area. Therefore, these channels would be expected to provide greater functions and values in terms of improving water quality despite heavy loads of pollutants for the surrounding area than a high value stream would in a pristine area.**

* Temperature: **The trees in the riparian buffer would be expected to contribute shade which would moderate temperature fluctuations in the upper portion of the channel.**

* Flood Storage: **Due to the incised nature of the channel, which may be due to the high velocity of the overland flow over the nearby impervious surfaces, the upper portion of the channel is not well connected to the floodplain and would thereby provide limited flood storage.**

* Commerce: **The upper portion of the channel is too small and flows too infrequently to provide recreational boating or fishing and thus has limited opportunities to support commerce. However, it would be expected to contribute stream flow and detritus which would improve water quality downstream in the Potomac River, a TNW which does support fishing and boating activities less than 1 mile from this area.**

* Navigation: **The channel is not navigable.**

* Recreation: **The channel is located on GWU's property and so would not be easily accessible to most people, with the exception of the students and staff of GWU. The stream would have limited recreational opportunities because of its small size and lack of regular or seasonal water flow regime. If allowed, the area of review could support non-aquatic recreational activities such as hiking and bird watching proportionate to the riparian upland forested habitat.**

* Public Health: **The water quality functions of the upstream portion of the channel, although modest, directly influence downstream areas thereby providing a direct benefit to the overall public health.**

* Groundwater Discharge: **No seeps were noted within the upper portion of the channel, but flow observed in the lower portion of the stream channel during the 27 September 2013 Corps site visit indicated groundwater influence.**

* Groundwater recharge: **The upper portion of the channel and its riparian buffer are not paved, thus it would be expected that although the project site may not connect directly with a deeper aquifer, some amount of groundwater recharge into the surface water aquifer could occur.**

Based on the above and field experience in Washington , D.C., the upper portion of the channel does have a significant nexus with the physical, chemical or biological integrity of the 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: **The lower portion of the channel was observed to be flowing during the Corps site visit on 27 September 2013, toward the end of the "dry season," and it had not rained for six days in the area of review.**

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☒ **Tributary waters: 162 square feet along 81 linear feet (seasonally intermittent RPW)**
   - ☐ 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: 282 square feet along 141 linear feet (ephemeral non-RPW)**
   - ☐ 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:

[8] See Footnote # 3.

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:

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:

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:
   ☐ 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:

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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: **ESC Mid-Atlantic LLC, Delineation Report dated 21 August 2009, Plan Drawing dated 14 August 2009.**

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☒ Office concurs with data sheets/delineation report. **The Corps agrees that no wetlands are present within the area of review**.

☐ 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: **Washington West Quadrangle included in 21 August 2009 Delineation Report.**

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: **data layer accessed in ArcGIS Explorer on 08 November 2013.**

☒ National wetlands inventory map(s). Cite name: **data layer accessed in ArcGIS Explorer on 08 November 2013.**

☐ State/Local wetland inventory map(s):

☒ FEMA/FIRM maps: **data layer accessed in ArcGIS Explorer on 08 November 2013.**

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): **GoogleEarth aerial photographs from 1999, 2002, 2005, and 2011;**
or ☒ Other (Name & Date): **Photographs included with Delineation Report**

☐ 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:

References:

HUC Characterization Tool created by Jae Chung at the USACE IWR in 2012 using data from the NWI and the National Land Cover dataset. Accessed 08 November 2013.