

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): May 5, 2015

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENAB-OPR-MS (6789 GOLDSBORO RD, MOCO/JD) 2015-00433
PROJECT LOCATION AND BACKGROUND INFORMATION: 5.26-acre property located north of the intersection of Goldsboro Road and McArthur Boulevard at 6789 Goldsboro Road, Bethesda, Montgomery County, Maryland

State: **Maryland** County/parish/borough: **Montgomery County** City: **Bethesda**

Center coordinates of site (lat/long in degree decimal format): **38.971140, -77.136911**

Name of nearest waterbody: **Minnehaha Branch**

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

Name of watershed or Hydrologic Unit Code (HUC): **Tuscarora Creek-Potomac River (HUC: 0207000804)**

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: **17 April 2015**

Field Determination. Date(s): **09 April 2015**

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are and are not "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

**b. Identify (estimate) size of waters of the U.S. in the review area:
The project impact area is indicated below.**

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

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

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

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.

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 waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

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

(i) General Area Conditions:

Watershed size: **120.1 square miles**⁵

Drainage area:

Average rainfall for Montgomery County in the Month of April: **3.3 inches**⁶

Average annual snowfall in DC: **15.4**⁷

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through **1** tributary before entering TNW

Project waters are approximately **0.41** river miles from TNW.

Project waters are approximately **0** river miles from RPW.

Project waters are approximately **0.37** aerial (straight) miles from TNW.

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

⁵ USACE HUC Characterization Tool.

⁶ Maryland Department of the Environment. Normal Monthly Precipitation Totals (in Inches) for Maryland Counties .

http://www.mde.state.md.us/programs/Water/WaterConservation/CurrentConditions/Pages/Programs/WaterPrograms/Water_Conservation/previous_condition_s/normalprecip_new.aspx. Accessed 17 April 2015.

⁷ National Oceanic and Atmospheric Administration. Washington D.C. Monthly Snowfall. <http://www.weather.gov/media/lwx/climate/dcasnow.pdf>. Accessed 17 April 2015.

Project waters are approximately **0** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁸: **The unnamed stream in the area of review flows offsite through a culvert into Minnehaha Branch, which then flows into the Potomac River a TNW.**

Tributary stream order, if known: **Unknown – the stream flows onto the site from a culvert and its headwaters are located off-site**

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

Tributary is: Natural:
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain: **The stream flows onto the site from a culvert from its headwaters located off-site and exits the site through a culvert. The banks of the upper portion of the stream appears to have been stabilized with small boulders near the culvert and for approximately 20 feet upstream and downstream of the driveway bridge crossing have been stabilized with rocks cemented with rebar-reinforced concrete.**

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

Average width: **6 feet**

Average depth: **5 feet**

Average side slopes: **highly variable: 0.5:1 in upper portion, 0:1 (vertical) in middle portion where manipulated, and 4:1 in lower portion**

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: **natural portions of the channel appeared stable**

Tributary geometry: **meandering (except for manipulated section in middle)**

Tributary gradient (approximate average slope): **~4%**

(c) Flow:

Tributary provides for: **perennial flow**

Estimate average number of flow events in review area/year: **flow throughout year**

Describe flow regime: **perennial**

Other information on duration and volume:

Surface flow is: Characteristics:

Subsurface flow:

- Dye (or other) test performed:

Tributary has (check all that apply):

- Bed and banks
 OHWM⁹ (check all indicators that apply):
- | | | |
|---|-------------------------------------|--|
| <input checked="" type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> | the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> | destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> | the presence of wrack line |
| <input checked="" type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> | sediment sorting |
| <input checked="" type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> | scour |
| <input type="checkbox"/> sediment deposition | <input checked="" type="checkbox"/> | multiple observed or predicted flow events |
- (observed during Corps site visit and by agent during delineation in March 2015)
- water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.¹⁰ Explain: N/A.

⁸ 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.

⁹ 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

¹⁰Ibid.

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

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

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: water color is clear; watershed characterized by medium-density residential development

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width): 353 feet, forested
- 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: **White-tailed deer and several species of birds (e.g. the call of the Red-bellied woodpecker) were observed during the Corps site visit.**

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: **975 square feet**

Wetland type: **PEM in summer, stream-wetland complex in winter**

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: **active flow during winter (observed during Corps site visit 09 April 2015)**

Characteristics: **water clear**

Subsurface flow: **presence not proven but likely** Explain findings: **Water flowing in the wetland during Corps site visit appeared to emerge from a seep in the ground – there was no water flowing in the upland hillside above the seep area**

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 **0.41** river miles from TNW.

Project wetlands are **0.37** aerial (straight) miles from TNW.

Flow is from: ground seep, through the wetland to the RPW, to Minnehaha Br

Estimate approximate location of wetland as within the floodplain: **the majority of the wetland is located above the floodplain; groundwater flow is conducted through the wetland downslope to the stream**

(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): **356-foot wideforested**

Vegetation type/percent cover. Explain: **5% cover at the time of the site visit. The wetland appears to be a PEM surrounded by upland forest in the summer and during the winter, while the herbaceous plants have died back, the wetland acts as more of a seasonally intermittent stream. At the time of the**

Corps site visit, seedlings of Impatiens capensis, Hedera helix, and Lindera benzoin were starting to sprout.

Habitat for:

- Federally Listed species. Explain findings:
- Fish/spawn areas. Explain findings:
- Other environmentally-sensitive species. Explain findings:
- Aquatic/wildlife diversity. Explain findings: **White-tailed deer and several species of birds (e.g. the call of the Red-bellied woodpecker) were observed during the Corps site visit.**

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:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland A (Y)	0.022 ac		

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:

- * Aquatic Life (Organisms):
- * Habitat for Wildlife:
- * Support Nutrient Cycling:
- * Sediment Transport:
- * Pollutant Trapping:
- * WQ Improvement:
- * Temperature:
- * Flood Storage:

Provide acreage estimates for jurisdictional wetlands in the review area:

7. Impoundments of jurisdictional waters.¹²

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):¹³

- 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): **Three potential wetland areas were examined: X1, X2, and X3. Areas X1 and X2 are located on the east side of the stream and X3 is located on the west side of the stream, with all three located southwest from the driveway.**

The soils of X1 met Hydric Soil Indicator F3: the soil matrix from the ground surface to 10.5 inches below was 10YR 3/1 with no concentrations, and from 10.5 to 13 inches below the ground surface and deeper the soil matrix was 10YR 4/2 with distinct concentrations in 7.5YR 5/6. Area X1 was dominated by herbaceous vegetation, primarily consisting of Stellaria media (FACU), Hedera helix (FACU), Rubus phoenicolasius (FACU), and an unidentified plant that may be either a violet or Alliaria petiolata (FACU). The only indicator of wetland hydrology examined in the field was geomorphic position, since X1 is located in a concave area in the floodplain of the RPW. However, review of leaf-off aerial photography from 2002, 2007, 2008 (GoogleEarth) did not show inundation or saturation within the X1 area. Based on a lack of wetland hydrological and vegetative indicators, the Corps determined that X1 is an upland area.

The soils X2 of met Hydric Soil Indicator F3: the soil matrix from the ground surface to 6.5 inches below was 10YR 2/1 with no concentrations, and from 6.5 to 13 inches below the ground surface and deeper the soil matrix was 10YR 4/3 with prominent concentrations. Area X2 was dominated by herbaceous vegetation, primarily consisting of Rosa multiflora (FACU), an unidentified shrub, an unidentified vine, and Alliaria petiolata (FACU), with a few Acer negundo (FAC) along the edges. Area X2 was located at a slightly lower elevation than X1 and the RPW was less incised near X2, indicating that X2 is likely in an active floodplain. The only indicator of wetland hydrology examined in the field was geomorphic position, since X2 is located in a concave area in the floodplain of the RPW. However, review of leaf-off aerial photography from 2002, 2007, 2008 (GoogleEarth) did not show inundation or saturation within the X2 area. Based on a lack of wetland hydrological and vegetative indicators, the Corps determined that X2 is an upland area.

¹² To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹³ 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.

The soils X3 of met Hydric Soil Indicator F3: the soil matrix was very gray with prominent concentrations from the ground surface to approximately 10 inches below. Area X3 had a few small seedlings of Polygonum cuspidatum (UPL), but was mostly unvegetated. The surrounding uplands were dominated by larger Polygonum cuspidatum, with a few Acer negundo (FAC). Area X3 was located at close to the same elevation as the RPW is likely in an active floodplain. The only indicator of wetland hydrology examined in the field was geomorphic position, since X3 is located in a concave area in the floodplain of the RPW and at the toe of a steep slope. However, review of leaf-off aerial photography from 2002, 2007, 2008 (GoogleEarth) did not show inundation or saturation within the X3 area. Based on a lack of wetland hydrological and vegetative indicators, the Corps determined that X3 is an upland area.

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:

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: **vicinity map included in submission dated 3 April 2015. Wetland plan was prepared by Macris, Hendricks, & Glascock, P.A. and the wetland report was prepared by Ken Wallis of Wetland Studies and Solutions, Inc.**
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. **The original delineation report dated 3 April 2015.**
 - 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: **Falls Church VA-MD 1994 included in wetland delineation report dated 03 April 2015**
- USDA Natural Resources Conservation Service Soil Survey. Citation: **SSURGO Digital Data map included in wetland delineation report dated 03 April 2015**
- National wetlands inventory map(s). Cite name: **Digital NWI map included in wetland delineation report dated 03 April 2015**
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): **GoogleEarth – 2002, 2008, 2013,color infrared photography, high resolution imagery from MERLIN website**
 - or Other (Name & Date): **Photographs included with Delineation Report dated 03 April 2015,**
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify): **Montgomery County Digital Data – 2-foot contours, leaf-on aerial photos from several other years on GoogleEarth and MERLIN (did not show aquatic resources in area of review clearly)**

B. ADDITIONAL COMMENTS TO SUPPORT JD:

References:

USACE HUC Characterization Tool.

Maryland Department of the Environment. Normal Monthly Precipitation Totals (in Inches) for Maryland Counties .
http://www.mde.state.md.us/programs/Water/WaterConservation/CurrentConditions/Pages/Programs/WaterPrograms/Water_Conservation/previous_conditions/normalprecip_new.aspx. Accessed 17 April 2015.

National Oceanic and Atmospheric Administration. Washington D.C. Monthly Snowfall.
<http://www.weather.gov/media/lwx/climate/dcasnow.pdf>. Accessed 17 April 2015.