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): June 13, 2014

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENAB-OP-RMS 2014-00239 (Thompson Property/JD) Form 1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Maryland County/parish/borough: St. Mary's City: Hollywood Center coordinates of site (lat/long in degree decimal format): Lat. 39° 19' 30.41" N, Long. 76° 33' 21.61" W. Name of nearest waterbody: Broad Run Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Breton Bay

Name of watershed or Hydrologic Unit Code (HUC): 02080101

- 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. <u>REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):</u>

Office (Desk) Determination. Date:

Field Determination. Date(s): March 20, 2014 and May 9, 2014

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 "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):
 - TNWs, including territorial seas Complete Section III.A. next NO SNE Required
 - Wetlands adjacent to TNWs *Complete Section III.A.2 next* **NO SNE Required**
 - Relatively permanent waters¹ (RPWs) that flow directly or indirectly into TNWs *Complete Section III.D.2 next* **NO SNE Required for perennial**
 - Non-RPWs that flow directly or indirectly into TNWs Complete Sections III.B through D next SNE Required
 - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs *Go to Section III.D.4* **NO SNE Required** for perennial
 - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs *Complete Sections III.B through D next* **SNE Required**
 - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs *Complete Sections III.B through D next* **SNE Required**
 - Impoundments of jurisdictional waters Go to Section III.
 - Isolated (interstate or intrastate) waters, including isolated wetlands Go to Section III.E
- b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or acres. Wetlands: acres.
- c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual & 2010 Altantic Gulf & Coastal Plain Supplement Elevation of established OHWM (if known):

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

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

¹ 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).

² 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 <u>adjacent</u> to but that <u>does not directly abut</u> 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 <u>relatively permanent tributary that is not perennial</u> (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 waterbody³ is <u>not an RPW</u>, 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: 1,177.4 square miles Drainage area: 50 acres Average annual rainfall: 47 inches Average annual snowfall: 12 inches

(ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 □ Tributary flows directly into TNW.
 ☑ Tributary flows through 2 tributaries before entering TNW.

Project waters are 10-15 river miles from TNW.
Project waters are 1-2 river miles from RPW.
Project waters are 2-5 aerial (straight) miles from TNW.
Project waters are 1 (or less) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A.

Identify flow route to TNW⁴: **The unnamed seasonal RPW flows into Broad Run, which flows in McIntosh Run and into Breton Bay a tidally influenced traditionally navigable tributary of the Potomac River**. Tributary stream order, if known:

³ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁴ 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.

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

Tributary is: 🛛 Natural

Natural Artificial (man-made). Explain:

\boxtimes	Manipulated	(man-altered).	Explain: A	A culvert for a	a farm acces	s road	was installed	in	the
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tributary on the property.

	Tributary properties with respect to top of bank (estimate): Average width: 2 to 3 feet Average depth: feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
wetlands dire along the ban	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The stream banks are stable. Nontidal ectly abut the stream bank provide water storage capacity during high flow events. In addition, wetland vegetation iks provides stabilization. Presence of run/riffle/pool complexes. Explain: Tributary geometry: Meandering Tributary gradient (approximate average slope): %
(c)	<u>Flow:</u> Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 11-20 Describe flow regime: Flow regime is seasonally intermittent. The tributary flows for 3 months or more of the
year.	Other information on duration and volume:
	Surface flow is: Discrete and confined. Characteristics:
	Subsurface flow: Unknown. Explain findings: Dye (or other) test performed: .
	Tributary has (check all that apply): Bed and banks OHWM ⁵ (check all indicators that apply): the presence of litter and debris 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): .
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list):
(iii) Che	mical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: ...Water flowing through the tributary was clear and visibly flowing on the date of the site inspection.

⁵A 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. ⁶Ibid.

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics: The tributary runs through a 5-acre nontidal forested wetland.
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: Spring peepers were heard during the site inspection in March

2014. The channel and adjacent wetlands provide spawning, nursery and foraging habitat for reptiles, amphibians, and some insect species.

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: 5 acres
 - Wetland type. Explain: Palustrine Forested wetland.

Wetland quality. Explain: The wetland has high plant diversity and is dominated by Pin oak, sweet gum, red maple, and American Holly.

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent flow. Explain: There are braided flow patterns throughout the wetland and an intermittent stream flows through the wetland area.

Surface flow is: Discrete Characteristics:

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

- (c) <u>Wetland Adjacency Determination with Non-TNW:</u>
 - 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 10-15 river miles from TNW.
Project waters are 2-5 aerial (straight) miles from TNW.
Flow is from: Wetland to navigable waters.
Estimate approximate location of wetland as within the 50 - 100-year floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water in wetland was clear within the channel and flow within the wetland is intermittent. Nontidal forested wetland had a diversity of Fac and FacW species, including mature individuals. 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: Spring peepers were heard during the site inspection in March 2014. The channel and adjacent wetlands provide spawning, nursery and foraging habitat for reptiles, amphibians, and some insect species.

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

All wetland(s) being considered in the cumulative analysis: 1

Approximately (**5**) 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 1	5	Y	

Summarize overall biological, chemical and physical functions being performed: The 5 acre palustrine forested wetland provides increased sediment storage capacity, filters out pollutants through uptake, and provides habitat for aquatic wildlife such as spring peepers and other reptiles and amphibians. The wooded area also provided habitat for transient species such as deer who may utilize the stream for drinking and utilize the forest for foraging and shelter.

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:

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

- TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
- 2. RPWs that flow directly or indirectly into TNWs.
 - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
 - ☑ 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: **900** linear feet **2 to 3** width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

Non-RPWs⁷ that flow directly or indirectly into TNWs. 3.

Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters:

- Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. 4.
 - 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 acres.

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

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

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

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

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

Impoundments of jurisdictional waters.⁸ 7.

- 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):⁹
 - 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. \square
 - which are or could be used for industrial purposes by industries in interstate commerce. П
 - ☐ Interstate isolated waters. Explain:
 - Other factors. Explain:

Identify water body and summarize rationale supporting determination:

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

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters:

Wetlands: acres.

⁷See Footnote # 3.

⁸ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

⁹ 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.

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. A wet signature observed on aerial imagery within the northern farm-field near the farm road was investigated during the field inspections. Hydrology and hydrophytic vegetation was not present during either site visit, therefore the area did not meet the criteria identified in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain.
- 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 <u>solely</u> 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): An existing rill was observed during the Corps site inspection. A clear area of erosion was observed within the northern farm field along the slope between the road and the wetlands on the northern side of the site. The area did not exhibit any signs of an ordinary high water mark on site including a lack of a clear line impressed upon the bank, no sorting of material, and some vegetation existed within portions of the feature. Due to the lack of an ordinary high water mark, the feature would not fit the definition of a stream channel and is considered to be a drainage swale.

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

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

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

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

SECTION IV: DATA SOURCES.

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

Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Map dated June 2, 2014 created by R.A. Barrett & Associates, Inc.

Data sheets prepared/submitted by or on behalf of the applicant/consultant. Additional information was provided by McCarthy & Associates and the original map provided with the delineation report was revised to reflect additional wetlands and waters found on the subject property. In general, the Corps concurs with the waters as described in the wetland delineation report; however additional areas that were not previously addressed in the wetland delineation report were accessed in additional information provided by the consultant as a result of the Corps site investigation.

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.

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- USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name:
- USDA Natural Resources Conservation Service Soil Survey. Citation: Web Soil Survey provided by the consultant in the delineation report.

National wetlands inventory map(s). Cite name: GIS data layer obtained from http://www.fws.gov/wetlands/Data/Data-Download.html.

State/Local wetland inventory map(s): Maryland Department of Natural Resources Wetland GIS Data Layer obtained from http://dnrweb.dnr.state.md.us/gis/data/data.asp.

- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

Photographs: Aerial (Name & Date): Maryland Merlin Online 2007-2008 & 2010-2011 6-inch color aerial photography custom maps obtained from <u>http://www.mdmerlin.net/mapper.html</u>; Google Earth historical aerial imagery; State of Maryland Nontidal Wetland Maps.

- or 🔀 Other (Name & Date): Photographs taken by the Corps dated March 20, 2014 and May 9, 2014.
- 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:

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): June 13, 2014

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENAB-OP-RMS 2014-00239 (Thompson Property/JD)

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Maryland County/parish/borough: St. Mary's City: Hollywood Center coordinates of site (lat/long in degree decimal format): Lat. 39° 19' 30.41" N, Long. 76° 33' 21.61" W. Name of nearest waterbody: Broad Run Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Breton Bay

Name of watershed or Hydrologic Unit Code (HUC): 02080101

- 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:

Field Determination. Date(s): March 20, 2014 and May 9, 2014

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 "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):



 \square

- TNWs, including territorial seas *Complete Section III.A. next*
- Wetlands adjacent to TNWs *Complete Section III.A.2 next*
- Relatively permanent waters¹ (RPWs) that flow directly or indirectly into TNWs *Complete Section III.D.2 next*
- Non-RPWs that flow directly or indirectly into TNWs Complete Sections III.B through D next
-] Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Go to Section III.D.4 -

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs – Complete Sections III.B through D next –



Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs – Complete Sections III.B through D next –

- Impoundments of jurisdictional waters Go to Section III.
- Isolated (interstate or intrastate) waters, including isolated wetlands Go to Section III.E
- b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or acres. Wetlands: acres.
- **c. Limits (boundaries) of jurisdiction** based on: **Pick List** Elevation of established OHWM (if known):

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

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

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

¹ 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).

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 <u>adjacent</u> to but that <u>does not directly abut</u> 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 <u>relatively permanent tributary that is not perennial</u> (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 waterbody³ is <u>not an RPW</u>, or a wetland directly abutting an RPW</u>, 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: 1,177.4 square miles Drainage area: 50 acres Average annual rainfall: 47 inches Average annual snowfall: 12 inches
 - (ii) Physical Characteristics:
 - (a) <u>Relationship with TNW:</u>
 ☐ Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.
Project waters are 10-15 river miles from TNW.

Project waters are 1-2 river miles from RPW.

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

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

Project waters cross or serve as state boundaries. Explain: N/A.

Identify flow route to TNW⁴: The unnamed non-RPW flows through a prior-converted cropland and through a culvert under Sandy Bottom Road. The unnamed tributary flows into Broad Run, which flows into Broad Run, which flows in McIntosh Run and into Breton Bay a tidally influenced traditionally navigable tributary of the Potomac River.

Tributary stream order, if known:

³ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁴ 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.

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

Tributary is: 🗌 Natural

Artificial (man-made). Explain:

Manipulated (man-altered). Explain: The tributary is a previously excavated channel at the edge of an existing agricultural field. Evidence of excavation, including historic spoil piles that have created a micro-berm along the channel were present during site visits conducted by the Corps. Historic aerials show a different alignment of the channel within the agricultural field and the stream is entirely natural beyond the culvert under Sandy Bottom Road. The evidence shows that a portion of the existing stream was manipulated to provide drainage for an agricultural operation.

Tributary properties with respect to top of bank (estimate): Average width: 1-2 feet Average depth: 3 to 6 inches

Average side slopes: Vertical (1:1 or less).

Primary tributary substrate composition (check all that apply):

🔀 Silts	🔀 Sands	Concrete
Cobbles	Gravel	Muck
Bedrock	☐ Vegetation. Type/% cover:	

Other. Explain: Water stained leaves and debris were observed in some areas of the channel.

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The banks of the tributary were moderately eroded, as observed in tree root exposure, steep slopes and undercut banks in some locations. The steep banks and the presence of large trees directly adjacent to the tributary do not allow the tributary to meander outside of the originally excavated ditch area.

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: Relatively straight The channel meandered tightly through the relatively straight historically excavated ditch area.

Tributary gradient (approximate average slope): 1 to 2 %

(c) Flow:

Tributary provides for: Intermittent but not seasonal flow

Estimate average number of flow events in review area/year: 6-10

Describe flow regime: The tributary would be a seasonally intermittent non-RPW that flows between 2 weeks to 3 months out of the year. Ground water influence was evident from seeps observed along the slopes of the bank.

Other information on duration and volume:

Surface flow is: **Discrete and confined.** Characteristics:

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

Tributary has (check all that apply):

Thouary has (check an that apply).	
Bed and banks	
\boxtimes OHWM ⁵ (check all indicators that apply):	
\boxtimes clear, natural line impressed on the bank	the presence of litter and debris
changes in the character of soil	destruction of terrestrial vegetation
shelving	the presence of wrack line
vegetation matted down, bent, or absent	sediment sorting
leaf litter disturbed or washed away	⊠ scour
sediment deposition	multiple observed or predicted flow events
water staining	abrupt change in plant community
other (list):	
Discontinuous OHWM. ⁶ Explain:	
If factors other than the OHWM were used to determine	ne lateral extent of CWA jurisdiction (check all that apply):
High Tide Line indicated by:	Mean High Water Mark indicated by:
oil or scum line along shore objects	survey to available datum;
fine shell or debris deposits (foreshore)	physical markings;
physical markings/characteristics	vegetation lines/changes in vegetation types.
tidal gauges	

⁵A 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. ⁶Ibid

other (list):

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: The water flowing through the tributary was clear. No oily films or sheens were observed in the tributary. Some water-stained leaves were observed throughout the tributary.

Identify specific pollutants, if known: Not known

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

Riparian corridor. Characteristics (type, average width):

Wetland fringe. Characteristics: Two wetland areas occur adjacent to this tributary. One wetland is a small nontidal wetland meadow that is directly abutting the tributary, and is identified as Wetland 2. The second wetland, Wetland 3, is an emergent nontidal wetland that is adjacent to but not directly abutting the non-RPW. Overland sheet flow was observed from Wetland 3 into the tributary during the Corps site visit.

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:

Wetland 2: 50 square feet

Wetland 3: 5,100 square feet

Wetland type. Explain: Emergent nontidal wetlands.

Wetland quality. Explain: Wetlands 2 and 3 occur in depressional areas adjacent to the tributary. Both

wetlands have vegetation that covers more than 80% of the wetland area. Wetland vegetation in these areas are dominated by juncus spp., Cinnamon fern, and marsh marigold.

Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent flow. Explain: The wetlands are connected to the wetland through overland sheet flow. An iron sheen was observed in wetland 3 which would indicate the influence of ground water.

Surface flow is: Overland sheetflow Characteristics:

Subsurface flow: Yes. Explain findings: An iron sheen was observed in wetland 3 which would indicate the influence of ground water.

Dye (or other) test performed:

- (c) Wetland Adjacency Determination with Non-TNW:
 - Directly abutting Wetland 2 was directly abutting the tributary

Not directly abutting

Discrete wetland hydrologic connection. Explain: Wetland 3 is connected through a discrete wetland hydrologic connection. Water flows from the wetland through an non-jurisdictional drainage feature into the tributary.

Ecological connection. Explain:

Separated by berm/barrier. Explain: A small berm exists adjacent to the tributary and Wetland 3; however a small depression in the berm provides a connection to the tributary.

- (d) <u>Proximity (Relationship) to TNW</u>
 Project wetlands are 10-15 river miles from TNW.
 Project waters are 2-5 aerial (straight) miles from TNW.
 Flow is from: Wetland to navigable waters.
 Estimate approximate location of wetland as within the 2 5-year floodplain.
- (ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Wetland 2: Water color was clear and the surface was saturate.

Wetland 3: Water-stained leaves were observed throughout the wetland area. Water flows through a culvert onto the property and ponds in depressional areas between individual trees. The wetland occurs within a microtopographic

feature. A red iron sheen was observed within areas of the wetland indicating the presence of ground water. Oil sheens were observed in portions of the wetland as well.

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 3 is dominated by Cinnamon fern and marsh marigold that covers approximately 95% of the wetland area. Wetland 2 is dominated by a juncus spp. that covers approximately 80% of the wetland area.

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: The wetland provides habitat for local reptile and amphibian species. Tadpoles and young frogs were observed in wetland 2 during the Corps site inspection.

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

All wetland(s) being considered in the cumulative analysis: **2** 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)
Wetland 2	50 square feet	Wetland 3	5,100 square feet

Summarize overall biological, chemical and physical functions being performed: The wetlands adjacent to the non-RPW provide filtration and uptake of pollutants and nutrients from runoff. In addition, Wetland 3 provides additional sediment and storm water storage capacity for runoff flowing through the property from the culvert under Sandy Bottom Road at the south of the property. The soil profile indicates a buried A horizon with stratified land layers, which were most likely deposited during prior storm events. Both wetlands provide spawning and nursery habitat for reptiles, amphibians, and some insects.

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: Both wetlands on the property adjacent to the tributary would flow into the tributary. Wetland 2 is directly abutting the non-RPW and Wetland 3 is adjacent to the non-RPW with a discrete

unregulated drainage feature that connects the wetland to the non-RPW. The wetlands provide habitat for wildlife such as resptiles and amphibians. The wetlands would also provide ecosystem functions to other RPWs and TNWs downstream by providing sediment storage capacity, stormwater storage capacity, and filtration of pollutants through nutrient uptake of the soil. The wetlands would help filter runoff entering the stream from the roadside ditch and culvert on the property. Wetlands 2 and 3 and the unnamed non-RPW tributary of Broad Run would have a significant nexus with traditionally navigable waters and are therefore waters of the United States within the Corps jurisdiction.

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:

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

- 1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: linear feet width (ft), Or, acres. Wetlands adjacent to TNWs: acres.
- 2 RPWs that flow directly or indirectly into TNWs.
 - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
 - 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: linear feet width (ft). acres.
- Other non-wetland waters:
 - Identify type(s) of waters:

Non-RPWs⁷ that flow directly or indirectly into TNWs. 3.

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: 670 linear feet 1 width (ft).
- Other non-wetland waters: acres.
 - Identify type(s) of waters:

Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. 4.

Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

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

- Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. 5.
 - 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: acres.

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

⁷See Footnote # 3.

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: 5,150 square feet.

7. Impoundments of jurisdictional waters.⁸

- 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):⁹

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 r	eview area	(check all	that apply):
		5			·	11 2/

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters: .

Wetlands: acres.

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

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based <u>solely</u> 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 <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.

Other non-wetland waters: acres. List type of aquatic resource:

Wetlands: acres.

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

Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).

Lakes/ponds: acres.

- Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands: acres.

SECTION IV: DATA SOURCES.

⁸ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

⁹ 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*.

А.	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: Map dated June 2, 2014 created by R.A. Barrett
	& Associates, Inc.
	Data sheets prepared/submitted by or on behalf of the applicant/consultant. Additional information was provided by McCarthy
	& Associates and the original map provided with the delineation report was revised to reflect additional wetlands and waters
	found on the subject property. In general, the Corps concurs with the waters as described in the wetland delineation report;
	however additional areas that were not previously addressed in the wetland delineation report were accessed in additional
	information provided by the consultant as a result of the Corps site investigation.
	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:
	USDA Natural Resources Conservation Service Soil Survey. Citation: Web Soil Survey provided by the consultant in the
	delineation report.
	National wetlands inventory map(s). Cite name: GIS data layer obtained from http://www.fws.gov/wetlands/Data/Data-
	Download.html.
	State/Local wetland inventory map(s): Maryland Department of Natural Resources Wetland GIS Data Layer obtained from
	http://dnrweb.dnr.state.md.us/gis/data/data.asp.
	FEMA/FIRM maps:
	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
	Photographs: Aerial (Name & Date): Maryland Merlin Online 2007-2008 & 2010-2011 6-inch color aerial photography
	custom maps obtained from http://www.mdmerlin.net/mapper.html; Google Earth historical aerial imagery; State of Maryland
	Nontidal Wetland Maps.
	or 🔀 Other (Name & Date): Photographs taken by the Corps dated March 20, 2014 and May 9, 2014.
	Previous determination(s). File no. and date of response letter:
	Applicable/supporting case law:

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Applicable/supporting case taw. Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: