

**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):** DEC 15 2014

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** NAB-2014-02395-M32 (4810 GLENBROOK RD, DC/JD)

**PROJECT LOCATION AND BACKGROUND INFORMATION:** Reaches: 1 stream on an approximately 8,285-square foot area of review (AOR) on the property at 4810 Glenbrook Road, NW, in Washington, D.C.

State: Washington D.C. County/parish/borough: City:

Center coordinates of site (lat/long in degree decimal format): latitude N 38.93424 and longitude W -77.09412

Name of nearest waterbody: Little Falls Branch

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

Name of watershed or Hydrologic Unit Code (HUC): Middle-Potomac-Anacostia-Occoquan (HUC: 01070010)

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: 03 December 2014

Field Determination. Date(s): 10 November 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 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):<sup>1</sup>**

TNWs, including territorial seas  
 Wetlands adjacent to TNWs  
 Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

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

**b. Identify (estimate) size of waters of the U.S. in the review area: The project site consists of approximately 330 square feet along 132 linear feet of an intermittent RPW, an unnamed tributary of Little Falls Branch**

**The project impact area is indicated below.**

**c. Limits (boundaries) of jurisdiction based on: the Eastern Mountains and Piedmont Regional Supplement to the Corps Wetland Delineation Manual**

Elevation of established OHWM (if known):

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

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

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

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

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

### SECTION III: CWA ANALYSIS

#### A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

(i) General Area Conditions:

Watershed size: **approximately 37,000 acres**

Drainage area: **approximately 6 acres**

Normal average monthly rainfall for November: **approximately 3 inches per month<sup>5</sup>**

Departure from normal average monthly rainfall for November 2014: **0.5 inches less than average in the general vicinity of the project area**

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through ~ 1 tributaries before entering TNW

Project waters are approximately 1 - 2 river miles from TNW.

Project waters are approximately **less than 1** river miles from RPW.

Project waters are approximately 1 - 2 aerial (straight) miles from TNW.

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

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

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

<sup>5</sup> NOAA, National Weather Service, Advanced Hydrologic Prediction Service, <http://water.weather.gov/precip/> Accessed 01 May 2014. For additional information on normal rainfall, please see <http://water.weather.gov/precip/about.php>

Identify flow route to TNW<sup>6</sup>: **the unnamed tributary onsite flows directly into Little Falls Branch which flows directly into the C&O Canal, a historical TNW, which flows directly into the Potomac River, a TNW.**

(b) Tributary stream order, if known: **1<sup>st</sup> order**  
General Tributary Characteristics (check all that apply):

Tributary is:  Natural:  
 Artificial (man-made). Explain:  
 Manipulated (man-altered). Explain: **the channel likely has an artificially straight geometry due to historic disturbance from the construction of the house on the property**

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

Average width: **11 feet**

Average depth: **8 feet**

Average side slopes: **0.5: 1**

Primary tributary substrate composition (check all that apply):

Silts       Sands  
 Concrete     Cobbles  
 Gravel  
 Muck       Bedrock  
 Vegetation. Type/% cover:  
 Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **moderate stability within deeply incised channel – banks above OHWM vegetated with English Ivy; below OHWM channel lined with cobbles, no erosion observed in channel**

Tributary geometry:

Tributary gradient (approximate average slope): **15- 25%**

(c) Flow:

Tributary provides for: **intermittent flow**

Estimate average number of flow events in review area/year: **20 or more**

Describe flow regime: **see above**

Other information on duration and volume: **The Corps observed that stream was flowing from south to north in the bottom of a narrow steep valley during the site visit. The agent stated that the stream had been flowing during the delineation in July 2014. The agent stated that based on the results of benthic sampling as part of the stream evaluation, using the methods of the North Carolina Division of Water Quality and Fairfax County Department of Public Works and Environmental Services, she determined that the stream was a frequently flowing intermittent stream rather than a perennial stream.**

Surface flow is: **intermittent** Characteristics:

Subsurface flow: **unknown, but assumed to be present considering stream flows more than 48 hours following a rain event;**

Dye (or other) test performed: **N/A.**

Tributary has (check all that apply):

Bed and banks  
 OHWM<sup>7</sup> (check all indicators that apply):  
 clear, natural line impressed on the bank       the presence of litter and debris  
 changes in the character of soil                       destruction of terrestrial vegetation  
 shelving     the presence of wrack line  
 vegetation matted down, bent, or absent               sediment sorting  
 leaf litter disturbed or washed away                   scour  
 sediment deposition     multiple observed or predicted flow events  
 water staining     abrupt change in plant community  
 other (list):  
 Discontinuous OHWM.<sup>8</sup> 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:                       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;

<sup>6</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>7</sup> A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break

<sup>8</sup> Ibid.

- physical markings/characteristics       vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list):

**(iii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  
 Explain: **water generally clear in the stream, but water quality likely impacted by high percentage of impervious surface coverage and managed pervious surface coverage (e.g. lawns) in drainage area**  
 Identify specific pollutants, if known: **unknown**

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

- Riparian corridor. Characteristics (type, average width):  
 Wetland fringe. Characteristics:  
 Habitat for:  
 Federally Listed species. Explain findings:  
 Fish/spawn areas. Explain findings:  
 Other environmentally-sensitive species. Explain findings:  
 Aquatic/wildlife diversity. Explain findings: **Caddisflies found during stream evaluation during delineation by agent**

**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:  
 Surface flow is:  
 Characteristics:  
 Subsurface flow: Explain findings:  
 Dye (or other) test performed:

**(c) Wetland Adjacency Determination with Non-TNW:**

- Directly abutting  
 Not directly abutting  
 Discrete wetland hydrologic connection. Explain:  
 Ecological connection. Explain:  
 Separated by berm/barrier. Explain:

**(d) Proximity (Relationship) to TNW**

Project wetlands are    river miles from TNW.  
 Project wetlands are    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:
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:
  - \* Commerce:
  - \* Navigation:
  - \* Recreation:
  - \* Public Health:
  - \* Groundwater Discharge:
  - \* Groundwater recharge:

### 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: **The stream on site was observed to have well developed stream morphology characteristic of intermittent RPW flow, including the presence of aquatic fauna; flow observed during the Corps site visit at the beginning of the “wet season” and during the “dry season” during the delineation in July 2014; and clear and consistent bed, bank, and ordinary high water mark as indicated by the absence of rooted vegetation within the channel, the absence of debris within the channel, and some scour of the channel.**

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):  
 Other non-wetland waters:        acres.  
Identify type(s) of waters:

3. **Non-RPWs<sup>9</sup> that flow directly or indirectly into TNWs.**

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

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

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

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

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

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

Provide rationale indicating that wetland is directly abutting an RPW:

Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:        Provide acreage estimates for jurisdictional wetlands in the review area:

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

Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. 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 acreage estimates for jurisdictional wetlands in the review area:

7. **Impoundments of jurisdictional waters.<sup>10</sup>**

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

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

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):<sup>11</sup>**

<sup>9</sup>See Footnote # 3.

<sup>10</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>11</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- 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: **W-10, 1,248 square feet**

**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: **ADC vicinity map included in Wetland Studies and Solutions Inc. (WSSI) submission dated 22 July 2013.**
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
  - Corps navigable waters' study:
  - U.S. Geological Survey Hydrologic Atlas:
    - USGS NHD data.
    - USGS 8 and 12 digit HUC maps.
  - U.S. Geological Survey map(s). Cite scale & quad name: **Washington West DC-MD-VA 1983 included in July 2014 Delineation Report;**
  - USDA Natural Resources Conservation Service Soil Survey. Citation: **soil series mapped using District of Columbia Digital Data for project site included in submission dated 22 July 2014.**
  - National wetlands inventory map(s). Cite name: **NWI map of site provided in submission dated 22 July 2014.**
  - State/Local wetland inventory map(s):
  - FEMA/FIRM maps: **panels 1100010011C, effective 9/27/2010 included in submission dated 22 July 2014.**
  - 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

■ Photographs:  Aerial (Name & Date): **Color infrared aerial map of Spring 1994 and natural color imagery dated 2010 included in the submission dated 22 July 2014.**

or  Other (Name & Date): **Photographs included with Delineation Report dated 22 July 2014.**

■ Previous determination(s). File no. and date of response letter:

Applicable/supporting case law:

Applicable/supporting scientific literature:

■ Other information (please specify): **normal and departure from normal precipitation for November 2014 from NOAA NWS (for Corps site visit); NOAA drought Severity Index by Division for the week ending July 5, 2014, and the U.S. Drought Monitor for the District of Columbia dated 08 July 2014 (released 10 July 2014) included with Delineation Report dated 22 July 2014.**

## **B. ADDITIONAL COMMENTS TO SUPPORT JD:**

### **References:**

**NOAA National Weather Service <http://water.weather.gov/precip/> Accessed 03 December 2014.**