

**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): 01 December 2008**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: LRN-2008-01875, Packaging Corporation of America**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:** Campbell Old Mill Road

State: Tennessee

County/parish/borough: Hardin

City: near Counce

Center coordinates of site (lat/long in degree decimal format): Lat. 35.0119° **N**, Long. 88.2954° **W**.

Universal Transverse Mercator:

Name of nearest waterbody: Unnamed Tributary of Battles Branch

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

Name of watershed or Hydrologic Unit Code (HUC): 6040001, Lower Tennessee-Beech

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: 1 December 2008

Field Determination. Date(s):

**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 no** "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:**

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):<sup>3</sup>**

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

Explain: **There is a small ephemeral conveyance present with a small associated wetland, but data and observations show no significant nexus to TNW.**

<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: 2080 square miles

Drainage area: 35 acres

Average annual rainfall: 58.91 inches

Average annual snowfall: 2.9 inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 5-10 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: .

Identify flow route to TNW<sup>5</sup>: Ephemeral conveyance runs approximately 0.1 mile to Battles Branch mile 2.2 L, which flows to Chambers Creek mile 5.2 R which flows to the Tennessee River mile 205.2 L.

<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> 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.

Tributary stream order, if known: Subject Tributary-Battles Branch-Chambers Creek-Tennessee River.

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

**Tributary is:**  Natural  
 Artificial (man-made). Explain: .  
 Manipulated (man-altered). Explain: recent and historic timber practices have possibly altered this conveyance.

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

Average width: 1 feet  
Average depth: 0.5 feet  
Average side slopes: **2:1**.

**Primary tributary substrate composition (check all that apply):**

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover: grasses, 50%  
 Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: partially grass covered on subject property, stable, braided channel near confluence with RPW.

Presence of run/riffle/pool complexes. Explain: none.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Ephemeral flow**

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

Describe flow regime: Evidence indicates that tributary flows only after heavy rain events.

Other information on duration and volume: One observation by the applicant's agent and TDEC personnel indicated a small flow persisting three days after a significant rain event.

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

Subsurface flow: **No**. Explain findings: no observed evidence.

Dye (or other) test performed: .

Tributary has (check all that apply):

Bed and banks  
 OHWM<sup>6</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>7</sup> Explain: .

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;  
 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: .

Identify specific pollutants, if known: .

<sup>6</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>7</sup>Ibid.

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

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

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 0.43 acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain:

Surface flow is: **Discrete**

Characteristics:

Subsurface flow: **Unknown**. Explain findings:

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: The Non-RPW tributary is partially occluded causing water to be slowed or stopped. This has led to a saturation of the soils adjacent to the ephemeral channel resulting in a small area with wetland characteristics but with no significant connection to RPW nor TNW.

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **5-10** river miles from TNW.

Project waters are **5-10** aerial (straight) miles from TNW.

Flow is from: **No Flow**.

Estimate approximate location of wetland as within the **Pick List** 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: Agent's data sheets available upon request.
- 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: **1**

Approximately ( 0.43 ) 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:

### 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: Based on observations, the tributary is ephemeral and flows only in response to heavy rain events. It is near RPW and relatively near TNW, however it does not appear to have the capacity to significantly affect the biological, physical or chemical integrity of downstream waters. There were indications of aquatic insect larvae (stonefly and caddis fly larvae) in the conveyance but no other aquatic fauna were observed in the tributary nor in the small wetland during two site visits. The tributary drains less than 35 acres and did not appear to be influenced by significant ground water. These observations and considerations leads to the conclusion that the characteristics and functions of the non-RPW and its associated wetland do not provide a significant nexus to TNW.
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).
  - Other non-wetland waters:            acres.
- Identify type(s) of waters: .

**3. Non-RPWs<sup>8</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:            linear feet            width (ft).
  - Other non-wetland waters:            acres.
- 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:            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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

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

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

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

**7. Impoundments of jurisdictional waters.<sup>9</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>10</sup>**

- which are or could be used by interstate or foreign travelers for recreational or other purposes.

<sup>8</sup>See Footnote # 3.

<sup>9</sup>To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</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.

- 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: 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 solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: **See III.C.**
- 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): 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): **525** linear feet, **1** width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: 0.43 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: .
- 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: Nashville District Public Notice #86-23, dated May 1986.
- U.S. Geological Survey Hydrologic Atlas: .
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000, Counce, TN.
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): .  
or  Other (Name & Date): July 2008, January 2007 (by agent).
- 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: POC= Scott Fanning, 615-369-7521.**

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

## SECTION I: BACKGROUND INFORMATION

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**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 02-Dec-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-02035-JD1

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee

County/parish/borough: Marion

City: Whitwell

Lat: 35.0885

Long: -85.5512

Universal Transverse Mercator

Folder UTM List

*UTM list determined by folder location*

▶ NAD83 / UTM zone 36S

Waters UTM List

*UTM list determined by waters location*

▶ NAD83 / UTM zone 36S

Name of nearest waterbody: Sequatchie River

Name of nearest Traditional Navigable Water (TNW): Sequatchie River

Name of watershed or Hydrologic Unit Code (HUC):



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date:



14-Nov-2008

Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

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**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There  "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There  "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.****a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	Wetlands directly abutting RPWs that flow directly or indirect

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Area: (m<sup>2</sup>)

Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on:

OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

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

**SECTION III: CWA ANALYSIS****A. TNWs AND WETLANDS ADJACENT TO TNWs****1. TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):****1. Characteristics of non-TNWs that flow directly or indirectly into TNW****(i) General Area Conditions:**

Watershed size:

Drainage area:

Average annual rainfall: inches

Average annual snowfall: inches

**(ii) Physical Characteristics****(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through  tributaries before entering TNW.

:Number of tributaries

Project waters are  river miles from TNW.

Project waters are  river miles from RPW.

Project Waters are [ ] aerial (straight) miles from TNW.

Project waters are [ ] aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

**Tributary Stream Order, if known:**

Not Applicable.

**(b) General Tributary Characteristics:**

**Tributary is:**

Not Applicable.

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

Not Applicable.

**Primary tributary substrate composition:**

Not Applicable.

**Tributary (conditions, stability, presence, geometry, gradient):**

Not Applicable.

**(c) Flow:**

Not Applicable.

**Surface Flow is:**

Not Applicable.

**Subsurface Flow:**

Not Applicable.

**Tributary has:**

Not Applicable.

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:**

**High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Not Applicable.

**(iv) Biological Characteristics. Channel supports:**

Not Applicable.

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW****(i) Physical Characteristics:****(a) General Wetland Characteristics:****Properties:**

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Bou
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	22.5	Forested	-	-

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

Wetland Name	Flow
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	Perennial flow.

**Surface flow is:**

Wetland Name	Flow	Characteristics
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	Discrete and confined	Manmade ditch connected to two springs and roadway

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	Unknown	-	

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

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	Yes	-	-

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

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	W
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	1 (or less)	1 (or less)	Wetland to navigable waters	50

**(ii) Chemical Characteristics:****Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics)**

Wetland Name	Explain	Identify specific pollutants
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	-	-

**(iii) Biological Characteristics. Wetland supports:**

Wetland Name	Riparian Buffer	Characteristics	Vegetat
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	X	-	-

**3. Characteristics of all wetlands adjacent to the tributary (if any):****All wetlands being considered in the cumulative analysis:**

Not Applicable.

**Summarize overall biological, chemical and physical functions being performed:**

Not Applicable.

## 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.

**Significant Nexus:** Not Applicable

## D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

### 1. TNWs and Adjacent Wetlands:

Not Applicable.

### 2. RPWs that flow directly or indirectly into TNWs:

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

### 3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

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

Wetland Name	Flow
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	PERENNIAL

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Wetland Name	Type	Size (Linear) (m)
LRN-2008-02035, Sequatchie Valley Wetland Mitigation Site	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-
<b>Total:</b>		<b>0</b>

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

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

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

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**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:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS**

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):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**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.**

Not Applicable.

**SECTION IV: DATA SOURCES.****A. SUPPORTING DATA. Data reviewed for JD**

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	-	-

---Office concurs with data sheets/delineation report	-	-
--Corps navigable waters study	-	-
--National wetlands inventory map(s).	-	-

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

Not Applicable.

<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.

<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>-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>6</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>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</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.

**APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers**

**SECTION I: BACKGROUND INFORMATION**

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**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 11-Jun-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-02032-JD1

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Hancock  
City: Rogersville  
Lat: 36.52866  
Long: -83.38059  
Universal Transverse Mercator: Folder UTM List  
*UTM list determined by folder location*  
    . NAD83 / UTM zone 37S  
Waters UTM List  
*UTM list determined by waters location*  
    . NAD83 / UTM zone 37S  
Name of nearest waterbody: Little Mulberry Creek  
Name of nearest Traditional Navigable Water (TNW): Powell River  
Name of watershed or Hydrologic Unit Code (HUC): 06010206

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 the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**

Office Determination Date: 11-Jun-2008

Field Determination Date  
(s):

## SECTION II: SUMMARY OF FINDINGS

---

### A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There  "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

### B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There  "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

#### 1. Waters of the U.S.

##### a. Indicate presence of waters of U.S. in review area:<sup>1</sup>

Water Name	Water Type(s) Present
LRN 2008-02032	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

##### b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m<sup>2</sup>)

Linear: (m)

##### c. Limits (boundaries) of jurisdiction:

based on:

OHWL Elevation: (if known)

#### 2. Non-regulated waters/wetlands:<sup>3</sup>

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

## SECTION III: CWA ANALYSIS

---

### A. TNWs AND WETLANDS ADJACENT TO TNWs

**1.TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

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

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

**(i) General Area Conditions:**

Watershed size: [ ]

Drainage area: [ ]

Average annual rainfall: inches

Average annual snowfall: inches

**(ii) Physical Characteristics**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are [ ] river miles from TNW.

Project waters are [ ] river miles from RPW.

Project Waters are [ ] aerial (straight) miles from TNW.

Project waters are [ ] aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

**Tributary Stream Order, if known:**

Order	Tributary Name
3	LRN 2008-02032

**(b) General Tributary Characteristics:**

Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
LRN 2008-02032	X	-	-	-	-

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
LRN 2008-02032	5	1	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
LRN 2008-02032	X	-	-	X	-	-	X	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
LRN 2008-02032	Relatively stable at this location	Approximately 30% of channel contains riffle/pool complexes	Meandering	-

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
LRN 2008-02032	Perennial flow	20 (or greater)	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
LRN 2008-02032	Discrete and confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
LRN 2008-02032	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWL	Discontinuous OHWM <sup>7</sup>	Explain
LRN 2008-02032	X	X	-	-

**Tributaries with OHWM<sup>6</sup> - (as indicated above)**

Tributary Name	OHWL	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow Events	Water Staining	Changes Plant	Other
LRN 2008-02032	X	X	-	X	X	-	-	X	-	-	-	-	-	-	-	-

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:****High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Tributary Name	Explain	Identify specific pollutants, if known
LRN 2008-02032	Water color is clear	Unknown

**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
LRN 2008-02032	-	-	-	-	-

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW****(i) Physical Characteristics:****(a) General Wetland Characteristics:****Properties:**

Not Applicable.

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

Not Applicable.

**Surface flow is:**

Not Applicable.

**Subsurface flow:**

Not Applicable.

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

Not Applicable.

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

Not Applicable.

**(ii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Not Applicable.

**(iii) Biological Characteristics. Wetland supports:**

Not Applicable.

**3. Characteristics of all wetlands adjacent to the tributary (if any):****All wetlands being considered in the cumulative analysis:**

Not Applicable.

**Summarize overall biological, chemical and physical functions being performed:**

Not Applicable.

**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.

**Significant Nexus:** Not Applicable**D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/ WETLANDS ARE:****1. TNWs and Adjacent Wetlands:**

Not Applicable.

**2. RPWs that flow directly or indirectly into TNWs:**

Wetland Name	Flow	Explain
LRN 2008-02032	PERENNIAL	Steady flow is present year round

**Provide estimates for jurisdictional waters in the review area:**

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
LRN 2008-02032	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	3.048	-
<b>Total:</b>		<b>3.048</b>	<b>0</b>

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

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

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

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

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

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

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**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:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

## F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

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):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**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.**

Not Applicable.

## SECTION IV: DATA SOURCES.

---

### A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Not Applicable.

### B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

- 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.
- 4-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
- 5-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
- 6-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
- 7-Ibid.
- 8-See Footnote #3.
- 9 -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
- 10-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers**

**SECTION I: BACKGROUND INFORMATION**

---

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 06-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-02029-JD1

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Johnson  
City: Mountain City  
Lat: 36.43023  
Long: -81.80936  
Universal Transverse Mercator: Folder UTM List  
*UTM list determined by folder location*  
    . NAD83 / UTM zone 37S  
Waters UTM List  
*UTM list determined by waters location*  
    . NAD83 / UTM zone 37S  
Name of nearest waterbody: Roan Creek  
Name of nearest Traditional Navigable Water (TNW): Watauga River  
Name of watershed or Hydrologic Unit Code (HUC): 06010103

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 the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**

Office Determination Date: 06-Nov-2008

Field Determination Date  
(s):

## SECTION II: SUMMARY OF FINDINGS

---

### A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There  "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

### B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There  "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

#### 1. Waters of the U.S.

##### a. Indicate presence of waters of U.S. in review area:<sup>1</sup>

Water Name	Water Type(s) Present
LRN 2008-02029; John V. Wills	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

##### b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m<sup>2</sup>)

Linear: (m)

##### c. Limits (boundaries) of jurisdiction:

based on:

OHWL Elevation: (if known)

#### 2. Non-regulated waters/wetlands:<sup>3</sup>

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

## SECTION III: CWA ANALYSIS

---

### A. TNWs AND WETLANDS ADJACENT TO TNWs

**1.TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

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

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

**(i) General Area Conditions:**

Watershed size: [ ]

Drainage area: [ ]

Average annual rainfall: inches

Average annual snowfall: inches

**(ii) Physical Characteristics**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are [ ] river miles from TNW.

Project waters are [ ] river miles from RPW.

Project Waters are [ ] aerial (straight) miles from TNW.

Project waters are [ ] aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

**Tributary Stream Order, if known:**

Order	Tributary Name
3	LRN 2008-02029; John V. Wills

**(b) General Tributary Characteristics:**

**Tributary is:**

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
LRN 2008-02029; John V. Wills	X	-	-	-	-

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
LRN 2008-02029; John V. Wills	50	6	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
LRN 2008-02029; John V. Wills	X	-	-	X	-	-	X	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition/Stability	Run/Riffle/Pool Complexes	Geometry	Gradient (%)
LRN 2008-02029; John V. Wills	Highly eroding in this particular area	Approximately 10% of this stream channel contains riffle/pool complexes	Meandering	-

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
LRN 2008-02029; John V. Wills	Perennial flow	20 (or greater)	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
LRN 2008-02029; John V. Wills	Discrete and confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
LRN 2008-02029; John V. Wills	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
LRN 2008-02029; John V. Wills	X	X	-	-

**Tributaries with OHWM<sup>6</sup> - (as indicated above)**

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted/Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow Events	Water Staining	Changes Plant	Other
LRN 2008-02029; John V. Wills	X	X	-	-	X	-	-	X	-	X	X	-	-	-	-	-

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:****High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Tributary Name	Explain	Identify specific pollutants, if known
LRN 2008-02029; John V. Wills	Water color is murky due to erosion, otherwise generally clean	Sediment

**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
LRN 2008-02029; John V. Wills	-	-	-	-	-

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW****(i) Physical Characteristics:****(a) General Wetland Characteristics:****Properties:**

Not Applicable.

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

Not Applicable.

**Surface flow is:**

Not Applicable.

**Subsurface flow:**

Not Applicable.

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

Not Applicable.

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

Not Applicable.

**(ii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Not Applicable.

**(iii) Biological Characteristics. Wetland supports:**

Not Applicable.

**3. Characteristics of all wetlands adjacent to the tributary (if any):****All wetlands being considered in the cumulative analysis:**

Not Applicable.

**Summarize overall biological, chemical and physical functions being performed:**

Not Applicable.

**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.

Significant Nexus: Not Applicable

**D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/ WETLANDS ARE:****1. TNWs and Adjacent Wetlands:**

Not Applicable.

**2. RPWs that flow directly or indirectly into TNWs:**

Wetland Name	Flow	Explain
LRN 2008-02029; John V. Wills	PERENNIAL	Steady flow is present year round

**Provide estimates for jurisdictional waters in the review area:**

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
LRN 2008-02029; John V. Wills	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	91.44	-
<b>Total:</b>		<b>91.44</b>	<b>0</b>

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

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

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

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

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

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

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**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:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

## F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

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):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**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.**

Not Applicable.

## SECTION IV: DATA SOURCES.

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### A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Not Applicable.

### B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

- 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.
- 4-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
- 5-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
- 6-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
- 7-Ibid.
- 8-See Footnote #3.
- 9 -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
- 10-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers**

**SECTION I: BACKGROUND INFORMATION**

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**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 08-Oct-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01605-JD1

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Hawkins  
City: Rogersville  
Lat: 36.40856  
Long: -83.04468  
Universal Transverse Mercator: Folder UTM List  
*UTM list determined by folder location*  
    . NAD83 / UTM zone 37S  
Waters UTM List  
*UTM list determined by waters location*  
    . NAD83 / UTM zone 37S  
Name of nearest waterbody: Caney Creek  
Name of nearest Traditional Navigable Water (TNW): Holston River  
Name of watershed or Hydrologic Unit Code (HUC): 06010104

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 the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**

Office Determination Date: 30-Sep-2008

Field Determination Date

(s):

**SECTION II: SUMMARY OF FINDINGS****A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There  "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There  "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.****a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
LRN 2008-01605; Earl Horton	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Area: (m<sup>2</sup>)

Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on:

OHWL Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

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

**SECTION III: CWA ANALYSIS****A. TNWs AND WETLANDS ADJACENT TO TNWs**

**1.TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

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

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

**(i) General Area Conditions:**

Watershed size: 990 square miles  
 Drainage area: 141 acres  
 Average annual rainfall: 33.35 inches  
 Average annual snowfall: 2.5 inches

**(ii) Physical Characteristics**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are 2-5 river miles from TNW.

Project waters are 1 (or less) 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 TNW:<sup>5</sup>

Unnamed Tributary to Caney Creek to Holston River

**Tributary Stream Order, if known:**

Order	Tributary Name
1	LRN 2008-01605; Earl Horton

**(b) General Tributary Characteristics:****Tributary is:**

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
LRN 2008-01605; Earl Horton	X	-	-	-	-

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
LRN 2008-01605; Earl Horton	3	1	2:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
LRN 2008-01605; Earl Horton	X	-	-	X	X	-	-	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
LRN 2008-01605; Earl Horton	Fairly stable at this location with occasional bank sloughing	None	Meandering	-

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
LRN 2008-01605; Earl Horton	Seasonal flow	20 (or greater)	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
LRN 2008-01605; Earl Horton	Discrete and confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
LRN 2008-01605; Earl Horton	Unknown	Channel is perennial upstream and downstream from this site, therefore potential for subsurface flow	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWL	Discontinuous OHWL <sup>7</sup>	Explain
LRN 2008-01605; Earl Horton	X	X	-	-

**Tributaries with OHWM<sup>6</sup> - (as indicated above)**

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted/Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow Events	Water Staining	Changes Plant	Other
LRN 2008-01605; Earl Horton	X	X	X	-	X	-	-	X	-	-	X	-	-	-	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

**High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known
LRN 2008-01605; Earl Horton	No water present at inspection, watershed is primarily used for agriculture	Unknown

**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
LRN 2008-01605; Earl Horton	X	30-40', privet	-	-	-

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

**(i) Physical Characteristics:**

**(a) General Wetland Characteristics:**

**Properties:**

Not Applicable.

**(b) General Flow Relationship with Non-TNW:**

**Flow is:**

Not Applicable.

**Surface flow is:**

Not Applicable.

**Subsurface flow:**

Not Applicable.

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

Not Applicable.

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

Not Applicable.

**(ii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Not Applicable.

**(iii) Biological Characteristics. Wetland supports:**

Not Applicable.

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

**All wetlands being considered in the cumulative analysis:**

Not Applicable.

**Summarize overall biological, chemical and physical functions being performed:**

Not Applicable.

## **C. SIGNIFICANT NEXUS DETERMINATION**

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**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.**

**Findings for:** LRN 2008-01605; Earl Horton

Presence of significant nexus is confirmed due to ability to transport pollutants from project site to TNW.

## **D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/ WETLANDS ARE:**

---

**1. TNWs and Adjacent Wetlands:**

Not Applicable.

**2. RPWs that flow directly or indirectly into TNWs:**

Wetland Name	Flow	Explain
LRN 2008-01605; Earl Horton	SEASONAL	Channel is dry during the summer months

**Provide estimates for jurisdictional waters in the review area:**

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
LRN 2008-01605; Earl Horton	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	60.96	-
<b>Total:</b>		<b>60.96</b>	<b>0</b>

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

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

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

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

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

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

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**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:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS**

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):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**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.**

Not Applicable.

**SECTION IV: DATA SOURCES.**

---

**A. SUPPORTING DATA. Data reviewed for JD**

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Not Applicable.

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

Not Applicable.

- 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.
- 4-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
- 5-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
- 6-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
- 7-Ibid.
- 8-See Footnote #3.
- 9 -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
- 10-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers**

**SECTION I: BACKGROUND INFORMATION**

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**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 02-Dec-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-02068-JD1

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : TN - Tennessee  
County/parish/borough: Knox  
City: Corryton  
Lat: 36.13062  
Long: -83.78671  
Universal Transverse Mercator: Folder UTM List  
*UTM list determined by folder location*  
    . NAD83 / UTM zone 37S  
Waters UTM List  
*UTM list determined by waters location*  
    . NAD83 / UTM zone 37S  
Name of nearest waterbody: Little Flat Creek  
Name of nearest Traditional Navigable Water (TNW): Holston River  
Name of watershed or Hydrologic Unit Code (HUC): 06010104

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 the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**

Office Determination Date: 03-Dec-2008

02-Dec-2008

Field Determination Date

(s):

## SECTION II: SUMMARY OF FINDINGS

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### A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There  "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

### B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There  "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

#### 1. Waters of the U.S.

##### a. Indicate presence of waters of U.S. in review area:<sup>1</sup>

Water Name	Water Type(s) Present
LRN 2008-02068; James Thompson	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

##### b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m<sup>2</sup>)

Linear: (m)

##### c. Limits (boundaries) of jurisdiction:

based on:

OHWL Elevation: (if known)

#### 2. Non-regulated waters/wetlands:<sup>3</sup>

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

## SECTION III: CWA ANALYSIS

---

### A. TNWs AND WETLANDS ADJACENT TO TNWs

**1.TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

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

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

**(i) General Area Conditions:**

Watershed size: [ ]

Drainage area: [ ]

Average annual rainfall: inches

Average annual snowfall: inches

**(ii) Physical Characteristics**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are [ ] river miles from TNW.

Project waters are [ ] river miles from RPW.

Project Waters are [ ] aerial (straight) miles from TNW.

Project waters are [ ] aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

**Tributary Stream Order, if known:**

Order	Tributary Name
3	LRN 2008-02068; James Thompson

**(b) General Tributary Characteristics:**

**Tributary is:**

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
LRN 2008-02068; James Thompson	X	-	-	-	-

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
LRN 2008-02068; James Thompson	6	2	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
LRN 2008-02068; James Thompson	X	-	-	X	-	-	X	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
LRN 2008-02068; James Thompson	Fairly stable at this location	Occurs in approximately 15% of the channel	Meandering	-

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
LRN 2008-02068; James Thompson	Perennial flow	20 (or greater)	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
LRN 2008-02068; James Thompson	Discrete and confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
LRN 2008-02068; James Thompson	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWL	Discontinuous OHWM <sup>7</sup>	Explain
LRN 2008-02068; James Thompson	X	X	-	-

**Tributaries with OHWM<sup>6</sup> - (as indicated above)**

Tributary Name	OHWL	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow Events	Water Staining	Changes Plant	Other
LRN 2008-02068; James Thompson	X	X	X	-	X	-	-	X	-	-	X	-	-	-	-	-

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:****High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Tributary Name	Explain	Identify specific pollutants, if known
LRN 2008-02068; James Thompson	Generally clear	Unknown

**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
LRN 2008-02068; James Thompson	-	-	-	-	-

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW****(i) Physical Characteristics:****(a) General Wetland Characteristics:****Properties:**

Not Applicable.

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

Not Applicable.

**Surface flow is:**

Not Applicable.

**Subsurface flow:**

Not Applicable.

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

Not Applicable.

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

Not Applicable.

**(ii) Chemical Characteristics:**

**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Not Applicable.

**(iii) Biological Characteristics. Wetland supports:**

Not Applicable.

**3. Characteristics of all wetlands adjacent to the tributary (if any):****All wetlands being considered in the cumulative analysis:**

Not Applicable.

**Summarize overall biological, chemical and physical functions being performed:**

Not Applicable.

**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.

**Significant Nexus:** Not Applicable**D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/ WETLANDS ARE:****1. TNWs and Adjacent Wetlands:**

Not Applicable.

**2. RPWs that flow directly or indirectly into TNWs:**

Wetland Name	Flow	Explain
LRN 2008-02068; James Thompson	PERENNIAL	Steady flow is present year round

**Provide estimates for jurisdictional waters in the review area:**

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
LRN 2008-02068; James Thompson	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	121.92	-
<b>Total:</b>		<b>121.92</b>	<b>0</b>

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

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

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

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

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

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

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**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:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

## F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

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):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**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.**

Not Applicable.

## SECTION IV: DATA SOURCES.

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### A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Not Applicable.

### B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

- 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.
- 4-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
- 5-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
- 6-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
- 7-Ibid.
- 8-See Footnote #3.
- 9 -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
- 10-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.