

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

## SECTION I: BACKGROUND INFORMATION

---

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 24-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-01998-JD1

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

State : AL - Alabama  
 County/parish/borough: Madison  
 City: Huntsville  
 Lat:  
 Long:  
 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: Unnamed Tributary of Sherwood Creek  
 Name of nearest Traditional Navigable Water (TNW): Wheeler Lake  
 Name of watershed or Hydrologic Unit Code (HUC): 6030002

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: 24-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
Uplands	Uplands

**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. Explain: Hydric soils indicated on NRCS soil survey but site visit revealed no wetlands present.

**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:**

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:**

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.**

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):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
--Corps navigable waters study	-	Nashville District Public Notice #86-23, dated 8 May 1986.
--U.S. Geological Survey map(s).	-	1:24,000, Jeff, AL
--USDA Natural Resources Conservation Service Soil Survey.	-	-
--FEMA/FIRM maps	-	-

**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):** 07-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-00727-JD9

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

State : TN - Tennessee  
County/parish/borough: Cumberland  
City:  
Lat: 35.882765835594  
Long: -84.7517959015913  
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: Laurel Branch  
Name of nearest Traditional Navigable Water (TNW): Tennessee River  
Name of watershed or Hydrologic Unit Code (HUC): 6010201

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: 13-Nov-2008

Field Determination Date(s):  06-Nov-2008

**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
------------	-----------------------

200800727: Trib Laurel E	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200800727: WL T	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL U	Wetlands directly abutting 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: [ ]

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. 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: 1340 square miles

Drainage area: 90 acres

Average annual rainfall: 39 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 15-20 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>

Unnamed tributary to Laurel Branch, to Piney Creek, to Whites Creek to Tennessee River (Watts Bar Lake)

**Tributary Stream Order, if known:**

Order	Tributary Name
1	200800727: Trib Laurel E

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

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200800727: Trib Laurel E	-	-	-	X	Interstate 40 construction

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200800727: Trib Laurel E	3	1	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200800727: Trib Laurel E	-	X	-	-	-	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200800727: Trib Laurel E	-	-	Relatively straight	2

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200800727: Trib Laurel E	Seasonal flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200800727: Trib Laurel E	Overland sheetflow	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: Trib Laurel E	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200800727: Trib Laurel E	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
200800727: Trib Laurel E	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
200800727: Trib Laurel E	No flow at time of inspection	-

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

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200800727: Trib Laurel E	-	-	X	-	-

**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 Boundaries. Explain
200800727: WL T	.03	scrub/shrub	-	-
200800727: WL U	.41	scrub/shrub	-	-

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

**Flow is:**

Wetland Name	Flow	Explain
200800727: WL T	Intermittent flow.	-
200800727: WL U	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200800727: WL T	-	-
200800727: WL U	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: WL T	Unknown	-	-
200800727: WL U	Unknown	-	-

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

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200800727: WL T	Yes	-	-	-
200800727: WL U	Yes	-	-	-

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

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200800727: WL T	15-20	2-5	Wetland to navigable waters	-
200800727: WL U	15-20	5-10	Navigable waters to wetland	-

**(ii) Chemical Characteristics:**

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

Wetland Name	Explain	Identify specific pollutants, if known
200800727: WL T	-	-
200800727: WL U	-	-

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

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
--------------	-----------------	-----------------	------------	---------

200800727: WL T	-	-	X	-
200800727: WL U	-	-	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.

Findings for: 200800727: Trib Laurel E, 200800727: WL T, 200800727: WL U

Wetland abuts tributary, which provides a direct conduit for any pollutants or fill to reach TNW. Wetland is part of headwater complex for Laurel Branch.

**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
200800727: Trib Laurel E	SEASONAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: Trib Laurel E	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	228.6	-
<b>Total:</b>		<b>228.6</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.**

Wetland Name	Flow	Explain
200800727: WL T	SEASONAL	-
200800727: WL U	SEASONAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: WL T	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	121.40568
200800727: WL U	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	1659.21096

<b>Total:</b>		<b>0</b>	<b>1780.61664</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 Description
--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	S&ME, Inc 13-Oct-2008	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Ozone, Tennessee quad	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 6-Nov-2008	-

**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**

---

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 07-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-00727-JD8

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

State : TN - Tennessee  
County/parish/borough: Cumberland  
City:  
Lat: 35.882765835594  
Long: -84.7517959015913  
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: Laurel Branch  
Name of nearest Traditional Navigable Water (TNW): Tennessee River  
Name of watershed or Hydrologic Unit Code (HUC): 6010201

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: 13-Nov-2008

Field Determination Date(s):  06-Nov-2008

**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
------------	-----------------------

200800727: Laurel Branch	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200800727: WL O	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL P	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL Q	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL R	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL S	Wetlands directly abutting 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: [ ]  
 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. 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
-	200800727: Laurel Branch

**(b) General Tributary Characteristics:**

**Tributary is:**

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200800727: Laurel Branch	-	-	-	X	historic mining activity, and impacts from road and interstate construction

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200800727: Laurel Branch	6	2	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200800727: Laurel Branch	-	X	-	X	X	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200800727: Laurel Branch	-	-	Meandering	2

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200800727: Laurel Branch	Perennial flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200800727: Laurel Branch	Confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: Laurel Branch	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200800727: Laurel Branch	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
200800727: Laurel Branch	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
200800727: Laurel Branch	Clear at time of inspection	unknown

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

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200800727: Laurel Branch	-	-	X	-	-

**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 Boundaries. Explain
200800727: WL O	1.03	emergent	-	-
200800727: WL P	.14	scrub/shrub	-	-
200800727: WL Q	.14	scrub/shrub	-	-
200800727: WL R	.1	scrub/shrub	-	-
200800727: WL S	.44	scrub/shrub	-	-

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

**Flow is:**

Wetland Name	Flow	Explain
200800727: WL O	Intermittent flow.	-
200800727: WL P	Intermittent flow.	-
200800727: WL Q	Intermittent flow.	-
200800727: WL R	Intermittent flow.	-
200800727: WL S	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200800727: WL O	-	-
200800727: WL P	Overland sheetflow	-
200800727: WL Q	Overland sheetflow	-
200800727: WL R	Overland sheetflow	-
200800727: WL S	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: WL O	-	-	-
200800727: WL P	-	-	-
200800727: WL Q	Unknown	-	-
200800727: WL R	Unknown	-	-
200800727: WL S	-	-	-

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

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200800727: WL O	Yes	-	-	-

200800727: WL P	Yes	-	-	-
200800727: WL Q	Yes	-	-	-
200800727: WL R	Yes	-	-	-
200800727: WL S	Yes	-	-	-

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

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200800727: WL O	15-20	5-10	-	-
200800727: WL P	15-20	5-10	Wetland to navigable waters	-
200800727: WL Q	15-20	5-10	-	-
200800727: WL R	15-20	5-10	Wetland to navigable waters	-
200800727: WL S	15-20	5-10	Wetland to navigable waters	-

**(ii) Chemical Characteristics:**

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

Wetland Name	Explain	Identify specific pollutants, if known
200800727: WL O	-	-
200800727: WL P	-	-
200800727: WL Q	-	-
200800727: WL R	-	-
200800727: WL S	-	-

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

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200800727: WL O	-	-	-	-
200800727: WL P	-	-	-	-
200800727: WL Q	-	-	-	-
200800727: WL R	-	-	-	-
200800727: WL S	-	-	-	-

**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
200800727: Laurel Branch	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: Laurel Branch	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	1524	-
<b>Total:</b>		<b>1524</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.**

Wetland Name	Flow	Explain
200800727: WL O	SEASONAL	-
200800727: WL P	PERENNIAL	-
200800727: WL Q	PERENNIAL	-
200800727: WL R	PERENNIAL	-
200800727: WL S	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: WL O	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	4168.26168
200800727: WL P	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	566.55984
200800727: WL Q	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	566.55984
200800727: WL R	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	404.6856
200800727: WL S	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	1780.61664
<b>Total:</b>		<b>0</b>	<b>7486.6836</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 Description
--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	13-Oct-2008	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Ozone, Tennessee quad	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 06-Nov-2008	-

**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**

---

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 07-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-00727-JD7

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

State : TN - Tennessee  
County/parish/borough: Cumberland  
City:  
Lat: 35.882765835594  
Long: -84.7517959015913  
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: Laurel Branch  
Name of nearest Traditional Navigable Water (TNW): Tennessee River  
Name of watershed or Hydrologic Unit Code (HUC): 6010201

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: 13-Nov-2008

Field Determination Date(s):  06-Nov-2008

**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
------------	-----------------------

200800727: Trib Laurel A	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200800727: WL I	Wetlands directly abutting 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: [ ]  
 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. 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
1	200800727: Trib Laurel A

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

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200800727: Trib Laurel A	-	-	-	X	historic mine related activity

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200800727: Trib Laurel A	3	1	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200800727: Trib Laurel A	X	X	-	-	X	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200800727: Trib Laurel A	-	-	Meandering	2

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200800727: Trib Laurel A	Perennial flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200800727: Trib Laurel A	Confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: Trib Laurel A	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200800727: Trib Laurel A	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
200800727: Trib Laurel A	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

200800727: Trib Laurel A	clear at time of inspection	unknown
--------------------------	-----------------------------	---------

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

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200800727: Trib Laurel A	-	-	-	-	-

**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 Boundaries. Explain
200800727: WL I	2.59	scrub/shrub	-	-

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

**Flow is:**

Wetland Name	Flow	Explain
200800727: WL I	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200800727: WL I	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: WL I	-	-	-

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

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200800727: WL I	Yes	-	-	-

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

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200800727: WL I	15-20	5-10	Wetland to navigable waters	-

**(ii) Chemical Characteristics:**

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

Wetland Name	Explain	Identify specific pollutants, if known
200800727: WL I	-	unknown

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

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200800727: WL I	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:

Wetland Name	Flow	Explain
200800727: Trib Laurel A	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: Trib Laurel A	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	822.96	-
<b>Total:</b>		<b>822.96</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.

Wetland Name	Flow	Explain
200800727: WL I	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: WL I	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	10481.35704
<b>Total:</b>		<b>0</b>	<b>10481.35704</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 Description
--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	S&ME, Inc 13-Oct-2008	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	-	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 6-Nov-2008	-

**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**

---

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 07-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-00727-JD6

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

State : TN - Tennessee  
County/parish/borough: Cumberland  
City:  
Lat: 35.882765835594  
Long: -84.7517959015913  
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: Laurel Branch  
Name of nearest Traditional Navigable Water (TNW): Tennessee River  
Name of watershed or Hydrologic Unit Code (HUC): 6010201

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: 13-Nov-2008

Field Determination Date(s):  06-Nov-2008

**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
------------	-----------------------

200800727: Trib Laurel C	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200800727: WL G	Wetlands directly abutting 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: [ ]  
 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. 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
1	200800727: Trib Laurel C

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

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200800727: Trib Laurel C	-	-	-	X	historic Mine related activity

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200800727: Trib Laurel C	3	1	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200800727: Trib Laurel C	X	X	-	-	X	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200800727: Trib Laurel C	-	-	Relatively straight	2

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200800727: Trib Laurel C	Perennial flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200800727: Trib Laurel C	Confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: Trib Laurel C	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200800727: Trib Laurel C	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
200800727: Trib Laurel C	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

200800727: Trib Laurel C	Clear at time of inspection	unknown
--------------------------	-----------------------------	---------

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

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200800727: Trib Laurel C	-	-	-	-	-

**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 Boundaries. Explain
200800727: WL G	2.03	scrub/shrub	-	-

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

**Flow is:**

Wetland Name	Flow	Explain
200800727: WL G	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200800727: WL G	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: WL G	Unknown	-	-

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

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200800727: WL G	Yes	-	-	-

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

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200800727: WL G	15-20	5-10	Wetland to navigable waters	-

**(ii) Chemical Characteristics:**

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

Wetland Name	Explain	Identify specific pollutants, if known
200800727: WL G	-	-

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

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200800727: WL G	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:

Wetland Name	Flow	Explain
200800727: Trib Laurel C	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: Trib Laurel C	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	365.76	-
<b>Total:</b>		<b>365.76</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.

Wetland Name	Flow	Explain
200800727: WL G	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: WL G	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	8215.11768
<b>Total:</b>		<b>0</b>	<b>8215.11768</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 Description
--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	S&ME, Inc 13-Oct-2008	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Ozone, Tennessee quad	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 2008-Nov-6	-

**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**

---

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 07-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-00727-JD5

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

State : TN - Tennessee  
County/parish/borough: Cumberland  
City:  
Lat: 35.882765835594  
Long: -84.7517959015913  
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: Laurel Branch  
Name of nearest Traditional Navigable Water (TNW): Tennessee River  
Name of watershed or Hydrologic Unit Code (HUC): 6010201

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: 13-Nov-2008

Field Determination Date(s):  06-Nov-2008

**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
------------	-----------------------

200800727: Trib Laurel B	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200800727: WL F	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL H	Wetlands directly abutting 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
1	200800727: Trib Laurel B

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

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200800727: Trib Laurel B	-	-	-	X	historic mine related activity

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200800727: Trib Laurel B	2	1	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200800727: Trib Laurel B	X	X	-	-	X	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200800727: Trib Laurel B	-	-	Relatively straight	2

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200800727: Trib Laurel B	Perennial flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200800727: Trib Laurel B	Confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: Trib Laurel B	-	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200800727: Trib Laurel B	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
200800727: Trib Laurel B	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

200800727: Trib Laurel B	Clear at time of inspection	unknown
--------------------------	-----------------------------	---------

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

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200800727: Trib Laurel B	-	-	-	-	-

**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 Boundaries. Explain
200800727: WL F	5.01	scrub/shrub	-	-
200800727: WL H	.38	scrub/shrub	-	-

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

**Flow is:**

Wetland Name	Flow	Explain
200800727: WL F	Intermittent flow.	-
200800727: WL H	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200800727: WL F	Overland sheetflow	-
200800727: WL H	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: WL F	Unknown	-	-
200800727: WL H	Unknown	-	-

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

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200800727: WL F	Yes	-	-	-
200800727: WL H	Yes	-	-	-

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

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200800727: WL F	15-20	5-10	Wetland to navigable waters	-
200800727: WL H	15-20	5-10	Wetland to navigable waters	-

**(ii) Chemical Characteristics:**

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

Wetland Name	Explain	Identify specific pollutants, if known
200800727: WL F	-	-
200800727: WL H	-	-

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

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200800727: WL F	X	-	-	-

200800727: WL H	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:**

Wetland Name	Flow	Explain
200800727: Trib Laurel B	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: Trib Laurel B	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	1219.2	-
<b>Total:</b>		<b>1219.2</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.**

Wetland Name	Flow	Explain
200800727: WL F	SEASONAL	-
200800727: WL H	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: WL F	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	20274.74856
200800727: WL H	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	1537.80528
<b>Total:</b>		<b>0</b>	<b>21812.55384</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 Description
---------------	--------------	--------------------

--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	S&ME, Inc 13-Oct-2008	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
---USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Ozone, Tennessee quad	-
--Photographs	-	-
---Aerial	ORM2	-
---Other	COE 6-Nov-2008	-

**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**

---

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 07-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-00727-JD4

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

State : TN - Tennessee

County/parish/borough: Cumberland

City:

Lat: 35.882765835594

Long: -84.7517959015913

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: Laurel Branch

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

Name of watershed or Hydrologic Unit Code (HUC): 6010201

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: 13-Nov-2008

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
200800727: King Br	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200800727: WL B	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL C	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL D	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL E	Wetlands directly abutting 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:

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. 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
1	200800727: King Br

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

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200800727: King Br	-	-	-	X	impacted by historic mining

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200800727: King Br	4	2	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200800727: King Br	X	X	-	X	-	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200800727: King Br	stable	-	Relatively straight	2

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200800727: King Br	Perennial flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200800727: King Br	Confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: King Br	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200800727: King Br	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
200800727: King Br	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
200800727: King Br	clear at time of inspection	-

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

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200800727: King Br	X	-	X	-	-

**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 Boundaries. Explain
200800727: WL B	.52	Scrub/Shrub	-	-
200800727: WL C	.7	scrub/shrub	-	-
200800727: WL D	.64	scrub/shrub	-	-
200800727: WL E	.1	Scrub/Shrub	-	-

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

**Flow is:**

Wetland Name	Flow	Explain
200800727: WL B	Intermittent flow.	-
200800727: WL C	Intermittent flow.	-
200800727: WL D	Intermittent flow.	-
200800727: WL E	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200800727: WL B	Overland sheetflow	-
200800727: WL C	-	-
200800727: WL D	Overland sheetflow	-
200800727: WL E	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: WL B	Unknown	-	-
200800727: WL C	Unknown	-	-
200800727: WL D	No	-	-
200800727: WL E	Unknown	-	-

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

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200800727: WL B	Yes	-	-	-
200800727: WL C	Yes	-	-	-
200800727: WL D	Yes	-	-	-
200800727: WL E	Yes	-	-	-

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

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200800727: WL B	15-20	5-10	Wetland to navigable waters	-
200800727: WL C	15-20	5-10	Wetland to navigable waters	-
200800727: WL D	15-20	10-15	Wetland to navigable waters	-
200800727: WL E	15-20	5-10	-	-

**(ii) Chemical Characteristics:**

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

Wetland Name	Explain	Identify specific pollutants, if known
200800727: WL B	-	-
200800727: WL C	-	-
200800727: WL D	-	-
200800727: WL E	-	-

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

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200800727: WL B	X	-	X	-
200800727: WL C	X	-	X	-
200800727: WL D	-	-	-	-
200800727: WL E	-	-	-	-

**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
200800727: King Br	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: King Br	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	670.56	-
<b>Total:</b>		<b>670.56</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.**

Wetland Name	Flow	Explain
200800727: WL C	PERENNIAL	-
200800727: WL E	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: WL B	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	2104.36512
200800727: WL C	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	2832.7992
200800727: WL D	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	2589.98784
200800727: WL E	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	404.6856
<b>Total:</b>		<b>0</b>	<b>7931.83776</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 Description
--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	S&ME, Inc 13-Oct-2008	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Ozone, Tennessee quad	-
--Photographs	-	-
----Aerial	ORM 2	-
----Other	COE 6-Nov-2008	-

**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):** 07-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-00727-JD3

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

State : TN - Tennessee  
County/parish/borough: Cumberland  
City:  
Lat: 35.882765835594  
Long: -84.7517959015913  
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: Laurel Branch  
Name of nearest Traditional Navigable Water (TNW): Tennessee River  
Name of watershed or Hydrologic Unit Code (HUC): 6010201

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: 13-Nov-2008

Field Determination Date(s):  06-Nov-2008

**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
------------	-----------------------

200800727: Trib RR B	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200800727: WL AA	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL BB	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
200800727: WL CC	Wetlands directly abutting 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: [ ]

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. 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

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

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200800727: Trib RR B	-	-	-	X	Impacted by historical mining

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200800727: Trib RR B	3	1	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200800727: Trib RR B	X	X	-	X	-	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200800727: Trib RR B	-	-	Relatively straight	2

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200800727: Trib RR B	Perennial flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200800727: Trib RR B	Confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: Trib RR B	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200800727: Trib RR B	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
200800727: Trib RR B	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
200800727: Trib RR B	Clear at time of inspection	unknown

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

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200800727: Trib RR B	X	-	X	-	-

**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 Boundaries. Explain
200800727: WL AA	.3	Scrub/Shrub	good	-
200800727: WL BB	.77	scrub/Shrub	good	-
200800727: WL CC	.54	Scrub/Shrub	-	-

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

**Flow is:**

Wetland Name	Flow	Explain
200800727: WL AA	Perennial flow.	-
200800727: WL BB	Perennial flow.	-
200800727: WL CC	Perennial flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200800727: WL AA	Overland sheetflow	-
200800727: WL BB	Overland sheetflow	-
200800727: WL CC	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: WL AA	Unknown	-	-
200800727: WL BB	Unknown	-	-
200800727: WL CC	Unknown	-	-

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

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200800727: WL AA	Yes	-	-	-
200800727: WL BB	Yes	-	-	-
200800727: WL CC	Yes	-	-	-

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

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200800727: WL AA	15-20	5-10	Wetland to navigable waters	-
200800727: WL BB	15-20	5-10	Wetland to navigable waters	-
200800727: WL CC	15-20	5-10	Wetland to navigable waters	-

**(ii) Chemical Characteristics:**

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

Wetland Name	Explain	Identify specific pollutants, if known
200800727: WL AA	-	-
200800727: WL BB	-	-
200800727: WL CC	-	-

(iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200800727: WL AA	X	-	-	-
200800727: WL BB	X	-	X	-
200800727: WL CC	X	-	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:

Wetland Name	Flow	Explain
200800727: Trib RR B	PERENNIAL	-

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: Trib RR B	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	518.16	-
<b>Total:</b>		<b>518.16</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.

--	--	--

Wetland Name	Flow	Explain
200800727: WL AA	PERENNIAL	-
200800727: WL BB	PERENNIAL	-
200800727: WL CC	PERENNIAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: WL AA	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	1214.0568
200800727: WL BB	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	3116.07912
200800727: WL CC	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	2185.30224
<b>Total:</b>		<b>0</b>	<b>6515.43816</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 Description
--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	S&ME, Inc 13-Oct-2008	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Ozone, Tennessee quad	-
--USDA Natural Resources Conservation Service Soil Survey.	-	-
--National wetlands inventory map(s).	-	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 6-Nov-2008	-

### 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**

---

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 07-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-00727-JD2

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

State : TN - Tennessee  
County/parish/borough: Cumberland  
City:  
Lat: 35.882765835594  
Long: -84.7517959015913  
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: Laurel Branch  
Name of nearest Traditional Navigable Water (TNW): Tennessee River  
Name of watershed or Hydrologic Unit Code (HUC): 6010201

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: 13-Nov-2008

Field Determination Date(s):  06-Nov-2008

**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
------------	-----------------------

200800727: Trib RR A	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200800727: WL A	Wetlands directly abutting 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: [ ]  
 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. 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: 1340 square miles  
 Drainage area: 60 acres  
 Average annual rainfall: 39 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 15-20 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>  
 Unnamed tributary, to Railroad Branch, to King Branch, to Mammy's Creek, to Piney Creek, to Whites Creek (Watts Bar Lake), to Tennessee River

**Tributary Stream Order, if known:**

Order	Tributary Name
1	200800727: Trib RR A

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

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200800727: Trib RR A	-	-	-	X	impacted by historic mining activities

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200800727: Trib RR A	3	1	3:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200800727: Trib RR A	X	X	-	-	-	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200800727: Trib RR A	-	-	Meandering	2

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200800727: Trib RR A	Seasonal flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200800727: Trib RR A	Discrete and confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: Trib RR A	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWL	Discontinuous OHWL <sup>7</sup>	Explain
200800727: Trib RR A	X	X	-	-

**Tributaries with OHWL<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
200800727: Trib RR A	X	X	-	-	-	-	-	-	-	-	-	-	

**If factors other than the OHWL 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
200800727: Trib RR A	No flow at time of inspection	-

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

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200800727: Trib RR A	-	-	-	-	-

**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 Boundaries. Explain
200800727: WL A	1.9	scrub/shrub	-	-

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

**Flow is:**

Wetland Name	Flow	Explain
200800727: WL A	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200800727: WL A	Overland sheetflow	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: WL A	Unknown	-	-

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

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200800727: WL A	Yes	-	-	-

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

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200800727: WL A	15-20	5-10	Wetland to navigable waters	-

**(ii) Chemical Characteristics:**

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

Wetland Name	Explain	Identify specific pollutants, if known
200800727: WL A	-	-

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

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200800727: WL A	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.

**Findings for:** 200800727: Trib RR A, 200800727: WL A

Wetland abut tributary, which provides a direct conduit for any pollutant or fill to reach the TNW. Wetland is part of headwater complex the drainage, which works to naturally mitigate impacts to downstream waters.

### 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
200800727: Trib RR A	SEASONAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: Trib RR A	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	579.12	-
<b>Total:</b>		<b>579.12</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.**

Wetland Name	Flow	Explain
200800727: WL A	SEASONAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: WL A	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	7689.0264
<b>Total:</b>		<b>0</b>	<b>7689.0264</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 Description
--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	S&ME, Inc 13-Oct-2008	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Ozone, Tennessee quad	-
--USDA Natural Resources Conservation Service Soil Survey.	-	-

--National wetlands inventory map(s).	-	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 6-Nov-2008	-

**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**

---

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 07-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-00727-JD1

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

State : TN - Tennessee  
County/parish/borough: Cumberland  
City:  
Lat: 35.882765835594  
Long: -84.7517959015913  
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: Laurel Branch  
Name of nearest Traditional Navigable Water (TNW): Tennessee River  
Name of watershed or Hydrologic Unit Code (HUC): 6010201

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: 13-Nov-2008

Field Determination Date(s):  06-Nov-2008

**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
------------	-----------------------

200800727: pond 1	Uplands
200800727: pond 2	Uplands
200800727: WWC 1	Uplands
200800727: WWC 10 a, b	Uplands
200800727: WWC 2a, b, c	Uplands
200800727: WWC 3	Uplands
200800727: WWC 5	Uplands
200800727: WWC 6	Uplands
200800727: WWC 7	Uplands
200800727: WWC 8	Uplands
200800727: WWC 9	Uplands

**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. Explain: Drainage features did not have bed and or ordinary high water marks. Ponds were found to be sediment basins with no connection to traditionally navigable waters.

## **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:**

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:**  
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.**

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):

Data Reviewed	Source Label	Source Description
--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	S&ME, Inc 13-Oct-2008	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Ozone, Tennessee Quad	-
--Photographs	-	-
----Aerial	ORM2	-
----Other	COE 6-Nov-2008	-

### 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**

---

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 07-Nov-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Nashville District, LRN-2008-00727-JD10

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

State : TN - Tennessee  
County/parish/borough: Cumberland  
City:  
Lat: 35.882765835594  
Long: -84.7517959015913  
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: Laurel Branch  
Name of nearest Traditional Navigable Water (TNW): Tennessee River  
Name of watershed or Hydrologic Unit Code (HUC): 6010201

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: 13-Nov-2008

Field Determination Date(s):  06-Nov-2008

**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
------------	-----------------------

200800727: Trib Laurel D	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
200800727: WL V	Wetlands directly abutting 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: [ ]

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. 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: 1340 square miles

Drainage area: 50 acres

Average annual rainfall: 39 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 15-20 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>

Unnamed tributary to Laurel Branch, to Piney Creek, to Whites Creek, to Tennessee River (Watts Bar Lake)

**Tributary Stream Order, if known:**

Order	Tributary Name
1	200800727: Trib Laurel D

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

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
200800727: Trib Laurel D	-	-	-	X	farming

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
200800727: Trib Laurel D	2	1	2:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
200800727: Trib Laurel D	X	X	-	-	X	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
200800727: Trib Laurel D	-	-	Relatively straight	2

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
200800727: Trib Laurel D	Seasonal flow	-	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
200800727: Trib Laurel D	Discrete and confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: Trib Laurel D	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
200800727: Trib Laurel D	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
200800727: Trib Laurel D	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

200800727: Trib Laurel D	No flow at time of inspection	unknown
--------------------------	-------------------------------	---------

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

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
200800727: Trib Laurel D	-	-	-	-	-

**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 Boundaries. Explain
200800727: WL V	.1	scrub/shrub	-	-

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

**Flow is:**

Wetland Name	Flow	Explain
200800727: WL V	Intermittent flow.	-

**Surface flow is:**

Wetland Name	Flow	Characteristics
200800727: WL V	-	-

**Subsurface flow:**

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
200800727: WL V	Unknown	-	-

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

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
200800727: WL V	Yes	-	-	-

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

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
200800727: WL V	15-20	5-10	Wetland to navigable waters	-

**(ii) Chemical Characteristics:**

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

Wetland Name	Explain	Identify specific pollutants, if known
200800727: WL V	-	-

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

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
200800727: WL V	-	-	-	-

**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.

**Findings for:** 200800727: Trib Laurel D, 200800727: WL V

Wetland abuts tributary, which provides a direct conduit for any pollutants or fill to reach TNW. Wetland is part of headwater complex for Laurel Branch

## 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
200800727: Trib Laurel D	SEASONAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: Trib Laurel D	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	914.4	-
<b>Total:</b>		<b>914.4</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.

Wetland Name	Flow	Explain
200800727: WL V	SEASONAL	-

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
200800727: WL V	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	404.6856
<b>Total:</b>		<b>0</b>	<b>404.6856</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 Description
--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	S&ME, Inc 13-Oct-2008	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
---USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	Cardiff, Tennessee quad	-
--Photographs	-	-
---Aerial	ORM2	-

**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.