

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

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District ; Green Sea 2 RPW #1 ; LRN-2008-01015

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Tennessee County/parish/borough: Van Buren City: Spencer
Center coordinates of site (lat/long in degree decimal format): Lat. 35.56600° **N**, Long. 85.46859° **W**.
Universal Transverse Mercator: 16S 638779 3936892

Name of nearest waterbody: Green Sea Branch

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

Name of watershed or Hydrologic Unit Code (HUC): 05130108

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

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

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

Office (Desk) Determination. Date:

Field Determination. Date(s): July 3, 2008

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

Waters subject to the ebb and flow of the tide.

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

Explain: Navigable water as listed in Nashville District Public Notice #86-23, dated 8 May 1986.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

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

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

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

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 75 linear feet: 15' width (ft) and/or acres.

Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: **Established by OHWM.**

Elevation of established OHWM (if known): .

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

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

Explain: **Isolated waters (pits) were assessed and deemed non-jurisdictional.**

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

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

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW: .

Summarize rationale supporting determination: Navigable water as listed in Nashville District Public Notice #86-23, dated 8 May 1986

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

(i) General Area Conditions:

Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

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

Identify flow route to TNW⁵:
Tributary stream order, if known:

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

Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

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

Average width: feet
Average depth: feet
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

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

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**

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

Describe flow regime:

Other information on duration and volume:

Surface flow is: **Pick List**. Characteristics:

Subsurface flow: **Pick List**. Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain:

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

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

(iii) **Chemical Characteristics:**

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

Explain:

Identify specific pollutants, if known:

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.

⁷Ibid.

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

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

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: .

Ecological connection. Explain: .

Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

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

Identify specific pollutants, if known: .

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres) Directly abuts? (Y/N) Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: A small seep originating at the toe of the mine spoil flows almost year-round .
 Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

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

- Tributary waters: **75** linear feet **15** width (ft).
 - Other non-wetland waters: acres.
- Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

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

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

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

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

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

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

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

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

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

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

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

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

7. Impoundments of jurisdictional waters.⁹

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

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

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

⁸See Footnote # 3.

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

¹⁰Prior 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): 15-Aug-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District, LRN-2008-00701-JD4

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : AL - Alabama
County/parish/borough: Limestone
City: Huntsville
Lat:
Long:
Universal Transverse Mercator: []
Name of nearest waterbody: Oakland Spring Branch
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: 18-Aug-2008
Field Determination Date: 15-Jul-2008
(s): 12-Aug-2008
14-Aug-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:¹**

Water Name	Water Type(s) Present
UT Oakland Spring Branch 4	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

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

Area: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:³

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: 16 square miles
 Drainage area: 10 acres
 Average annual rainfall: 54 inches
 Average annual snowfall: 3 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 5-10 river miles from TNW.

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

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

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

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:⁵

Unnamed tributary, Unnamed tributary, Oakland Spring Branch, Moore Branch, Beaverdam Creek that becomes Wheeler Lake(TNW)

Tributary Stream Order, if known:

Order	Tributary Name
1	UT Oakland Spring Branch 4

(b) General Tributary Characteristics:

Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
UT Oakland Spring Branch 4	X	-	-	-	-

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
UT Oakland Spring Branch 4	2	1	2:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
UT Oakland Spring Branch 4	X	-	-	-	-	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
UT Oakland Spring Branch 4	stable	no	Relatively straight	1

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
UT Oakland Spring Branch 4	Seasonal flow	20 (or greater)	wet months and following rain events year round	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
UT Oakland Spring Branch 4	Discrete and confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
UT Oakland Spring Branch 4	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM ⁷	Explain
UT Oakland Spring Branch 4	X	X	-	-

Tributaries with OHWM⁶ - (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
UT Oakland Spring Branch 4	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
UT Oakland Spring Branch 4	dry, watershed wooded	-

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
UT Oakland Spring Branch 4	X	wooded	-	-	-

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.

Findings for: UT Oakland Spring Branch 4

flow attenuation, carbon transport, food source of seasonal aquatic macroinvertebrates

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
UT Oakland Spring Branch 4	SEASONAL	dry in summer inspections but lack of vegetation in bottom of channel

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m ²)
UT Oakland Spring Branch 4	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	76.2	-
Total:		76.2	0

3. Non-RPWs that flow directly or indirectly into TNWs:⁸

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:⁹

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:¹⁰

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
--U.S. Geological Survey map(s).	-	1:24,000, Greenbrier, AL
--USDA Natural Resources Conservation Service Soil Survey.	-	Limestone County, AL
--Photographs	-	-
----Aerial	-	-
----Other	-	-

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): 15-Aug-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District, LRN-2008-00701-JD3

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : AL - Alabama
County/parish/borough: Limestone
City: Huntsville
Lat:
Long:
Universal Transverse Mercator: []
Name of nearest waterbody: Oakland Spring Branch
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: 18-Aug-2008
Field Determination Date: 15-Jul-2008
(s): 12-Aug-2008
14-Aug-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:¹**

Water Name	Water Type(s) Present
UT Oakland Spring Branch 3	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

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

Area: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:³

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: 16 square miles
 Drainage area: 170 acres
 Average annual rainfall: 54 inches
 Average annual snowfall: 3 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 5-10 river miles from TNW.

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

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

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

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:⁵

Unnamed tributary, Oakland Spring Branch, Moore Branch, Beaverdam Creek that becomes Wheeler Lake(TNW)

Tributary Stream Order, if known:

Order	Tributary Name
1	UT Oakland Spring Branch 3

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

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
UT Oakland Spring Branch 3	-	-	-	X	portion is straightened through pasture

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
UT Oakland Spring Branch 3	6	4	2:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
UT Oakland Spring Branch 3	X	-	-	-	X	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
UT Oakland Spring Branch 3	stable	few	Meandering	1.25

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
UT Oakland Spring Branch 3	Seasonal flow	20 (or greater)	wet months and following rain events year round	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
UT Oakland Spring Branch 3	Discrete and confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
UT Oakland Spring Branch 3	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM ⁷	Explain
UT Oakland Spring Branch 3	X	X	-	-

Tributaries with OHWM⁶ - (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
UT Oakland Spring Branch 3	X	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
UT Oakland Spring Branch 3	water clear, watershed mixed wooded, pasture and residential	-

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
UT Oakland Spring Branch 3	X	varies	-	-	X

Habitat for: (as indicated above)

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish\Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic Wildlife Diversity	Explain Findings
UT Oakland Spring Branch 3	X	-	-	-	-	-	-	X	seasonal aquatic macroinvertebrates

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.

Findings for: UT Oakland Spring Branch 3

flow attenuation, carbon transport, food source of seasonal aquatic macroinvertebrates.

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
UT Oakland Spring Branch 3	SEASONAL	standing water during inspections in portion, dry in portion and small flow in portion

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m ²)
UT Oakland Spring Branch 3	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	731.52	-
Total:		731.52	0

3. Non-RPWs that flow directly or indirectly into TNWs:⁸

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:⁹

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:¹⁰

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, Greenbrier, AL
--USDA Natural Resources Conservation Service Soil Survey.	-	-
--Photographs	-	-
----Aerial	-	-
----Other	-	-

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): 15-Aug-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District, LRN-2008-00701-JD2

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : AL - Alabama
County/parish/borough: Limestone
City: Huntsville
Lat:
Long:
Universal Transverse Mercator: []
Name of nearest waterbody: Oakland Spring Branch
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: 18-Aug-2008
Field Determination Date: 15-Jul-2008
(s): 12-Aug-2008
14-Aug-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:¹**

Water Name	Water Type(s) Present
UT Oakland Spring Branch 2	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

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

Area: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:³

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: 16 square miles
 Drainage area: 210 acres
 Average annual rainfall: 54 inches
 Average annual snowfall: 3 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 5-10 river miles from TNW.

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

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

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

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:⁵

Unnamed tributary, Oakland Spring Branch, Moore Branch, Beaverdam Creek that becomes Wheeler Lake(TNW)

Tributary Stream Order, if known:

Order	Tributary Name
2	UT Oakland Spring Branch 2

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

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
UT Oakland Spring Branch 2	-	-	-	X	appears channelized

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
UT Oakland Spring Branch 2	8	4	2:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
UT Oakland Spring Branch 2	X	-	-	-	X	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
UT Oakland Spring Branch 2	stable	-	Relatively straight	1

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
UT Oakland Spring Branch 2	Seasonal flow	20 (or greater)	wet months	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
UT Oakland Spring Branch 2	Confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
UT Oakland Spring Branch 2	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM ⁷	Explain
UT Oakland Spring Branch 2	X	X	-	-

Tributaries with OHWM⁶ - (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
UT Oakland Spring Branch 2	X	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
UT Oakland Spring Branch 2	dry during inspections, watershed varies wooded, pasture and residential	-

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
UT Oakland Spring Branch 2	X	wooded varies in width	-	-	X

Habitat for: (as indicated above)

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish\Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic Wildlife Diversity	Explain Findings
UT Oakland Spring Branch 2	X	-	-	-	-	-	-	X	seasonal aquatic macroinvertebrate, crayfish

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.

Findings for: UT Oakland Spring Branch 2

flow attenuation, carbon transport, food source of headwater species.

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
UT Oakland Spring Branch 2	SEASONAL	channel bottom lacks vegetation, size of watershed, sediment sorting in channel

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m ²)
UT Oakland Spring Branch 2	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	426.72	-
Total:		426.72	0

3. Non-RPWs that flow directly or indirectly into TNWs:⁸

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:⁹

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:¹⁰

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 Greenbrier, AL
--USDA Natural Resources Conservation Service Soil Survey.	-	-
--Photographs	-	-
----Aerial	-	-
----Other	-	-

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): 15-Aug-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District, LRN-2008-00701-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : AL - Alabama
County/parish/borough: Limestone
City: Huntsville
Lat:
Long:
Universal Transverse Mercator: []
Name of nearest waterbody: Oakland Spring Branch
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: 18-Aug-2008
Field Determination Date: 15-Jul-2008
(s): 12-Aug-2008
14-Aug-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:¹**

Water Name	Water Type(s) Present
UT Oakland Spring Branch 1	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
Wetland Abutting UT Oakland Spring Branch 1	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: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWL Elevation: (if known)

2. Non-regulated waters/wetlands:³

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: 16 square miles
 Drainage area: 5 acres
 Average annual rainfall: 54 inches
 Average annual snowfall: 3 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 5-10 river miles from TNW.

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

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

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

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:⁵

Unnamed tributary, Oakland Spring Branch, Moore Branch, Beaverdam Creek that becomes Wheeler Lake

Tributary Stream Order, if known:

Order	Tributary Name
1	UT Oakland Spring Branch 1

(b) General Tributary Characteristics:

Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
UT Oakland Spring Branch 1	X	-	-	-	-

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
UT Oakland Spring Branch 1	3	1	2:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
UT Oakland Spring Branch 1	X	-	-	-	-	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
UT Oakland Spring Branch 1	stable	no	Meandering	-

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
UT Oakland Spring Branch 1	Seasonal flow	20 (or greater)	wet months	consultant said it had flow earlier in year

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
UT Oakland Spring Branch 1	Confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
UT Oakland Spring Branch 1	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM ⁷	Explain
UT Oakland Spring Branch 1	X	X	-	-

Tributaries with OHWM⁶ - (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
UT Oakland Spring Branch 1	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
UT Oakland Spring Branch 1	dry during inspection, watershed small and in good condition	-

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
UT Oakland Spring Branch 1	-	-	X	0.73 acre wetland	X

Habitat for: (as indicated above)

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish\Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic Wildlife Diversity	Explain Findings
UT Oakland Spring Branch 1	X	-	-	-	-	-	-	X	seasonal aquatic macroinvertebrate

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
Wetland Abutting UT Oakland Spring Branch 1	1	slope forested	good	-

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

Wetland Name	Flow	Explain
Wetland Abutting UT Oakland Spring Branch 1	Intermittent flow.	-

Surface flow is:

Wetland Name	Flow	Characteristics
Wetland Abutting UT Oakland Spring Branch 1	Discrete and confined	-

Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
Wetland Abutting UT Oakland Spring Branch 1	Unknown	-	-

(c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
Wetland Abutting UT Oakland Spring Branch 1	Yes	-	-	-

(d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
Wetland Abutting UT Oakland Spring Branch 1	5-10	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
Wetland Abutting UT Oakland Spring Branch 1	-	-

(iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
Wetland Abutting UT Oakland Spring Branch 1	X	wooded, varies	X	90% hardwood trees

Habitat for:

Wetland Name	Habitat	Federally Listed Species	Explain Findings	Spawn Area	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic/Wildlife Diversity	Explain Findings
Wetland Abutting UT Oakland Spring Branch 1	X	-	-	-	-	-	-	X	reptiles and amphibians

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: UT Oakland Spring Branch 1, Wetland Abutting UT Oakland Spring Branch 1
Flow attenuation, flood storage, carbon transport, food source of seasonal aquatic macroinvertebrates.

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
UT Oakland Spring Branch 1	SEASONAL	dry during July inspection but evidence of drift lines and lack of vegetation in bottom of channel

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m ²)
UT Oakland Spring Branch 1	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	60.96	-
Total:		60.96	0

3. Non-RPWs that flow directly or indirectly into TNWs:⁸

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
Wetland Abutting UT Oakland Spring Branch 1	SEASONAL	slope wetland with groundwater input to stream in wet months

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m ²)
Wetland Abutting UT Oakland Spring Branch 1	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	4046.856
Total:		0	4046.856

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:⁹

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:¹⁰

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	-	-
--Corps navigable waters study	-	Nashville District Public Notice #86-23, dated 8 May 1986
--U.S. Geological Survey map(s).	-	1:24,000, Greenbrier, AL
--USDA Natural Resources Conservation Service Soil Survey.	-	Limestone County, AL

--Photographs	-	-
---Aerial	-	-
---Other	-	-

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): 16-Jul-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District, LRN-2008-01246-JD2

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : TN - Tennessee
 County/parish/borough: Blount
 City: Maryville
 Lat: 35.75509
 Long: -84.03788
 Universal Transverse Mercator: []
 Name of nearest waterbody: Culton Creek
 Name of nearest Traditional Navigable Water (TNW): Little River
 Name of watershed or Hydrologic Unit Code (HUC): 06010201

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: 16-Jul-2008
 Field Determination Date (s): 16-Jul-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:¹**

Water Name	Water Type(s) Present
File #2008-01246; Detention Basin	Uplands

b. Identify (estimate) size of waters of the U.S. in the review area:Area: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Area is a man-made detention basin with no regulated streams entering or draining the area. Area also did not exhibit requirements for jurisdictional waters or wetlands.

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:⁵**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:⁸

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:⁹

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:¹⁰

Not Applicable.

Identify water body and summarize rationale supporting determination:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

Other (Explain):

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

Not Applicable.

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

Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD

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

Not Applicable.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 16-Jul-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District, LRN-2008-01246-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : TN -
Tennessee
County/parish/borough: Blount
City: Maryville
Lat: 35.75509
Long: -84.03788
Universal Transverse Mercator: []
Name of nearest waterbody: Culton Creek
Name of nearest Traditional Navigable Water (TNW): Little River
Name of watershed or Hydrologic Unit Code (HUC): 06010201

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: 16-Jul-2008
Field Determination Date: 16-Jul-2008
(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:¹**

Water Name	Water Type(s) Present
File #2008-01246; Stream Site	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

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

Area: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:³

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: 102 acres
 Average annual rainfall: 47.4 inches
 Average annual snowfall: 10.1 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 10-15 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:

No

Identify flow route to TNW:⁵

Stream flows to Culton Creek to Pistol Creek to Little River

Tributary Stream Order, if known:

Order	Tributary Name
1	File #2008-01246; Stream Site

(b) General Tributary Characteristics:

Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
File #2008-01246; Stream Site	X	-	-	-	-

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
File #2008-01246; Stream Site	5	2	3:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
File #2008-01246; Stream Site	X	-	-	X	-	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
File #2008-01246; Stream Site	Relatively stable banks	none observed	Meandering	-

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
File #2008-01246; Stream Site	Seasonal flow	20 (or greater)	-	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
File #2008-01246; Stream Site	Discrete and confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
File #2008-01246; Stream Site	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWL	Discontinuous OHWL ⁷	Explain
File #2008-01246; Stream Site	X	X	-	-

Tributaries with OHWL⁶ - (as indicated above)

Tributary Name	OHWL	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow Events	Water Staining	Changes Plant	Other
File #2008-01246; Stream Site	X	X	-	-	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
File #2008-01246; Stream Site	Water color is relatively clear until it reaches the ponded area, which is turbid due to nearby development and grading	Sediment

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
File #2008-01246; Stream Site	X	Wooded, 25-30'	-	-	-

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.

Findings for: File #2008-01246; Stream Site

Significant Nexus exists due to ability to transport pollutants to TNW

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

Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
File #2008-01246; Stream Site	SEASONAL	Stream channel may dry up during summer months, but shows characteristics of seasonal flow

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m ²)
File #2008-01246; Stream Site	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	457.2	-
Total:		457.2	0

3. Non-RPWs that flow directly or indirectly into TNWs:⁸

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:⁹

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:¹⁰

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	-	-
--U.S. Geological Survey map(s).	-	-
--Photographs	-	-

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

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 14 August 2008

B. DISTRICT OFFICE: Nashville District
FILE NAME: Generic JD for All Section 10 Navigable Waters
FILE NUMBER: LRN-2008-01275 Jesse Walker

C. PROJECT LOCATION AND BACKGROUND INFORMATION: The proposed project is located on a navigable water located within the regulatory jurisdiction of the Nashville District Corps of Engineers. The Nashville District has previously determined the extent of navigable waters within the drainage areas of the Tennessee and Cumberland Rivers located within the states of Tennessee, Kentucky, Alabama, and Mississippi. Posting of this JD establishes that the Corps has jurisdiction over navigable waters under Section 10 of the Rivers and Harbors Act of 1899 not only for this application but also for all future permit applications located on recognized navigable waters. Future permit applications will reference this generic JD which will eliminate the need to post separate JDs for each future application. Since jurisdiction over Section 10 navigable waters is straightforward, we have determined that it serves no useful purpose to perform and post a separate JD for each action. Development and posting of this generic JD will allow limited staff resources to be focused on other JDs that require more in-depth analysis. (Additionally, since a significant nexus determination and related factors are not required for this JD, non-relevant sections of the standard seven-page JD form have been eliminated in the interest of brevity and clarity.)

State: Tennessee County: Wilson City: Mount Juliet
Center coordinates of site (lat/long in degree decimal format): Lat 36.2689° **N**, Long. 86.5499° **W**.
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Cumberland River, Old Hickory Lake
Name of watershed or Hydrologic Unit Code (HUC): 5130201
 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., adjacent wetlands, offsite mitigation sites, disposal sites, etc) are associated with this action and recorded on a different JD form.

D. REVIEW PERFORMED FOR EVALUATION: Office (Desk) Determination. Date: 14 August 2008

SUMMARY OF FINDINGS
RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

- Waters subject to the ebb and flow of the tide.
- Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: Prior to the determination and listing of the Nashville District's navigable waters, detailed navigability studies were performed throughout the Nashville District to determine which waters meet the navigable waters definition found in 33 CFR Part 329. These studies are available for review in the Nashville District office. Upon completion of these navigability studies, the Nashville District issued Public Notice #86-23, dated 8 May 1986, listing all navigable waters within the district. The complete list of navigable waters can be found on the district's website at http://www.lrn.usace.army.mil/cof/navigable_waters_list.htm.
- Identify TNW: **Cumberland River (Old Hickory Lake)**.
Summarize rationale supporting determination: .

DATA SOURCES

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

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Location map submitted with application.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: Navigable water as listed in Nashville District Public Notice #86-23, dated 8 May 1986.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24K, Hendersonville, TN
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): 2006
or Other (Name & Date):
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 13-Aug-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District, LRN-2008-01051-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : AL - Alabama
 County/parish/borough: Madison
 City: Huntsville
 Lat: 34.61140044490451
 Long: -86.73728663590501
 Universal Transverse Mercator: []
 Name of nearest waterbody: Barren Fork 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: 13-Aug-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:¹**

Water Name	Water Type(s) Present
Upland	Uplands

b. Identify (estimate) size of waters of the U.S. in the review area:Area: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:³

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

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:⁵**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:⁸

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:⁹

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:¹⁰

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	-	-
--Corps navigable waters study	-	Nashville District Public Notice #86-23, dated 8 May 1986
--U.S. Geological Survey map(s).	-	1:24,000, Triana, AL
--USDA Natural Resources Conservation Service Soil Survey.	-	Madison County, AL

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.