Regulatory Program

INTERIM APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers
This form should be completed by following the instructions provided
in the Interim Approved Jurisdictional Determination Form User Manual.

SECTION I: BACKGROUND INFORMATION

A. COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (AJD): February 14, 2019

B. ORM NUMBER IN APPROPRIATE FORMAT (e.g., HQ-2015-00001-SMJ): HQ-2018-00502-LRN

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State:Tennessee County/parish/borough: Sumner City: Gallatin
Center coordinates of site (lat/long in degree decimal format): Lat. 36.4083°N, Long. 86.36667°.
Map(s)/diagram(s) of review area (including map identifying single point of entry (SPOE) watershed and/or potential jurisdictional areas where applicable) is/are: ☒attached ☒ in report/map titled .
☐ Other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different jurisdictional determination (JD) form. List JD form ID numbers (e.g., HQ-2015-00001-SMJ-1): .

D. REVIEW PERFORMED FOR SITE EVALUATION:
☐ Office (Desk) Determination Only. Date: .
☒ Office (Desk) and Field Determination. Office/Desk Dates: Field Date(s): July 24, 2018 and September 20, 2018.

SECTION II: DATA SOURCES

Check all that were used to aid in the determination and attach data/maps to this AJD form and/or references/citations in the administrative record, as appropriate.
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant. Title/Date: USACE JURISDICTIONAL WATERS MAP/9-5-18.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Data sheets/delineation report are sufficient for purposes of AJD form. Title/Date: Jurisdictional Waters Report (submitted on June 15, 2018) and and JD Waters Supplemental Info (submitted on July 09, 2018) .
☐ Data sheets/delineation report are not sufficient for purposes of AJD form. Summarize rationale and include information on revised data sheets/delineation report that this AJD form has relied upon: .
Revised Title/Date: .
☒ Data sheets prepared by the Corps. Title/Date: Site Notes from July 24, 2018 and September 20, 2018.
☐ Corps navigable waters study. Title/Date: .
☐ CorpsMap ORM map layers. Title/Date: .
☐ USGS Hydrologic Atlas. Title/Date: .
☒ USGS, NHD, or WBD data/maps. Title/Date: The National Hydrography Dataset Map (August 2018) and (USGS Stream Stats Web Application (access date January 29, 2019).
☐ USGS 8, 10 and/or 12 digit HUC maps. HUC number: .
☒ USGS maps. Scale & quad name and date: 1:24000 Bethpage 1956, 1:24000 Bethpage 1981, 1:24000 Bethpage 2010, 1:24000 Bethpage 2016.
☒ USDA NRCS Soil Survey. Citation: Custom Soil Resource Report for Sumner County, Tennessee.
☒ USFWS National Wetlands Inventory maps. Citation: Provided in Jurisdictional Waters Report.
☐ State/Local wetland inventory maps. Citation: .
☒ FEMA/FIRM maps. Citation: FEMA Flood Rate Insurance Map, Sumner County, Tennessee.
☒ Photographs: ☒ Aerial. Citation: Skillet Aerial (December 2004), Skillet Aerial (November 2013), and Skillet Aerial (April 2018) . or ☒ Other. Citation: Provided in Jurisdictional Waters Report (submitted on June 15, 2018), JD Waters

Supplemental Info (submitted on July 09, 2018), and taken during site visits on July 24, 2018 and September 20, 2018.

☐ LiDAR data/maps. Citation:

☒ Previous JDs. File no. and date of JD letter: LRN-2018-00502/October 24, 2018.

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): USDA Soil Survey of Davidson County, Tennessee (February 1997).

SECTION III: SUMMARY OF FINDINGS

Complete ORM "Aquatic Resource Upload Sheet" or Export and Print the Aquatic Resource Water Droplet Screen from ORM for All Waters and Features, Regardless of Jurisdictional Status – Required

A. RIVERS AND HARBORS ACT (RHA) SECTION 10 DETERMINATION OF JURISDICTION:

☐ "*navigable waters of the U.S.*" within RHA jurisdiction (as defined by 33 CFR part 329) in the review area.

- **Complete Table 1 - Required**

NOTE: If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Section 10 navigable waters list, DO NOT USE THIS FORM TO MAKE THE DETERMINATION. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Section 10 RHA navigability determination.

B. CLEAN WATER ACT (CWA) SECTION 404 DETERMINATION OF JURISDICTION: "*waters of the U.S.*" within CWA jurisdiction (as defined by 33 CFR part 328.3) in the review area. **Check all that apply.**

☐ (a)(1): All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. (Traditional Navigable Waters (TNWs))

- **Complete Table 1 - Required**

☐ This AJD includes a case-specific (a)(1) TNW (Section 404 navigable-in-fact) determination on a water that has not previously been designated as such. Documentation required for this case-specific (a)(1) TNW determination is attached.

☐ (a)(2): All interstate waters, including interstate wetlands.

- **Complete Table 2 - Required**

☐ (a)(3): The territorial seas.

- **Complete Table 3 - Required**

☒ (a)(4): All impoundments of waters otherwise identified as waters of the U.S. under 33 CFR part 328.3.

- **Complete Table 4 - Required**

☒ (a)(5): All tributaries, as defined in 33 CFR part 328.3, of waters identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

- **Complete Table 5 - Required**

☒ (a)(6): All waters adjacent to a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

- **Complete Table 6 - Required**

☒ Bordering/Contiguous.

Neighboring:

☐ (c)(2)(i): All waters located within 100 feet of the ordinary high water mark (OHWM) of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3.

☒ (c)(2)(ii): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 and not more than 1,500 feet of the OHWM of such water.

☐ (c)(2)(iii): All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of 33 CFR part 328.3, and all waters within 1,500 feet of the OHWM of the Great Lakes.

☐ (a)(7): All waters identified in 33 CFR 328.3(a)(7)(i)-(v) where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

- **Complete Table 7 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(7) waters identified in the similarly situated analysis. - Required**

☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

☒ (a)(8): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3 not covered by (c)(2)(ii) above and all waters located within 4,000 feet of the high tide line or OHWM of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 where they are determined on a

case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

- **Complete Table 8 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(8) waters identified in the similarly situated analysis. - Required**

☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

C. NON-WATERS OF THE U.S. FINDINGS:

Check all that apply.

☐ The review area is comprised entirely of dry land.

☐ Potential-(a)(7) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

- **Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(7) waters identified in the similarly situated analysis. - Required**

☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

☒ Potential-(a)(8) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

- **Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(8) waters identified in the similarly situated analysis. - Required**

☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

☐ Excluded Waters (Non-Waters of U.S.), even where they otherwise meet the terms of paragraphs (a)(4)-(a)(8):

- **Complete Table 10 - Required**

☐ (b)(1): Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA.

☐ (b)(2): Prior converted cropland.

☐ (b)(3)(i): Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.

☐ (b)(3)(ii): Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.

☐ (b)(3)(iii): Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1)-(a)(3).

☐ (b)(4)(i): Artificially irrigated areas that would revert to dry land should application of water to that area cease.

☐ (b)(4)(ii): Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds.

☐ (b)(4)(iii): Artificial reflecting pools or swimming pools created in dry land.[1]

☐ (b)(4)(iv): Small ornamental waters created in dry land.[1]

☐ (b)(4)(v): Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water.

☒ (b)(4)(vi): Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways.[1]

☐ (b)(4)(vii): Puddles.[1]

☐ (b)(5): Groundwater, including groundwater drained through subsurface drainage systems.[1]

☐ (b)(6): Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.[1]

☐ (b)(7): Wastewater recycling structures created in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

☐ Other non-jurisdictional waters/features within review area that do not meet the definitions in 33 CFR 328.3 of (a)(1)-(a)(8) waters and are not excluded waters identified in (b)(1)-(b)(7).

- **Complete Table 11 - Required.**

D. ADDITIONAL COMMENTS TO SUPPORT AJD:

[1] In many cases these excluded features will not be specifically identified on the AJD form, unless specifically requested. Corps Districts may, in case-by-case instances, choose to identify some or all of these features within the review area.

Jurisdictional Waters of the U.S.

Table 1. (a)(1) Traditional Navigable Waters

(a)(1) Waters Name	(a)(1) Criteria	Rationale to Support (a)(1) Designation Include High Tide Line or Ordinary High Water Mark indicators, when applicable.
N/A	N/A	N/A

Table 2. (a)(2) Interstate Waters

(a)(2) Waters Name	Rationale to Support (a)(2) Designation
N/A	N/A

Table 3. (a)(3) Territorial Seas

(a)(3) Waters Name	Rationale to Support (a)(3) Designation
N/A	N/A

Table 4. (a)(4) Impoundments

(a)(4) Waters Name	Rationale to Support (a)(4) Designation
HQR-2018-00502-LRN-W4	W4 is a pond with wetland fringe located at the head of S4, an ephemeral stream that feeds the intermittent stream identified as S1. W4 is not identified on the current NHD map (Figure 2) nor USGS Topo Maps (Figures 3-6), but the Flow Path tool on the USGS StreamStats Web Application traced its streamflow from its outlet into S4, through the review area of S2, directly into S1, and then to the beginning of the Bledsoe Creek embayment of Old Hickory Lake (Lat: 36.398419, Long.: -86.343238). The 1997 USDA Soil Survey of Sumner County, Tennessee (Figures 8-9) identifies an intermittent stream within the review area of S2, S4, and W4 that flows into a stream within the review area of S1, the flow path matching that traced by the USGS StreamStats Web Application. Jurisdictional Waters Report (submitted on June 15, 2018) identified this resource as a former farm pond that drains into S4, and field review supported the determination that the feature had been excavated and still retains a hydrologic connection to downstream waters. Based on a field review and further investigation, W4 is an impoundment of S2, which is a tributary to the Bledsoe Creek, an (a)(1) water and embayment of Old Hickory Lake.

Table 5. (a)(5)Tributaries

(a)(5) Waters Name	Flow Regime	(a)(1)-(a)(3) Water Name to which this (a)(5) Tributary Flows	Tributary Breaks	Rationale for (a)(5) Designation and Additional Discussion. Identify flowpath to (a)(1)-(a)(3) water or attach map identifying the flowpath; explain any breaks or flow through excluded/non-jurisdictional features, etc.
HQR-2018-00502-LRN-S1	Perennial	Bledsoe Creek	No	S1 is a 680-foot segment of a stream that begins off-site and flows through Northeast corner of the AJD Review Area (Figure 1). After exiting the review area through a culvert under Brights Lane, S1 flows for approximately 160 feet, ending at its confluence with Deshea Creek. Deshea Creek is a named tributary of Bledsoe Creek. USGS Topo Maps from 1956, 1981, and 2010 identify a perennial stream in the review area of S1 (Figures 3-5) that flows into Deshea Creek. The 2016 USGS Topo Map (Figure 6) and the 1997 USDA Soil Survey of Davidson County, Tennessee (Figures 7 and 8) identify an intermittent stream within the review area of S1. The current National Hydrography Dataset Map (Figure 2) shows S1's continuous flow path from outside the AJD Review Area to the beginning of the Bledsoe Creek embayment of Old Hickory Lake (Lat: 36.398419, Long.: -86.343238). The Bledsoe Creek embayment of Old Hickory Lake spans approximately 4 miles from Hartsville Pike bridge to Cumberland River Mile 248.5L. Jurisdictional Waters Report (submitted on June 15, 2018) identified this resource as a perennial stream based on biological and hydrological indicators observed under normal weather conditions. Flowing water was observed within the channel during site visits on July 24, 2018 and September 20, 2018. Based on multiple field reviews and further investigation, S1 is a perennial tributary to Bledsoe Creek, an (a)(1) water.
HQR-2018-00502-LRN-S2	Intermittent	Bledsoe Creek	Yes	S2 is an intermittent stream located within a narrow concave area in the Northern half of the AJD Review Area. S2 is not identified on the current NHD map (Figure 2) nor USGS Topo Maps (Figures 3-6), but the Flow Path tool on the USGS StreamStats Web Application traced its streamflow from W2 and S4 directly into S1 and then to the beginning of the Bledsoe Creek embayment of Old Hickory Lake (Lat: 36.398419, Long.: -86.343238). The 1997 USDA Soil Survey of Sumner County, Tennessee (Figures 8-9) identifies an intermittent stream within the review area of S2, S4, and W4 that flows into a stream within the review area of S1, the flow path matching that traced by the USGS StreamStats Web Application. Jurisdictional Waters Report (submitted on June 15, 2018) also identified S2 as an intermittent stream, based on biological and hydrological indicators observed under normal weather conditions. However, the flow path identified in the JD report (Figure 1) differs from the historical path in that it shows S2 flowing directly into W1 and being within the 100-year floodplain of Deshea Creek.

				Aerial imagery and field observation of OHWM indicators support this finding, except the last 450 feet of the channel that has become overgrown with herbaceous vegetation. Bed and bank and OHWM were not observed in this part of the channel, so it represents a break between the S2 tributary and the downgradient wetland identified as W1. Per 33 CFR 328.3(c)(3), a water that qualifies as a tributary does not lose its status as a tributary if, for any length, there are one or more constructed or natural breaks so long as bed and bank and OHWM can be identified upstream of the break. Bed and bank and OHWM were identified in S2 in the JD report and during the site visits on July 24, 2018 and September 20, 2018. Based on multiple field review and further investigation, S2 is an intermittent tributary to Bledsoe Creek, an (a)(1) water.
HQR-2018-00502-LRN-S3	Ephemeral	Bledsoe Creek	No	S3 is an ephemeral stream that flows downslope into S2. Bed and bank and OHWM were identified in S3 in the JD report and during the site visit on July 24, 2018. Based on field review and further investigation, S3 is a tributary to Bledsoe Creek, an (a)(1) water.
HQR-2018-00502-LRN-S4	Ephemeral	Bledsoe Creek	No	S4 is an ephemeral stream that feeds S2 and serves as the hydrologic connection of W4 and S2. The 1997 USDA Soil Survey of Sumner County, Tennessee (Figures 8-9) identifies an intermittent stream within the review area of S2, S4, and W4 that flows into a stream within the review area of S1, the flow path matching that traced by the USGS StreamStats Web Application. Bed and bank and OHWM were identified in S4 in the JD report and during the site visit on July 24, 2018. Based on field review and further investigation, S4 is a tributary to Bledsoe Creek, an (a)(1) water.
HQR-2018-00502-LRN-S5	Ephemeral	Bledsoe Creek	No	S5 flows onsite for approximately 101 linear feet before exiting along the Southern boundary of the AJD Review area, ending at its confluence with S9 (Figure 1). S9 flows continuously for approximately 1.8km (1.1 mi), ending at its confluence with Bledsoe Creek. S5 is not identified on the current NHD map (Figure 2), but the 1997 USDA Soil Survey of Sumner County, Tennessee (Figures 8-9) identifies an intermittent stream within the review area of S5 that flows into a perennial stream within the review area for S9. Bed and bank and OHWM indicators were identified in S5 in the JD report and during the site visit on May 30, 2018. Based on a field review and further investigation, S5 is a tributary to Bledsoe Creek, an (a)(1) water and embayment of Old Hickory Lake.
HQR-2018-00502-LRN-S7	Ephemeral	Bledsoe Creek	No	S7 is the upgradient, ephemeral segment of a stream that flows into S9 (Figure 1). S8 is the intermittent segment, and it flows into S9 along the Southern

				boundary of the AJD Review Area (Figure 1). S9 flows continuously for approximately 2.7km (1.71 miles), ending at its confluence with Bledsoe Creek. S7 is not identified on the current NHD map (Figure 2), but the 1997 USDA Soil Survey of Sumner County, Tennessee (Figures 8-9) identifies an intermittent stream within the review area of S7 and S8 that flows into a perennial stream within the review area for S9. Bed and bank and OHWM indicators were identified in S7 in the JD report and during the site visit on May 30, 2018. Based on a field review and further investigation, S7 is a tributary to Bledsoe Creek, an (a)(1) water and embayment of Old Hickory Lake.
HQR-2018-00502-LRN-S8	Intermittent	Bledsoe Creek	No	S8 is the downgradient, intermittent segment of a stream that flows into S9 along the Southern boundary of the AJD Review Area (Figure 1). After exiting the review area, S9 flows continuously for approximately 2.7 km (1.71 miles), ending at its confluence with Bledsoe Creek. S8 is not identified on the current NHD map (Figure 2), but the 1997 USDA Soil Survey of Sumner County, Tennessee (Figures 8-9) identifies an intermittent stream within the review area of S7 and S8 that flows into a perennial stream within the review area for S9. The Jurisdictional Waters Report (submitted on June 15, 2018) identified S8 as an intermittent stream based on observation of specific biological and hydrological indicators during the intitial field investigation. Based on a field review and further investigation, S8 is a tributary to Bledsoe Creek, an (a)(1) water and embayment of Old Hickory Lake.
HQR-2018-00502-LRN-S9	Perennial	Bledsoe Creek	No	S9 is a segment of a stream that begins off-site and flows for 1,177 linear feet through Southwest corner of the AJD Review Area. After exiting the review area, S9 flows offsite for approximately 2.7 km (1.71 miles), ending at its confluence with Bledsoe Creek. USGS Topo Maps from 1956, 1981, and 2010 (Figures 3-5) as well as the 1997 USDA Soil Survey of Sumner County, Tennessee (Figures 8-9) identify a perennial stream within the review area of S9 that flows into Bledsoe Creek. The current National Hydrography Dataset Map (Figure 2) shows S9's continuous flow path to the beginning of the Bledsoe Creek embayment of Old Hickory Lake (Lat: 36.398419, Long.: -86.343238). The Bledsoe Creek embayment of Old Hickory Lake spans approximately 4 miles from Hartsville Pike bridge to Cumberland River Mile 248.5L. Based on a field review and further investigation, S9 is a perennial tributary to Bledsoe Creek, an (a)(1) water.
HQR-2018-00502-LRN-S10	Ephemeral	Bledsoe Creek	No	S10 is an ephemeral stream that begins at the border of W9 and flows into S9 of the Southeast boundary of the AJD Review Area (Figure 1). Then, S9 flows continuously for approximately 1.8km (1.7 miles), ending at its confluence with Bledsoe Creek.

				S10 is not identified on the current NHD map (Figure 2), but the 1997 USDA Soil Survey of Sumner County, Tennessee (Figures 8-9) identifies an intermittent stream within the review area of S10 that flows into a perennial stream within the review area for S9. Bed and bank and OHWM indicators were identified in S7 in the JD report and during the site visit on May 30, 2018. Based on a field review and further investigation, S10 is a tributary to Bledsoe Creek, an (a)(1) water and embayment of Old Hickory Lake.

Table 6. (a)(6) Adjacent Waters

(a)(6) Waters Name	(a)(1)-(a)(5) Water Name to which this Water is Adjacent	Rationale for (a)(6) Designation and Additional Discussion. Identify the type of water and how the limits of jurisdiction were established (e.g., wetland, 87 Manual/Regional Supplement); explain how the 100-year floodplain and/or the distance threshold was determined; whether this water extends beyond a threshold; explain if the water is part of a mosaic, etc.
HQR-2018-00502-LRN-W1	Deshea Creek, (a)(5)	W1 is a palustrine, emergent wetland located approximately 170 feet from the OHWM of Deshea Creek, which is within the 1,500' OHWM threshold for adjacency. A portion of this wetland is also located within the 100-year floodplain (Figure 9), so the entire wetland meets the definition of adjacency as an (a)(6)(ii) Neighboring water per CFR 328.3(c)(2)(ii). The distance was measured using the CorpsMap layers. The delineation of W1 was conducted in accordance with the 1987 *Corps of Engineers Wetland Delineation Manual* and the 2012 *Regional Supplement to the Corps of Engineers Delineation Manual: Eastern Mountain and Piedmont Region.*
HQR-2018-00502-LRN-W2	S2,(a)(5)	W2 is a seep wetland located at the head of the feature identified as S2 (Figure 1), so it meets the definition of adjacency as an (a)(6) Bordering/Contiguous water. The delineation of W2 was conducted in accordance with the 1987 *Corps of Engineers Wetland Delineation Manual* and the 2012 *Regional Supplement to the Corps of Engineers Delineation Manual: Eastern Mountain and Piedmont Region.*
HQR-2018-00502-LRN-W8	S9, (a)(5)	W8 is a palustrine, emergent wetland that is downgradient of the feature identified as S6 and immediately adjacent to the Southern boundary of the AJD Review Area. The boundary line of the review area is approximately 200 feet from the OHWM of S9 (Figure 1), which is within the 1,500' OHWM threshold for adjacency. A portion of this wetland is also located within the 100-year floodplain (Figure 9), so the entire wetland meets the definition of adjacency as an (a)(6)(ii) Neighboring water per CFR 328.3(c)(2)(ii). The distance was measured using the CorpsMap layers. The delineation of W8 was conducted in accordance with the 1987 *Corps of Engineers Wetland Delineation Manual* and the 2012 *Regional Supplement to the Corps of Engineers Delineation Manual: Eastern Mountain and Piedmont Region.*
HQR-2018-00502-LRN-W9	S10, (a)(5)	W9 is located at the head of the feature identified as S10 (Figure 1), so it meets the definition of adjacency as an (a)(6) Bordering/Contiguous water.

		The delineation of W9 was conducted in accordance with the 1987 *Corps of Engineers Wetland Delineation Manual* and the 2012 *Regional Supplement to the Corps of Engineers Delineation Manual: Eastern Mountain and Piedmont Region.*

Table 7. (a)(7) Waters

SPOE Name	(a)(7) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination **Identify SPOE watershed; discuss whether any similarly situated waters were present and aggregated for SND; discuss data, provide analysis, and summarize how the waters have more than speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.**
N/A	N/A	N/A	N/A

Table 8. (a)(8) Waters

SPOE Name	(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination **Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to subject water and aggregated for SND; discuss data, provide analysis, and then summarize how the waters have more than speculative or insubstantial effect the on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.**
Bledsoe SPOE	HQR-2018-00502-LRN-W7	Bledsoe Creek	In the JD report, W7 is identified as a seasonally, flooded wetland continguous with the erosional feature identified as S6a and S6b (Figure 1), but the National Wetland Inventory identifies it as a permanently flooded freshwater impoundment created or modified by man-made barriers. The feature is located within the Bledsoe SPOE watershed approximately 940 linear feet North of the OHWM of S9. This distance is within the 1,500' OHWM threshold for adjacency, but the resource is outside of the 100-year floodplain according to most recent FEMA/FIRM map of the project site (Figure 10). These distances were determined using CorpsMap layers. The 1956 USGS Topo Map does not identify any wetland or pond/impoundment features within the review area of W7 (Figure 3). The 1981 USGS Topo Map (Figure 4) identifies a new pond feature within the review area of W7, which is shown as a perennial pond in both 2010 and 2016 USGS Topo Maps (Figures 5-6). The 1997 USDA Soil Survey of Sumner County, Tennessee also identifies a small, dammed water feature in the review area of W7 (Figure 9), but it appears to be continguous with an intermittent stream flowing into a perennial stream within the review area of S9. This survey and the Custom Soil Report for Sumner County (retrieved from NRCS database) indicate that this feature was excavated in Harpeth Silt Loam, which is an upland soil that forms in loamy alluvium along stream terraces.

			In the JD report and during a site visit on July 24, 2018, evidence of a hydrologic connection between W7 and W8 was observed, but it lacked the physical indicators of bed and bank required to meet the defintion of a tributary. Although S6a was determined to meet the criteria for exclusion per (b)(4)(vi), it can serve as the hydrologic connection for (a)(8) case-specific analysis. Based on a field review and further investigation, W7 has a direct hydrologic connection to W8 and a significant nexus to S9 and downstream waters. By performing the functions of sediment trapping, retention and attenuation of flood waters, and pollutant management, W7 contributes to the physical, chemical, and biological integrity of Bledsoe Creek.

Non-Jurisdictional Waters

Table 9. Non-Waters/No Significant Nexus

SPOE Name	Non-(a)(7)/(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water DOES NOT have a Significant Nexus	**Basis for Determination that the Functions DO NOT Contribute Significantly to the Chemical, Physical, or Biological Integrity of the (a)(1)-(a)(3) Water. Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to the subject water; discuss data, provide analysis, and summarize how the waters did not have more than a speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water.**
Deshea SPOE	HQR-2018-00502-LRN-W6	Bledsoe Creek	W6 is a small wetland located within the Deshea Single Point of Entry watershed(SPOE).This watershed boundary also includes all aquatic resources identified on the Northern half of the AJD Review Area (Figure 1). W6 is located in a concave area approximately 620 feet from an off-site segment of S1, which is within the 1,500' OHWM threshold for adjacency, but the resource is outside of the 100-year floodplain according to most recent FEMA/FIRM map of the project site (Figure 9). The distance was determined using CorpsMap layers. W6 is identified on the National Wetland Inventory as a permanently flooded freshwater impoundment, but no water was reported in the JD reported nor observed during the field visit on July 24, 2018. The 1997 USDA Soil Survey of Sumner County, Tennessee (Figures 8-9) identifies an intermittent stream flowing through the review area of W6 and into an offsite segment of S1 (Figure 8), but during a field review, no inlet and outlet channels were observed. Also, this feature has no observable groundwater connection, so its hydrology is likely a result of downslope drainage. A significant nexus analysis was examined to determine whether or not W6, either alone or in combination with other similarly situated waters in the Deshea SPOE significantly affect the chemical, physical, or biological integrity of Bledsoe Creek, an (a)(1) water. Per the 2015 Clean Water Rule, similarly situated waters must function alike and lie within a contiguous area of land with homogeneous soils, vegetation, and

			landform (SVL) or function alike and lie within the distance thresholds for (a)(8) waters. There are no waters belonging to the Palustrine Cowardin Class within the SVL of W6, and only two similarly situated Palustrine Emergent wetlands within the Deshea SPOE. W6 and the two similarly situated waters have a combined area of approximately 0.56 acres, and all are surrounded by areas that have been highly impacted from agricultural development and road construction. The Custom Soil Report for Sumner County (retrieved from NRCS database) indicates that all three wetlands are located in Mimosa series soils, which are highly eroded, not hydric, and form on hills and steep uplands. Given the small size, position within the watershed, and the limited functioning capacity of W6 and the similarly situarted waters, they do not significantly contribute to the biological, chemical, and phyiscal integrity of S1 and downstream waters. Therefore, W6 does not have a significant nexus to Bledsoe Creek.

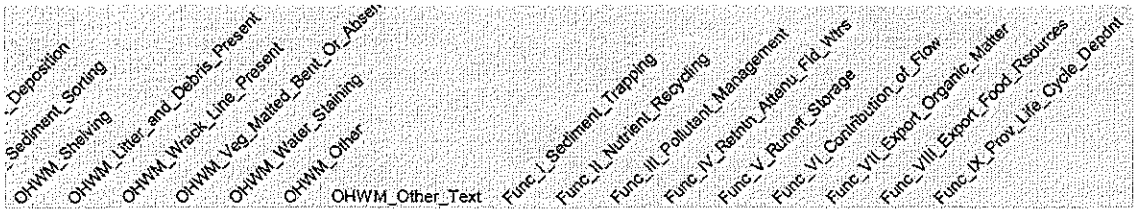
Table 10. Non-Waters/Excluded Waters and Features

Paragraph (b) Excluded Feature/Water Name	Rationale for Paragraph (b) Excluded Feature/Water and Additional Discussion.
HQR-2018-00502-LRN-S6a	Based on a field review and further investigation, S6a meets the criteria for exclusion per (b)(4)(vi), erosional features, because it lacks the physical characteristics of bed and bank that are required to meet the defintion of a tributary per 33 C.F.R 328.3.
HQR-2018-00502-LRN-S6b	Based on a field review and further investigation, S6b meets the criteria for exclusion per (b)(4)(vi), erosional features, because it lacks the physical characteristics of bed and bank that are required to meet the defintion of a tributary per 33 C.F.R 328.3.

Table 11. Non-Waters/Other

Other Non-Waters of U.S. Feature/Water Name	Rationale for Non-Waters of U.S. Feature/Water and Additional Discussion.
N/A	N/A

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude	Local_Waterway	Similarity_Situated	Sim_Situated_Aggregated_SPOE	Adjcnt_Waters_Sbjct_33USC1344	OHWM_Chg_In_Plant_Community	OHWM_Bed_And_Banks	OHWM_Break_In_Slope	OHWM_Chg_In_Character_Of_Soil	OHWM_Chg_In_Veg_Density_Maturity	OHWM_Chg_In_Sediment_Texture	OHWM_Line_Impressed_On_Bank	OHWM_Destr_Of_Terrestrial_Veg	OHWM_Leaf_Litter_Disturbed	OHWM_Multiple_Flow_Events	OHWM_Scour	OHWM_Sediment	OHWM
W4	TENNESSEE	POW		Area	0.62	ACRE	A4	36.40916	-86.36441																	
S1	TENNESSEE	R5UB1		Linear	680	FOOT	A5	36.40819	-86.361					YES		YES		YES			YES					
S2	TENNESSEE	R4SB1		Linear	1304	FOOT	A5	36.41054	-86.36199					YES							YES		YES			
S3	TENNESSEE	R6		Linear	250	FOOT	A5	36.41026	-86.3633					YES	YES								YES			
S4	TENNESSEE	R6		Linear	258	FOOT	A5	36.40955	-86.3638					YES	YES			YES	YES							
S5	TENNESSEE	R6		Linear	833	FOOT	A5	36.40402	-86.36366					YES				YES								
S7	TENNESSEE	R6		Linear	678	FOOT	A5	36.41279	-86.37275					YES				YES							YES	
S8	TENNESSEE	R4SB3		Linear	1054	FOOT	A5	36.40381	-86.36812					YES		YES								YES		
S9	TENNESSEE	R5		Linear	1177	FOOT	A5	36.40129	-86.37161					YES							YES					
S10	TENNESSEE	R6		Linear	674	FOOT	A5	36.40491	-86.3622					YES		YES			YES	YES				YES		
W1	TENNESSEE	PEM		Area	0.18	ACRE	A6N2WB	36.41137	-86.36061																	
W2	TENNESSEE	PEM		Area	0.2	ACRE	A6BWB	36.4093	-86.36356																	
W8	TENNESSEE	PEM		Area	1.15	ACRE	A6N2WB	36.40282	-86.36781																	
W9	TENNESSEE	PEM		Area	0.1	ACRE	A6BWB	36.40563	-86.36232																	
W7	TENNESSEE	PEM2		Area	0.9	ACRE	A8OWB	36.40492	-86.36887		YES	NO														
W6	TENNESSEE	PEM2		Area	0.08	ACRE	OTHERA8F	36.41286	-86.37206		YES	NO														
S6a	TENNESSEE	R6		Linear	418	FOOT	EXCLDB4VI	36.40381	-86.36812					NO												
S6b	TENNESSEE	R6		Linear	211	FOOT	EXCLDB4VI	36.41286	-86.37206					NO												



YES

YES

YES

YES

YES

YES	YES	YES	YES		YES			YES	
YES	NO	NO	NO	NO	NO	NO	NO	NO	