

### I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 12/10/2020

ORM Number: LRN-2018-00784

Associated JDs: LRN-2018-00784 PJD, dated May 30, 2019

Review Area Location<sup>1</sup>: State/Territory: TN City: Ashland City County/Parish/Borough: Cheatham

Center Coordinates of Review Area: Latitude 36.217574 Longitude -87.002207

#### II. FINDINGS

- **A. Summary:** Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.
  - The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
  - □ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
  - There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
  - There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

### B. Rivers and Harbors Act of 1899 Section 10 (§ 10)<sup>2</sup>

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
Cumberland	740	linear	RHA Non-tidal	This project is located on the Cumberland River at River
River		feet	water is on the	Mile 164, Right Bank, and the Cumberland River (Mouth
			district's Section 10 waters list	to Mile 694.2) is included in the List of Navigable Waters of the United States (U.S.) within the Nashville District
				(Public Notice ORNOR-F 86-23, dated 8 May 1986).

#### C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters):3						
(a)(1) Name	(a)(1)	) Size	(a)(1) Criteria	Rationale for (a)(1) Determination		
Cumberland	740 linear		(a)(1) Water is also	This project is located on The Cumberland River		
River		feet	subject to Sections 9 or	at River Mile 164, Right Bank, and the		
			10 of the Rivers and	Cumberland River (Mouth to Mile 694.2) is		
			Harbors Act - RHA Tidal	included in the List of Navigable Waters of the		
			water is subject to the	United States (U.S.) within the Nashville District		
			ebb and flow of the tide.	(Public Notice ORNOR-F 86-23, dated 8 May		
				1986).		

<sup>&</sup>lt;sup>1</sup> Map(s)/figure(s) are attached to the AJD provided to the requestor.

<sup>&</sup>lt;sup>2</sup> If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

<sup>&</sup>lt;sup>3</sup> A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



Tributaries ((	Tributaries ((a)(2) waters):						
(a)(2) Name	(a)(2)	Size	(a)(2) Criteria	Rationale for (a)(2) Determination			
S1 Intermittent	1096	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	The flow regime of S1 Intermittent was verified via information provided in the JD report (submitted February 28, 2019). The report indicated that during field observations made on November 14, 2018, S1 Intermittent exhibited several OHWM indicators, including bed & bank, scour, wracking, and vegetation matted down—bent—or absent. The report also cited the following primary indicators of streams:  - presence of multiple populations of obligate lotic organisms with >2 month aquatic phase  - presence of fish (except Gambusia)  - naturally occurring ground water table connection The status of S1 intermittent as a tributary that contributes surface water flow directly or indirectly to an (a)(1) water in a typical year was verified using information submitted in an DA permit application (dated April 1, 2019) and LiDAR Point Cloud Data (Figure 3).  As shown on Figure 2, S1 Intermittent begins at the boundary of the "Study Area" and flows Southwest directly into the Cumberland River, an (a)(1) water.			

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):						
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination		
N/A.	N/A. N/A.		N/A.	N/A.		

Adjacent wetla	inds ((a)(4)	) waters):			
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination	
WD	2.11	acre(s)	(a)(4) Wetland separated from an (a)(1)-(a)(3) water only by a natural feature.	WD is a palustrine scrub-shrub wetland located in a depressional area in the southern central portion of the AJD Review Area and is entirely within the Regulatory Floodway of the Cumberland River Cheatham Lake Reservoir. WD was delineated using the 1987 Wetlands Delineation Manual and Regional Supplements.	
				During a site visit on September 24, 2020, the Corps observed an elevated area stretching along the Southern border of the property adjacent to the Cumberland River. This elevated area is located within Wolftever soil series, which is defined as having soils in fine or moderately-fine textured alluvial deposits on low stream terraces. As shown on the LiDAR in Figure 4, there is a change in elevation of approximately 15 feet from Cumberland River at full pool (385 feet above sea level) to the top of the natural levee/berm. Based on site observations, LiDAR and soils data, the area between the	



Adjacent wetlands ((a)(4) waters):					
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination		
			Cumberland River and Wetland WD was determined to be a natural levee/berm.		
			Wetland WD is separated from the Cumberland River, an (a)(1) water, only by a natural berm, bank, dune, or similar natural feature. Therefore, Wetland WD meets the criteria of an (a)(4) adjacent wetland and is jurisdictional under the Navigable Waters Protection Rule.		

#### D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): <sup>4</sup>					
<b>Exclusion Name</b>			Exclusion <sup>5</sup>	Rationale for Exclusion Determination	
S1 Ephemeral	54	linear feet		S1 Ephemeral was determined to have an ephemeral flow regime based on an evaluation of the submitted field data sheet, APT, and online resources. S1 Ephemeral was observed to have sheet flow, but lacked primary indicators of streams, including natural ground water table connection and obligate lotic organisms with >2 month aquatic phase.  As cited in the JD report and verified by the APT, the feature was observed during wetter than normal conditions. Reference Section III B of this AJD form for typical year assessments.  In addition, in a Hydrologic Determination letter (dated January 17, 2019), Tennessee Department of Environment and Conservation determined S1 Ephemeral to be a wet weather conveyance, which is a non-relatively permanent water that flows only in direct response to precipitation runoff and whose channels are always above the groundwater table.	
				S1 Ephemeral is an excluded water as an ephemeral feature and is not jurisdictional under the Navigable Waters Protection Rule of the Clean Water Act.	
WA	0.03	acre(s)	(b)(1) Non- adjacent wetland.	WA is a palustrine emergent wetland located within floodplain of the Cumberland River Cheatham Lake Reservoir. The feature was delineated using the 1987 Wetlands Delineation Manual and Regional Supplements.	
				WA is approximately 65 feet from the OHWM of S1 Intermittent, an (a)(2) tributary, and 1,000 feet from the	

<sup>&</sup>lt;sup>4</sup> Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district

to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

<sup>5</sup> Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



Excluded waters	((b)(1) - (b)(12)	Excluded waters ((b)(1) – (b)(12)): <sup>4</sup>				
<b>Exclusion Name</b>			Rationale for Exclusion Determination			
EXCIUSION NAME	EXCIUSION SIZE	EXCIDSION	Cumberland River (Section 10 water). Based on the LiDAR data shown in Figures 3 and 4, there is elevation change of approximately 15 feet from the Cumberland River to the natural levee along the riverbank and 8.5 feet from S1 Intermittent and Wetland WA. For Wetland WA to be inundated by S1 Intermittent, the stream would have to reach an elevation of at least 393.5 feet, and for Wetland WA to be flooded by the Cumberland River, the river would have to reach an elevation of 400 feet. Stream gage data from USGS 03431790 Cumberland River at Ashland City, TN, located approximately 6 river miles from the project area, showed that during the last 3 years, the Cumberland River only surpassed this during extreme flood conditions between February 23 and 26, 2019. Additionally, no data was found to support that Stream S1 Intermittent raises 8.5 feet during a typical year to flood Wetland WA. The determination that flooding conditions in February 2019 did not occur within a "typical year" were confirmed using the Antecedent Precipitation tool.  Wetland WA does not touch at least one side of an (a)(1)-(a)(3) water; it is not inundated by flooding from an (a)(1)-(a)(3); and it is not physically separated from an (a)(1)-(a)(3)			
WB	3.30 acre(s)	(b)(1) Non-adjacent wetland.	(a)(3); and it is not physically separated from an (a)(1)-(a)(3) by a natural or artificial barrier. Therefore, Wetland WA does not meet any of the criteria of an (a)(4) adjacent wetland and is an excluded water that is not jurisdictional under the Navigable Waters Protection Rule of the Clean Water Act.  WB is a palustrine scrub-shrub wetland located within the floodplain of the Cumberland River Cheatham Lake Reservoir. The feature was delineated using the 1987 Wetlands Delineation Manual and Regional Supplements.  WB is approximately 55 feet from the OHWM of S1 Intermittent, an (a)(2) tributary and 1,075 feet from the Cumberland River (Section 10 water). Based on the LiDAR data shown in Figures 3 and 4, there is elevation change of approximately 15 feet from the Cumberland River to the natural levee along the riverbank and 7.5 feet from S1 Intermittent and Wetland WB. For Wetland WB to be inundated by S1 Intermittent, the stream would have to reach an elevation of at least 392.5 feet, and for Wetland WB to be flooded by the Cumberland River, the river would have to reach an elevation of 400 feet. Stream gage data from USGS 03431790 Cumberland River at Ashland City, TN, located approximately 6 river miles from the project area, showed that during the last 3 years, the Cumberland River only surpassed this during extreme flood conditions between February 23 and 26, 2019. Additionally, no data was found to support that Stream S1 Intermittent raises 7.5 feet during a typical year to			



Excluded waters	((b)(1	) – (b)(12))	:4	
Exclusion Name				Rationale for Exclusion Determination
				flood Wetland WB. The determination that flooding conditions in February 2019 did not occur within a "typical year" were confirmed using the Antecedent Precipitation tool.  Wetland WB does not touch at least one side of an (a)(1)-(a)(3) water; it is not inundated by flooding from an (a)(1)-(a)(3); and it is not physically separated from an a)(1)-(a)(3) by a natural or artificial barrier. Therefore, Wetland WB does not meet any of the criteria of an (a)(4) adjacent wetland and is an excluded water that is not jurisdictional under the Navigable Waters Protection Rule of the Clean Water Act.
WC	1.64	acre(s)	(b)(1) Non-adjacent wetland.	WC is a palustrine scrub-shrub wetland located within the Regulatory Floodway and floodplain of the Cumberland River Cheatham Lake Reservoir. The feature was delineated using the 1987 Wetlands Delineation Manual and Regional Supplements.  WC is approximately 115 feet from the OHWM of S1 Intermittent, an (a)(2) tributary, and 650 feet from the Cumberland River (Section 10 water). Based on the LiDAR data shown in Figures 3 and 4, there is elevation change of approximately 15 feet from the Cumberland River to the natural levee along the riverbank and 8 feet from S1 Intermittent and Wetland WC. For Wetland WC to be inundated by S1 Intermittent, the stream would have to reach an elevation of at least 393 feet, and for Wetland WC to be flooded by the Cumberland River, the river would have to reach an elevation of 400 feet. Stream gage data from USGS 03431790 Cumberland River at Ashland City, TN, located approximately 6 river miles from the project area, showed that during the last 3 years, the Cumberland River only surpassed this during extreme flood conditions between February 23 and 26, 2019. Additionally, no data was found to support that stream S1 Intermittent raises 8 feet during a typical year to flood Wetland WC. The determination that flooding conditions in February 2019 did not occur within a "typical year" were confirmed using the Antecedent Precipitation tool.  Wetland WC does not touch at least one side of an (a)(1)-(a)(3) water; it is not inundated by flooding from an (a)(1)-(a)(3); and it is not physically separated from an a)(1)-(a)(3) by a natural or artificial barrier. Therefore, Wetland WC does not meet any of the criteria of an (a)(4) adjacent wetland and is an excluded water that is not jurisdictional under the Navigable Waters Protection Rule of the Clean Water Act.

### **III. SUPPORTING INFORMATION**



- **A.** Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.
  - ☑ Information submitted by, or on behalf of, the applicant/consultant: "Wetland and Stream Delineation Report, Proposed Ashland City Terminal" (submitted February 29, 2019) and "Updated Aquatic Resource Map" (dated October 2020)

This information is and is not sufficient for purposes of this AJD.

Rationale: WB delineation was amended after site visit on March 13, 2019. Only 47 linear feet of S1 Intermittent was included in the original request for Jurisdictional Determination because located on Corps Real Estate Parcel G-701.

- ☐ Data sheets prepared by the Corps: Title(s) and/or date(s).
- ☐ Corps site visit(s) conducted on: March 13, 2019 and September 24, 2020
- Previous Jurisdictional Determinations (AJDs or PJDs): LRN-2018-00784, May 30, 2019
- Antecedent Precipitation Tool: <u>provide detailed discussion in Section III.B.</u>

- □ USGS topographic maps: Accessed October 30, 2020 via USGS TopoView website:

https://ngmdb.usgs.gov/topoview/viewer/#13/36.2176/-87.0022

#### Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
Other USGS data (specify)	USGS 03431790 Stream Gage Data (retrieved from:
	https://waterdata.usgs.gov/tn/nwis/uv/?site_no=03431790&agency_cd=USGS)
USDA NRCS WETS tables	Included in Antecedent Precipitation Tool, determined to be wetter than normal
Other NOAA data (specify)	National Weather Service, Advanced Hydrologic Prediction Service
Other USACE data (specify)	Nashville Regulatory Viewer
LiDAR data/maps	U.S. Geological Survey, 20190711, USGS Lidar Point Cloud TN Middle B1 2018
	1660685SE LAS 2019: U.S. Geological Survey.
FEMA/FIRM maps	Accessed 10/28/2020 using Nashville Regulatory Viewer
Other state/local data	Tennessee Department of Environment and Conservation (TDEC), Hydrologic
(specify)	Determination (DWR ID No. 11294) (dated January 17, 2019)
Other state/local data	
(specify)	

- **B. Typical year assessment(s):** The Antecedent Precipitation Tool (APT) was used to evaluate the project area for the previous 90 days, with a date of November 14, 2018. A single point centered on the center of the review area was used to evaluate the rainfall data and was determined to be sufficient based on the small geographic size of the site. The 90 day period beginning September 15, 2028 was determined to be wetter than normal, and the drought index further describes the period as moderate wetness. In the previous 60 days, the rainfall exceeded the 70th percentile as well as the 30-year rolling total. According to NOAA's AHPS tool, site received a between 0.51-1.25 inches rainfall in the 4-days prior of the site visit.
- C. Additional comments to support AJD: This property is located on The Cumberland River at River Mile 164, Right Bank, and the Cumberland River (Mouth to Mile 694.2) is included in the List of Navigable Waters of the United States (U.S.) within the Nashville District (Public Notice ORNOR-F 86-23, dated 8 May 1986).

