July 23, 2021

Via Electronic Mail to cody.a.flatt@usace.army.mil
Attn: Cody Flatt, Biologist
Department of the Army
Nashville District, Corps of Engineers
110 9th Avenue South, Room A-405
Nashville, TN 37203

Dear Mr. Flatt:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the U.S. Army Corps of Engineers (USACE) – Nashville District Draft Environmental Assessment (EA) and Unsigned Finding of No Significant Impact (FONSI) which assesses the impacts of proposed revisions to the 1998 Cordell Hull Dam and Reservoir Water Control Manual (WCM). The WCM at Cordell Hull Dam serves as a guide for the day-to-day and emergency regulation of the project and provides background information on the project. The manual presents the plan of regulation for the project and furnishes information pertinent to its operation. Actions considered in detail within the Draft EA include:

- **No Action Alternative (NAA)** – According to USACE, over the past 20 years operations have adapted to changing demands such as water quality, water supply, and hydropower generation and environmental fluctuations like climate change causing increased rain events. The No Action Alternative would not result in revisions to the 1998 WCM. The WCM would remain the same as outlined in the 1998 version. The NAA could limit future operational capabilities and would not include current operating procedures; therefore, the NAA is not preferred by USACE. However, the NAA is included in the alternatives analysis to establish a baseline condition for existing human and natural environmental conditions, to allow comparison between future with and without project actions, and to determine potential environmental effects of proposed project alternatives. Evaluation of the NAA is a requirement under NEPA regulation.

- **Proposed Action Alternative (PAA) – Revision of the 1998 Water Control Manual** – The revision of the WCM would involve several updates to incorporate recent historical data (1998-2019), watershed characteristics, communication networks, and modern forecasting methods, which are needed for current project operations and optimal management of authorized purposes.
These updates are informational in nature and provide prudent knowledge to Nashville District water managers. This document only evaluates proposed operational alterations to the 1998 WCM. Proposed operational modifications include:

- **Control Flow at Carthage** – Flood control benefits of Nashville District reservoirs are achieved by maintaining a control flow at downstream damage centers. Carthage, Tennessee is the designated downstream control point for Cordell Hull and Center Hill Reservoirs. Revisions to the Center Hill Dam and Reservoir WCM are expected in the near future and would work in conjunction with Cordell Hull’s WCM to produce the control flow point at Carthage, Tennessee. This evaluation will cover the proposed control flow modification of both Cordell Hull and Center Hill revisions of WCMs. Currently, the control flow at Carthage, Tennessee varies seasonally based on crop season (April 15th – December 15th) at 45,000 cubic feet per second (cfs) or a stage of 20 feet and flood season (December 15th – April 15th) at 72,000 cfs or a stage of 29 feet. The revised water control manual proposes a control flow at Carthage that would not vary seasonally and be 72,000 cfs (stage of 29 feet) year-round.

- **Hydropower Ramp Rates** – Cordell Hull Dam has three hydropower units/turbines. To minimize river level fluctuations, changes in hydropower generation normally are limited to two units per hour, up or down. However, it is strongly preferred to limit ramp rates to one unit per hour unless a power emergency or similar situation necessitates a two unit per hour ramp rate.

- **Spillway Gate Operations** – Occasionally, floating trash and woody debris collects in front of the Dam and can damage the gates while opening and closing. Spillway gate operations are currently limited to a 5,000 cfs increase and a 10,000 cfs decrease. The proposed modification would allow spillway gate releases greater than these to be implemented by Dam personnel to pass debris through the spillway gates. Increased spillway gate releases to pass debris would be limited to one hour. Spillway gate discharge may also rarely be used to improve water quality conditions, particularly low dissolved oxygen (DO), during periods of low flow in the Cumberland River. While rare, these spillway gate operations could be utilized as needed.

TDEC has reviewed the Draft EA with Unsigned FONSI and provides the following comments:

**Cultural Resources**

TDEC believes the Draft EA adequately addresses potential impacts to cultural resources within the proposed project area.¹

¹ This is a state-level review only and cannot be substituted for a federal agency Section 106 review/response. Additionally, a court order from Chancery Court must be obtained prior to the removal of any human graves. If human remains are encountered or accidentally uncovered by earthmoving activities, all activity within the immediate area must cease. The county coroner or medical examiner, a local law enforcement agency, and the state archaeologist’s office should be notified at once (Tennessee Code Annotated 11-6-107d).
Solid Waste

TDEC recommends that the Final EA reflect that any wastes generated in association with the PAA be evaluated and managed in accordance with the Solid and Hazardous Wastes Rules and Regulations of the State of Tennessee (TDEC DSWM Rule 0400 Chapters 11 and 12, respectively).  

Water Resources

TDEC believes the Draft EA adequately addresses potential impacts to water resources.

TDEC appreciates the opportunity to comment on this Draft EA with Unsigned FONSI. Please note that these comments are not indicative of approval or disapproval of the proposed action or its alternatives, nor should they be interpreted as an indication regarding future permitting decisions by TDEC. Please contact me should you have any questions regarding these comments.

Sincerely,

Matthew Taylor
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