

## U.S. ARMY CORPS OF ENGINEERS, NASHVILLE DISTRICT 110 9<sup>TH</sup> AVENUE SOUTH, ROOM A-405 NASHVILLE, TN 37203-3852

April 15, 2024

Project Planning Branch

## To All Interested Parties:

The U.S. Army Corps of Engineers, Nashville District (USACE), is initiating scoping under the National Environmental Policy Act (NEPA) to evaluate potential impacts of the proposed revision of the 1998 Wolf Creek Dam and Lake Cumberland Water Control Manual (WCM). The Wolf Creek WCM comprises pertinent project data, background information, the plan for day-to-day and emergency water management, and the effects of the plan on authorized project purposes.

Wolf Creek Dam is located at Mile 460.90 on the Cumberland River about 10 miles southwest of Jamestown, KY. Lake Cumberland Reservoir is located in Clinton, Laurel, McCreary, Pulaski, Russell, Wayne, and Whitley Counties in Kentucky (Figure 1). The Reservoir is one of four major flood risk management reservoirs within the Cumberland River Basin; the others being J. Percy Priest Reservoir, Dale Hollow Reservoir, and Center Hill Reservoir. Wolf Creek Dam was authorized for flood control in 1938 and hydropower in 1946. Construction was completed in 1952. After construction, Congress authorized additional project purposes for all USACE projects including recreation, water supply, fish and wildlife conservation, and water quality. Visitors to Wolf Creek Dam and Lake Cumberland have diverse interests such as camping, bird watching, sightseeing, fishing, and paddling. Lake Cumberland Reservoir is consistently one of the top fifty most-visited Corps of Engineers' reservoirs in the nation, receiving over one million visitors per year.

The WCM ensures unbiased operations and informs the public of mission priorities. The purpose of the proposed action is to update the Wolf Creek Dam and Lake Cumberland WCM to include current project operations under the existing congressional authorizations. The WCM update would address factors such as changes in basin hydrology, new and rehabilitated structural features, and environmental considerations. The updated WCM would also contain records of institutional knowledge to prevent the loss of operational expertise and updates of Corps terms and definitions that have changed since the manual was last updated. Below are some current operations the Corps is considering updating:

- Hydropower Ramp Rates This rate describes the number of generating units that could be turned on or off over a certain amount of time. The 1998 WCM allows for three units per hour up or down.
- Sluice and Orifice Gate Operation The sluice and orifice gates release highlyoxygenated water from the reservoir to the tailwater. The sluice gates

sit at the base of the dam and are operated manually. The orifice gates are perforated steel plates that are placed over two of the sluice gate openings to limit flow from approximately 1500 to approximately 250 cubic feet per second (CFS). Both sluice and orifice gates can improve dissolved oxygen downstream when water quality is degraded due to warm summer temperatures. The 1998 Water Control Manual does not address the discharge of water that would bypass hydropower turbines except for in times of flood risk management.

 Dissolved Oxygen (DO) Diffusor System – A newly constructed dissolved oxygen DO diffusor system is set to be completed in 2026. It is designed to improve the water quality of turbine releases, thereby reducing the need to release water through the orifice and sluice gates.

The Corps goal is to gather input from all stakeholders and best balance all the reservoir's authorized project purposes. The Corps will evaluate input submitted to determine the proper NEPA class of action (categorical exclusion, environmental assessment, or environmental impact statement). This letter serves to solicit scoping comments from the public, federal, state, local agencies and officials, and other interested parties in order to consider and evaluate the impacts of this proposed activity as part of the Corps' planning process and in accordance with the NEPA process. We encourage comments not only about resources in the immediate project area, but also of plans or proposals for any other development that may impact or influence project resources. Comments are used to assess impacts on the human environment.

Comments may be sent by email to <a href="mailto:corpslrnplanningpubliccom@usace.army.mil">corpslrnplanningpubliccom@usace.army.mil</a>, no later than thirty calendar days from the date of this letter. If you are unable to access an email account, you may send written comments to the address listed on the letterhead ATTN: CELRN-PMP (Brad Potts). For additional information regarding the proposed project, please contact Mr. Potts at (931)-310-2596. Your participation is greatly appreciated.

Sincerely,

Enclosures: Project Vicinity Map Valerie McCormack Ph.D. Chief, Project Planning Branch



Vicinity Map of Wolf Creek Dam and Lake Cumberland