

To: Upper Mississippi River Restoration Coordinating Committee
From: Water Level Management Task Force
Through: River Resources Forum
Subject: Use of UMRR Funds for Pool-wide Water Level Drawdowns

The Water Level Management Task Force (WLMTF) was formed by the River Resources Forum (RRF) in 1996 and has since been instrumental in coordinating and implementing pool-wide drawdowns on Pool 8 (2001 and 2002), Pool 5 (2005 and 2006), and Pool 6 (2010). Seasonal variation in water levels was reduced by construction of the lock and dam system in the 1930's. Pool-wide drawdowns have provided the opportunity for research scientists, engineers, and biologists to observe and document environmental changes resulting from the return of more natural water level variability to the pools. A compilation of these observations and studies can be found in the May 2014 document "*Habitat Enhancement using Water Level Management on the Upper Mississippi River.*"

While the benefits of water level management (WLM) have been documented in wetlands, lakes, and impoundments across the country, implementation on a pool-wide scale on the Upper Mississippi River is challenging. A drawdown requires extensive coordination with state and federal interests, the navigation industry, and extensive outreach to the public including privately owned marinas, municipalities, and general river users. There is a relatively high cost associated with conducting drawdowns, the majority of which is incurred by the U.S. Army Corps of Engineers (USACE) to complete the necessary planning, coordination with higher authority, and additional dredging of the navigation channel. The planning process often takes five years, or longer, to implement a single pool-wide drawdown. A summary of the process utilized to plan and implement these drawdowns can be found in the attached document "*Process, Policy, and Implementation of Pool-Wide Drawdowns on the Upper Mississippi River: A Promising Approach for Ecological Restoration of Large Impounded Rivers*" (Kenow et al., 2016).

It has long been the goal of the WLMTF to implement drawdowns on a programmatic level, potentially alleviating a portion of the work load and costs associated with conducting an individual pool-wide drawdown. In 2008, the RRF endorsed the following WLMTF recommendation: "*The River Resources Forum recommends the St. Paul District include pool-wide water level reductions (drawdowns) and other water management options as ecosystem restoration components of their Water Management Program.*"

A step in that direction was achieved in the May 2017 Preliminary Informational Assessment (PIA) "*Recurring Operational Drawdown Pool 8, Upper Mississippi River, LaCrosse and Vernon Counties, Wisconsin, Houston and Winona Counties, Minnesota*" (attached). This report was compiled by a diverse team of USACE, St Paul District staff, with input from other state, federal, and non-government organizations, to evaluate the feasibility of conducting regular and recurring drawdowns on Pool 8. Pool 8 was selected for a multitude of reasons including, availability of historic monitoring data, high beneficial use of dredge material, and relatively high probability of success. The PIA considered two alternatives that would require additional dredging of the navigation channel every three or five years and then implement a drawdown when channel conditions allowed.

The PIA provides a preliminary evaluation that offers justification for a recurring drawdown in Pool 8 and represents an opportunity to restore natural low water variability on a recurring basis. However, to move this project forward, the WLMTF requests the UMRRCC's response to two questions:

- 1) Which portions of a pool-wide water level reduction (drawdown) are the UMRR program able to fund? Portions to consider could include project planning (feasibility, NEPA), pre-drawdown dredging and disposal, and/or stakeholder outreach.
- 2) Since traditionally funded UMRR projects are designed with a 50-year life, what mechanisms are in place, or could be developed, for the UMRR program to regularly fund a project over a 50 year period? For example from the Pool 8 PIA: dredging in anticipation of a drawdown would occur every five years with a drawdown occurring when channel conditions allow. Could funding be provided for the five-year dredging cycle (10 dredging events) over a 50-year period?

The WLMTF is available to answer any questions that may arise from discussions regarding past and future drawdowns within the USACE St. Paul District. If additional information is required, please contact the WLMTF Chair Mary Stefanski at mary_stefanski@fws.gov or 507-494-6229.

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