

Waterways Action Plan

2023

Mississippi River & Ohio River & Tributaries



Executive Summary

The Mississippi and Ohio Valley and Tributaries Waterways Action Plan (WAP) provides the Maritime Industry, U.S. Coast Guard (USCG), U.S. Army Corps of Engineers (USACE), State and local governments with a plan to facilitate safe and orderly movement of traffic during evolving conditions on the inland rivers within USCG's area of responsibility. This plan supports the USCG District Eight WAP promulgated in 2007, which gives overall context, history and intent for regional WAPs throughout the District.

The WAP is an evolving document referenced and evaluated frequently. The USCG will continue to facilitate the review of the WAP in conjunction with Industry leaders and USACE and verify the accuracy of the plan and communications information. It is highly desirable that all stakeholders document the lessons-learned from both experience and history through continual refinement of the plan with prudent joint actions. This plan establishes a single common framework for all parties to use when taking proactive or reactive steps to deal with high water and velocity, low water, and ice conditions. The overall goal of this plan is to ensure safety of life and navigation, protection of infrastructure and property, and to prevent marine casualties.

Conference calls between Industry stakeholders USCG, and USACE, National Weather Service (NWS) remains a tremendous value to respond to river changes, and they remain critical to manage evolving river conditions and during emergencies.

Industry leaders, USACE and USCG from Pittsburgh, PA, Huntington, WV, Louisville, KY, Paducah, KY, Cincinnati, OH, and Nashville, TN worked jointly to update this plan. The diligent efforts and coordination of all parties working close together to manage the waterways allowed for successful publication of this WAP. The USACE manages the Cumberland River Waterways Management Plan and the TVA manages the Tennessee River Waterway Management plan, which we have added to this document for reference.

Safe navigating!

Record of Changes

2022: Updated Contacts

2023: Updated Contacts, Updated BNM's. MSD Nashville's Area of Responsibility (AOR), upper limit of Tenn-Tom adjust/remove Mile 450.5 and add 450.7 based on 2022 Light List (Page 1iii and 2013 USACE Tennessee River Chart, Chart Page # 32.

4. Action Plan

Actions taken during waterways crisis span a wide range of controls and responses from all involved parties including industry and federal government agencies. In general, actions taken by industry will be intended to reduce marine casualties during low & high water situations. Some actions taken by industry during extreme low water conditions include reducing loads or lightening barges, which reduce vessel drafts. During high water conditions, industry may reduce tow sizes to allow more positive control over the tow to more effectively utilize towboat horsepower. The federal government, including the U.S. Coast Guard, U.S. Army Corps of Engineers, and the Tennessee Valley Authority, is also required to take specific and timely actions to aid in preventing marine casualties while facilitating commerce. Some of these actions include the USCG's issuance of Broadcast Notice to Mariners (BNM), establishment of Safety Zones, dredging operations by the USACE, and adjustment of flow rates from locks and dams by the Tennessee Valley Authority (TVA). The enclosed Safety Advisory and Safety Zone templates are recommended for use, but can be modified or combined to meet the needs of the situation.

4.A. Ohio River Action Plan
4.A.15. McAlpine Lock and Dam High/Low Water Operations

CRITICAL AREA DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
<p>MCALPINE LOCK & DAM</p> <p>OHIO RIVER MM: 606.8</p> <p>FLOOD STAGE READING: 23' UG</p> <p>OTHER USEFUL DATA: MAX OPENING 113' GATES ALL OUT 28'-30' LG CEASE LOCKING 66' LG 31.5 UG</p> <p>TABLE USES A COMBINATION OF DAM OPENING AND LOWER GAUGE READING. THE POTENTIAL FOR VESSEL ALLISIONS WITH MCALPINE L&D TENDS TO INCREASE AS WATER RISES AND CURRENTS INCREASE. VESSELS EXPERIENCE OUTDRAFT WHILE ENTERING SOUTHBOUND PORTLAND CANAL. MARINERS ARE ADVISED TO EXERCISE EXTREME CAUTION, ENTER CHAMBERS AT SLOWEST SAFE SPEED, AND PREPARE FOR POTENTIAL OUTDRAFTS.</p> <p>CAUTIONARY NOTE 1: THE VANE DYKE AT THE ENTRANCE TO THE LOUISVILLE AND PORTLAND CANAL AT OHR MM 604.3 EXPERIENCES STRONG OUTDRAFTS ON THE UP STREAM END DURING HIGH FLOWS.</p> <p>CAUTIONARY NOTE 2: SEDIMENT SHOALING FROM MM 606 TO 609 RESTRICTS VESSEL TRAFFIC AT 10' ON THE LOWER GAUGE; VESSELS SHOULD USE CAUTION WHEN TRANSITING THIS AREA.</p> <p>CAUTIONARY NOTE 3: CONSIDER SOUTH BOUND DAYLIGHT ONLY TRAFFIC AT MCALPINE UPPER GAUGE >18'.</p> <p><u>USACE GAUGE READINGS REPORT</u></p>	<60' DAM OPENING	Rising	Normal Operations/ Flow Conditions	n/a	Locking operations normal.
	60'+ DAM OPENING	Rising & projected to continue rising rapidly	High Water/ High Flow Conditions	Watch	Sector Ohio Valley Command Center contacts duty WWM; decision is made to issue a Broadcast Notice to Mariners
	ALL OUT DAM OPENING and 15' UG	Rising	Extreme High Water/ Extreme High Flow Conditions	Action	WWM/VTS and/or CORMIG will initiate a phone conference between CG, USACE and CORMIG. Factors to evaluate include rate of rise, amount of drift, and presence of ice and weather conditions. Consider: providing local Pilot knowledge of river characteristics and/or daylight only transit of south bound vessels. Note: Safety Zone (See Enclosure) is initiated when the McAlpine L&D reaches 13.0' UG (VTS Louisville activated). CG turns on AIS Geographical notice.
	100' - DAM OPENING or < 13' UG	Falling	High Water/Increased Flow Conditions	Watch	Continue conference calls, monitor conditions, and adjust restrictions as appropriate. Consider Broadcast Notice to Mariners, (See Enclosure) Cancel Broadcast Notice to Mariners once river levels fall below 13' UG. CG turns off AIS Geographical notice.
	60' - DAM OPENING	Falling	Normal Operations/ Normal Flow Conditions	Recovery	Continue monitoring river conditions until locking operations return to normal. Notify duty WWM
	9.0' LG >20' DAM OPENING	Falling	Normal Operations/ Normal Flow Conditions	Watch	Locking operations normal. Notify duty WWM.
	8.9' - 8.5' LG	Falling	Low Water / Low Flow Conditions	Watch	Command Center contacts Duty WWM and issues Broadcast Notice to Mariners.
	8.5' - LG	Falling	Extreme low Water/ Extreme low Flow Conditions	Action	Continue conference calls, monitor conditions, and adjust restrictions as appropriate. Consider activating VTS Louisville. Mile markers 637-677 may warrant one-way traffic during low water conditions.
	8.5' + LG	Rising	Low Water/ Low Flow Conditions	Recovery	Continue monitoring river conditions, notify duty WWM and cancel Broadcast Notice to Mariners.