

SUMMARY REPORT OF THE MISSISSIPPI RIVER COMMISSION 2003 LOW-WATER INSPECTION TRIP

The following is an executive summary prepared for the Assistant Secretary of the Army for Civil Works and the Chief of the U.S. Army Corps of Engineers (USACE) on the 2003 Low-Water Inspection Trip of the Mississippi River Commission. The 366th Session of the Commission was held on board the Motor Vessel MISSISSIPPI from St. Paul, Minnesota, to Morgan City, Louisiana, during the period 11-22 August 2003.

Summary

Interest and support for managing the water resources of the Mississippi River as a watershed and the role of the Mississippi River Commission in developing and operating projects on the Mississippi River and its tributaries remain high. The semiannual inspection trips and public meetings held by the Commission continue to be an effective means of partnering with local sponsors, informing the public, and receiving suggestions and requests of local sponsors and the public.

The MRC will provide reports of its proceedings and actions regarding the Upper Mississippi River-Illinois Waterway Systems Navigation Feasibility Study; Upper Mississippi River Comprehensive Feasibility Study; the Louisiana Coastal Authority Comprehensive Plan; and other comprehensive watershed plans and studies to the Chief of Engineers.

Major MRC Efforts and Concerns

- The MRC recommends funding to the level of full Corps capability of General Investigation studies for timely completion of the Upper Mississippi River-Illinois Waterway Systems Navigation Feasibility Study, Upper Mississippi River Comprehensive Feasibility Study, and the Louisiana Coastal Authority Comprehensive Plan.
- The MRC is deeply concerned about the questionable structural integrity of the bulkheads/stop logs and poiree dams used in a majority of the locks on the Mississippi River. These critical components have been in use over the last 60 or more years (a period that exceeds the intended design life by 10 or more years), and deterioration of metal and welds has occurred to the extent that the structural integrity of these components is in doubt. This condition could impair our ability to safely de-water the locks. As a result, the only reliable and safe method to dewater the locks for an emergency repair is to construct earthen dams above and below the locks. This type of repair would result in closure of the Mississippi River for 3 to 6 months causing regional and national impacts,

along with devastating effects on local economies. The use of the existing bulkheads or poiree dams is a life safety risk. A concerted effort must be made to fund the replacement/repair of these critical lock structures.

- The MRC has repeatedly observed at many of the locks and dams on the Mississippi River a need for concrete improvements due to excessive deterioration as a result of silica reaction and repetitive freeze-thaw occurrences. The concerns of the MRC are focused on the impediments of inadequate funding, inflexible policy interpretation for justifying concrete replacement, and the inability to obtain Construction General funding for major repair work. Without prompt resolution of this matter, the Mississippi Valley Division Districts have no choice but to continue to deplete already limited or non-existing Operations and Maintenance funds to correct these findings by classifying the work as Major Maintenance. If this situation is allowed to continue, the probability of loss of use of the control gates and the inability to perform lockages will be greatly increased, as well as the possibility of damaging tows and other boats or accidents due to protruding reinforcement steel and concrete.
- The MRC firmly supports and will continue to monitor and evaluate the direction of the Upper Mississippi Comprehensive Study to develop a systemic flood control plan for the upper Mississippi Valley. Also, the potential effects of such a project on river stages on the lower Mississippi River are of particular interest to the MRC.
- Both Lock and Dam Numbers 15 and 22, constructed in the 1930's, have two lock miter gates that are near failure. The MRC has observed extensive deterioration resulting in a system-threatening condition. The MRC recommends immediate action by HQUSACE and ASA(CW) to secure advance funding to fix these items that are near failure. The MRC considers this situation to be one of immediate risk to the Nation's navigation system. A failure will impact the economic welfare, environment, and recreation in the region and nation. Lock 19 has miter gates that have failed, and it has spare gates in place for lock operation. A project is now underway to replace these gates, and it is critical that funding for that project be continued on its current schedule. The spare gates are not designed for extended use, and there are no replacement gates.
- The MRC has determined a need for additional rehabilitation and maintenance of the existing lock system at a rate of approximately \$15 million per year over the next 6 years. With the age and condition of the locks and dams on the upper Mississippi River system, it is recommended that a system-wide program be developed and funded to replace the existing deteriorated lock and dam gate structures.
- The MRC supports the USACE position that the Tennessee Valley Authority (TVA) should not implement any changes, as a result of their ongoing comprehensive study, to their upstream reservoirs that would adversely affect

flood control or navigation on the lower Mississippi River. The lower Mississippi River receives 60 percent of its flow from the Ohio River and its major tributaries consisting of the Tennessee and Cumberland Rivers. If any impacts to the lower Mississippi River are defined in the TVA study, this Commission recommends a detailed analysis of all downstream impacts be fully addressed in the TVA Supplemental Environmental Impact Statement (EIS). Presently, TVA does not have the necessary approval or funds to extend the EIS to the lower Mississippi River.

- The MRC considers all water associated with structures on the river to be the responsibility and jurisdiction of the U.S. Coast Guard for protection of the waterway from terrorism and other acts of destruction.
- The MRC encourages Congress to appropriate adequate funds to enable the Corps to pursue means and methods by which to improve navigability through reaches of the Atchafalaya River bar channel that are historically plagued with fluff. Additional research is needed to find a practical solution to the navigation constraints encountered by vessels.

Policy Recommendations

- The MRC requests the Chief of Engineers revise USACE policy to allow the use of Construction General rehabilitation money to address additional critical structural needs on the Mississippi River Navigation system.

General Themes Resulting from Public Meetings

- Several speakers expressed strong support of expansion of the locks and dams for navigation and expressed that barge transportation is the safest, most environmentally friendly, and efficient means of transportation.
- The public is asking for a more aggressive stance by the MRC on funding requirements and navigation system improvements.
- Flood Control remains at the top of the agenda of needs for the majority of the people that live and work in the Mississippi Valley.