

Preface

The field investigation reported herein was conducted as part of the Upper Mississippi River-Illinois Waterway (UMR-IWW) System Navigation Study. The information generated for this interim effort will be considered as part of the plan formulation process for the System Navigation Study.

The UMR-IWW System Navigation Study is being conducted by the U.S. Army Engineer Districts of Rock Island, St. Louis, and St. Paul under the authority of Section 216 of the Flood Control Act of 1970. Commercial navigation traffic is increasing and, in consideration of existing system lock constraints, will result in traffic delays that will continue to grow in the future. The system navigation study scope is to examine the feasibility of navigation improvements to the Upper Mississippi River and Illinois Waterway to reduce delays to commercial navigation traffic. The study will determine the location and appropriate sequencing of potential navigation improvements on the system, prioritizing the improvements for the 50-year planning horizon from 2000 through 2050. The final product of the System Navigation Study is a Feasibility Report, which is the decision document for processing to Congress.

The work for this interim effort was performed by the U.S. Army Engineer Waterways Experiment Station (WES), Vicksburg, MS, during the months of October 1995, July 1996, and September 1996. This effort was funded by the Rock Island District under the management of Mr. Ken Barr. The WES liaison was Mr. Thomas J. Pokrefke, Waterways and Estuaries Division, Coastal and Hydraulics Laboratory (CHL).

Personnel of the CHL Hydraulic Analysis Group (HAG) performed the work under the general supervision of Dr. James R. Houston, Jr., Director, CHL; Mr. Charles C. Calhoun, Jr., Assistant Director, CHL; Mr. William A. McAnally, Chief, Estuaries and Hydrosciences Division; and Dr. Robert T. McAdory, Chief, Tidal Hydraulics Branch. The data collection program was designed by Messrs. Timothy L. Fagerburg, Howard A. Benson, and Thad C. Pratt, Prototype and Field Studies Group (PFSG). Data reduction was performed by Ms. Clara J. Coleman and Messrs. Pratt, Benson, and Fagerburg, PFSG. Laboratory analyses of water samples were performed by Ms. Coleman. This report was prepared by Mr. Fagerburg with the assistance of Mr. Pratt.

At the time of publication of this report, Director of WES was Dr. Robert W. Whalin. Commander was COL Robin R. Cababa, EN.

The contents of this report are not to be used for advertising, publication, or promotional purposes. Citation of trade names does not constitute an official endorsement or approval of the use of such commercial products.