



EXECUTIVE SUMMARY

Periodic Inspection Results for the Bettendorf, Iowa Local Flood Control Protection Project

The Bettendorf, Iowa Local Flood Protection Project (Bettendorf Levee Project) is a federally authorized and non-federally operated and maintained urban flood protection project. The flood protection is located on the north (right) bank of the Mississippi River between river miles 485.5 and 487.8. The system of levees and floodwalls was constructed between 1982 and 1987.

The City of Bettendorf is responsible for operating and maintaining the flood protection project. This is recorded with a copy of the original cooperation agreement in the Operation and Maintenance manual. The Bettendorf, Iowa Local Flood Control Protection Project was authorized in August 1968 (Public Law 90-483, 90th Congress).

The five year Periodic Inspection of the Bettendorf Levee System occurred on December 7 and 8, 2009, and March 10, 2010. The local sponsor shows an active response to operation and maintenance of the project; however, some deficiencies were noted and actions are required. The overall system rating recommended by our inspection contractor was unacceptable based on the deficiencies identified in the report.

The Rock Island District received comments from the Sponsor in response to the draft Periodic Inspection Report. Those comments and responses were considered during our levee risk analysis used to determine the final inspection rating. Several deficiencies were determined to be temporary conditions allowing the rating of the system to be appropriately based on an engineering determination of risk.

The Rock Island District has determined that the existing departures from USACE standards identified during the Periodic Inspection result in an appropriate rating of the levee system as **Minimally Acceptable**.

Issues that could impair the operation of the system and are in the most need of action:

- A railroad crossing over Duck Creek has an elevation significantly below the top of the adjacent levee without a designated closure structure
- Lack of an updated emergency action plan that addresses the current encroachments on the flood protection system
- A reported seepage issue during previous high water events near STA 116+50. These observations could not be verified by the inspection contractor and have therefore not been used in the determination of Levee Rating. This seepage observation can turn into a serious concern quickly during a flood event. The City is highly urged to determine the nature of this reported flow and inform the Corps of any Corrective action.
- Pump stations had insufficient documentation and frequency of inspections, and insufficient testing of pump station facilities
- Vegetation is present on levee side slopes and crown on both earthen, riprapped levee sections, and along floodwalls
- Encroachments by private industry occur frequently along the flood protection system project, and numerous locations had encroachments typically consisting of utility poles, signs, concrete debris and various other objects. Encroachments were observed to inhibit operation and



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maintenance. The encroachments can negatively impact the integrity of the levee/floodwall during a flood fighting event without proper pre-agreements which need to be put in place

- Depressions/rutting and loss of sod were noted at several locations on the levee section

The next annual Inspection will be scheduled after October 2011, with periodic inspections currently scheduled every five years.