

PART I. EXECUTIVE SUMMARY

The City of Elba is located in southeast Alabama in Coffee County and its main business area is bound on three sides by the Pea River, Whitewater Creek and Beaver Dam Creek. Whitewater and Beaver Dam Creeks are tributaries to the Pea River.

A levee project was originally constructed in 1938 by the Works Progress Administration for the City of Elba. The levee project is a federally authorized, non-federally operated and maintained urban flood protection project. The Water Resources Development Act of 1999 (WRDA-99) authorized \$12.9 million for a major rehabilitation of the Elba Project. Cost sharing was set at a 65 to 35 percent ratio for federal and non-federal costs respectively. The Energy and Water Development Appropriations Act of 2001 appropriated \$8.4 million for the estimated federal share to construct the Elba Levee Rehabilitation Project. The State of Alabama committed the \$4.5 million non-federal share. The rehabilitation project was completed in 2006.

This periodic levee inspection was performed on 27 April 2010 including the pump station inspection. The local sponsor showed an active response to operation and maintenance of the project. No major deficiencies were found but some remedial actions are anticipated and required for the minor deficiencies before the next periodic inspection to insure more efficient operation of the levee system.

The following were some of the project deficiencies:

1. Encroachments consisted mainly of a chain link fence, a residential storage building and power poles on both sides of levee embankment within the 25 foot requirement from toe. Recommend that Sponsor moves every item to clear the 25 foot line from toe.
2. Several areas, including the levee embankments, which have vegetation growth that is in the 15 foot buffer zone, need to be addressed. Some sod areas on the levee riverside is thinning out. Recommend that Sponsor removes vegetation and resod thinning areas on levee.
3. Areas of the embankment from the northeast end of the project up to US Hwy 11 contained some small animal burrows. Recommend that Sponsor fills and establishes an animal control program.
4. A local drainage ditch on the landside located at Sta 29+00 (protected side) has notable bank erosion. Recommend that Sponsor repairs bank erosion.
5. Retention pond at Pump Station No. 1 has mature vegetation and has accumulated measurable amounts of sediment. Recommend that Sponsor removes vegetation and sediment from pond.



6. Some of the culverts were obstructed with vegetation. Recommend that Sponsor cleans and removes vegetation from culverts.
7. O&M Manual does not address the original Pump Station No. 1 located at Sta 82+84. Recommend that Sponsor updates O&M Manual to reflect any and all improvements to levee system.
8. Culvert No. 3 appears to have been tapped into with a pipe. A pipe is sticking out of the plug. A further evaluation is needed.
9. Culverts have not been visually inspected by means of using video cameras. Recommend that Sponsor performs a visual inspection using a video camera and maintain a video record of the inspection.

Overall engineering determination concludes that the deficiencies would not prevent the system from performing as intended under the current established level of flood protection of 500-year (0.2%/year). Repairs should be made and investigations completed as recommended within two years from the time of the inspection. The next periodic inspection is scheduled for FY 2015.