

## PROPOSED FEASIBILITY STUDY – U.S. ARMY CORPS OF ENGINEERS 2015 ANNUAL REPORT

### BRAZOS RIVER EROSION MANAGEMENT STUDY

1. Proposed Non-Federal Sponsor: Fort Bend County, Texas
2. Feasibility Study
3. Investigate stream bank protection measures to reduce property damage associated with severe, ongoing riverbank erosion which undermines public and private investment adjacent to a 12,000 foot segment of the Brazos River in the City of Richmond, Texas.
4. The Feasibility Study is proposed in two increments: an initial body of work which investigates the nature and severity of the problem, and determines if feasible solutions exist to reduce or mitigate erosion potential within the study area. The output of this study phase would be a conceptual plan to address erosion losses and mitigate associated increases in flood risk. The current cost estimate for Phase I is \$750,000. The second phase of the study would involve a more robust alternatives analysis and include environmental compliance activities, permitting, and more detailed cost estimating. The second phase would result in a Feasibility Study recommending a specific path forward for Federal action. The estimated cost of the second phase is approximately \$2,200,000.
5. Extensive erosion of the Brazos River occurs in the vicinity of Richmond, Texas. Geomantic analysis of maps from 1941 through 2012 suggest that average annual migration rates of the Brazos River near Richmond, Texas are 4-foot per year. In excess of 400-feet of movement has occurred within that 70 year period. Over ten feet of soil loss has been documented following peak storm events. Additional scour and soil loss threatens historically significant properties, public buildings owned by Fort Bend County and private property. Additionally, further erosion will impact the general public of the City of Richmond, Texas (population 11,600) and public infrastructure including levees, utilities, a State of Texas roadway, local roads and railroad bridges. Fort Bend County Levee Improvement District No. 6 owns and operates a series of levees adjacent to the Brazos River in the project area which protect properties with over \$1.1 billion in assessed value. The proposed study will investigate stream bank measures to reduce or mitigate these erosion losses, reduce the impacts of increased flood risk and provide protection benefits for the above listed public and infrastructure.
6. The non-Federal Sponsor for the proposed BREM study is Fort Bend County, Texas. The Fort Bend County Commissioners' Court unanimously supports the project. This project also has the support of the City of Richmond and other affected entities.
7. Fort Bend County is prepared to contribute the non-Federal Sponsor share of the Feasibility Study costs, and understands the obligations of a non-Federal sponsor if a project is recommended for authorization/construction.
8. See attached letters of support from the Fort Bend County Commissioners' Court, the Union Pacific Railroad and the City of Richmond.