



FEMA

**FINDING OF NO SIGNIFICANT IMPACT
FORT BEND COUNTY LEVEE IMPROVEMENT DISTRICT NO. 7
BRAZOS RIVER BANK STABILIZATION PROJECT
FORT BEND COUNTY, TEXAS
HMGP-4332-0035-TX**

BACKGROUND

In accordance with the Federal Emergency Management Agency's (FEMA) Instruction 108-1-1, an Environmental Assessment (EA) has been prepared pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ; 40 CFR Parts 1500-1508). The purpose of the proposed project is to reduce bank erosion and provide flood mitigation along a section of the Brazos River in Fort Bend County, Texas. This EA informed FEMA's decision on whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

The Fort Bend County Levee Improvement District No. 7 (FBCLID7) has applied for FEMA funding assistance through FEMA's Hazard Mitigation Grant Program (HMGP), under HMGP-4332-0035-TX, for the design and implementation of bank stabilization treatment(s) along the eroding northern bank of the Brazos River in the area of FBCLID7's flood protection levee. Through HMGP, FEMA provides grants to states and local governments to implement long-term hazard mitigation measures, including flood mitigation. The purpose of HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

Two project alternatives were evaluated in this EA: 1) No Action; and 2) Proposed Action (Bank Reconstruction and Bendway Weirs). Three additional build alternatives: 1) Levee Relocation, 2) Bank Slope Layback, and 3) River Channel Reconstruction/Relocation were initially developed and considered but were dismissed from further consideration either due to their increased adverse environmental impacts or construction feasibility.

Under the No Action Alternative, the northern bank of the Brazos River in the project area would not be stabilized. With no bank stabilization, the Brazos River would continue to erode and meander within its floodplain during extreme weather events, and likely would eventually erode into and breach FBCLID7's flood protection levee, which could result in wide-spread flooding in the New Territory community. Additionally, the SH 99 bridge structure may become unstable, possibly requiring that the roadway be temporarily closed for repairs. The No Action Alternative would not meet the purpose and need of the proposed project.

Under the Proposed Action Alternative, FBCLID7 proposes to reconstruct a stable bank at or near the current river bank location. Earthen material along the existing bank would be removed to create a sloped bank that would be protected with stone riprap. Larger stone boulders would be placed along the river bank toe, with the intent being that as minor erosion occurs along the bank toe, the larger stone boulders would fall to fill in eroded areas (launching stone toe protection). The reconstructed bank would facilitate the conveyance of flood flows through the bend in the Brazos River and the SH 99 bridge structure. The improved hydraulics would reduce the scouring and erosion that would lead to accelerated bank loss. The toe of the reconstructed bank would be configured to maintain a consistent geometric curve along the bank. Placing the reconstructed toe at or near the existing bank toe would minimize work and fill within the jurisdictional waters of the Brazos River, thereby minimizing overall environmental impacts. Upslope of the bank toe, materials and techniques appropriate for stabilizing and protecting the river bank from the erosive forces of flood flows would be installed.

A series of bendway weirs, which would extend partially into the channel of the Brazos River and would be stabilized at their bases with rock riprap, are proposed to be constructed as part of the Proposed Action. The bendway weirs would assist in improving the river hydraulics in the project area. The intent of the bendway weirs would be to alter the flow characteristics in the immediate vicinity of the weir structures to capture suspended sediment and allow the sediment to settle in the area of the bendway weirs and the reconstructed bank toe. Over time, the accumulation of sediment would accrete along the northern river bank, shifting the river channel farther south, away from the adjacent flood protection levee. The Proposed Action would optimize stabilization of the northern river bank in the available area between the bank toe and the flood protection levee while minimizing potential environmental impacts to the river.

A public notice was posted in the local newspaper of record and on FEMA's website. The draft EA was made available for public comment for 30 days on FEMA's website and upon request in hard or electronic copy from FEMA. No comments were received from the public during the comment period.

FINDING OF NO SIGNIFICANT IMPACT

The Proposed Action as described in the EA will not significantly impact geology, seismicity, climate change, floodplain, migratory birds, threatened and endangered species, essential fish habitat, coastal zone resources, hazardous materials, land use, minority and low-income populations, or cultural or historic resources. During construction, short-term, minor impacts to surface water quality, air quality, noise, utilities, and traffic, are anticipated. The project will result in long term beneficial impacts to water quality, bank stabilization, hydraulic conditions, fish and wildlife habitat, and public health and safety.

No long-term adverse impacts are anticipated. Minimal direct impacts to jurisdictional waters of the United States associated with the Brazos River are anticipated to occur. Since two small areas of wetlands situated on the upper northern bank of the Brazos River would be avoided, the proposed work within the Brazos River has been authorized by the U.S. Army Corps of

Engineers (USACE) without the requirement for compensatory mitigation. All adverse impacts to the proposed project site and surrounding areas will be minimized and/or mitigated through required project conditions.

CONDITIONS

The following conditions must be met as part of this project. Failure to comply with these conditions may jeopardize the receipt of federal funding.

1. This review does not address all federal, state, and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.
2. Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
3. The applicant will employ dust control techniques, such as covering of transported material, and watering of the construction area and haul routes to control dust emissions. Emissions will be minimized by complying with the Texas low emission diesel fuel standards, limits on idling, construction equipment maintenance in accordance with the manufacturer's specifications and other emission limitation techniques, as appropriate.
4. The applicant must prepare a Storm Water Pollution Prevention Plan and file a Notice of Intent (NOI) with the Texas Commission on Environmental Quality (TCEQ) prior to the start of construction. Monitoring and maintenance of emplaced Best Management Practices (BMPs) for storm water management will be conducted on a regular basis as prescribed by the Texas Pollutant Discharge Elimination System (TPDES) General Permit.
5. The applicant must coordinate with the local floodplain administrator and obtain required permits prior to initiating work, including any necessary certifications that encroachments within the adopted regulatory floodway will not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Applicant must comply with any conditions of permit and all coordination pertaining to these activities should be retained as part of the project file in accordance with the respective grant program instructions.
6. BMPs will be implemented to allow for the conveyance of flood waters during construction to reduce the potential for floodplain alteration during the construction period.

7. A mussel survey will be conducted within the Brazos River in the area of the proposed project prior to the initiation of construction activities. Mussels collected in the project area will be relocated in accordance with an Aquatic Resources Relocation Plan approved by the TPWD.
8. Project construction affecting tree and shrub vegetation will be planned to occur outside the nesting season of migratory birds.
9. The applicant must comply with Clean Water Act Section 404 Permit SWG-2018-0806 and obtain and comply with any Section 401/402 Permit(s) from the State prior to initiating work.
10. Areas where ground disturbance will occur must be monitored by a professional archeologist during construction. If cultural materials are encountered, the monitor will stop construction in the immediate vicinity and examine the discovery. Construction may take place beyond a 50 ft. buffer surrounding the find.
11. To reduce noise levels during construction, construction will be timed to occur during the daytime hours. In addition, Noise levels will be mitigated by operating equipment only during periods of actual construction of the proposed project and maintaining muffler systems on all construction equipment.
12. The applicant will implement a traffic control plan, if needed, during the construction phase of the project.
13. The applicant must notify residents/businesses in the general area when construction is anticipated and any possible detours that may be needed.
14. Appropriate signage and barriers must be in place prior to construction to notify pedestrians and motorists of construction activities.
15. Vehicular travel lanes must remain open during construction and must not adversely affect emergency services or responders.
16. Barges used for construction will be positioned adjacent to the northern river bank in order to avoid an impediment to the free navigation of watercrafts operating on the river in the project area.
17. If hazardous constituents are encountered in the project area prior to or during construction operations, appropriate measures for the proper assessment, remediation, and management of the contamination will be initiated in accordance with applicable federal, state, and local regulations. The contractor will take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction and staging areas.

CONCLUSION

Based on the findings of the EA, coordination with the appropriate agencies, comments from the public, and adherence to the project conditions set forth in this FONSI, FEMA has determined that the proposed project qualifies as a major federal action that will not significantly affect the quality of the natural and human environment, nor does it have the potential for significant cumulative effects. As a result of this FONSI, an EIS will not be prepared (FEMA Instruction 108-1-1) and the proposed project as described in the attached EA may proceed.

APPROVAL AND ENDORSEMENT

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