



**DEPARTMENT OF THE ARMY**  
GALVESTON DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 1229  
GALVESTON, TEXAS 77553-1229

April 10, 2009

## **NOTICE OF AVAILABILITY**

### **U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT ENVIRONMENTAL ASSESSMENT FOR EMERGENCY REPAIRS TO THE PORT ARTHUR AND VICINITY HURRICANE/SHORE FLOOD PROTECTION PROJECT**

#### **PURPOSE**

This notice is being distributed to interested State, Federal, and local agencies, private organizations, news media, and individuals in order to assist in collecting facts and recommendations concerning proposed rehabilitation and repair work that will restore the Port Arthur and Vicinity Hurricane/Shore Flood Protection Project to pre-storm conditions following damages sustained from Hurricane Ike, which made landfall in northern Galveston County on September 13, 2008. The proposed rehabilitation and repair work is necessary to restore the project to its pre-storm levels of protection and safety consistent with current designs and sound engineering principles. The proposed work will not result in an expansion of the existing project.

#### **NEED FOR WORK**

Hurricane Ike made landfall in northern Galveston County on September 13, 2008. Before making landfall the hurricane was a Category 4 storm, as measured on the Saffir-Simpson Scale. Wind speeds decreased as it approached land, and the storm was classified as a Category 2 storm when it reached land. The magnitude of the storm surge was more characteristic of a Category 3 or 4 storm than a Category 2 storm. According to the National Hurricane Center, Ike was a very large hurricane with hurricane force winds extending 120 miles from the center and tropical storm force winds extending 275 miles. Hurricane Ike's unprecedented size, which at one point was the largest Atlantic hurricane ever recorded, caused extensive damage. Ike ranks as the third costliest storm in U.S. history, causing approximately \$27 billion in property damage. The proposed work would be conducted under authority of Public Law 84-99 for Flood Control and Coastal Emergencies. Engineer Regulation (ER) 500-1-1 eligibility requirements for the work are met under the criteria for extraordinary storm and significant amount of damage.

The combined storm surge and wave action from Hurricane Ike caused extensive damage to the Port Arthur and Vicinity Hurricane/Shore Flood Protection Project. The proposed rehabilitation work will include repairs that will restore this project to pre-storm conditions. If this project is left in its current condition, the risk of structural failure and potential damages the project may sustain during future significant storm events could threaten the communities and properties they protect.

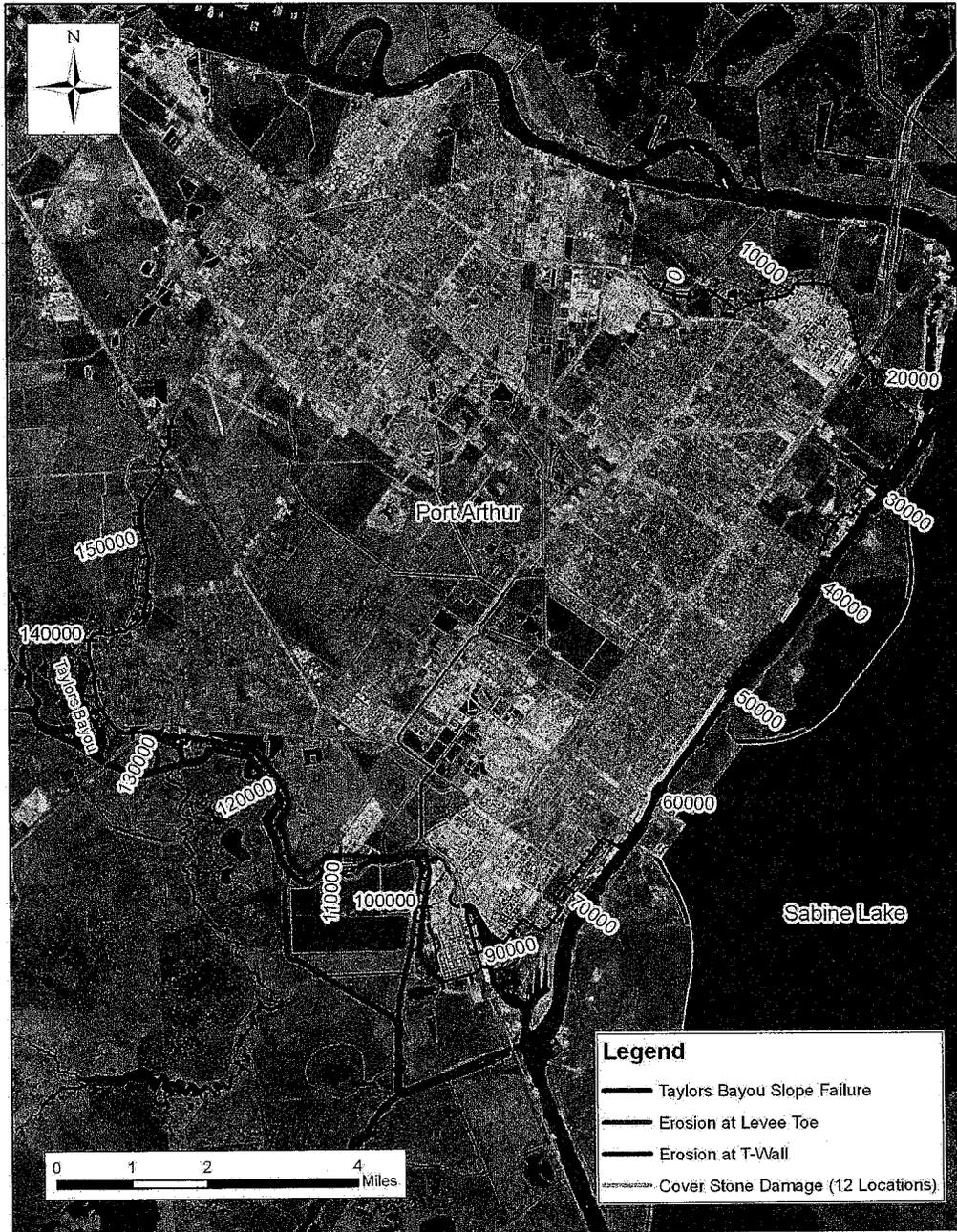
## **PROJECT DESCRIPTION AND LOCATION**

The Port Arthur and Vicinity, Texas, Hurricane-Flood Protection Project is located at Port Arthur, Jefferson County, in the extreme southeastern part of Texas, on the west side of Sabine Lake. The project, which consists of levees and floodwalls surrounding a 60 square mile area, was designed to protect Port Arthur and other communities in the vicinity, including the cities of Groves, Lakeview, Pear Ride, Port Acres, and Griffing Park, from a hurricane with a storm surge up to 14 feet.

## **DESCRIPTION OF REHABILITATION AND REPAIR WORK**

Storm surge and wave action from Hurricane Ike, which was recorded at 12 feet in the project area, caused significant damage from erosion to four main areas of the Port Arthur and Vicinity HFPP. The Port Arthur and Vicinity HFPP will be restored the pre-storm cross-sections and/or conditions by making repairs to the following areas that were damaged by erosion (Figure 1):

- Erosion at the Levee Toe - Station 262+00 to 270+00, where significant shoreline erosion ranged from 15 to 25 feet
- Erosion at the T-Wall - Stations 380+00 to 410+00 and 430+00 to 490+00, where the concrete floodwall (T-Wall) structure protecting residential sections of the Port Arthur area sustained over-splash causing erosion of one to two feet along the protected side at the base of the structure.
- Cover Stone Damage - Stations 410+00 to 430+00 and 490+00 to 610+00, where the waterway's cover stone is damaged in twelve locations from subgrade erosion or toe failure of the slope.
- Taylor Bayou Slope Failure - The Taylor Bayou area has multiple instances of slope failure along its levee which are reported to have occurred during the storm surge. Along the interior of the levee, there are multiple slope failures occurring from Sections 1110+00 to 1120+00 and 1250+00 to 1260+00. The exterior levee has a slope failure between Sections 1105+00 and 1140+00.



**Figure 1. Port Arthur Levee Stationing and Proposed Repair Work**

### **COMPLIANCE WITH LAWS AND REGULATIONS**

A Draft Environmental Assessment (EA) is being coordinated with the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and other Federal, state, and local agencies. Consultation has been initiated with the USFWS and NMFS in compliance with the

Endangered Species Act. The Biological Assessment (Appendix B of the Draft EA) concludes that the project is not likely to adversely affect the threatened or endangered species in the project area.

The EA also initiates Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The initial determination is that the proposed actions will not have adverse impacts on EFH or federally-managed fisheries in the Gulf of Mexico. The final determinations relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

The proposed rehabilitation and repair work will also be evaluated, as appropriate, with regard to the requirements of Section 404(b)(1) of the Clean Water Act (CWA). The Texas Council on Environmental Quality (TCEQ) has waived Clean Water Act Section 401 Certification for this project in recognition that impacts from the proposed work are minor and temporary in nature, and to expedite Hurricane Ike recovery efforts. It should be noted that this project would qualify under Corps of Engineers Nation Wide Permit 3, and as such, would require no further CWA coordination.

It is also our preliminary determination that the proposed action is consistent with the Texas Coastal Management Program (TCMP) to the maximum extent practicable.

A record of non-applicability has been issued for general conformity under the Clean Air Act (CAA), Section 176 according to the requirements of 40 CFR 93, Subpart B. The requirements of this rule are not applicable to this project because the project is an exempt action under 40 CFR 93.153(e)(1) and 30 TAC 101.30(c)(5)(A) and 40 CFR 93.153(e)(2) and 30 TAC 101.30(c)(5)(B).

The proposed activity will be coordinated with the State Historic Preservation Officer (SHPO). Our initial determination is that the proposed action does not have the potential to effect historic properties.

The following is a partial list of Federal, State, and local agencies with which this activity is being coordinated:

- U.S. Environmental Protection Agency, Region 6
- U.S. Department of Commerce
- U.S. Department of the Interior
- Texas Historical Commission
- Texas Parks and Wildlife Department
- Texas Commission on Environmental Quality
- Texas General Land Office
- Coastal Coordination Council

Texas Department of Transportation  
Texas Water Development Board

## **EVALUATION FACTORS**

The decision whether to proceed with this repair project will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for protection and utilization of important resources as well as public and environmental safety and economic concerns. The benefit, which reasonably may be expected to accrue from the proposals, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal, will be considered. The proposed repair project will proceed unless found contrary to the overall public interest.

## **ENVIRONMENTAL DOCUMENTATION**

It is anticipated that Environmental Assessment and Finding of No Significant Impact will fulfill the requirements of the National Environmental Policy Act. Single copies of these documents will be available by written request to the address below. The draft EA is also available online for review in the "Hot Topics" section at: <http://www.swg.usace.army.mil/>.

## **PUBLIC COMMENT**

Persons desiring to express their views or provide information to be considered in evaluating the impact of this work and the future maintenance and operations are requested to mail their comments within 30 days of the date of this notice to:

District Engineer  
U.S. Army Engineer District, Galveston  
ATTN: CESWG-PE-PR, Ms. Carolyn Murphy  
P.O. Box 1229  
Galveston, Texas 77553-1229

or email at: [Carolyn.e.murphy@usace.army.mil](mailto:Carolyn.e.murphy@usace.army.mil); or phone 409-766-3044.

The comments should make specific reference to the Port Arthur and Vicinity Hurricane/Shore Flood Protection Project. Any person who has an interest which may be affected by this action may request a public hearing. The request must be submitted in writing within 10 days of the date of this notice and must clearly set forth the interest which may be affected and the manner

in which the interest may be affected by this activity. Any questions concerning the proposed action may be directed to Ms. Carolyn Murphy at (409) 766-3044, or the email address above.

A handwritten signature in black ink, appearing to read "D. Weston", written in a cursive style.

David C. Weston  
Colonel, Corps of Engineers  
District Engineer