

## Construction

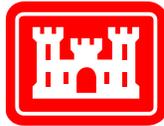
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**US Army Corps  
of Engineers®**  
Galveston District

# UPDATE REPORT FOR THE 2<sup>ND</sup> DISTRICT

Current as of May 2011



**Ted Poe**

*U.S. House of Representatives  
2nd Congressional District*

## About the Galveston District

**W**ith its rich heritage in Texas history, the U.S. Army Corps of Engineers Galveston District plays a key role in America's well-being by keeping waterways open for navigation and commerce and serves the nation as part of the world's largest public engineering, design and construction management agency.

Encompassing the Texas coast from Louisiana to Mexico; an area that spans across 50,000 square miles, includes 48 counties, two parishes and 16 congressional districts, the Galveston District successfully executes its mission of providing vital public engineering services in peace and war to strengthen our nation's security, energize the economy and reduce risks from disasters.

With its 370 dedicated professionals and annual budget of approximately \$150 million, the Galveston District will continue to provide valuable navigation, flood risk mitigation, environmental, shoreline protection, regulatory, military construction and emergency management services to our nation and remains fully committed to continuing our mission of building strong.

*"It is a great privilege to serve our nation  
as the commander of the U.S. Army  
Corps of Engineers Galveston District."*

*– Col. Christopher W. Sallase  
District Engineer and Commanding Officer  
U.S. Army Corps of Engineers Galveston District*



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# Cedar Bayou Navigation Project

State Hwy 146

Baytown

Mile 11

Bayer

HL&P

## Contact:

John (Jack) Otis

409-766-3157

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## Cedar Bayou

### Background:

The navigation project extends from its junction with the Houston Ship Channel near Barbour's Cut Container Terminal at Mile 25, eastward across Galveston Bay, to the mouth of Cedar Bayou to

a point three miles upstream. The proposed project extends the channel by eight miles to Highway 146 (dimensions are 10 by 100 feet). The Water Resources Development Act (WRDA) 2007 not only authorized the Assistant Secretary of the Army (Civil Works) to reimburse the sponsor for their portion of the cost of the feasibility study (50 percent), but also established project cost sharing based on Section 101 of WRDA 1986 for projects under 20 feet, which includes Cedar Bayou. The cost sharing would be 90/10, federal/non-federal, and amends the project authorization to construct a 10-foot deep channel rather than 12-foot deep.



Cedar Bayou and the Houston Ship Channel.

### Issue:

The project is authorized and waiting for construction appropriations to deepen and widen the existing channel to more efficiently serve the existing industries along the bayou.

### Current Status:

The project is not in the fiscal year 2012 President's Budget and is on hold pending receipt of new start construction funding.

Federal dollars to date:

\$418,000

Sponsor dollars to date:

\$717,000

Total cost of project:

\$17,680,000

FY11 President's Budget:

\$0

FY12 President's Budget:

\$0



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## Greens Bayou

### Background:

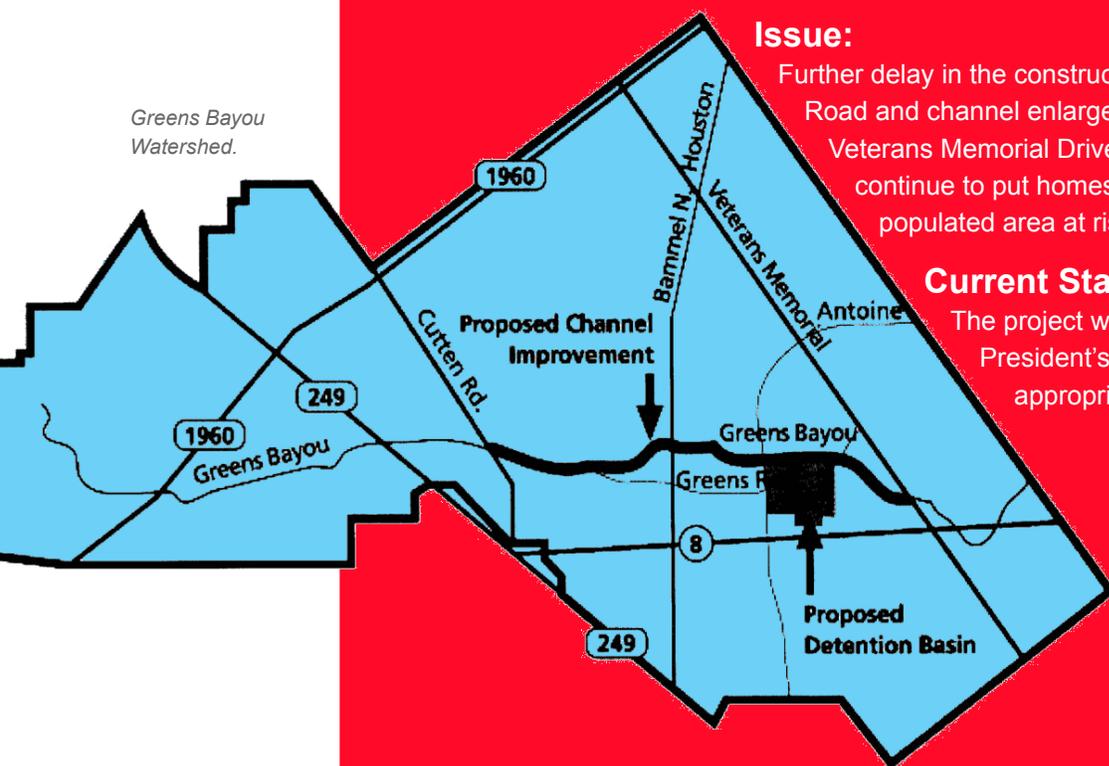
Greens Bayou is a tributary of Buffalo Bayou and is located in the north-central portion of Harris County, Texas. The purpose of the project is flood risk management for an extensively developed urban area. The original authorized plan has been re-evaluated. The reformulated plan consists of 3.7 miles of channel improvement in the upper reaches, between Veterans Memorial Drive and Cutten Road. The project was authorized for construction in the Water Resources Development Act of 2007.

### Issue:

Further delay in the construction of the lower reach at Greens Road and channel enlargement and rectification from Veterans Memorial Drive upstream to Cutten Road will continue to put homes and businesses in this highly populated area at risk for severe flood damage.

### Current Status:

The project was not in the fiscal year 11 or FY12 President's Budgets. The project is awaiting appropriation for initial construction.



Federal dollars to date:	\$6,686,000
Sponsor dollars to date:	\$0
Total cost of project:	\$45,080,000
FY11 President's Budget:	\$0
FY12 President's Budget:	\$0

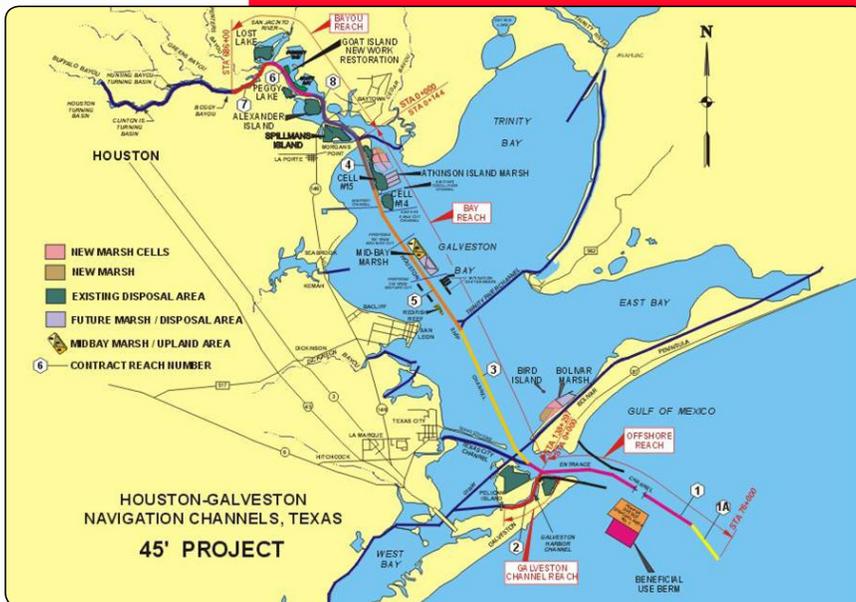


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# Houston-Galveston Navigation Channel

## Background:

The project is located in Texas, Chambers, Galveston and Harris counties. The project includes channel deepening of the Galveston Entrance Channel, Galveston Harbor Channel (GC) and the Houston Ship Channel (HSC) to Boggy Bayou in Houston, Texas, as well as the construction



Houston-Galveston Navigation Channel map.

of environmental restoration and mitigation features. Deepening of the HSC and GC were completed in 2005 and 2010, respectively. The ecosystem restoration features of the project include 2,850 acres of marsh at Bolivar and Atkinson Island and a six-acre bird nesting island. As much as 30 percent (45,000 acres) of estuarine emergent wetlands in Galveston Bay have been lost due to subsidence and development.

## Issue:

The remaining marsh creation is to be linked to the continued maintenance of the Bay Reach of the HSC meaning that a new marsh cell will be filled during each maintenance dredging contract. In order for the environmental restoration to not

impede channel maintenance, the federal government and the sponsor must diligently budget for the deferred construction so that funds are available when needed.

## Current Status:

Current ongoing construction includes efforts to repair placement areas and ecosystem restoration sites damaged by Hurricane Ike, construction of additional marsh acreage at Bolivar, and provision of additional capacity at Lost Lake, Mid Bay, Placement Area (PA) 14, and PA15 for maintenance dredging. Future efforts on this project will be dedicated solely to the creation of marsh within the Atkinson Island marsh complex.

Federal dollars to date:	\$487,145,000
Sponsor dollars to date:	\$152,452,000
Total cost of project:	\$846,145,000
FY11 President's Budget:	\$0
FY12 President's Budget:	\$600,000



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# Keith Lake Fish Pass

**Background:**

In April 2002, Jefferson County requested assistance to investigate the erosion and associated degrading ecosystem at Keith Lake Fish Pass. The marsh has been adversely affected by saltwater intrusion and high-energy inflows from the adjacent 40-foot deep Port Arthur Canal, a

part of the Sabine-Neches Waterway federal navigation project. The feasibility phase was initiated.

**Issue:**

This project was not in the fiscal year 2011 or the FY12 President's Budgets.

**Current Status:**

Funding from FY10 is being utilized to evaluate alternatives, identify the recommended plan, and prepare the Draft Detailed Project Report.



Keith Lake Fish Pass.

Federal dollars to date:	
	<b>\$680,000</b>
Sponsor dollars to date:	
	<b>\$0</b>
Total cost of project:	
	<b>\$6,666,000</b>
FY11 President's Budget:	
	<b>\$0</b>
FY12 President's Budget:	
	<b>\$0</b>



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## Texas Environmental Infrastructure Program

### Background:

The program consists of providing environmental assistance in the form of planning, design and construction assistance for water-related environmental infrastructure and resource protection and development projects to non-federal interests in Texas. This work includes projects for water supply; storage; treatment and related facilities; water quality protection; wastewater treatment and related facilities; environmental restoration; and surface water resource protection and development; as identified by the Texas Water Development Board (TWDB). The TWDB, in coordination with the Texas Water Conservation Association, Texas Rural Water Association and individual local public entities, have identified \$210 million in currently proposed projects that are in urgent need of funds to meet short-term water supply needs. Out of this \$210 million, 12 high-priority projects have been identified totaling \$46,086,000.

### Issue:

The Texas State Water Plan regional planning groups identified about 4,500 water management strategies to meet water supply needs over the next 50 years. Many of these strategies have been initiated and federal assistance (under the Texas Environmental Infrastructure Program, coupled with significant funding appropriated by the Texas Legislature), will ensure that water supply needs are met in the most efficient and timely manner.

### Current Status:

There were no funds allocated in the fiscal year 2011 or FY12 President's Budgets for this program.



*Example of a reservoir near Brownsville, Texas.*



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## 2nd District Authorized Studies

### Gulf Intracoastal Waterway, High Island to Brazos River (Realignments)

**NAVIGATION STUDY:** The study area includes approximately 85 miles of the Gulf Intracoastal Waterway (GIWW) in Galveston and Brazoria counties from High Island, Texas, to the Brazos River. The GIWW is designated as part of the nation's Inland Waterway System. The primary study purpose is navigation. The problems to be addressed include difficulties negotiating two sharp bends in the channel near High Island, a double "S" curve near Freeport, and the intersection with the Chocolate Bayou Channel. Additionally, long-range dredge material placement plans will be developed.

FY11 President's Budget:
\$200,000
FY12 President's Budget:
\$200,000
Total cost of project:
\$2,255,000

### Gulf Intracoastal Waterway, Modifications

**NAVIGATION STUDY:** The Brazos River Floodgates are located at the intersection of the Gulf Intracoastal Waterway and the Brazos River. The Colorado River Locks are located at the intersection of the Gulf Intracoastal Waterway and the Colorado River. The study will assess modifying the configuration of the crossings at the Brazos River Floodgates and the Colorado River Locks on the GIWW to reduce traffic accidents and navigation delays. Two feasibility studies have been recommended (one for each crossing).

FY11 President's Budget:
\$0
FY12 President's Budget:
\$0
Total cost of project:
\$10,640,000

### Lower Sabine River

**FLOOD RISK MANAGEMENT STUDY:** The Sabine River flows from headwaters in Hunt County, Texas, and forms much of the border between Texas and Louisiana before draining to the Gulf of Mexico through Sabine Lake. The Sabine River Basin has the second largest average watershed yield of any major river basin in Texas. This high yield value is due to the high precipitation and low evaporation rates within the region. The non-federal sponsor has recently expressed an interest in cost-sharing a collaborative basin-wide study to include environmental restoration and all other purposes. The reconnaissance phase was completed in June 2004. There is no ongoing work on the study.

FY11 President's Budget:
\$0
FY12 President's Budget:
\$0
Total cost of project:
\$5,300,000



## Sabine Neches River Basin

**FLOOD RISK MANAGEMENT STUDY:** The Neches River Basin is bound on the north and east by the Sabine River Basin, on the west by the Trinity River Basin, and on the south by the Neches-Trinity Coastal Basin. The Neches Basin is a prolific water resource and could be used to supply additional water both inside and outside the basin. The purpose for the study is to evaluate flood damage reduction, ecosystem restoration, water supply, and recreation possibilities within the watershed. Potential projects include multi-purpose reservoirs, development of wetlands to provide habitat and improve water quality for aquatic ecosystems, restoration of riverine corridors, development of a comprehensive watershed plan, and other measures. The need to begin this important study will continue to intensify, as planning for capital improvements and infrastructure become stymied due to the lack of a basin-wide management plan to account for water quality, water quantity and allow for new water permits. There are no ongoing activities as the project has never been funded.

FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0
Total cost of project:	\$16,498,000

## Sabine Neches Waterway

**NAVIGATION STUDY:** The Sabine Neches Waterway (SNWW) is a federally constructed deep draft navigation project, which serves the Ports of Port Arthur, Beaumont, and Orange in Jefferson and Orange counties, Texas, and Cameron and Calcasieu Parishes, La. The waterway is ranked third in the nation for tonnage volume in foreign trade (according to data from the Waterborne Commerce Statistics Center) and supplies 55 percent of the nation's strategic petroleum reserves. The current study has recommended modifying the existing waterway by deepening the channel to 48 feet to avoid delays, increase safety and improve efficiency. The estimated construction cost is \$1.2 billion with a 1.3 benefit-to-cost ratio.

FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0
Total cost of project:	\$2,620,000

## Sabine Pass to Galveston Bay

**ENVIRONMENTAL RESTORATION STUDY:** The study area is located along the southeastern Texas shoreline and consists of approximately 92 miles of Gulf of Mexico shoreline in Jefferson, Chambers, and Galveston counties from Sabine Pass to San Luis Pass at the western end of Galveston Island. This study will address the significant shoreline erosion occurring along the upper Texas Coast causing the destruction of nationally significant wetlands, loss of land, and damage to homes, commercial property, and State Highway 87. The State of Texas is interested in initiating a comprehensive assessment of the Texas Coast that will include all federal, state, and local entities to address future development and protection measures that could be implemented by each entity to reduce the risk of future damage from major storm events.

FY11 President's Budget:	
	\$200,000
FY12 President's Budget:	
	\$200,000
Total cost of project:	\$12,158,000



## 2nd District Operations and Maintenance

### Barbour Terminal Ship Channel

The Barbour Terminal Channel and Turning Basin is a 1.7-mile long deep draft waterway that extends from the Houston Ship Channel at Mile 26.3 west across Galveston Bay. The project is located in the vicinities of Houston, Pasadena, La Porte, and Shore Acres in Harris County, Texas. Operations and maintenance funds allow the Corps to keep the waterway open for navigation, as the commodities imported and exported through the ship channel contribute to the economic success of the nation.

FY11 President's Budget:

**\$1,811,000**

FY12 President's Budget:

**\$0**

### Bayport Ship Channel

The Bayport Ship Channel and Turning Basin is a 4.5 mile long deep draft waterway that extends from the Houston Ship Channel at Mile 20.5 west across Galveston Bay. The project is located in the vicinities of Houston, Pasadena, La Porte, and Shore Acres in Harris County, Texas. The flare of the Bayport Ship Channel serves as the entrance to the Bayport Terminal and its facilities. It has become a high shoal area that requires annual dredging to maintain project depth in this high volume container terminal for the Port of Houston. The Houston Pilots and Coast Guard Vessel Traffic Service closely monitor this section and have imposed draft restrictions in prior years. Operations and maintenance funds allow the Corps to keep the waterway open for navigation, as the commodities imported and exported through the ship channel contribute to the economic success of the nation.

FY11 President's Budget:

**\$4,028,000**

FY12 President's Budget:

**\$3,776,000**

### Buffalo Bayou and Tributaries (Addicks and Barker Dams and Reservoirs)

The project is located on Buffalo Bayou and Mayde Creek on the west side of the City of Houston, in Harris and Fort Bend counties, Texas. Addicks Dam and Reservoir is an earthen dam 61,166-feet long and 48.5 feet above the Mayde Creek streambed with a storage capacity of 200,840 acre-feet. Barker Dam and Reservoir is an earthen dam 71,960-feet long and 36.5 feet above the Buffalo Bayou streambed with a storage capacity of 209,000 acre-feet. Operations and maintenance funds for the Addicks and Barker dams and reservoirs allow for the project to continue serving its purpose of reducing flooding in the City of Houston, protecting residents downstream in the nation's fourth largest city.

FY11 President's Budget:

**\$3,518,000**

FY12 President's Budget:

**\$3,670,000**



## Cedar Bayou

This shallow draft channel is an important navigation channel adjacent to the Houston and Bayport Ship Channels. The improved portion of the channel extends from its junction with the Houston Ship Channel near Mile 25 eastward across Galveston Bay to the mouth of Cedar Bayou to a point three miles upstream. The project dimensions are 10 by 100 feet and supports heavy barge traffic to facilities. Operations and maintenance funds allow the Corps to keep the waterway open for navigation and reduce safety hazards.

FY11 President's Budget:

**\$1,695,000**

FY12 President's Budget:

**\$350,000**

## Gulf Intracoastal Waterway

The project traverses the entire Texas Coast, from the Sabine River to Port Isabel, Texas. The navigation portion of the main channel of the Gulf Intracoastal Waterway covers a distance of 423 miles, along with other tributaries. The authorized depth and width is generally 12 feet by 125 feet. Operations and maintenance funds allow the Corps to keep the waterway open for navigation.

FY11 President's Budget:

**\$27,792,000**

FY12 President's Budget:

**\$24,277,000**

## Houston Ship Channel

The Houston Ship Channel (HSC) consists of the main channel, Barbour Terminal Channel, Bayport Ship Channel and Greens Bayou Channel. The main channel is a 54-mile long deep draft waterway which extends from Bolivar Roads near Galveston, Texas, north through Galveston Bay, the San Jacinto River, and Main Turning Basin at Houston, Texas, and includes a 6.5-mile long shallow draft reach. The light draft channel extends upstream of the main turning basin. The channel is maintained to 45-feet from Bolivar Roads up to the Upper Bayou where it transitions from 40 feet to 36 feet at the turning basin. The Barbour Terminal Channel and turning basin is a 1.7 mile long deep draft waterway (authorized depth of 40 feet) that extends from the HSC at Mile 26.3 west across Galveston Bay. The Bayport Ship Channel and turning basin is a 4.5-mile long deep draft waterway (authorized depth of 40 feet) that extends from the HSC at Mile 20.5 west across Galveston Bay. The Greens Bayou Channel is a 1.6-mile long shallow and deep draft waterway which extends from the HSC at mile 42.9 northeast up Greens Bayou. Operations and maintenance funds allow the Corps to keep the waterway open for navigation.

FY11 President's Budget:

**\$17,978,000**

FY12 President's Budget:

**\$18,188,000**

## Project Condition Surveys

Periodic project condition surveying provides channel condition information to industry and government officials involved in responsible navigation decision making for safe and efficient navigation.

FY11 President's Budget:

**\$451,000**

FY12 President's Budget:

**\$100,000**



## Sabine-Neches Waterway

The Sabine-Neches Waterway is a 79-mile deep draft ship channel which extends from the 42-foot contour in the Gulf of Mexico through a jettied channel to Port Arthur, to Beaumont via the Neches River Channel, and to Orange via the north part of Sabine Lake and continues via the Sabine River Channel. The project is located in the vicinities of Beaumont, Port Arthur, Orange, and Sabine Pass in Jefferson and Orange counties, Texas, and Cameron and Calcasieu parishes, La. The channel is authorized to 40 feet from the Jetty Channel to the intersection of the Neches and Sabine River, where it is authorized at 30 feet. The Sabine Neches Waterway is ranked 4th in the nation by tonnage and supports a large percentage of the nation's petrochemical industry and has two Liquefied Natural Gas (LNG) facilities. The Port of Beaumont is a strategic military outload port that supports the war efforts. Operations and maintenance funds allow the Corps to keep the waterway open for navigation, as the commodities imported and exported through the channel contribute to the economic success of the nation.

FY11 President's Budget:
<b>\$14,330,000</b>
FY12 President's Budget:
<b>\$14,182,000</b>

## Trinity River and Tributaries

The Trinity River project is a 47-mile shallow draft waterway beginning with the Anahuac Channel which extends for 5.6 miles from the six-foot depth in upper Trinity Bay to the mouth of Trinity River at Anahuac, Texas. From the mouth of Trinity River, the Channel to Liberty proceeds for 41.4 miles along the meanders of the Trinity River to the Port of Liberty. The project also includes is a nine-foot depth channel (channel to Smith Point) extending from the Houston Ship Channel along the east shore of the Trinity Bay to a point one mile south of Anahuac, Texas. Operations and maintenance funds allow the Corps to keep the waterway open for navigation, as the commodities imported and exported through the channel contribute to the economic success of the nation.

FY11 President's Budget:
<b>\$0</b>
FY12 President's Budget:
<b>\$0</b>

## Wallisville Lake

Wallisville Lake is a multiple purpose project built on the Trinity River to prevent salinity intrusion and provide water supply, recreation, navigation, and fish and wildlife enhancements. The project includes approximately eight miles of earthen dam and an overflow spillway with a taintor gate assembly, and an 84-foot by 600-foot navigation lock with a sill depth of 16 feet for commerce and pleasure craft use. Construction initially began in the late 1960s but was stopped due to environmental concerns. Modifications resulted in a saltwater barrier project, with no reservoir pools, to emulate pre-project conditions as closely as possible. Construction resumed in 1996 and was completed in 1999. Operations and maintenance funds for the Wallisville Lake Project allow for water supply to continue, recreation, navigation and fishing for the community.

FY11 President's Budget:
<b>\$2,715,000</b>
FY12 President's Budget:
<b>\$1,990,000</b>

