

## Construction

- » Brays Bayou
- » Buffalo Bayou and Tributaries, Addicks and Barker Dams
- » Clear Creek
- » Houston-Galveston Navigation Channels
- » Hunting Bayou
- » Sims Bayou
- » Texas Environmental Infrastructure Program

## Authorized Studies

- » Clear Creek

## Operations and Maintenance

- » Barbour Terminal Ship Channel
- » Bayport Ship Channel
- » Buffalo Bayou and Tributaries (Addicks & Barker)
- » Houston Ship Channel



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

# UPDATE REPORT FOR THE 9<sup>TH</sup> DISTRICT

Current as of May 2011



**Al Green**

*U.S. House of Representatives  
9th 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*

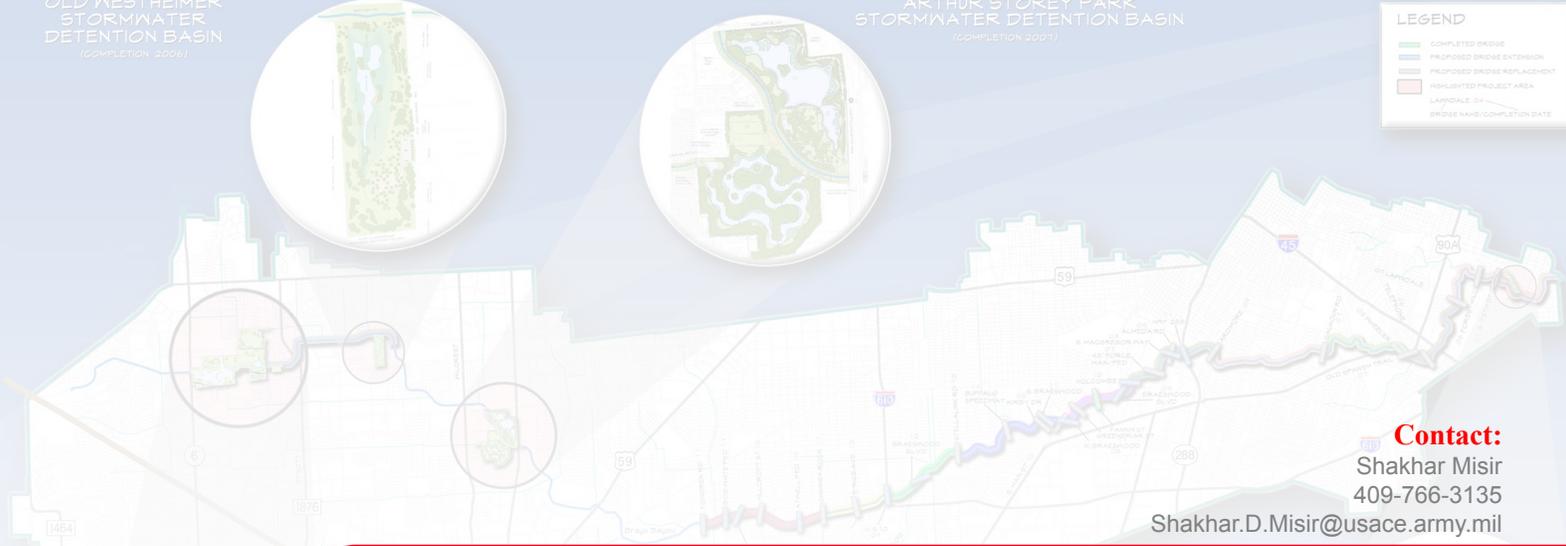


2000 Fort Point Road  
Galveston, TX 77550

**Public Affairs Office:**  
(409) 766-3004

**Visit us on the Web at:**  
[www.swg.usace.army.mil](http://www.swg.usace.army.mil)  
[www.facebook.com/GalvestonDistrict](http://www.facebook.com/GalvestonDistrict)

[www.dvidshub.net/units/USACE-GD](http://www.dvidshub.net/units/USACE-GD)  
[www.twitter.com/usacegalveston](http://www.twitter.com/usacegalveston)



**Contact:**  
Shakhar Misir  
409-766-3135

Shakhar.D.Misir@usace.army.mil

## Brays Bayou

### Background:

The authorized project, located in southwest Houston (within Harris County), consists of four regional detention basins (Sam Houston, Old Westheimer Road, Eldridge Road and Willow Waterhole), enlargement or modification of 21.1 miles of earthen channel, replacement and/or lengthening of 27 bridges and recreation features including hike-and-bike trails, picnic facilities, sports fields, comfort

stations and parking areas. As stated in the Water Resources Development Act of 1996, Section 211, subject to the approval of the Secretary of the Army, the non-federal interest may design and construct an alternative to the diversion component. The General Re-evaluation Report (GRR) for the alternative to the diversion component was approved April 3, 2009. The Project Corporation Agreement was amended in March 2010, uniting the upstream and downstream (formally the diversion component) into one project.



Brays Bayou.

### Issue:

The sponsor is seeking reimbursement for the federal share on the GRR (\$2,094,000) for an alternative to the authorized diversion feature (downstream element), and reimbursement for the federal share of the completed construction in both the upstream and downstream detention areas. The sponsor is not constructing both upstream and downstream elements. To date, the sponsor has completed 47 percent of the detention basins and received federal reimbursement for 100 percent of the completed detention basins.

### Current Status:

Fiscal year 2011 funds are being used for the Willow Waterhole Detention Basin, Discrete Segment (DS) 203 final reimbursement (\$810,000) and partial reimbursement of DS 209 at Willow Waterhole Detention Basin (\$6,930,000).

|                          |               |
|--------------------------|---------------|
| Federal dollars to date: | \$91,650,000  |
| Sponsor dollars to date: | \$8,629,053   |
| Total cost of project:   | \$571,660,000 |
| FY11 President's Budget: | \$7,740,000   |
| FY12 President's Budget: | \$3,000,000   |



Addicks

Houston

**Contact:**

Enrique (Rick) Villagomez  
409-766-3173

Enrique.Villagomez@usace.army.mil

## Buffalo Bayou and Tributaries, Addicks and Barker Dams

### Background:

The earthen dams, located in Houston, underwent a major rehabilitation effort under the Dam Safety Assurance Program in 1991. Improvements included raising embankments and protecting the ends of the dams with concrete to protect against possible overtopping and to meet modern safety standards. Significant development in the Buffalo Bayou watershed (since the 1991 upgrade) has increased flow into the reservoir. The dam safety team's most recent screening indicated that both dams were inadequate in areas including the spillway and/or stilling basin system, outlet works and conduit, embankment, and erosion along the reservoirs' rims. The Interim Risk Reduction Measures Plan requires the determination of areas of potential impact and the threat to local interests from a major rainfall event.

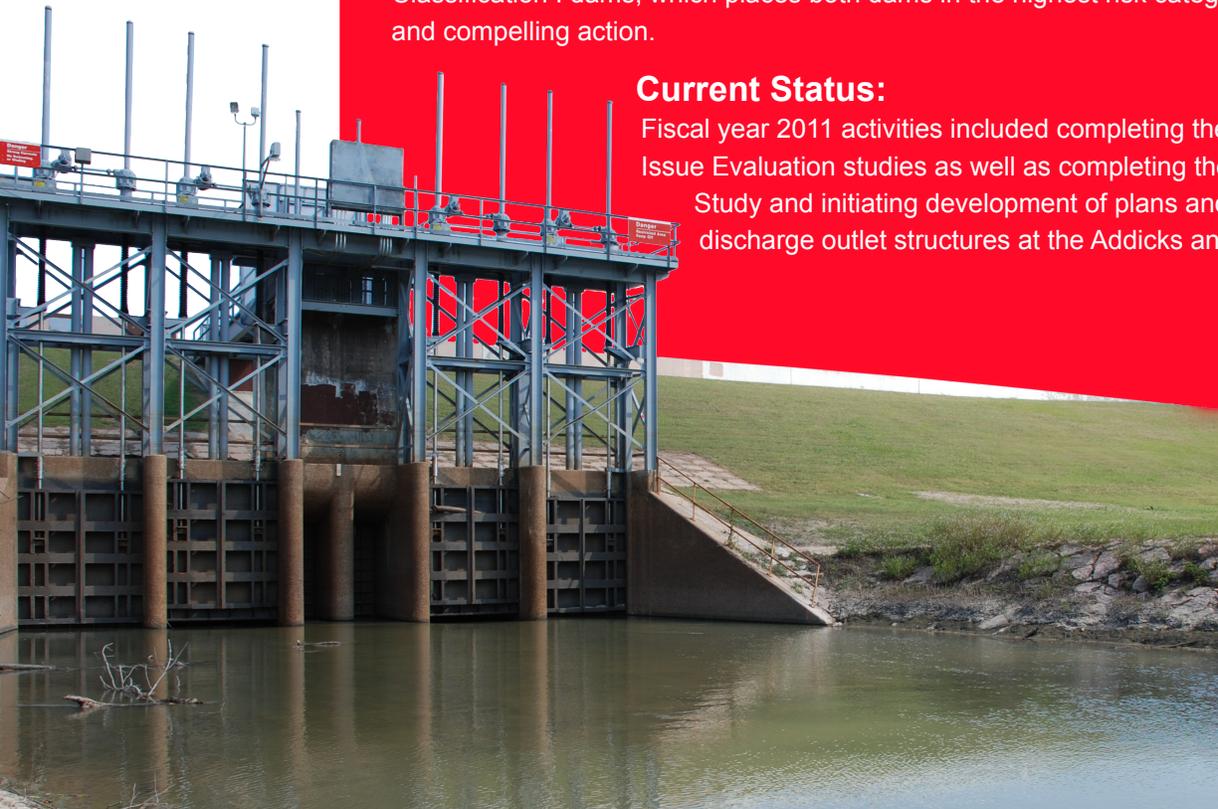
### Issue:

The National Dam Safety Cadre Team classified Addicks and Barker dams as Dam Safety Action Classification I dams, which places both dams in the highest risk category and requires urgent and compelling action.

### Current Status:

Fiscal year 2011 activities included completing the Value Engineering and Issue Evaluation studies as well as completing the Dam Safety Modification Study and initiating development of plans and specifications for the discharge outlet structures at the Addicks and Barker dams.

Outlet structure at  
Barker Dam.



|                          |              |
|--------------------------|--------------|
| Federal dollars to date: | \$5,556,000  |
| Sponsor dollars to date: | N/A          |
| Total cost of project:   | \$48,956,000 |
| FY11 President's Budget: | \$1,900,000  |
| FY12 President's Budget: | \$1,500,000  |

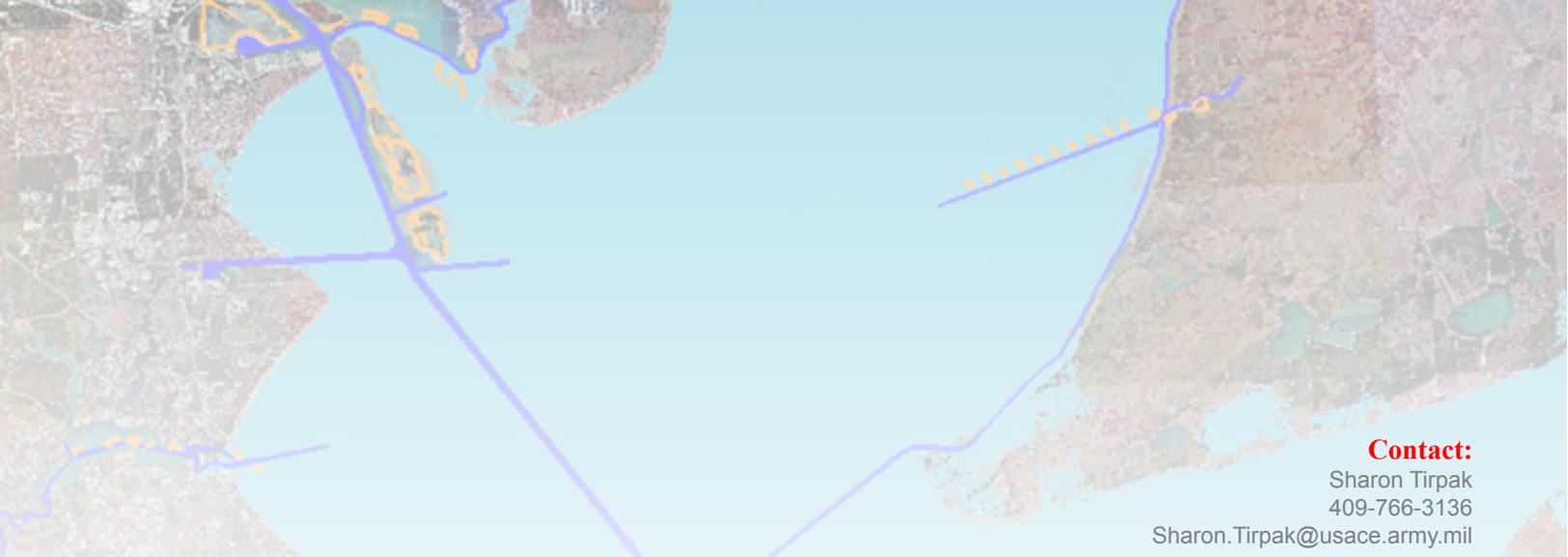


2000 Fort Point Road  
Galveston, TX 77550

Public Affairs Office:  
(409) 766-3004

Visit us on the Web at:  
[www.swg.usace.army.mil](http://www.swg.usace.army.mil)  
[www.facebook.com/GalvestonDistrict](http://www.facebook.com/GalvestonDistrict)

[www.dvidshub.net/units/USACE-GD](http://www.dvidshub.net/units/USACE-GD)  
[www.twitter.com/usacegalveston](http://www.twitter.com/usacegalveston)



**Contact:**

Sharon Tirpak  
409-766-3136

Sharon.Tirpak@usace.army.mil

## Clear Creek

### Background:

The proposed flood risk management project, located in Harris, Galveston and Brazoria counties, will include channel improvements and in-channel detention along the main channel and



Clear Creek area  
Flooding.

tributaries. Dredging and construction of the second outlet channel was completed in July 1997, and the outlet and gated structure were transferred in March 1998 to the local sponsor for operation and maintenance. The local sponsors are the Harris County Flood Control District (acting for Harris County), Galveston County and Brazoria Drainage District No. 4. Opposition to the authorized project over environmental concerns arose during construction in 1997 and, as a result, led to the preparation of a General Re-evaluation Report (GRR) that is currently ongoing.

### Issue:

The project was not funded in the fiscal year 2012 President's Budget. The preparation of the GRR will stop without federal funding.

### Current Status:

A determination by the U.S. Army Corps of Engineers Headquarters was made that the project does not need to be re-authorized. In addition, an in-progress-review was held in October 2010 to discuss the draft GRR/Environmental Impact Statement (EIS). Resolution of review comments will extend the schedule between three to four months. Once reviews are completed, the GRR/EIS will be revised and reviewed before public review. Final report approval is expected by November 2011.

|                          |               |
|--------------------------|---------------|
| Federal dollars to date: | \$34,823,000  |
| Sponsor dollars to date: | \$2,315,000   |
| Total cost of project:   | \$226,147,000 |
| FY11 President's Budget: | \$0           |
| FY12 President's Budget: | \$0           |

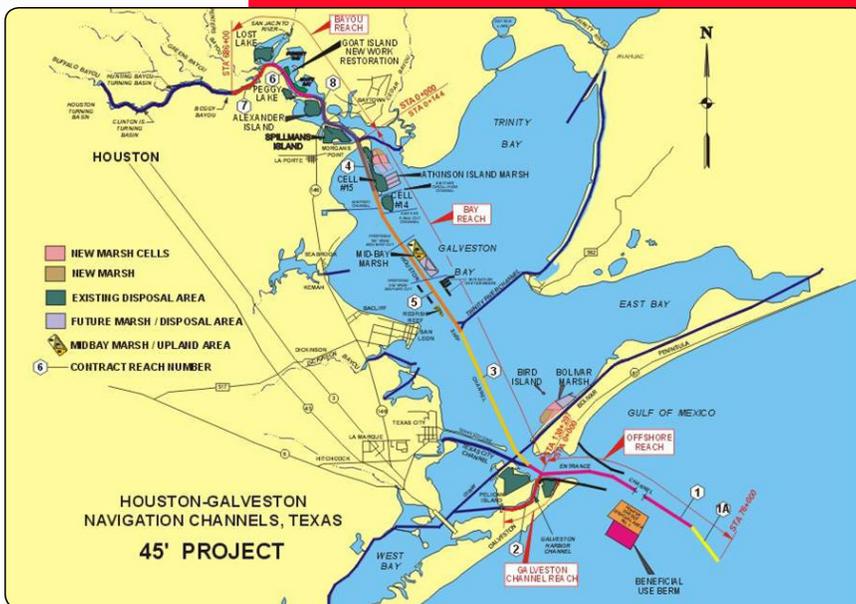


**Contact:**  
 James Worthington  
 409-766-3094  
 James.F.Worthington@usace.army.mil

# 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     |



2000 Fort Point Road  
 Galveston, TX 77550

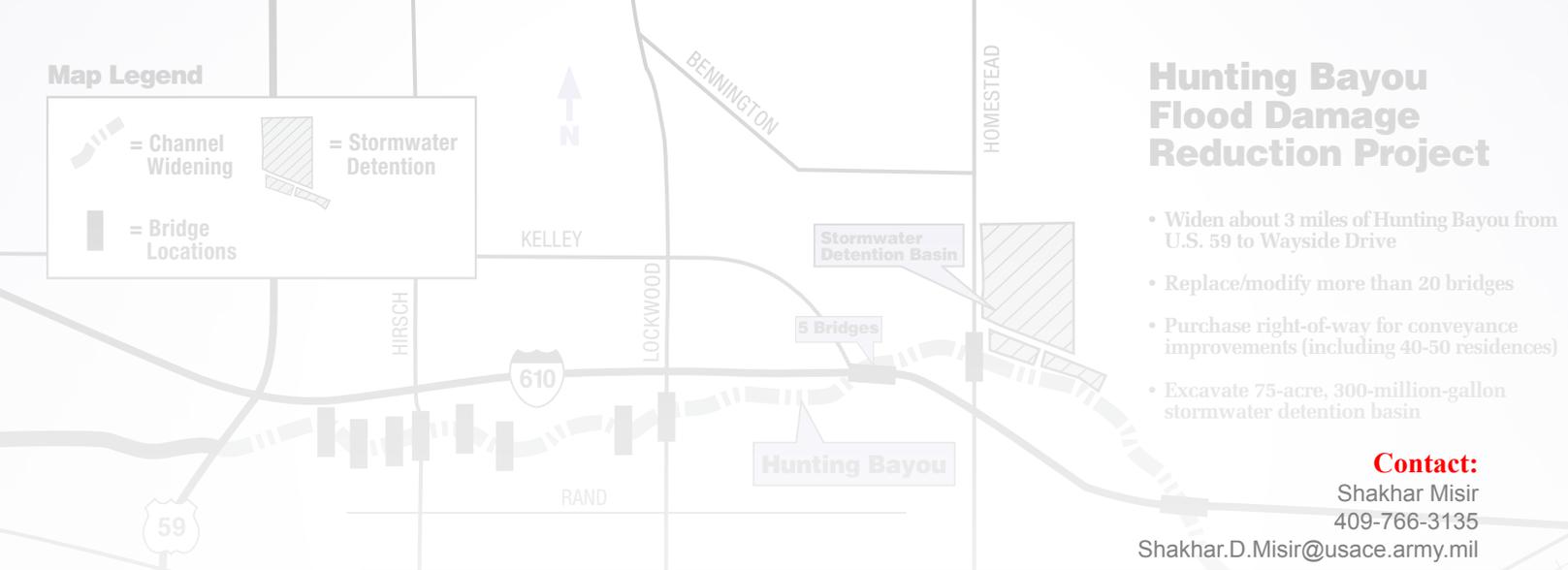
Public Affairs Office:  
 (409) 766-3004

Visit us on the Web at:  
[www.swg.usace.army.mil](http://www.swg.usace.army.mil)  
[www.facebook.com/GalvestonDistrict](http://www.facebook.com/GalvestonDistrict)

[www.dvidshub.net/units/USACE-GD](http://www.dvidshub.net/units/USACE-GD)  
[www.twitter.com/usacegalveston](http://www.twitter.com/usacegalveston)

### Map Legend

 = Channel Widening  
 = Stormwater Detention  
 = Bridge Locations



## Hunting Bayou Flood Damage Reduction Project

- Widen about 3 miles of Hunting Bayou from U.S. 59 to Wayside Drive
- Replace/modify more than 20 bridges
- Purchase right-of-way for conveyance improvements (including 40-50 residences)
- Excavate 75-acre, 300-million-gallon stormwater detention basin

### Contact:

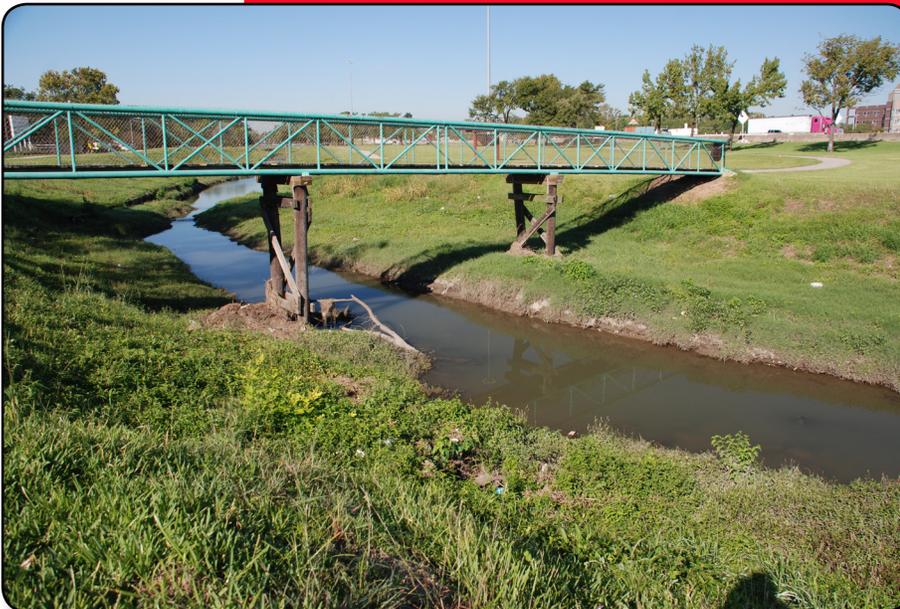
Shakhar Misir  
409-766-3135

Shakhar.D.Misir@usace.army.mil

## Hunting Bayou

### Background:

The Hunting Bayou watershed is 29 square miles located approximately five miles northeast of downtown Houston in Harris County, Texas. The watershed is highly developed with a mix of



Hunting Bayou.

residential, commercial and industrial land use. The proposed project will reduce the number of structures subject to the 100-year storm from 7,000 to 1,400. The reformulated project will be identified by the General Re-evaluation Report (GRR) and is anticipated to include channel modifications and detention features. The U.S. Army Corps of Engineers, Galveston District, will provide guidance and oversight to the Harris County Flood Control District during preparation of the report.

### Issue:

Section 211(f) of Water Resources Development Act 1996 authorizes non-federal interests to plan, design, and construct federal flood risk management

projects. Federal funding is needed in order to provide federal oversight of the GRR, which the sponsor is currently working to complete.

### Current Status:

This project was not in the fiscal year 2011 or FY12 President's Budgets. Carry over funds will be used to continue oversight of sponsor efforts to continue GRR including a feasibility scoping meeting and Agency Technical Review of the draft GRR.

|                          |               |
|--------------------------|---------------|
| Federal dollars to date: | \$1,435,000   |
| Sponsor dollars to date: | \$0           |
| Total cost of project:   | \$189,930,000 |
| FY11 President's Budget: | \$0           |
| FY12 President's Budget: | \$0           |



2000 Fort Point Road  
Galveston, TX 77550

Public Affairs Office:  
(409) 766-3004

Visit us on the Web at:  
www.swg.usace.army.mil  
www.facebook.com/GalvestonDistrict

www.dvidshub.net/units/USACE-GD  
www.twitter.com/usacegalveston



**Contact:**

Shakhar Misir  
409-766-3135

Shakhar.D.Misir@usace.army.mil

# Sims Bayou

**Background:**

Located in south central Houston within Harris County, the project consists of 19.3 miles of channel improvements that provide flood damage reduction and erosion control. The project also includes environmental quality measures, recreational features and entails connecting the authorized channel end into an existing large detention basin, which magnifies the intended benefits of the project. The recreation plan includes 13.9 miles of trail system along the banks of the improved channel with the trails connecting to seven city parks that currently exist along the bayou. Additional recreational support facilities include benches, picnic tables and drinking fountains.

**Issue:**

Flood risk management is the primary purpose for this project while recreation, a separable element, is a value added benefit. Final segments of the flood risk management component are under construction and completion is expected by last quarter of fiscal year 2012. The recreation component of the project and Project Partnership Agreement with the non-federal sponsor cannot be executed until substantial completion of the flood risk management component. The recreational component is a secondary feature of work within the flood risk management project's footprint.

**Current Status:**

Hurricane supplemental funds were used for storm repair and sediment removal while American Recovery and Reinvestment Act of 2009 funds were used to award a contract for the Martin Luther King Bridge plug removal and award the final for South Post Oak to Croquet. FY12 activities include completing the four channel construction contracts and awarding a tree and shrub planting contract. The recreation element will be initiated late FY12, upon completion of the flood risk management features.

Sims Bayou.



|                          |               |
|--------------------------|---------------|
| Federal dollars to date: | \$268,274,000 |
| Sponsor dollars to date: | \$21,557,573  |
| Total cost of project:   | \$393,925,000 |
| FY11 President's Budget: | \$0           |
| FY12 President's Budget: | \$0           |



2000 Fort Point Road  
Galveston, TX 77550

**Public Affairs Office:**  
(409) 766-3004

**Visit us on the Web at:**  
www.swg.usace.army.mil  
www.facebook.com/GalvestonDistrict

www.dvidshub.net/units/USACE-GD  
www.twitter.com/usacegalveston



**Contact:**

John Machol  
409-766-3944

[John.F.Machol@usace.army.mil](mailto:John.F.Machol@usace.army.mil)

## Texas Environmental Infrastructure Program

### Background:

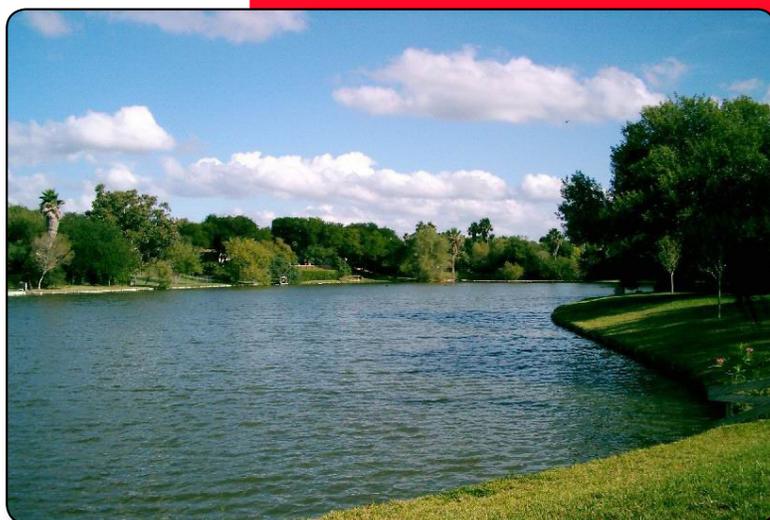
The program consists of providing environmental assistance in the form of planning, design and construction assistance for water-related environmental infrastructure and resource protection and development projects to non-federal interests in Texas. This work includes projects for water supply; storage; 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.*



2000 Fort Point Road  
Galveston, TX 77550

**Public Affairs Office:**  
(409) 766-3004

**Visit us on the Web at:**  
[www.swg.usace.army.mil](http://www.swg.usace.army.mil)  
[www.facebook.com/GalvestonDistrict](http://www.facebook.com/GalvestonDistrict)

[www.dvidshub.net/units/USACE-GD](http://www.dvidshub.net/units/USACE-GD)  
[www.twitter.com/usacegalveston](http://www.twitter.com/usacegalveston)



## 9th District Authorized Studies

### Clear Creek

**FLOOD RISK MANAGEMENT STUDY:** Located in Harris and Galveston counties, Texas, the project consists of approximately 15.3 miles of channel enlargement and bend easing, more stringent regulations restricting development of the 100-year floodplain and a second outlet channel with a gated structure between Clear Lake and Galveston Bay. The proposed project will include channel improvements and detention along the main channel and tributaries. Opposition to the project over environmental concerns arose during construction in 1997 and as a result led to the preparation of a General Re-evaluation Report that is still ongoing. The project, once completed, will reduce flooding in residential and commercial developments and provide ecosystem restoration along some stretches of Clear Creek.

|                          |               |
|--------------------------|---------------|
| FY11 President's Budget: | \$0           |
| FY12 President's Budget: | \$0           |
| Total cost of project:   | \$226,147,000 |



## 9th 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: |
| <b>\$1,811,000</b>       |
| FY12 President's Budget: |
| <b>\$0</b>               |

### 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: |
| <b>\$4,028,000</b>       |
| FY12 President's Budget: |
| <b>\$3,776,000</b>       |

### 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: |
| <b>\$3,518,000</b>       |
| FY12 President's Budget: |
| <b>\$3,670,000</b>       |





## 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: |
| <b>\$17,978,000</b>      |
| FY12 President's Budget: |
| <b>\$18,188,000</b>      |

