

Construction

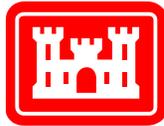
- » Buffalo Bayou and Tributaries, Addicks and Barker Dams
- » Cedar Bayou
- » Chocolate Bayou
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**US Army Corps
of Engineers®**
Galveston District

UPDATE REPORT FOR THE 14TH DISTRICT

Current as of May 2011



Ron Paul

*U.S. House of Representatives
14th Congressional District*

About the Galveston District

With 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. Sallèse
District Engineer and Commanding Officer
U.S. Army Corps of Engineers Galveston District*



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Addicks

Houston

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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.

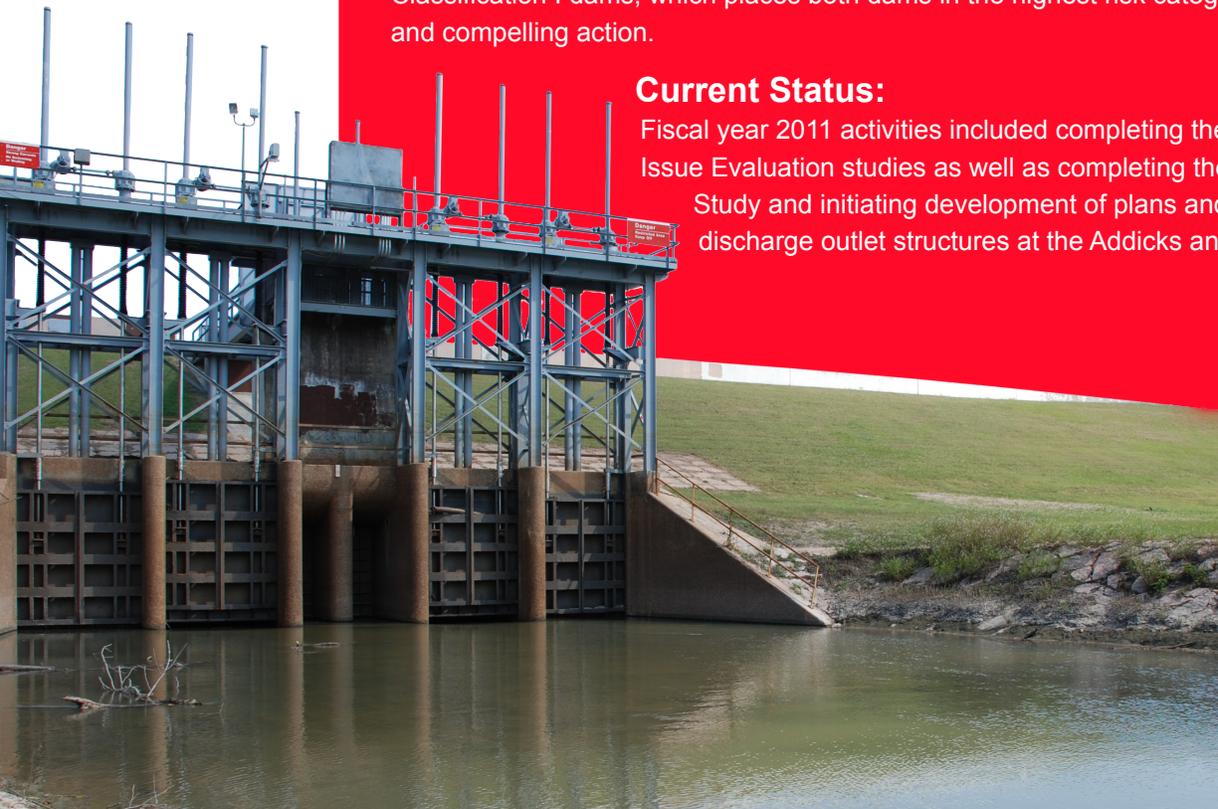
Issue:

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



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Cedar Bayou Navigation Project



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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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Chocolate Bayou

Background:

The Chocolate Bayou Channel is a federally-authorized 8.2 mile channel traversing Chocolate Bay and connecting industries at the northwest end of the bay within Chocolate Bayou and the Gulf Intracoastal Waterway. The channel, currently maintained at 12-foot deep (mean low tide) by 125-foot wide, is primarily used for transportation of crude petroleum and petrochemical products. The maintenance dredging frequency for the channel is every four years. This project provides



Barge Traveling up Chocolate Bayou.

a long-term management plan that will utilize maintenance material from dredging of the Chocolate Bayou Channel, over a 20-year period, to create and enhance approximately 560 acres of marsh and bird-nesting habitat within the Chocolate Bay area.

Issue:

Since 1950, approximately 32,400 acres of wetlands have been lost in the Chocolate Bay system. The development of long-term beneficial use sites will have a cumulative beneficial effect on the biological resources of the Chocolate Bayou system and will extend the life of existing upland confined placement areas.

Current Status:

This project was not funded in the fiscal year 11 budget and is not in the FY12 President's Budget. The Dredged Material Management Program (DMMP) is being revised to include current economic analysis and identify additional placement area capacity.

Under the revised DMMP, the first dredging cycle is expected to occur in 2014 for which Construction General Funds will be required to build the levees for the placement areas and Operation and Maintenance (O&M) funds for maintenance dredging. This project was not funded in FY11 for either Construction General or O&M funds. It is in the FY12 President's Budget to receive \$500,000 in O&M funds. Construction General Funds is required only for construction of the placement areas while O&M funds are used for the dredging of the channel.

Federal dollars to date:	\$5,510,000
Sponsor dollars to date:	\$631,000
Total cost of project:	\$14,738,000
FY11 President's Budget:	\$0
FY12 President's Budget:	\$0



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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



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Corpus Christi Ship Channel

Background:

The Corpus Christi Ship Channel is a 45-foot deep, 34-mile long federally constructed deep-draft navigation channel serving the ports at Harbor Island, Ingleside and Corpus Christi. The recommended plan of improvement will deepen the channel to 52 feet, widen to 530 feet, add

barge shelves on both sides of the channel across Corpus Christi Bay and extend the La Quinta Channel 1.5 miles at a depth of 39 feet. Construction of this project was authorized in the Water Resources Development Act (WRDA) 2007. A Limited Re-evaluation Report (LRR) is currently required to update the project economics and costs. There are four separable elements that make up the project – the La Quinta Channel extension, ecosystem restoration, the main channel and barge shelves. The sponsor’s priority is to construct the La Quinta Channel extension and ecosystem restoration. The economic update for these two separable elements is complete but the update for the main channel and barge shelves is ongoing.



Corpus Christi Ship Channel improvements.

Issue:

Adequate funding to award a contract to continue construction of the La Quinta Channel Extension is required. Due to a shortage of federal funding, the sponsor requests approval to advance funds to cover the federal share of the total project cost (\$60 million) so that the La Quinta Channel Extension can be constructed. Funds are not in the fiscal year 2012 President’s Budget. By requesting to advance the federal share of funds, the sponsor is taking a risk in that there is no guarantee of reimbursement of these funds by the federal government. The only way the sponsor can be reimbursed for advancing funds is by a congressional add.

Current Status:

Recovery funds were provided in FY10 to initiate the first construction contract, Placement Area 14, of the La Quinta Channel Extension. That contract was completed Oct. 12, 2010. Regular construction funds will be used to complete a LRR to update the benefits and costs for the main channel and barge shelves and to determine if the total project cost estimate for the overall Corpus Christi Ship Channel will exceed the 902 limit.

Federal dollars to date:	
	\$4,315,000
Sponsor dollars to date:	
	\$954,458
Total cost of project:	
	\$352,270,000
FY11 President’s Budget:	
	\$0
FY12 President’s Budget:	
	\$0



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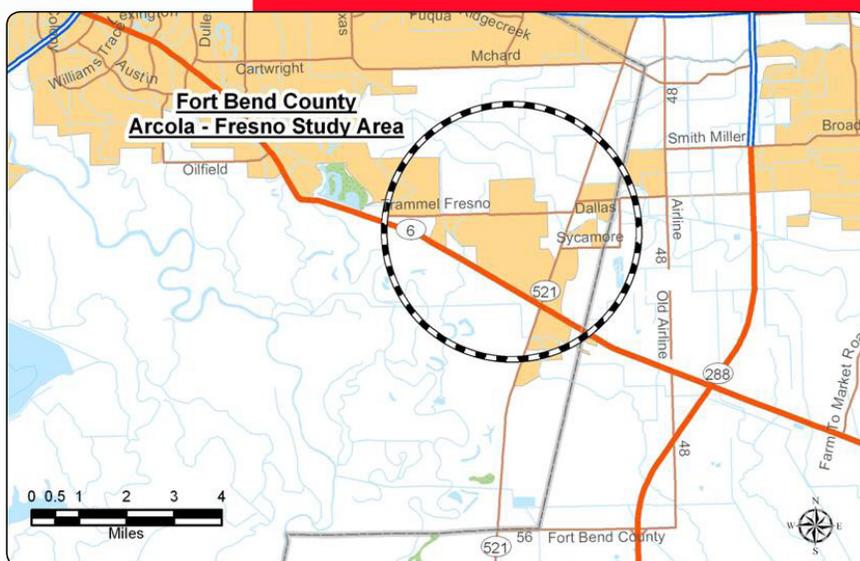
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Fort Bend County

Background:

There is no comprehensive water supply system (with the exception of three small water supply companies) in the project area which is located south of the City of Houston along the Farm to



Fort Bend County study area.

Market Road 521 corridor east of Missouri City and west of Pearland (approximately 4,600 acres in the project area). The majority of all water is provided by private water wells. The existing wells produce low quality water. Environmental complaints within the Arcola region generally exceed the total complaints received in the remainder of Fort Bend County. Wastewater treatment is typically accomplished through the use of private septic tanks. Additionally, lot sizes are often too small to provide an adequate drain field area for a proper functioning system. The Fort Bend County Health Department reports serious health concerns resulting from malfunctioning septic systems in the area.

Issue:

Funds are needed to initiate and complete the construction of wastewater infrastructure near the City of Arcola and in multiple areas in Fort Bend County.

Current Status:

The project has not been started. Funds are not included in the fiscal year 2012 President's Budget.

Federal dollars to date:	\$0
Sponsor dollars to date:	\$0
Total cost of project:	\$26,670,000
FY11 President's Budget:	\$0
FY12 President's Budget:	\$0





**Galveston County
MUD 12**

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Galveston County Municipal Utility District #12

Background:

The Galveston County Municipal Utility District (MUD) #12 ecosystem restoration project includes the residential canal communities of Bayou Vista and Omega Bay. The communities are adjacent to Interstate Highway 45 in an area known as the Texas City Wye, located northwest of the Galveston Causeway, in Galveston County, Texas.



Residential Canal at Bayou Vista.

Issue:

Sedimentation problems in the residential canals are restricting navigation and the poor circulation of many of the canals has contributed to anaerobic conditions and fish kills. The study will evaluate alternatives to reduce the sedimentation rate and improve the circulation within the residential canals. Restricted navigation is most severe throughout the canals in the community of Omega Bay and some of the more northerly canals and the canal entrances of Bayou

Vista. The canals in Bayou Vista were originally dredged to depths greater than -15 feet mean low tide (MLT) while Omega Bay was initially dredged to -6 feet MLT. The deeper depths at Bayou Vista have limited most of the sedimentation problems to the canal entrances.

Current Status:

The local sponsor is the Galveston County MUD #12. Carryover funding from fiscal year 2010 is being utilized to evaluate alternatives, identify the recommended plan, and prepare the Draft Detailed Project Report.

Federal dollars to date:	\$251,000
Sponsor dollars to date:	\$0
Total cost of project:	\$7,692,000
FY11 President's Budget:	\$0
FY12 President's Budget:	\$0



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Gulf Intracoastal Waterway - High Island to Brazos River

Background:

The Gulf Intracoastal Waterway (GIWW) is part of the nation's inland waterway system and stretches from Brownsville, Texas, along the entire Gulf of Mexico to St. Marks, Fla. The High Island to Brazos River reach includes approximately 43 miles of channels in Galveston and Brazoria counties, from Rollover Pass at GIWW Mile 330 to West Bay at Mile 373. Commerce transported along this section of the GIWW totaled nearly \$56 million in 2008 with petrochemicals



High Island.

as the major commodity shipped. The recommended project entails construction of a sediment basin at Rollover Pass, widening the channel area an additional 75 feet for a length of 1,400 feet at Sievers Cove, widening the channel at the Texas City Wye, setting back existing mooring facilities by 80 feet at Pelican Island, establishing a mooring basin at Greens Lake, and protecting existing open channels from wave action at the West Bay washout. The project was authorized for construction in the Water Resources Development Act of 2007.

Issue:

This section contains significant wetland and environmental sensitive areas which must be protected. Navigational difficulties are caused by frequent shoaling at Rollover Pass, traffic congestion at Sievers Cove and Texas City Wye. This portion of the channel requires realignment and new mooring facilities. Construction to alleviate these problems cannot be initiated until construction funds are appropriated.

Current Status:

The project was not funded in the fiscal year 2011 nor the FY12 President's Budgets.

Federal dollars to date:	
	\$668,000
Sponsor dollars to date:	
	\$0
Total cost of project:	
	\$16,910,000
FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0



GIWW - Mad Island Marsh

Mad Island WMA

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Gulf Intracoastal Waterway - Mad Island Marsh

Background:

Mad Island Wildlife Management Area is located in Matagorda County, Texas, approximately 25 miles southwest of Bay City. The study will investigate the protection of over 900 acres of coastal marsh from erosion and provide optimum conditions for up to 35 acres of emergent wetlands to develop. Additionally, a 200-acre freshwater moist-soil unit (an area managed to simulate the dynamics of seasonally flooded wetlands and a freshwater lake system) will be protected from salt water intrusion and erosion.

Mad Island Wildlife
Management Area.

Issue:

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

Current Status:

Carryover funding from FY10 is being used to evaluate alternatives, identify the recommended plan and prepare the Draft Detailed Project Report.



Federal dollars to date:	
	\$954,000
Sponsor dollars to date:	
	\$0
Total cost of project:	
	\$7,691,000
FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0



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Gulf Intracoastal Waterway - Matagorda Bay

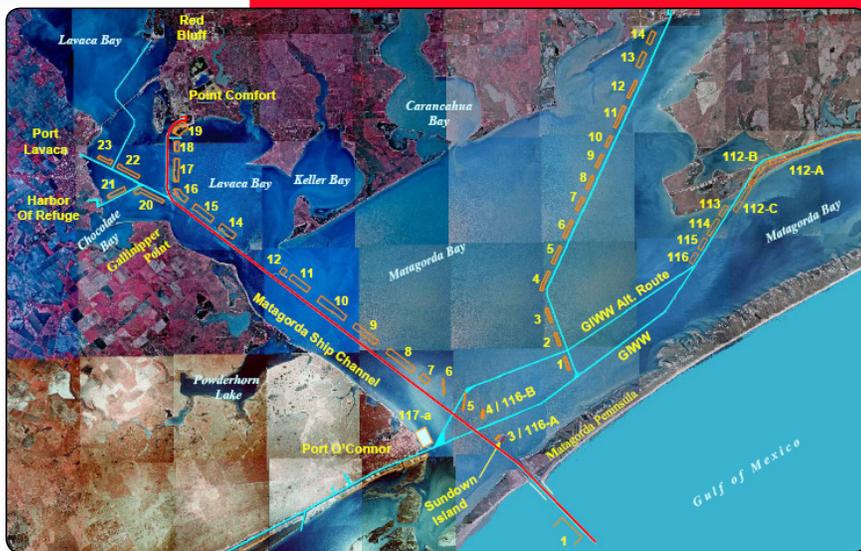
Background:

The project is located on the Gulf Coast in southeast Texas at approximately the midpoint between Corpus Christi and Galveston (a section of the Gulf Intracoastal Waterway that crosses Matagorda Bay). The project provides for rerouting the GIWW in the vicinity of the Matagorda

Ship Channel to avoid the strong currents and high shoaling occurring at the intersection. Several ecosystem restoration features and beneficial use of dredged material features are included in the placement plan. The project was authorized for construction in the Water Resources Development Act 2007.

Issue:

Due to the various problems along this reach, the waterways industry has reported that numerous groundings have occurred and that vessels operate under reduced speeds. Rerouting of the channel will reduce or eliminate the groundings and allow vessels to operate more safely and efficiently as well as reduce annual maintenance costs.



Matagorda Ship Channel.

Current Status:

This project was not in the fiscal year 2011 or FY12 President's Budgets. Funding is required to complete the preconstruction, engineering and design phase and initiate construction of the new channel. Construction of this project requires a 50 percent cost share from the Inland Waterways Trust Fund.

Federal dollars to date:	\$748,000
Sponsor dollars to date:	\$0
Total cost of project:	\$19,480,000
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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South Padre Island, TX

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South Padre Island

Background:

The City of South Padre Island is on a barrier island, located at the southernmost tip of Texas near the border of Mexico. The beaches of South Padre Island are critical economic and environmental assets as they host approximately 22,100 visitors and inhabitants daily, generate an estimated \$64 million in total retail sales, create about 3,170 jobs and generate annual property tax revenues of over \$4.56 million.

Issue:

Erosion rates along this barrier island vary considerably based upon wind, currents and proximity to rivers and other sediment carrying locations. These factors affect the critical economic and environmental assets of the City of South Padre Island.

Current Status:

Funding was not in the fiscal year 2011 or FY12 President's Budgets. Funding is needed to continue a feasibility study to determine the impact of placing sand obtained from the Brazos Santiago Pass on the beaches of South Padre Island.

Federal dollars to date:	\$500,000
Sponsor dollars to date:	\$0
Total cost of project:	\$5,267,000
FY11 President's Budget:	\$0
FY12 President's Budget:	\$0

Beach renourishment on South Padre Island.



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Texas City Channel

Background:

Texas City Channel is a deep-draft navigation project located on the northern Texas coast in Galveston Bay, adjacent to Texas City, Galveston County, Texas. The channel, which intersects with the Houston/Galveston Navigation Channel to the east, serves the Port of Texas City which

in 2009 ranked 10th in the U.S. in tonnage volume, with 52.6 million short tons (USACE Navigation Data Center). The main import is crude oil while primarily exporting gasoline, diesel, jet fuel, intermediate chemicals and petroleum coke.

Issue:

A deeper channel is necessary to enable larger vessels to have access to the port, bringing more efficiency to port operations and the associated petrochemical refineries that are located adjacent to the port.

Current Status:

Prior to 2010 the channel was maintained at a 40-foot depth. In October 2009, Weeks Marine, Inc. was awarded a \$61,810,000 contract, including

\$39,097,500 in American Recovery and Reinvestment Act (ARRA) funds, to deepen the 6.8 mile-long channel to a 45-foot depth and construct five new open water dredged material placement areas that in time will be converted to emergent marsh. The deepening of the channel is on-going and dredging is expected to be completed by the summer of 2011.



Houston-Galveston Navigation Channel map.

Federal dollars to date:	
	\$54,308,000
Sponsor dollars to date:	
	\$16,652,000
Total cost of project:	
	\$72,410,000
FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0





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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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14th 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

Freeport Harbor

NAVIGATION STUDY: The Freeport Harbor project is located along the mid to upper Texas Coast and is formed by the improvement of the Brazos River, Texas, from the mouth about six miles upstream to Freeport, Texas. It provides for a 47-foot deep, 400-foot wide entrance channel; 45-foot deep, 400-foot wide main channel with three associated 45-foot deep turning basins; plus the 36-foot deep, 200-foot wide Brazos Harbor channel and associated 36-foot deep Brazos Harbor Turning Basin. The locally preferred plan (recommended by the ongoing feasibility study) deepens the existing channel to 55 feet and widens to 600 feet. The feasibility study will also determine the federal interest in expanding the reach of the navigation channel to the Stauffer Channel and turning basin.

FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0
Total cost of project:	\$9,230,000

Freeport Harbor, Non-Federal Widening with Federal Assumption of Maintenance

NAVIGATION STUDY: The Freeport Harbor project is located along the mid to upper Texas Coast and is formed by the improvement of the Brazos River, Texas, from the mouth about six miles upstream to Freeport, Texas. It provides for a 47-foot deep, 400-foot wide entrance channel; 45-foot deep, 400-foot wide main channel with three associated 45-foot deep turning basins; plus the 36-foot deep, 200-foot wide Brazos Harbor channel and associated 36-foot deep Brazos Harbor Turning Basin. The locally preferred plan (recommended by the ongoing feasibility study) deepens the existing channel to 55 feet and widens to 600 feet. Port Freeport would like to receive approval to initiate channel widening in the entrance channel only using 100 percent non-federal funds. They have obtained a recommendation for federal assumption of maintenance from the U.S. Army Corps of Engineers, Galveston District, and are seeking final approval from Assistant Secretary of the Army (Civil Works) at this time. Port Freeport received a permit to widen the entrance channel in March 2009.

FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0
Total cost of project:	\$1,640,000



Gulf Intracoastal Waterway, Brazos River to Port O'Connor

NAVIGATION STUDY: The study area includes approximately 72 miles of the Gulf Intracoastal Waterway (GIWW) in Brazoria, Matagorda and Calhoun counties, from the Brazos River near Freeport to Port O'Connor, Texas. Tonnage transported along this section of the GIWW totaled over 53 million tons in 2008, with petrochemicals as the major commodity shipped. This study will evaluate operational problems along this reach of the GIWW. Initial problems identified by users along this reach included difficulties navigating currents encountered as a result of river flows from the San Bernard; high shoaling at Jones Creek, bank erosion, safety concerns and dangerous currents across Matagorda Bay, and delays and one-way traffic at Caney Creek. In order to expedite identifying a viable solution to these safety issues, the Matagorda Bay reach was studied separately as an interim to the overall feasibility study. No feasibility cost sharing agreement is required and all study costs are 100 percent federal.

FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0
Total cost of project:	\$6,550,000

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, Matagorda Bay (Reroute)

NAVIGATION STUDY: The navigation project is located on the Gulf Coast in southeast Texas at approximately the midpoint between Corpus Christi and Galveston. Severe crosscurrents and shoaling have resulted in a serious navigation hazard for barges traversing Matagorda Bay, threatening both loss of life and property. The proposed alternate channel would provide a safer passage for navigation traffic. The plan of improvement is to realign the navigation channel from Mile 460 to Mile 472, with a channel approximately 6,000 feet north of and paralleling the existing route.

FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0
Total cost of project:	\$1,260,000

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



Gulf Intracoastal Waterway, Port O'Connor to Corpus Christi Bay

NAVIGATION STUDY: The study area includes approximately 79 miles of the Texas section of the main channel of the Gulf Intracoastal Waterway (GIWW), extending from Port O'Connor to the Kennedy Causeway at Corpus Christi Bay. Thirty-one miles of this reach of the waterway are within the critical habitat of the endangered whooping crane. This segment has been addressed under a separate feasibility study for the Aransas National Wildlife Refuge, and is therefore excluded from consideration. Navigational difficulties caused by frequent shoaling at various locations within the remainder of this reach, traffic congestion near Port O'Connor, and the lack of navigational aids and mooring facilities have been previously identified by users as areas of concern. The State of Texas is the non-federal sponsor of the GIWW and continues to maintain a high interest in the waterway because of the economic importance of the waterway to the state and their responsibility to provide dredged material disposal areas.

FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0
Total cost of project:	\$5,107,000

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



14th 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

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

Channel to Port Bolivar

The project is located near the City of Port Bolivar, Galveston County, Texas. Channel to Port Bolivar is an approximately 14-foot deep, 200-foot wide, and 950-foot long shallow-draft channel, extending from the entrance to Galveston Bay northward to the tip of Bolivar Peninsula. The channel is maintained to accommodate Texas Department of Transportation's Galveston-Port Bolivar ferry. Operations and maintenance funds allow for the channel to remain open for navigation, reducing draft restrictions, navigation hazards, possible channel closures, loss of commerce and increase future maintenance costs.

FY11 President's Budget:	
	\$329,000
FY12 President's Budget:	
	\$0



Double Bayou

Double Bayou is just north of the junction of Farm Roads 1985 and 562, 50 miles southwest of Beaumont in west central Chambers County, Texas. The Double Bayou project consists of a shallow draft channel that extends from the seven feet contour in Trinity Bay to the Mouth of Double Bayou at Oak Island, Texas; and then follows the meanders of the West Fork of Double Bayou for two miles. The total length of the Channel is 5.9 miles. Operations and maintenance funds allow the Corps to keep the waterway open for navigation, which benefits barges servicing offshore oil rigs, commercial fishing and deep draft shrimp boats, marine service vessels and recreational boaters.

FY11 President's Budget:	
	\$0
FY12 President's Budget:	
	\$0

Freeport Harbor

This navigation project is located in the vicinity of Freeport, in Brazoria County, Texas. The project is a deep draft channel 8.5 miles in length extending from deep water in the Gulf of Mexico through a jettied entrance channel to the Upper Turning Basin. 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:	
	\$3,538,000
FY12 President's Budget:	
	\$4,796,000

Galveston Harbor and Channel

The project is located in the vicinity of Galveston in Galveston County, Texas. Galveston Harbor and Channel is a 14.4-mile deep draft channel that extends from deep water in the Gulf of Mexico to Galveston Bay near Bolivar Roads, where it is maintained to 45 feet. The 40-foot channel portion extends up to 43rd Street in Galveston, 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:	
	\$8,441,000
FY12 President's Budget:	
	\$3,738,000

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



Gulf Intracoastal Waterway - Channel to Victoria

This navigation project is located in the vicinity of Seadrift and Victoria in Calhoun and Victoria counties, Texas. The Channel to Victoria project provides a 34.8-mile shallow draft channel (authorized project dimensions 12 by 125 feet) extending from its junction with the main channel of the Gulf Intracoastal Waterway at Mile 492 northwesterly across San Antonio Bay through a landlocked section lying east of the Guadalupe River and terminating at the turning basin near the City of Victoria. 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:

\$1,825,000

FY12 President's Budget:

\$3,519,000

Gulf Intracoastal Waterway - Chocolate Bayou

This navigation project is located between Galveston and Freeport (Brazoria County), Texas. The project provides a shallow draft channel from the Gulf Intracoastal Waterway at Mile 376 through Chocolate Bay and Chocolate Bayou to a point 8.2 miles north of the Gulf Intracoastal Waterway. The project dimensions are 12 by 125 feet. Operations and maintenance funds allow the Corps to keep the waterway open for navigation.

FY11 President's Budget:

\$0

FY12 President's Budget:

\$500,000

Gulf Intracoastal Waterway - Mouth of Colorado River

This navigation project is located in the vicinity of Matagorda in Matagorda County, Texas. The Mouth of the Colorado River consists of an entrance channel 15-foot deep and 200-foot wide with jetties to protect the entrance in the Gulf; a 6.5-mile navigation channel, 12-foot deep and 100-foot wide, and a harbor and turning basin adjacent to the Gulf Intracoastal Waterway, and two recreation areas. Diversion features consist of a 3.1 mile long channel with a 20-foot depth and a 250-foot width to divert the flow of the Colorado River into Matagorda Bay, a diversion dam and navigation connecting channel, closing of Tiger Island Channel, and creation of an oyster cultch in Matagorda Bay. Operations and maintenance funds allow the Corps to keep the channel open for navigation.

FY11 President's Budget:

\$0

FY12 President's Budget:

\$0

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



Inspection of Completed Works

This project provides for the inspection of federal flood protection projects that have non-federal sponsors responsible for operations, maintenance, repair, replacement and rehabilitation. The primary purposes of these inspections are to prevent loss of life and catastrophic damages; preserve the value of the federal investment; and to encourage non-federal sponsors to bear responsibility for their own protection. Funding allows the program to assure sponsor compliance with existing agreements that the structures and facilities constructed by the U.S. for flood control protection will be continuously maintained in such a manner and operated at such times and for such periods as may be necessary to obtain the maximum benefits.

FY11 President's Budget:

\$175,000

FY12 President's Budget:

\$193,000

Matagorda Ship Channel

The project consists of a 38-foot deep by 300-foot wide entrance channel through a jettied entrance and a 36-foot draft by 200-foot wide main channel that extends 25.2 miles and terminates at a 1,000-foot by 1,000-foot wide turning basin at Point Comfort. The navigation project is located in the vicinities of Port O'Connor, Port Lavaca, and Point Comfort (in Matagorda and Calhoun counties, Texas). Operations and maintenance funds allow the Corps to keep the waterway open for navigation.

FY11 President's Budget:

\$3,024,000

FY12 President's Budget:

\$4,307,000

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

Texas City Channel

The Texas City Ship Channel is a 40-foot channel that extends 9.4 miles from intersection with the Galveston Entrance Channel to the Port of Texas City. The Port of Texas City is ranked 10th in the nation for tonnage shipped. The construction project to deepen the ship channel to 45 feet was initiated in January 2009 for the main turning basin. The design-build contract for deepening the main channel was awarded in October 2009 and scheduled to be completed in late 2011. 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:

\$1,436,000

FY12 President's Budget:

\$4,667,000





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:	\$0
FY12 President's Budget:	\$0

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:	\$2,715,000
FY12 President's Budget:	\$1,990,000

