

# Greens Bayou Corridor Coalition

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**Galveston District**  
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# Galveston District History

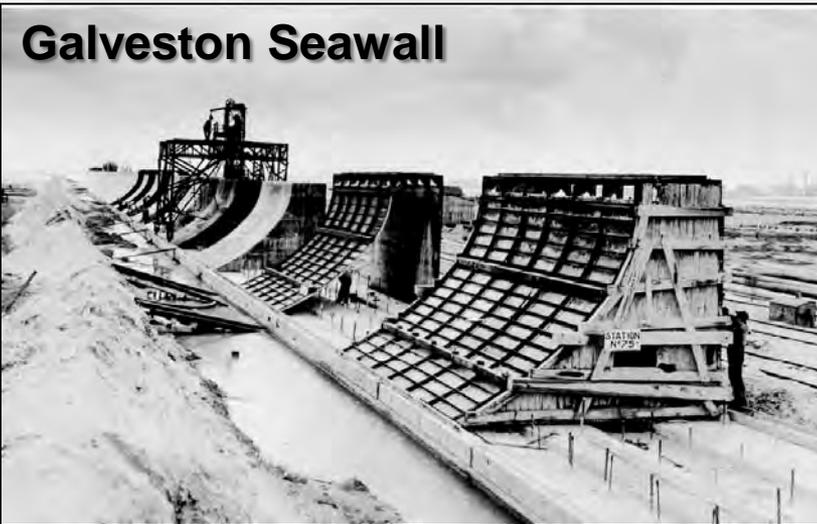
## Galveston Jetties



The Corps of Engineers and Galveston District have been deeply rooted in Texas history since its establishment in 1880 to facilitate navigation along the Texas coastline.

In the 1880s, Congress authorized the first deepening of Sabine-Neches and Houston-Galveston ship channels and the construction of breakwaters known as jetties, which protect harbor and inlet entrances.

## Galveston Seawall



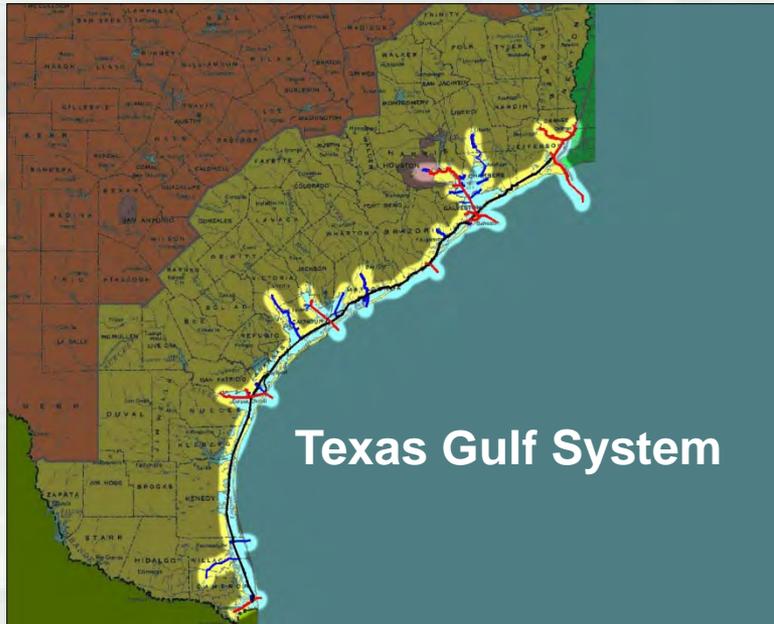
In addition to the deepening projects and jetty construction, the iconic Galveston Seawall, which has protected the city of Galveston for more than 100 years, was also completed in partnership with Galveston County after the 1900 hurricane.

***132 Years of Building Strong!***



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# Galveston District Facts



- Texas Ports and Waterways moved 575M
- 50,000 square mile district boundary
- 460 miles of coastline
- 48 Texas counties
- 18 counties – Coastal Bay Estuaries
- 2 Louisiana parishes
- 346 full time employees
- 760 miles shallow draft
- 240 miles deep draft
- 13 shallow draft ports
- 15 deep draft ports



# Mission Areas

- Navigation
- Flood Risk Mitigation
- Ecosystem Restoration
- Shoreline Protection
- Regulatory
- Military Construction
- Emergency Management



# Port Statistics & Studies

					2010			
					Channel	2008	UNDER STUDY	
TEXAS	AUTHORIZED	TONNAGE (millions)			Availability	Value of	IMPROVED	
PORTS	DEPTH (ft)	DOMESTIC	FOREIGN	TOTAL	1/2 Width	Tonnage	DEPTH (ft)	STATUS
<b>Deep Draft Coastal</b>						<b>- IWR -</b>		
Houston (2)	45	63.3	148	211.3	45.50%	\$184B	45	Construction Completed in June 2005
Corpus Christi (5)	45	17.4	50.8	68.2	68.10%	\$47B	52	Draft LRR to SWD July 2011
Beaumont (7)	40	24.4	43.3	67.7	13.50%	\$39.8B	48	Feasibility - Chief's Report May 2011
Texas City (10)	45	16.2	36.4	52.6	57.30%	\$30B	45	Construction Estimated to Complete May 2011
Port Arthur (19)	40	9.4	24.4	33.8	13.50%	\$15B	48	Feasibility - Chief's Report May 2011
Freeport (27)	45	4	23.4	27.4	27.30%	\$18B	55	Feasibility - CW Review Board May 2011
Galveston (47)	45	5.2	4.6	9.8	71.30%	\$8.2B	45	Construction Completed in March 2011
Matagorda (58)	38	1.4	5.6	7	28.30%	\$2.2B	38	No Improvements forecasted
Brownsville (72)	42	1.5	3.2	4.7	37.50%	\$7B	45-52	Recommended Plan Sept 2011, Chiefs Report 1st Qtr 2014
<b>Inland Waterway</b>								
GIWW	12			72	9.5' Self Imp	\$38B	12	
GIWW, High Island to Brazos Realignments Feasibility	12			72			12	Sponsor does not support. Fed funding 100% O&M
GIWW, Port O'Connor to Corpus Christi Feasibility	12			72			12	Recommended Plan 2011
GIWW, Modifications	12			72			12	Sponsor support, unfunded since 2005

21% of Nation's export tonnage (maritime)

42% of imported petroleum (maritime)



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**Texas is the Nation's #1 State for Waterborne Commerce (Major Ports = 554.4M tons worth \$389.2B) – [source - IWR]**

# Economic Factors

## Positive Factors

- Texas ports create **~900 K** direct jobs regionally and **~1.3 M** indirect jobs nationally
- ~\$5 billion in local and state tax revenue
- Current and future exports help stabilize the dollar and reduce the value of the federal deficit (national revenue)
- Allows nation to optimize the benefits of prior year strategic investments in navigation and supply chain infrastructure
- GIWW provides a intermodal linkage through domestic and international markets and facilities

## Negative Factors

- 1' of draft restriction = lost benefits due to lightering and lightening loads
  - Houston: \$380 million/year
  - Matagorda: \$80 million/year
  - GIWW-Texas: \$130 million/year
- TX ports receive less than **\$.25** on the dollar of HMTF contributions for O&M
- From a study aspect ready to take advantage of Panama Canal expansion

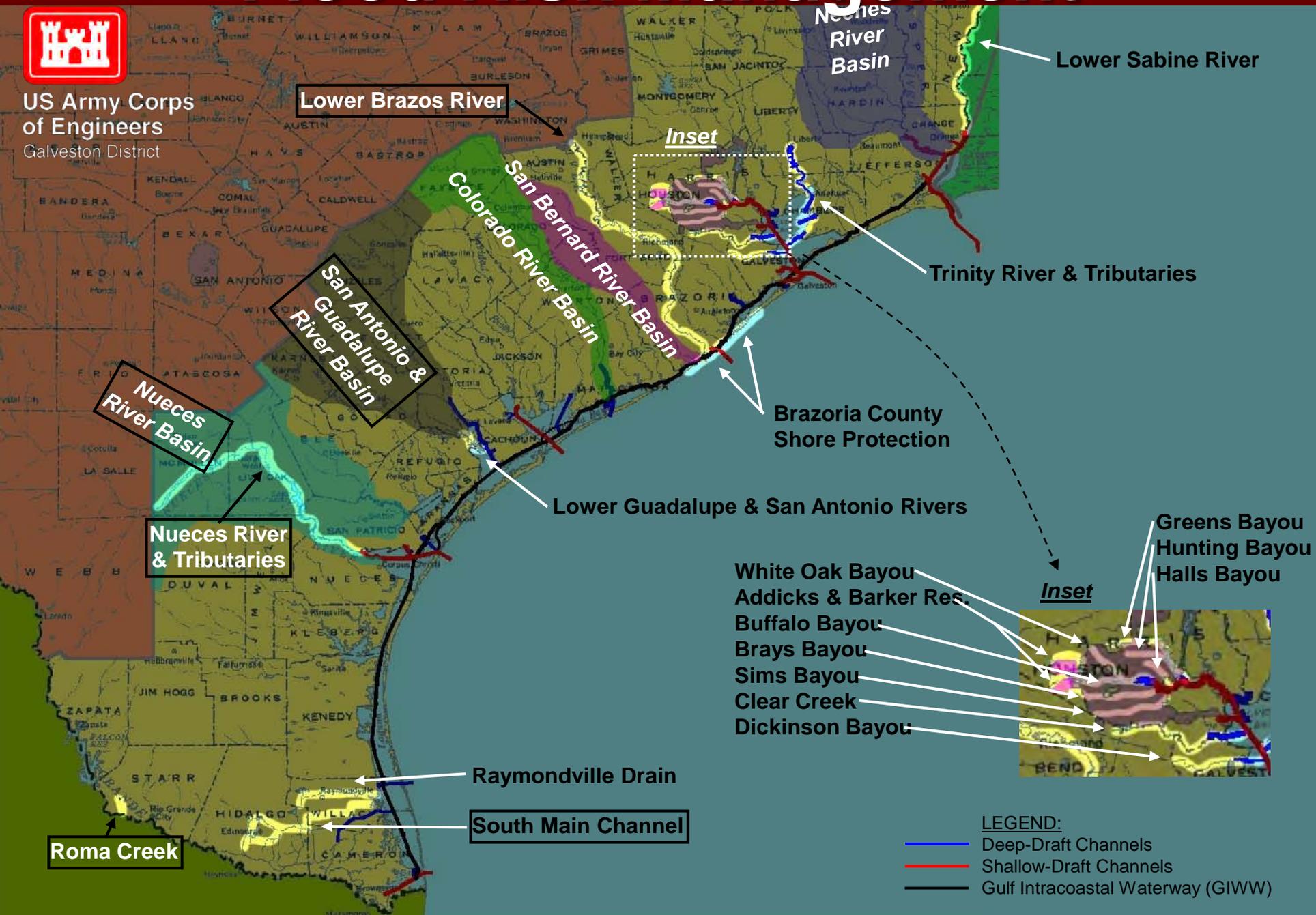
***The nation's navigation system requires a strategic investment to realize its full economic benefit***



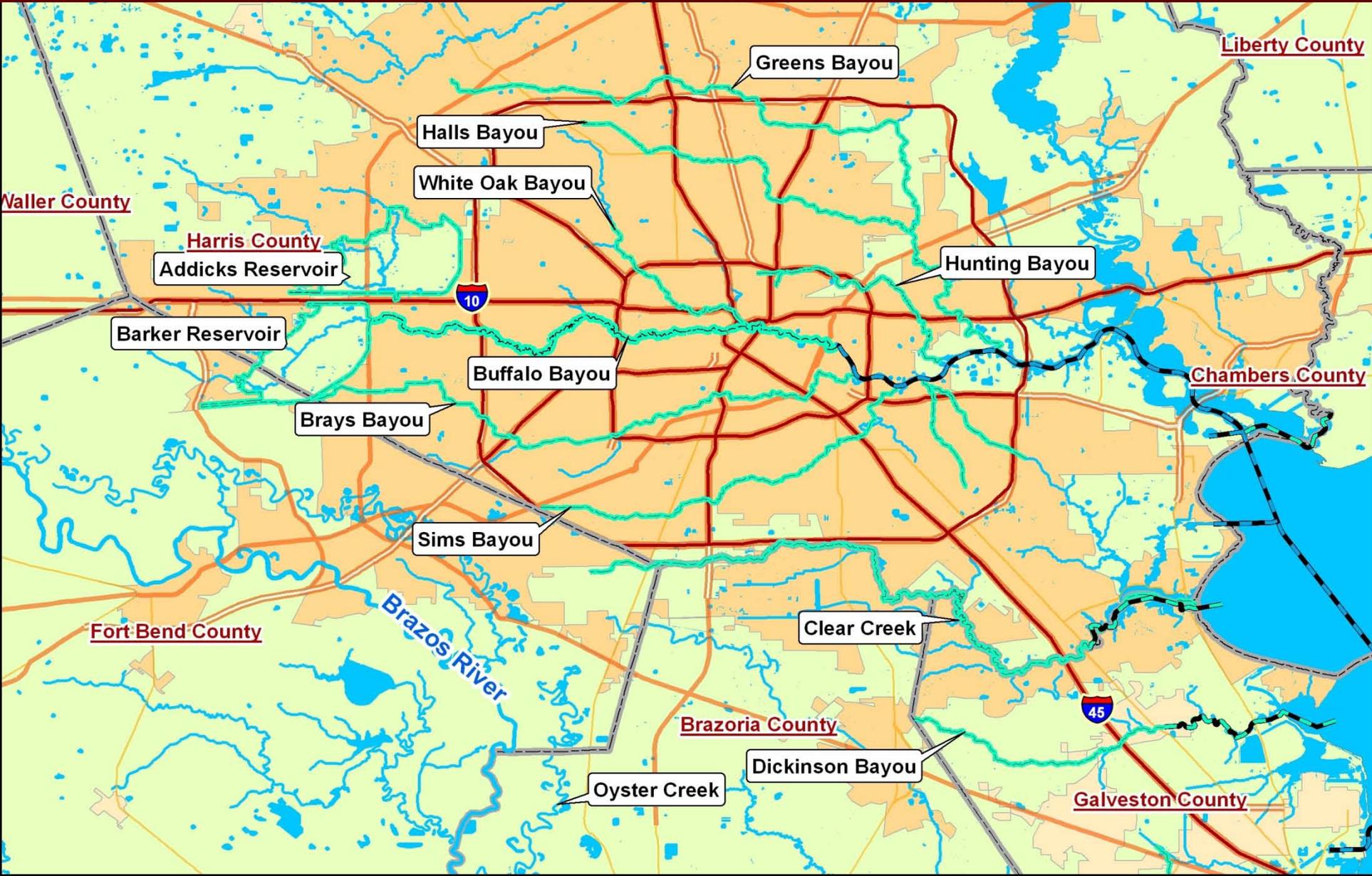
# Flood Risk Management



US Army Corps  
of Engineers  
Galveston District



# Houston Area Flood Risk Management



# Flood Risk Management

## Studies

- Clear Creek General Reevaluation
- White Oak Bayou Section 211 General Reevaluation
- Hunting Bayou Section 211 General Reevaluation
- Sabine to Galveston Feasibility

## Construction

- Sims Bayou
- Brays Bayou

## Operations and Maintenance

- Buffalo Bayou and Tributaries (Addicks and Barker)
- Wallisville Lake



# FY12 Status of Funding



## Office of Management and Budget

### *Status/environment for funding of flood risk management projects*

#### ○ **One project received funds from the president's budget:**

○ Brays Bayou at \$2.94 million

#### ○ **The following received funds under the auspices of "mini pot" action:**

- Sims - \$1 million
- Clear Creek - \$250,000
- Brays received an additional \$2.64 million



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# Flood Risk Management



\*Brays and Sims Bayou projects continue to play a vital role in flood risk reduction to the City of Houston.

*Flood mitigation projects impacting quality of life and addition of recreational amenities for the community.*



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# Flood Risk Management

Demand for hike and bike trail on the banks of these bayous which thread through dense multi-purpose development within the City of Houston remains very visible to local super community groups.



***Community groups remain vocal in augmenting support for these programs within the City of Houston.***



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# Recreation

## How we facilitate recreation

### **Wallisville**

- \*First-class nature-oriented facilities
- \*Existing partnership with Houston Wilderness
- \*Paddle trail, soon to be under construction

### **Addicks and Barker Reservoirs** – leased space

- \*4 recreation leases, 2 Harris County, 1 City of Houston, 1 Fort Bend County
- \*Player in development of West Houston Master Plan
- \*Currently reviewing Harris County/George Bush Master Plan



### **Sims Bayou Recreation**

- \*19 miles of trails, associated park amenities including benches and tables
- \*Partner with the City of Houston and Harris County Flood Control District

### **East End Flats – Galveston Island**

- reimbursement Water Resources Development Act
- \*Federal authorization for incremental
- \*211(f) Studies



# Greens Bayou Project

## Greens Bayou Parkwood Estates



## Greens Bayou Beltway 8 & Stuebner Airline



**Authorization:** WRDA 1990

**Type:** Flood Risk Management

**Project Phase:** Construction

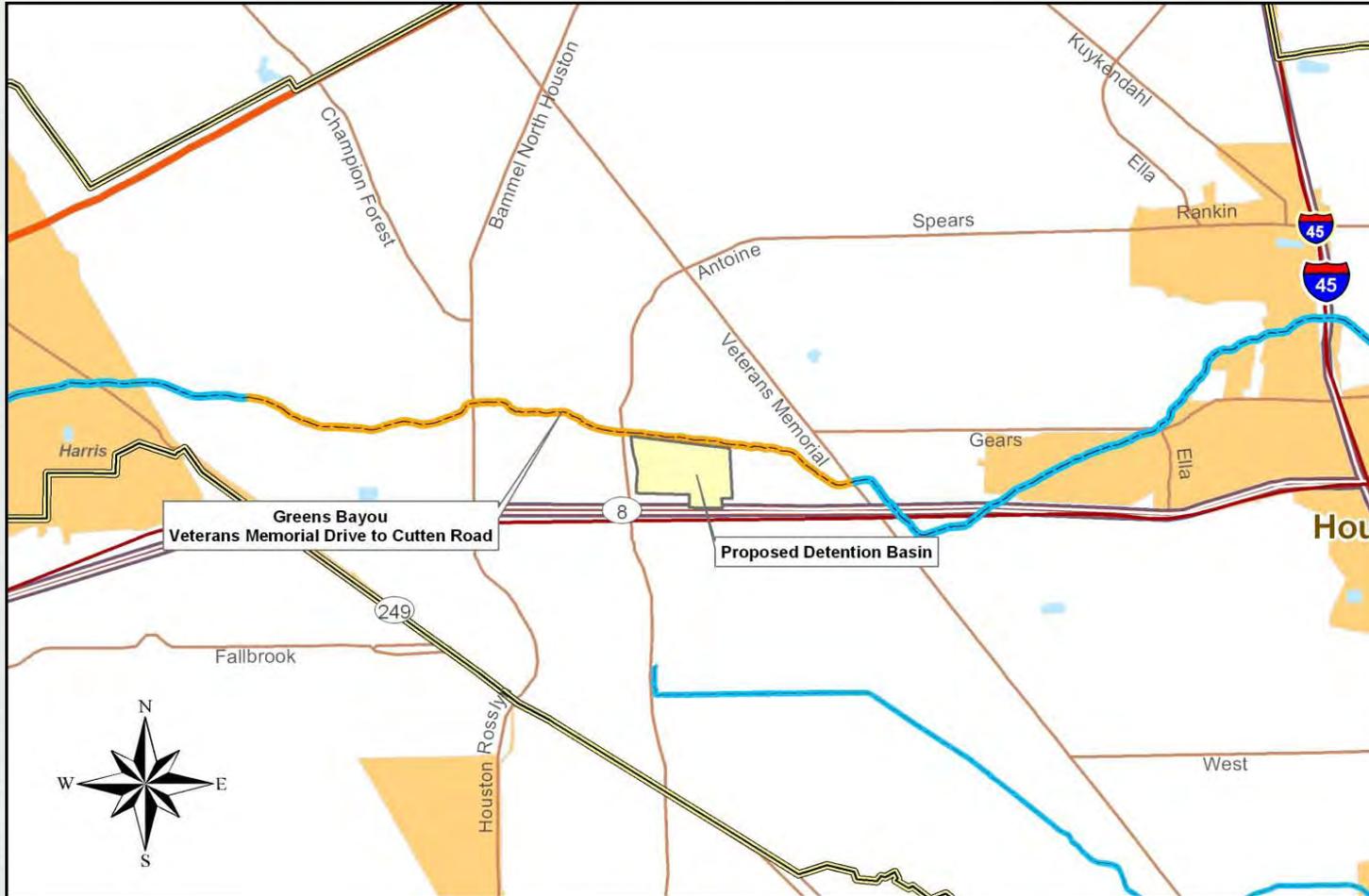
**Non-Federal Sponsor:** Harris County Flood Control District

**Background:** Located in the north-central and eastern part of Houston and Harris County, Texas. Greens Bayou lies approximately 10 miles north and east of the central business district of Houston. The bayou flows generally east from its headwaters just west of Farm-to-Market Road 1960 for a distance of about 23 miles and then turns south for another 19 miles to its junction with Buffalo Bayou and the Houston Ship Channel. The project is located in the upper reaches of the watershed.



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# Greens Bayou Project



# Greens Bayou Project

○Project Plan: Consists of 3.7 miles of channel improvement in the upper reaches, between Veterans Memorial Drive and Cutten Road.

○Awaiting funds to initiate construction.

○Flood damages in the subdivisions between Veterans Memorial Drive and Cutten Road in Houston, Texas would be effectively reduced by initiation and completion of proposed construction.

○Most severe flooding in the Greens Bayou area occurred in 2001 during Tropical Storm Allison. This storm is considered the flood of record for the study area and the greater Houston area. Up to 28 inches of rain were recorded during a 12-hour period, approaching the physical limits of how much rain could fall during that amount of time in the region (benefit-to-cost ratio of 2.9).



# Greens Bayou Project

- Federal Cost Estimate:  
\$34,220,000
- Non-Federal Cost Estimate:  
\$11,410,000
- Total Project Cost : \$45,630,000
- Allocation Through FY10:  
\$6,686,000
- ARRA Funding: 0
- Allocation for FY12: 0
- President Budget FY13: 0
- Capability for FY13: \$15,000,000
- Balance to Complete:  
\$27,538,000

*1/ - Funds in the amount \$4,000 were transferred to the flood control and coastal emergency account to repair damages at projects impacted by the 2011 floods.*



***Latest update:*** Partial funding has been authorized by headquarters to be used to commence update of cost estimate and economics for Greens Bayou Flood Risk Management project.



# Texas Coastal Study

*The Texas Gulf Coast needs a comprehensive, strategic plan – reduce risk and damages to safety, property, and environmental resources from storms and erosion.*

## Existing Federal Authorities

- Sabine Pass to Galveston Bay – continuing feasibility study
- Coastal Texas Ecosystem Protection and Restoration – unbudgeted new start reconnaissance
- Brazoria County Shoreline – unbudgeted new start reconnaissance
- Texas City Section 216 Hurricane Flood Protection – unbudgeted new start reconnaissance

## Coalition Building

- Gulf Coast Community Protection and Recovery District (GCCPRD) –6 major coastal counties
- Texas General Land Office – supports strategy and potential sponsor
- Gulf Coast Ecosystem Restoration Task Force – supports Texas Coastal Study strategy

## Communication

- Meeting with Sabine Pass to Galveston Bay sponsors, SWD, SWG and GCCPRD. Sponsors support rescoping the study. Funding to equalize cost-shares still needed. January 2011
- Meeting with Commissioner of the Texas GLO on proposed strategy. Honorable Jerry Patterson expressed support. January 2011
- Congressional briefs February-March 2011. Strategy support by LA Senator Landrieu and TX Congressman Gene Green,.

## Strategy

- Use existing Sabine to Galveston funding to rescope the study to include the six counties of the upper Texas Coast at full Federal expense.



# Conclusions

Texas is a **ready and supportive** partner for federal investment into required **navigation improvements** which have national benefits

## *Keys to Success*

- Partnerships
  - Managing expectations
  - Strategic Communication
  - Facilitating private investment (risk reduction)
- 
- Texas is in **desperate need** of comprehensive coastal study to **mitigate hurricane risks**
  - Dam safety – remains on track; unsure of funding for permanent repairs



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