



# Galveston District – Navigation Projects

US Army Corps  
of Engineers  
Galveston District

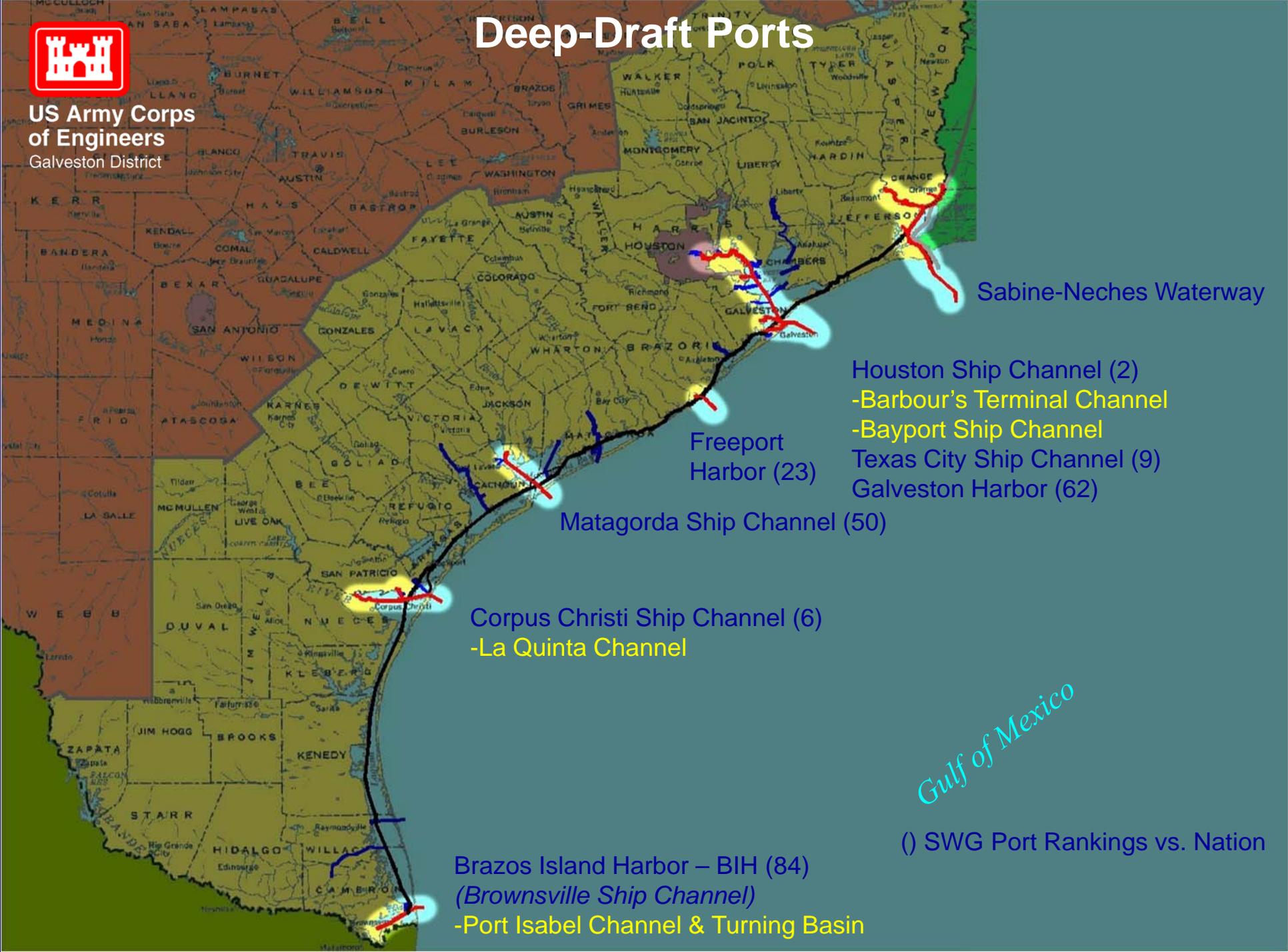
- Home to 28 Ports Handling 400 million tons of commerce
- Dredging Activities from 25 to 30 million cubic yards of material annually
- Eight (8) Deep Draft Channels
- 275 Miles of Deep Draft Channels
- GIWW runs 440 miles connecting the state's 12-deep water ports, 16 shallow draft ports
- Total of 749 Miles of Shallow Draft Channels

*Gulf of Mexico*



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# Deep-Draft Ports



Sabine-Neches Waterway

Houston Ship Channel (2)  
-Barbour's Terminal Channel  
-Bayport Ship Channel  
Texas City Ship Channel (9)  
Galveston Harbor (62)

Freeport  
Harbor (23)

Matagorda Ship Channel (50)

Corpus Christi Ship Channel (6)  
-La Quinta Channel

*Gulf of Mexico*

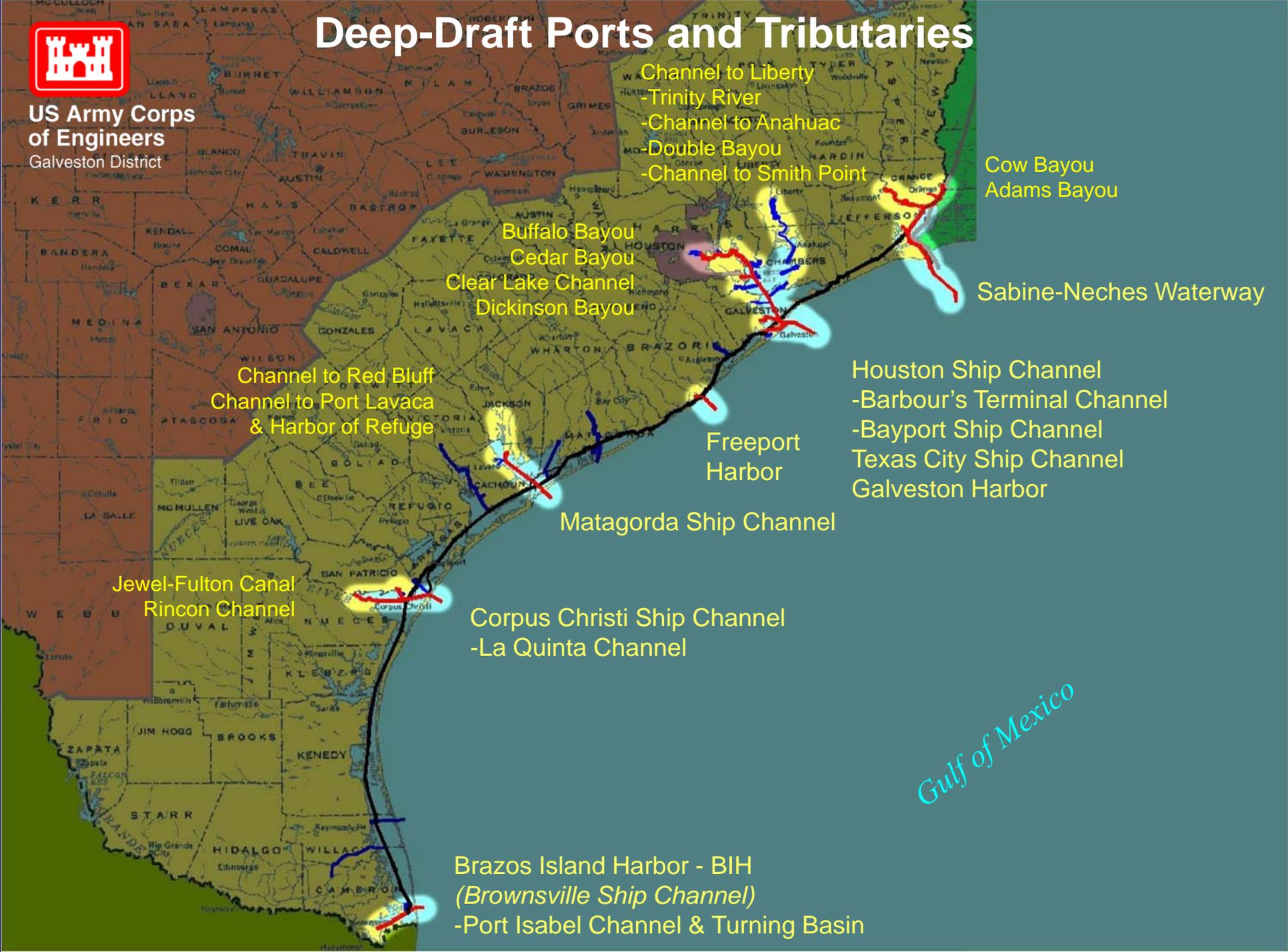
( ) SWG Port Rankings vs. Nation

Brazos Island Harbor – BIH (84)  
*(Brownsville Ship Channel)*  
-Port Isabel Channel & Turning Basin



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# Deep-Draft Ports and Tributaries



Channel to Liberty  
-Trinity River  
-Channel to Anahuac  
-Double Bayou  
-Channel to Smith Point

Cow Bayou  
Adams Bayou

Buffalo Bayou  
Cedar Bayou  
Clear Lake Channel  
Dickinson Bayou

Sabine-Neches Waterway

Channel to Red Bluff  
Channel to Port Lavaca  
& Harbor of Refuge

Houston Ship Channel  
-Barbour's Terminal Channel  
-Bayport Ship Channel  
Texas City Ship Channel  
Galveston Harbor

Freeport  
Harbor

Matagorda Ship Channel

Jewel-Fulton Canal  
Rincon Channel

Corpus Christi Ship Channel  
-La Quinta Channel

*Gulf of Mexico*

Brazos Island Harbor - BIH  
(Brownsville Ship Channel)  
-Port Isabel Channel & Turning Basin



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# Gulf Intracoastal Waterway - GIWW

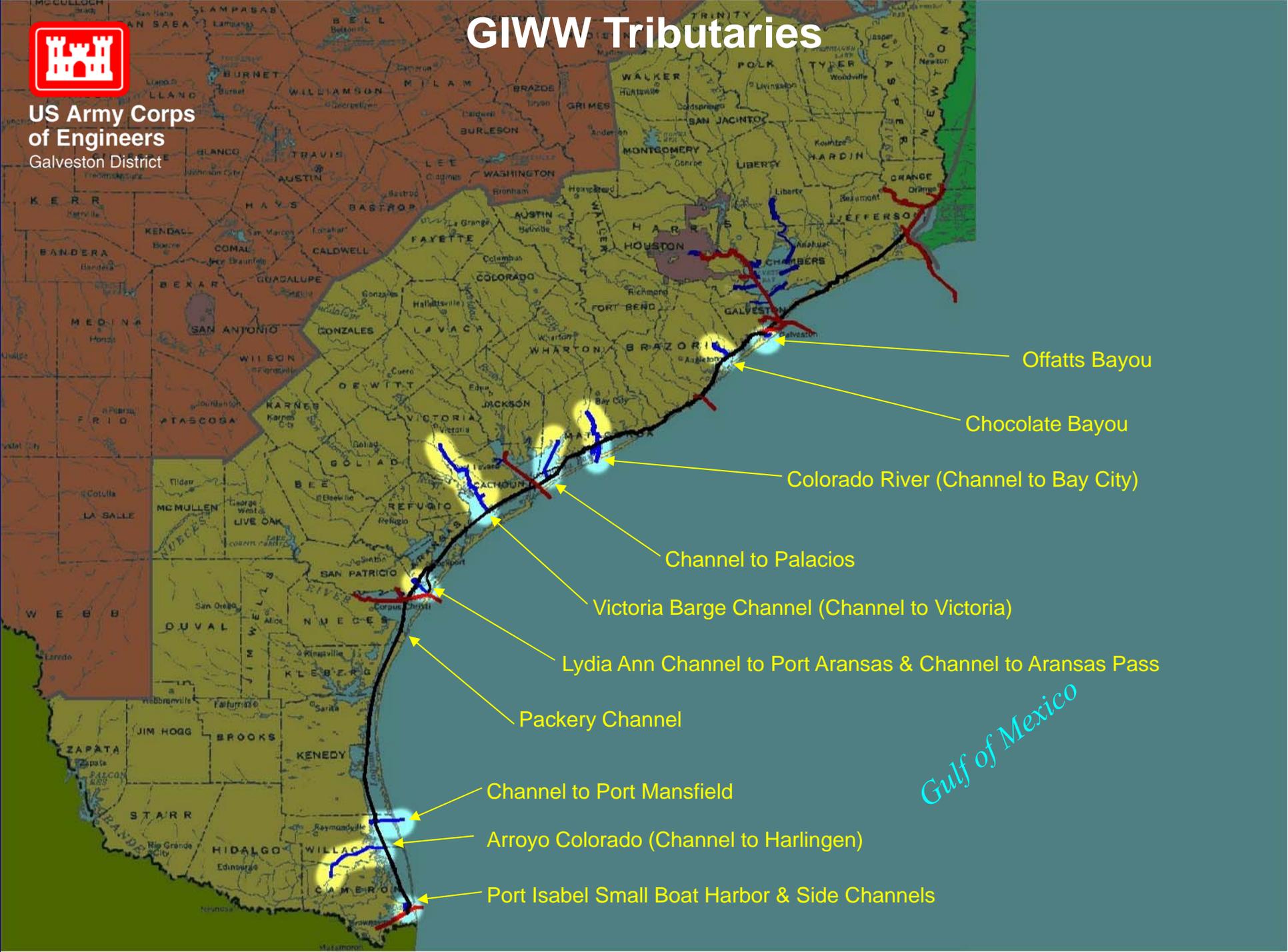


\* Major GIWW Reach Limits



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# GIWW Tributaries



# FY06 Awarded Jobs

JOB NAME	Award Date	Quantity Cubic Yds.	Contractor
GIWW-Main Ch in Matagorda	11/22/2005	525,000	T.W.LAQUAY DREDGING, INC
BIH -Main Ch & Turning Basin	12/29/2005	945,300	T.W.LAQUAY DREDGING, INC
SNWW-PA Canal & Junction	10/18/2005	467,900	KING FISHER MARINE SERV., INC.
Freeport-Entrance Ch	12/22/2005	1,815,500	BEAN STUYVESANT, LLC
MSC-Matagorda Peninsula	12/29/2005	3,791,000	T.W.LAQUAY DREDGING, INC
Victoria-Middle Reach	12/28/2005	535,000	KING FISHER MARINE SERV., INC.
GIWW-High Island Rollover	2/24/2006	1,387,000	KING FISHER MARINE SERV., INC.
GIWW-Main Ch in Aransas Bay	3/10/2006	986,000	KING FISHER MARINE SERV., INC.
TX. City Ch. & Turning Basin	3/15/2006	1,250,000	KING FISHER MARINE SERV., INC.
HSC-HSC & Adjoining Channels	4/27/2006	2,959,100	T.W.LAQUAY DREDGING, INC
GIWW-Turnstake to Live Oak	5/17/2006	870,372	RLB CONTRACTING, INC.
GIWW-Freeport Harbor to Braz	5/18/2006	600,200	KING FISHER MARINE SERV., INC.
SNWW - Lower Neches	5/31/2006	1,772,200	Weeks Marine, Inc.,
Galveston-Entrance&Jetty Ch	5/31/2006	1,600,000	Manson
MSC-Entrance Channel	5/31/2006	800,000	Manson
CHOCOLATE - Dredge Channel	6/8/2006	961,000	KING FISHER MARINE SERV., INC.

# FY06 Upcoming Jobs

JOB NAME	Advertise	Bid Open	Award Date	Quantity Cubic Yds.
Victoria-Lower Reach	3/23/2006	4/25/2006	8/8/2006	1,628,000
Ch to Pt.Mansfield-Nt.Jetty	3/27/2006	4/26/2006	TBD*	373,185
SNWW-Outer Bar & Bank	5/11/2006	6/13/2006	6/28/2006	1,200,000
HGNC-Redfish to Morgan's Pt	5/23/2006	6/22/2006	6/28/2006	4,000,000
MOC-Entrance Ch & Imp. Basin	11/15/2004	3/21/2006	TBD**	320,000
CCSC-Entrance Ch	5/31/2006	6/16/2006	6/30/2006	150,000

\*Bid Cancelled due to funding, will be re-scoped and resolicited.

\*\*Low Bidder exceeded funds available for work. Pursuing alternate methods to perform work.

# FY07 Projects

Name	Advertise Date	Bid Opening	Contract Date	CY
BIH Jetty Channel	4/27/2006	5/26/2006	6/19/2006	600,000
SNWW Port Arthur Junction Area & TB	7/14/2006	8/17/2006	9/6/2006	1,000,000
FH Entrance Channel	8/1/2006	9/1/2006	9/26/2006	1,500,000
GIWW Maint. (N) Boggy Bayou to Upper Matagorda Bay	9/8/2006	10/10/2006	11/1/2006	2,000,000
GIWW Maint. (S) Main Channel in Matagorda Bay & alt. route	9/11/2006	10/12/2006	11/3/2006	400,000
Channel to Port Bolivar	9/18/2006	11/15/2006	12/6/2006	70,000
GIWW Maint. (N) Rollover Pass to Port Bolivar	9/18/2006	11/15/2006	12/6/2006	1,000,000
GIWW Maint. (S) Corpus Christi Bay to PI Phase 1	9/20/2006	10/23/2006	11/7/2006	2,000,000
HSC Exxon to Carpenter's Bayou	9/22/2006	11/1/2006	11/22/2006	1,000,000
GIWW Maint. (N) Brazos River to Boggy Bayou	10/3/2006	11/2/2006	11/24/2006	2,000,000
MSC - Galinipper Point to Point Comfort	10/25/2006	11/29/2006	12/25/2006	2,500,000
CCSC Entrance Channel	11/2/2006	12/6/2006	1/27/2007	1,800,000
CCSC La Quinta to Beacon 82	11/2/2006	12/6/2006	1/27/2007	1,900,000
MSC - Entrance Channel Repair	12/20/2006	1/25/2007	2/15/2007	400,000
CV - Upper Reach	1/2/2007	2/5/2007	2/28/2007	2,300,000
GIWW Maint. (S) Turnstake Island to Live Oak Point	1/8/2007	2/8/2007	3/2/2007	1,500,000
Bayport (Flare & Inner Ch)	1/24/2007	2/19/2007	3/15/2007	800,000
HSC Sta 500+000 to Bayport	2/8/2007	4/25/2007	5/17/2007	800,000
SNWW Sabine Pass Channel	2/8/2007	4/25/2007	5/17/2007	1,000,000
GIWW Maint. (S) Across Aransas Bay	3/1/2007	3/29/2007	4/20/2007	500,000
Galveston Harbor-Inner Harbor Ch	4/11/2007	5/24/2007	6/12/2007	800,000



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A map of Texas showing county boundaries and names. Overlaid on the map are several red and blue lines representing initiatives. Red lines are prominent in the eastern and southern parts of the state, including areas around Houston, Galveston, and the Gulf Coast. Blue lines are scattered across the central and western parts of the state. The text 'SWG Galveston District Initiatives...' is superimposed over the map in a large, bold, black font.

# **SWG**

## ***Galveston District Initiatives...***

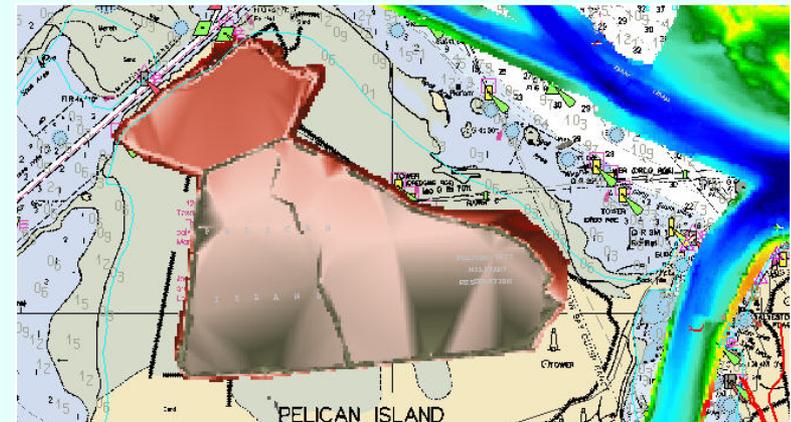
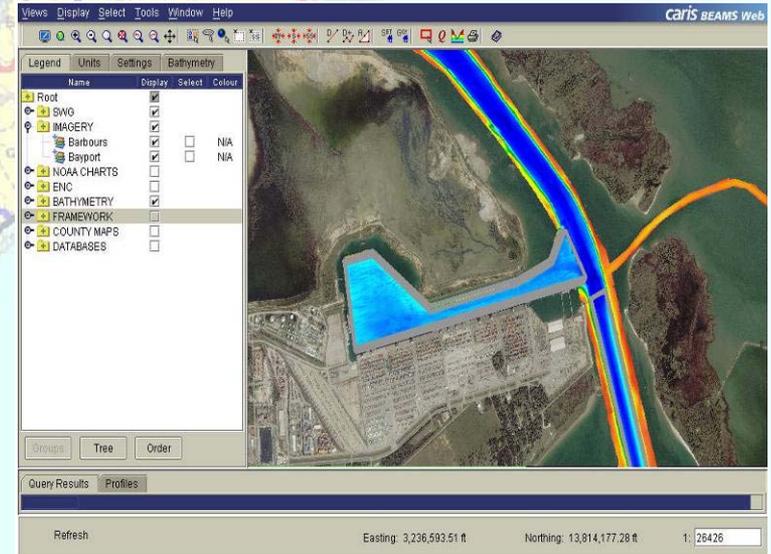


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# BEAMS

## *Bathymetric Engineering And Management System*

- A single standardized application for the management of spatial information along waterways, ports and harbors
- An operational tool for planning, monitoring, and decision making
- A presentation tool
- Galveston BEAMS Web Site
- <http://beams.swg.usace.army.mil>

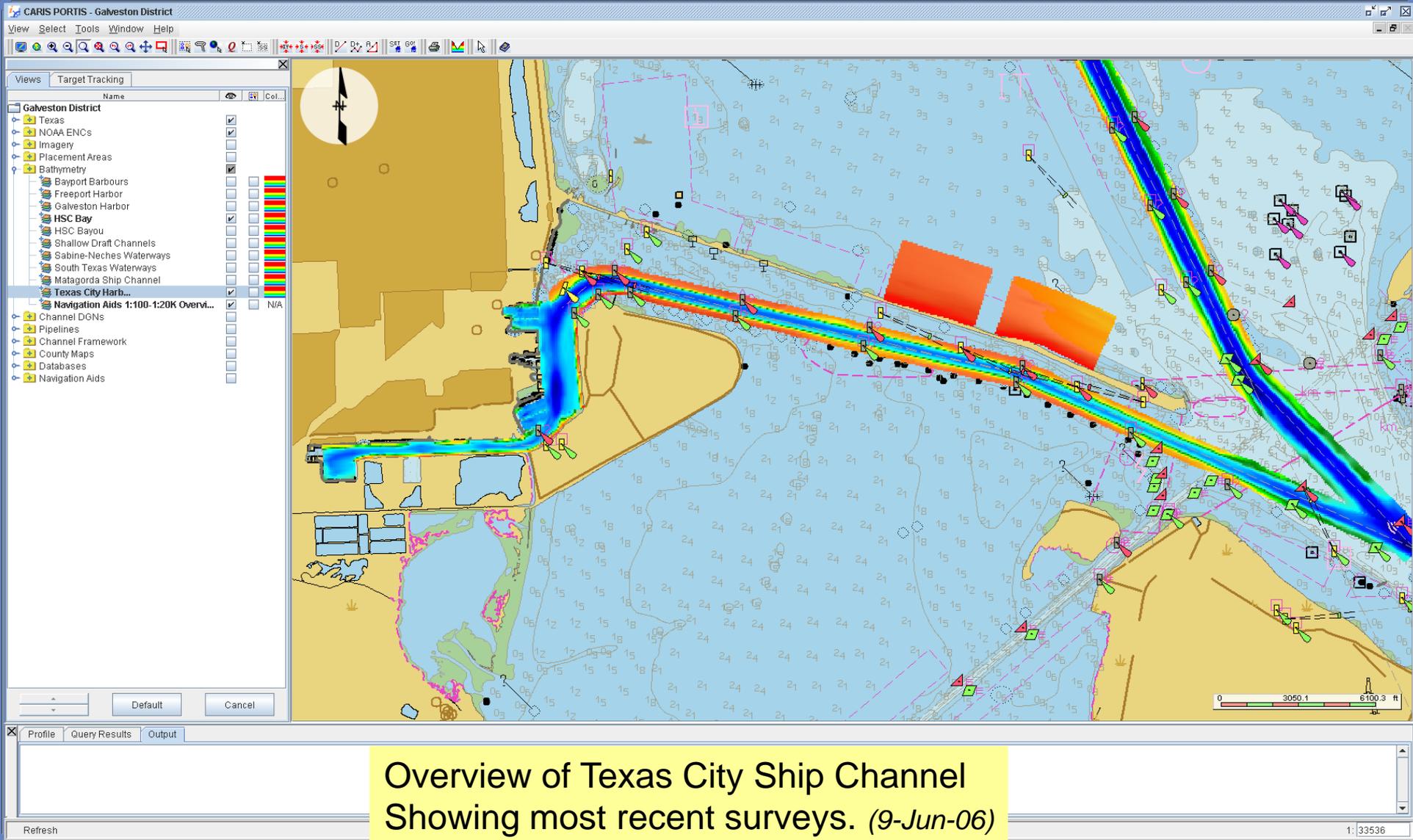




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# BEAMS

## Bathymetric Engineering And Management System

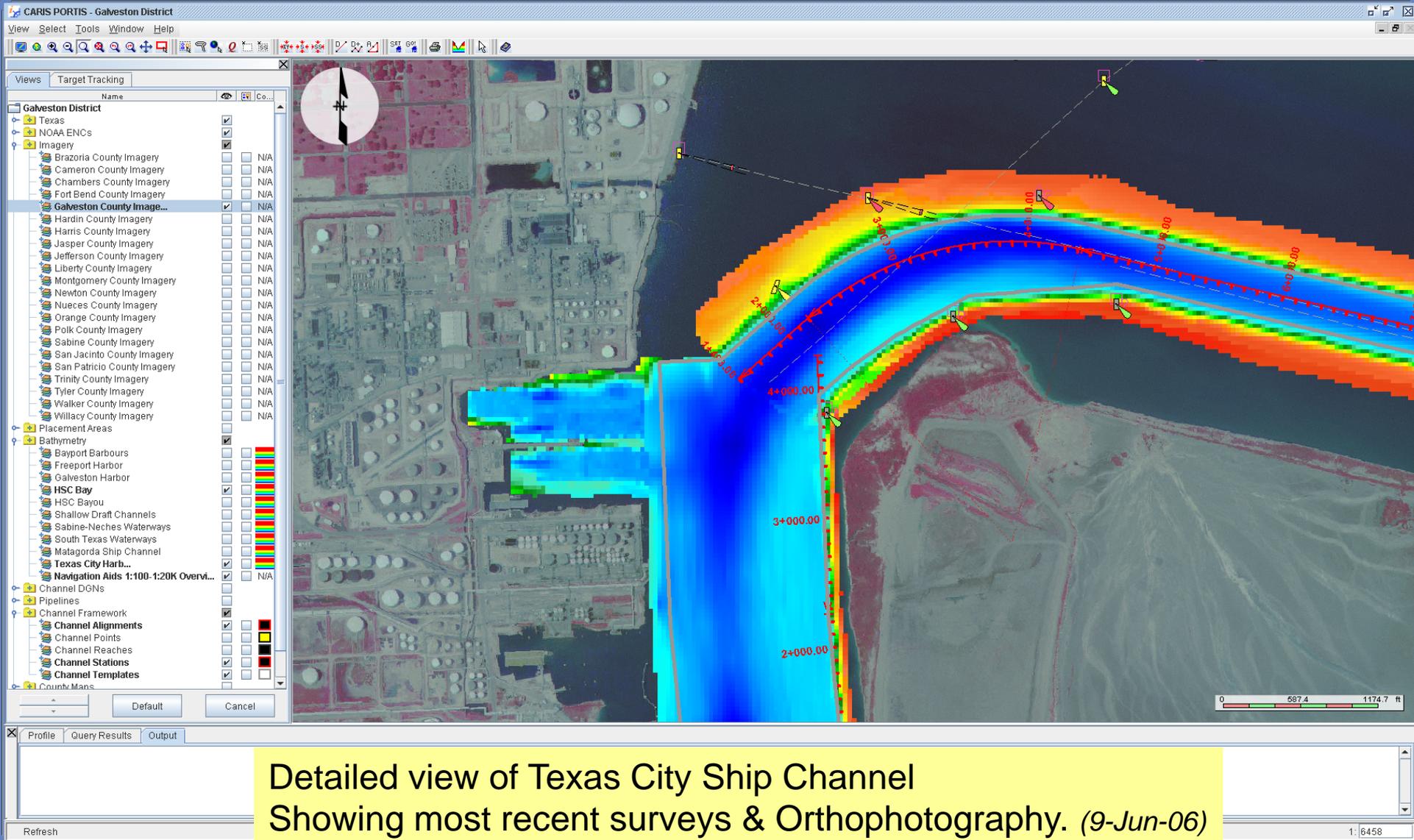




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# BEAMS

## Bathymetric Engineering And Management System



Detailed view of Texas City Ship Channel  
Showing most recent surveys & Orthophotography. (9-Jun-06)



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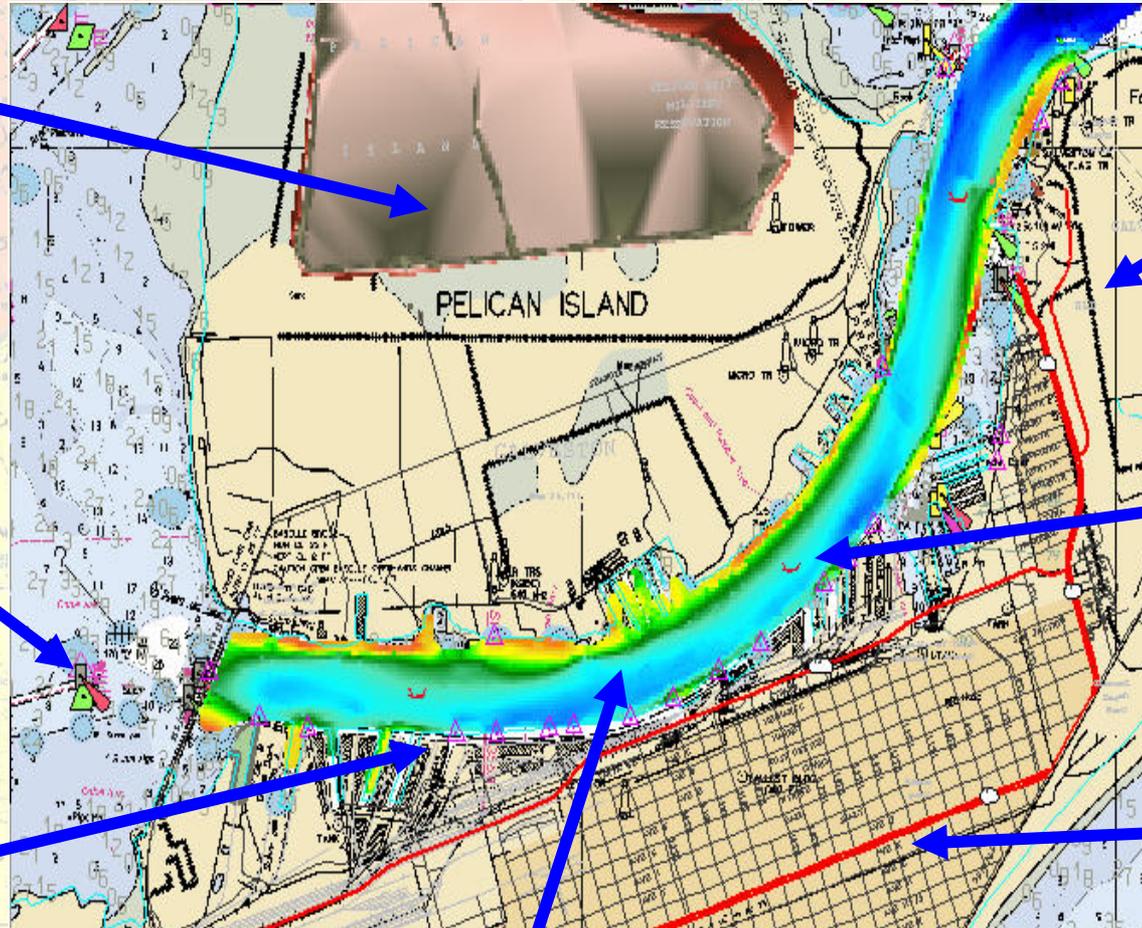
# BEAMS

## Multi Map & Format Support

LIDAR  
(WGS 84)

S-57  
(WGS 84)

Monument  
Database



BSB  
(Mercator)

Shoal  
Database

DGN  
(NAD 83)

Bathymetry

(US State Plane NAD 27 & NAD 83)



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# Beneficial Use of Dredge Material

## *Beach Nourishment*

South Padre Island – 278,000 cy



Rollover Beach – 131,000 cy



Port O'Connor Beach – 82,000 cy





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# Beneficial Use of Dredge Material

## *Bird Island Nourishment*

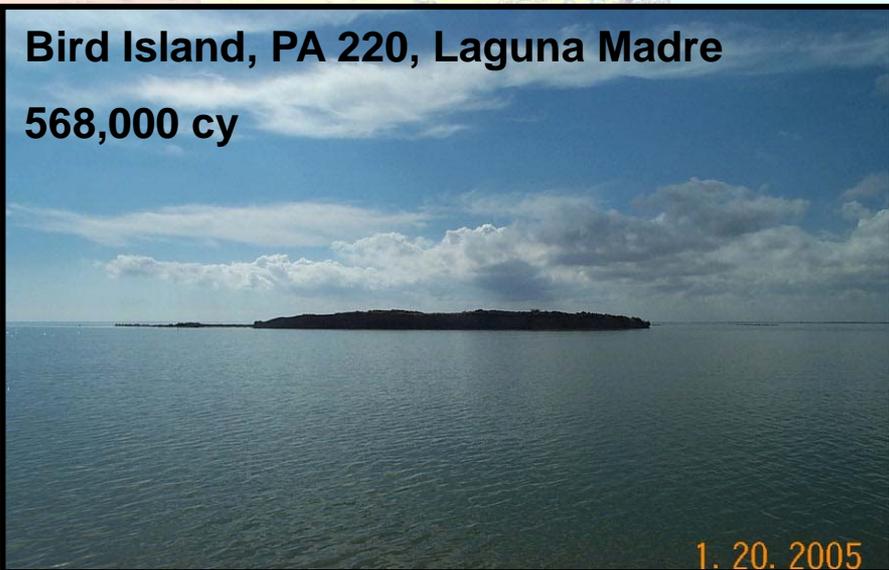
**Sundown Island (Brown Pelican) – 97,000 cy**



**Sargent Beach Plover Habitat - 182,000 cy**



**Bird Island, PA 220, Laguna Madre  
568,000 cy**



**Rock Breakwater protecting Bird Island**





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# Beneficial Use of Dredge Material

## *Houston-Galveston Nav. Channel (HGNC)*

**Goat Island Upland Bird Habitat**



**1,818,000 cy**



**Mid Bay Marsh Creation (1,634,000 cy)**





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# Working to Limit Turtle Takings



**Kemp's Ridley**  
**Opinion - 7**  
**FY06 - 0**

**Hawksbill**  
**Opinion - 1**  
**FY06 - 0**



**Loggerhead**  
**Opinion - 15**  
**FY06 - 0**

**Green**  
**Opinion - 5**  
**FY06 - 4**





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# Did You Know...

- **Top 10 Lists (2004 Waterborne Statistics)**

- **Leading U.S. Ports in Foreign & Domestic Trade**  
Houston, Beaumont, Corpus Christi, and Texas City

- **U.S. Ports Foreign Waterborne In-transits**  
Brownsville and Houston

- **2 Strategic Ports**

- Beaumont and Corpus Christi

- **Texas #1 in Domestic & Foreign Waterborne Traffic**  
(531M short tons)

- **Texas portion of GIWW accounts for 58.61% of total tonnage transported on GIWW from Apalachee to Mexico.**(72.2M short tons)



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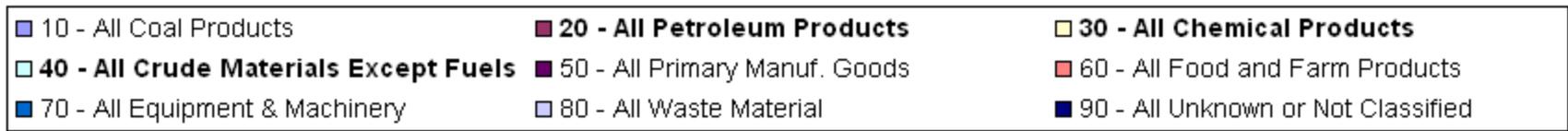
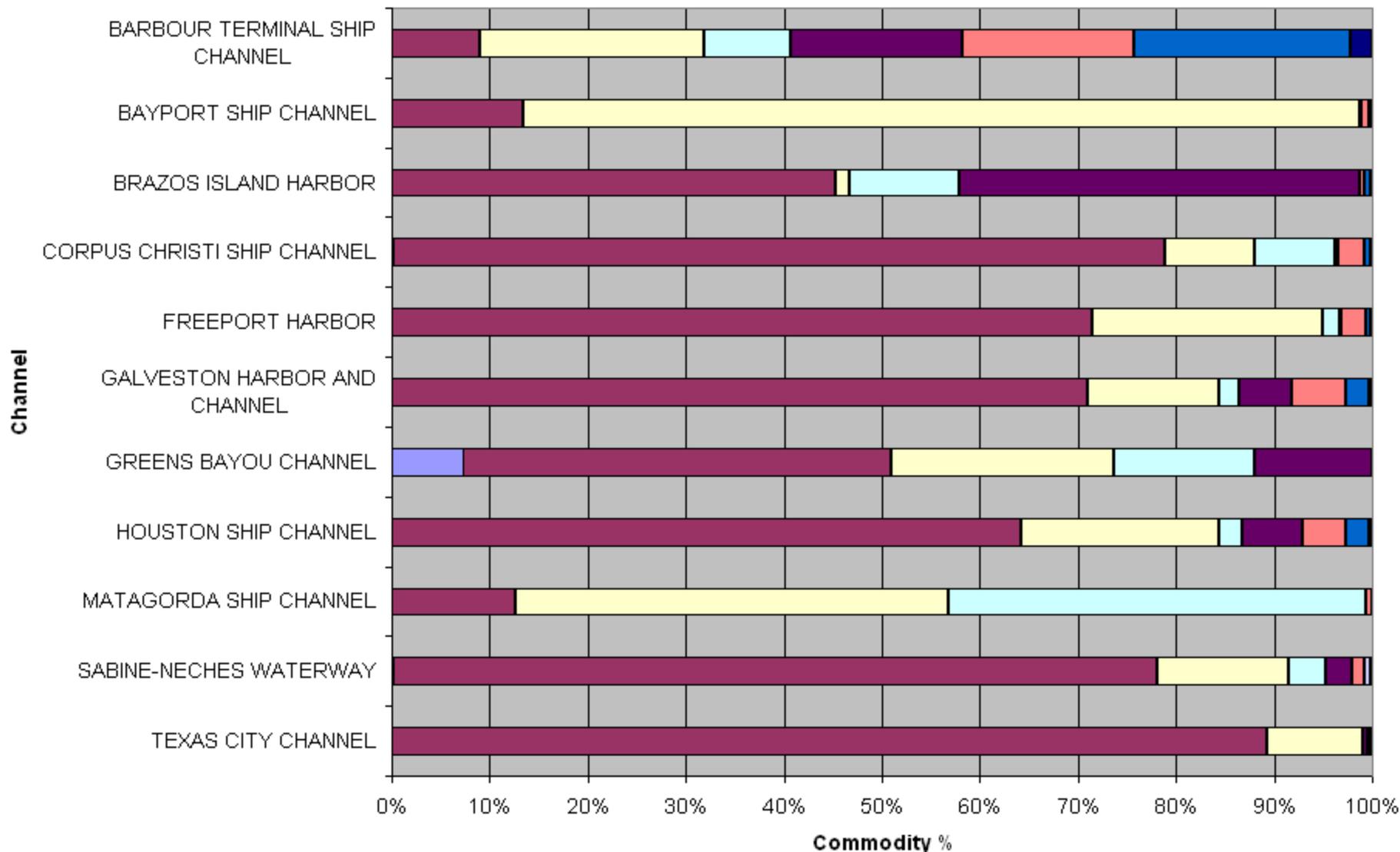
# SWG Port Rankings vs. The Nation

Rank	Port Name	Grand Total (1000 short tons)
1	South Louisiana, LA, Port of	224,187
2	<b>Houston, TX</b>	<b>202,047</b>
3	New York, NY and NJ	152,378
4	<b>Beaumont, TX</b>	<b>91,698</b>
5	Long Beach, CA	79,708
6	<b>Corpus Christi, TX</b>	<b>78,925</b>
7	New Orleans, LA	78,085
8	Huntington -Tristate	77,308
9	<b>Texas City, TX</b>	<b>68,283</b>
10	Baton Rouge, LA	57,083
11	Mobile, AL	56,212
12	Lake Charles, LA	54,768
13	Plaquemines, LA, Port of	54,405
14	Los Angeles, CA	51,363
15	Tampa, FL	48,289
16	Baltimore, MD	47,399
17	Valdez, AK	46,758
18	Duluth-Superior, MN and WI	45,393
19	Pittsburgh, PA	41,032
20	Philadelphia, PA	35,220
23	<b>Freeport, TX</b>	<b>33,908</b>
29	<b>Port Arthur, TX</b>	<b>27,570</b>
50	<b>Matagorda Ship Channel, TX</b>	<b>12,524</b>
62	<b>Galveston, TX</b>	<b>8,113</b>
84	<b>Brownsville, TX</b>	<b>4,171</b>
91	<b>Victoria, TX</b>	<b>3,712</b>

*\*2004 Waterborne Commerce Port Ranking by Total Tons*

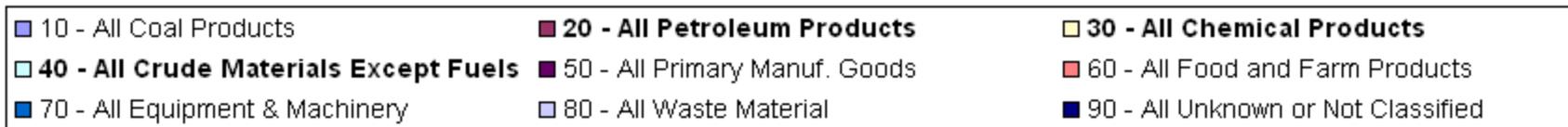
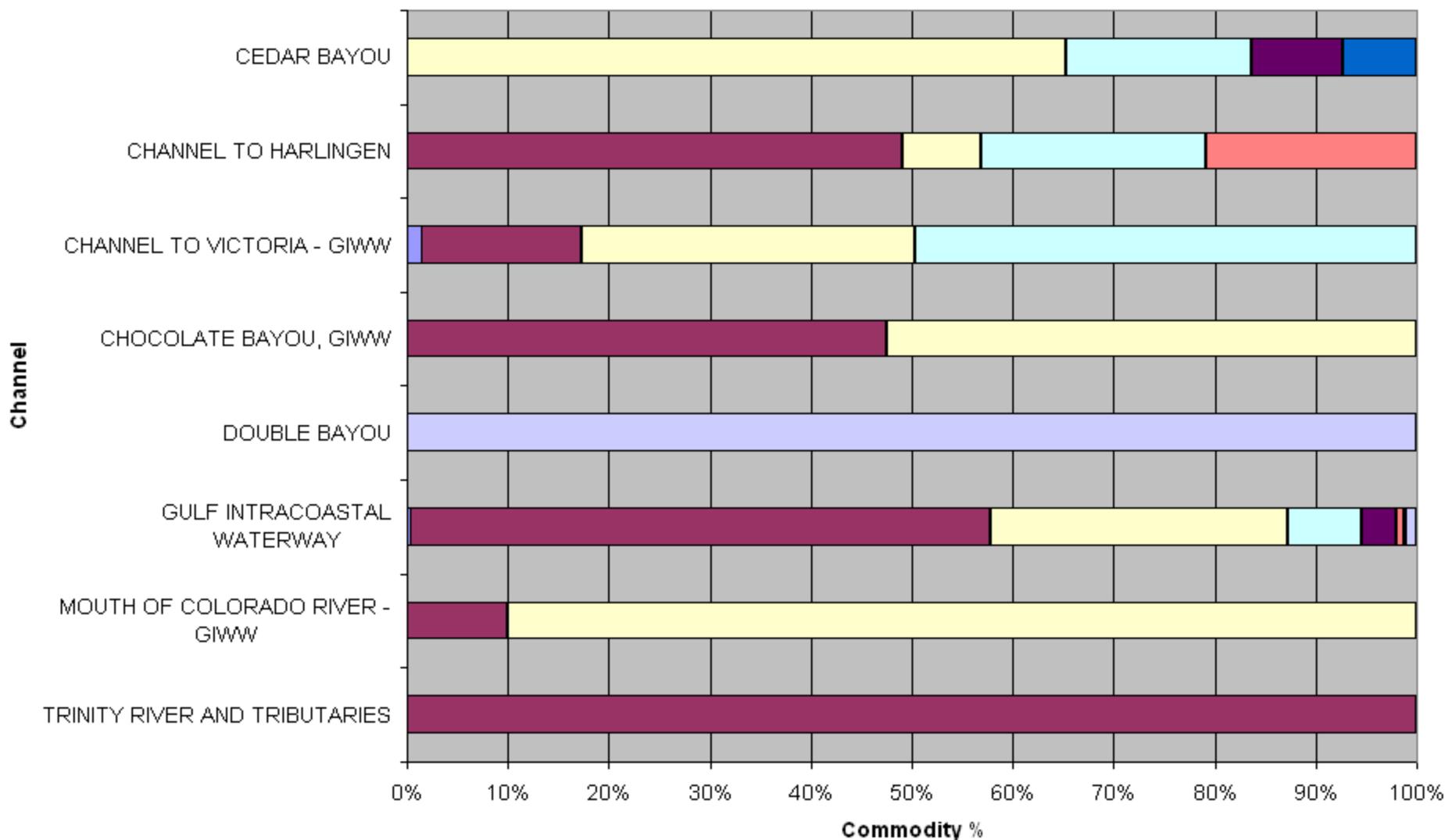
# Commodity by Channel – Deep Draft

\*\* from OMBIL 9-Jun-06



# Commodity by Channel – Shallow Draft

\*\* from OMBIL 9-Jun-06





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# Communication Plans

## with Local Sponsors & Stakeholders

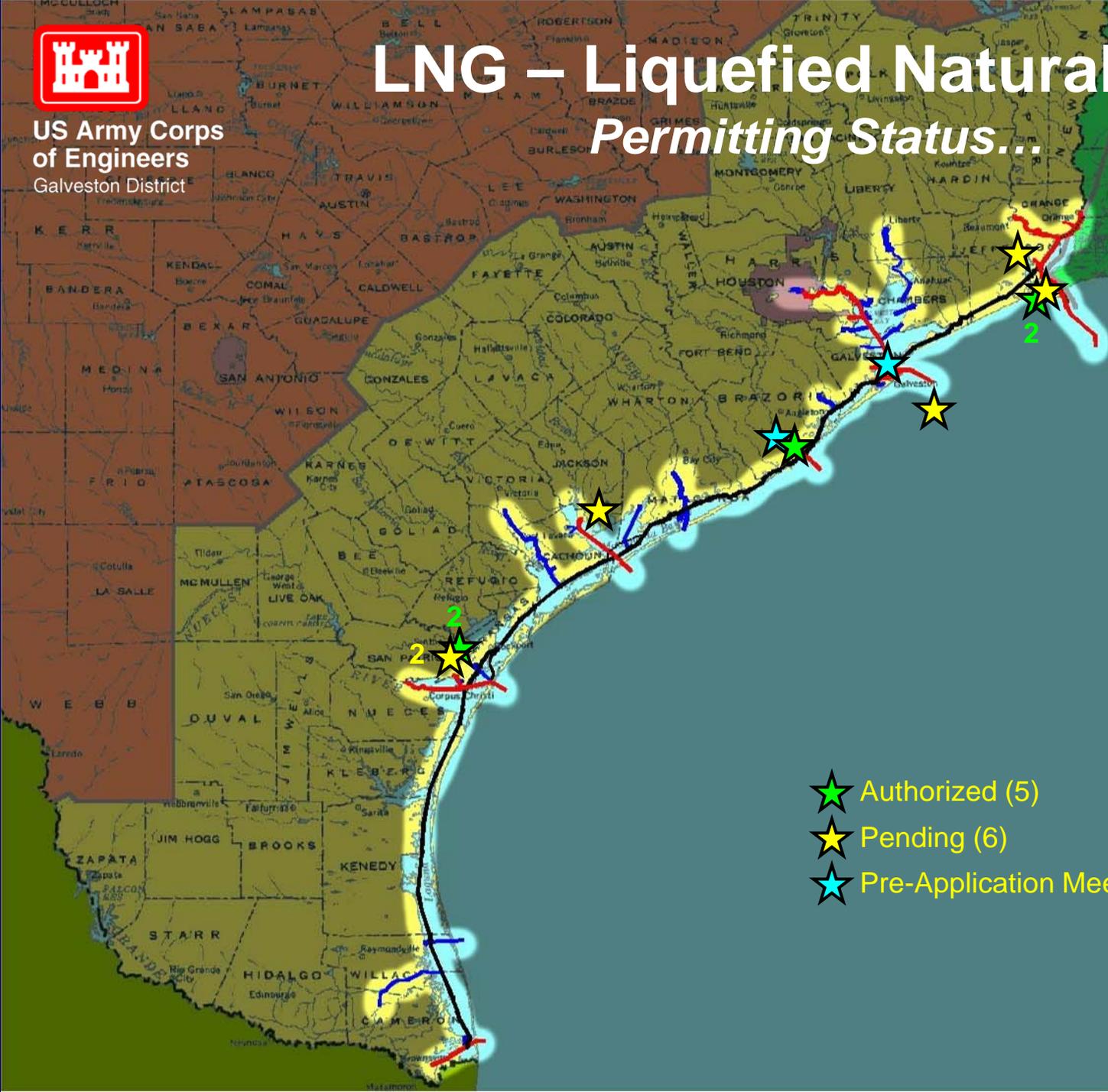
- Budget Process
- 5-Year Budget Plans
- PRB (monthly) & Annual District Dredging Conference
- Sponsor Participation in PDTs



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# LNG – Liquefied Natural Gas

## Permitting Status...



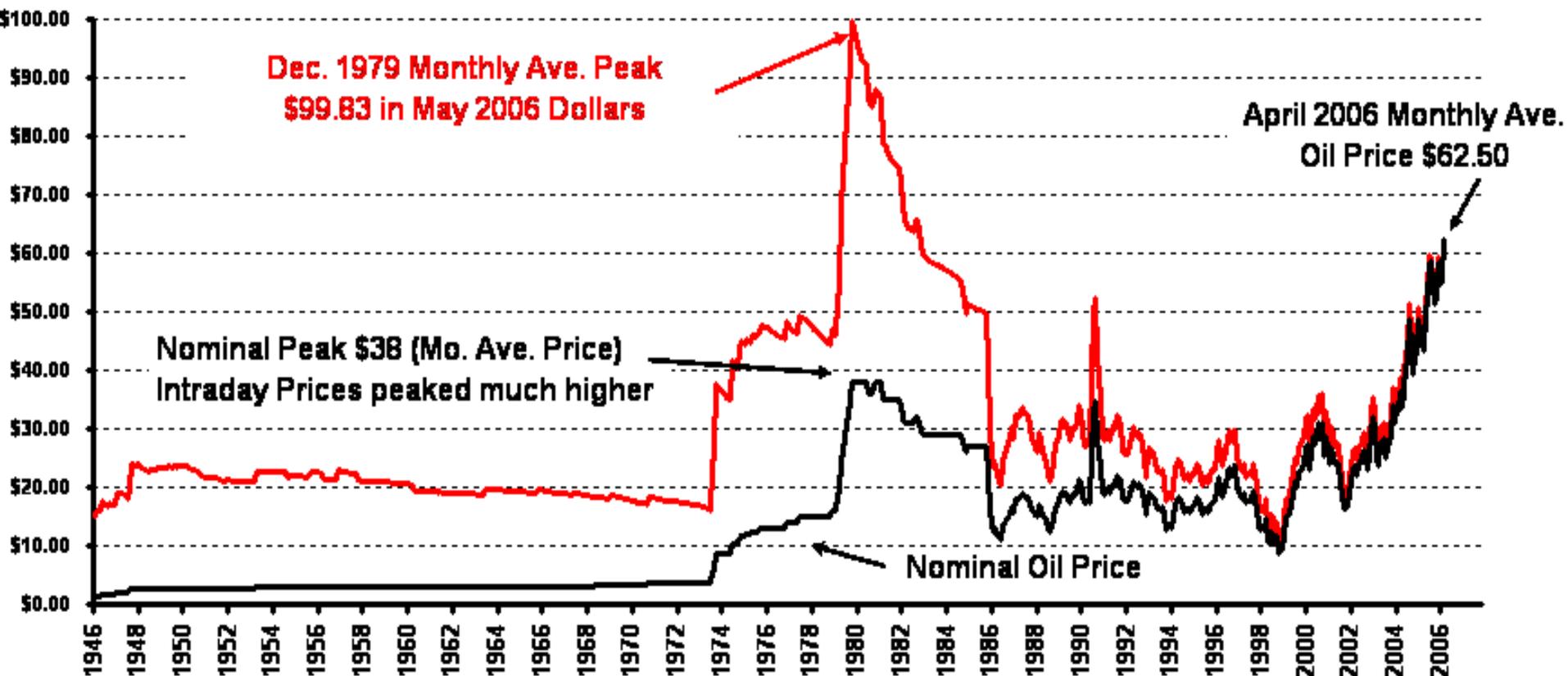
- ★ Authorized (5)
- ★ Pending (6)
- ★ Pre-Application Meetings (2)

# Inflation Adjusted Monthly CRUDE OIL PRICES (1946- Present)

In May 2006 Dollars

© www.InflationData.com

Updated 5/18/06



Nominal Monthly Ave. Oil Price

Inflation Adjusted Monthly Average Oil Price

Source of Data:

Illinois Basin Crude Prices- [www.ioga.com/Special/crudeoil\\_Hist.htm](http://www.ioga.com/Special/crudeoil_Hist.htm)

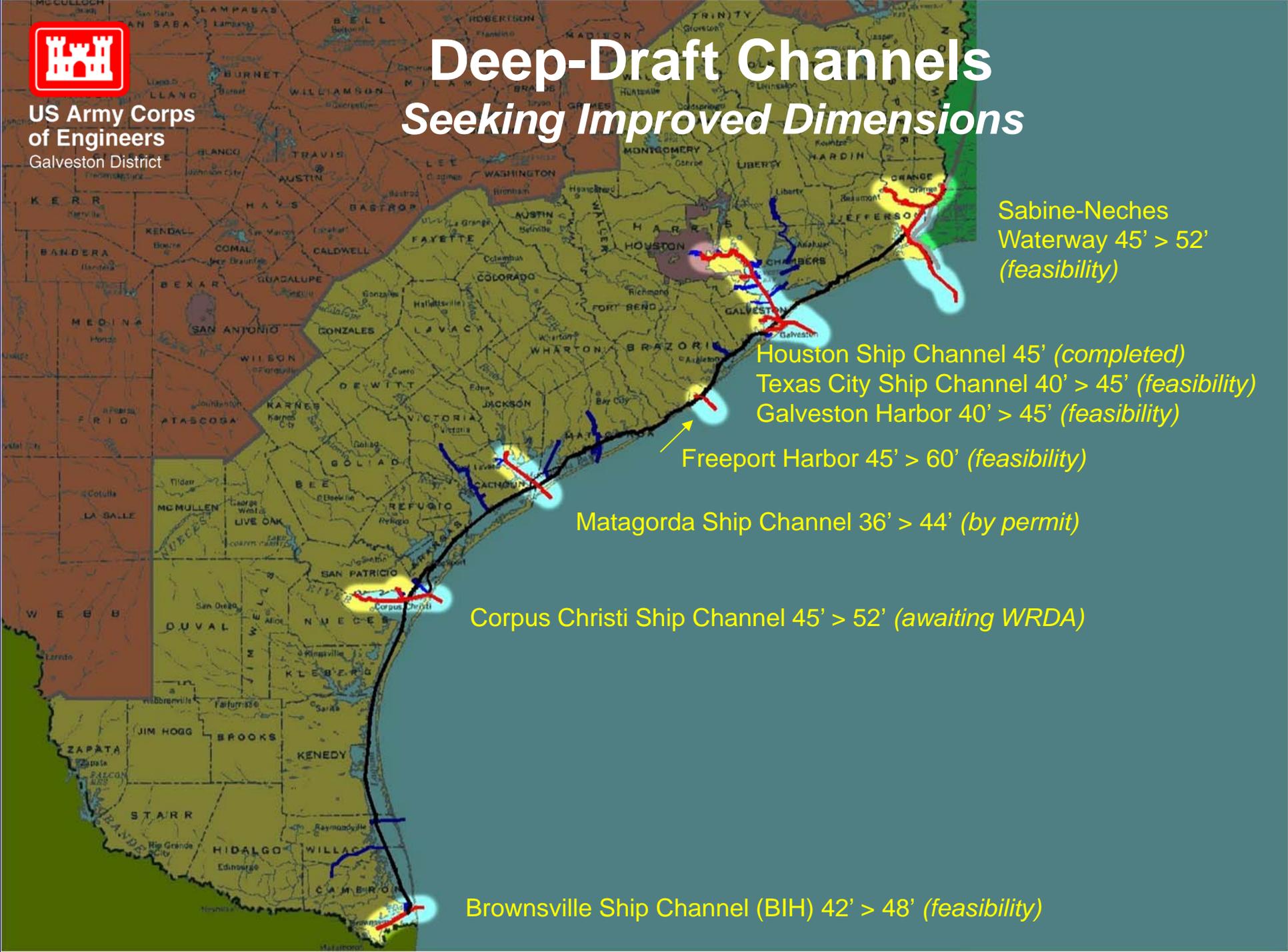
CPI-U Inflation index- [www.bls.gov](http://www.bls.gov)



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# Deep-Draft Channels

## Seeking Improved Dimensions



Sabine-Neches  
Waterway 45' > 52'  
*(feasibility)*

Houston Ship Channel 45' *(completed)*  
Texas City Ship Channel 40' > 45' *(feasibility)*  
Galveston Harbor 40' > 45' *(feasibility)*

Freeport Harbor 45' > 60' *(feasibility)*

Matagorda Ship Channel 36' > 44' *(by permit)*

Corpus Christi Ship Channel 45' > 52' *(awaiting WRDA)*

Brownsville Ship Channel (BIH) 42' > 48' *(feasibility)*

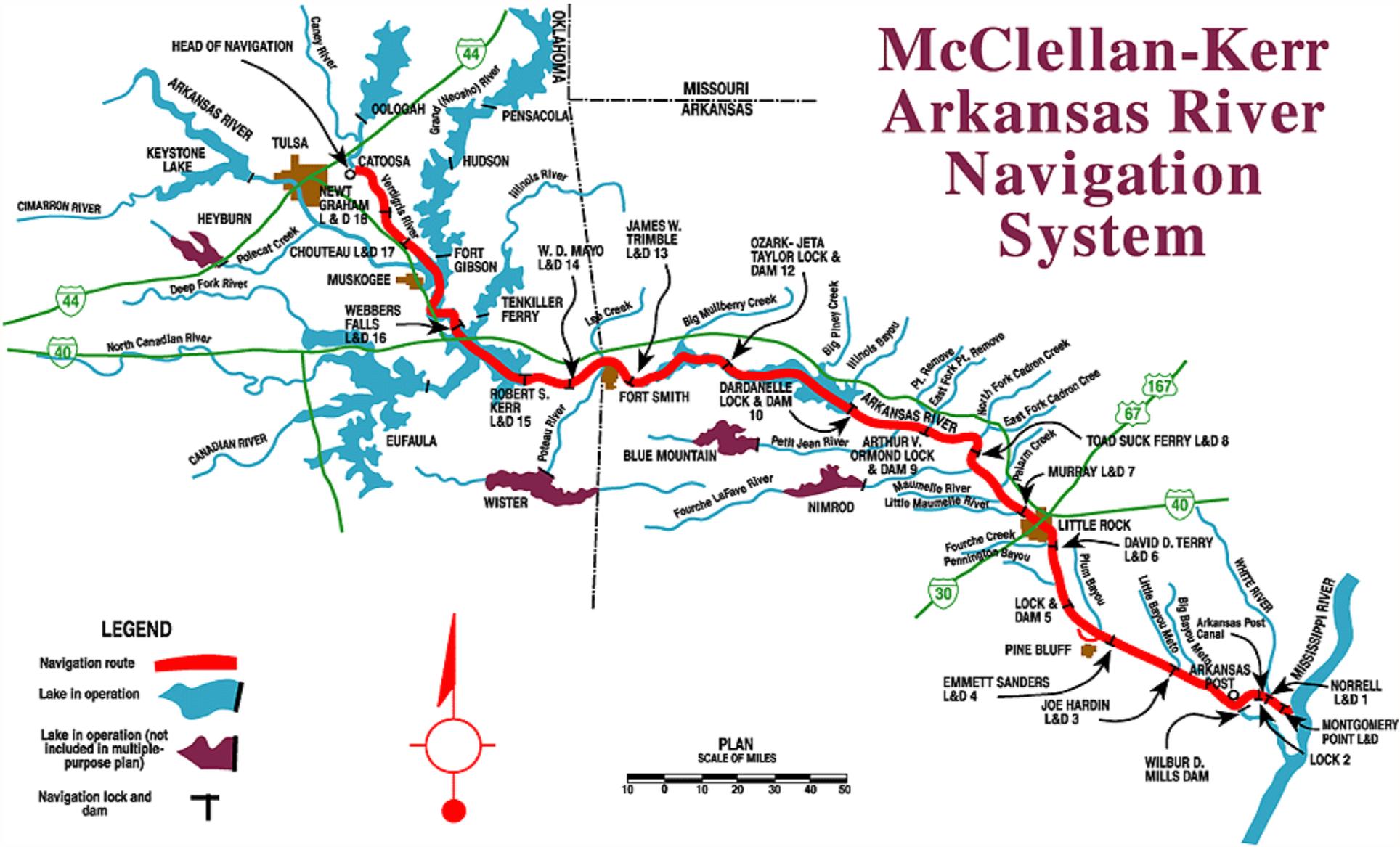


# Galveston District Hurricane Lessons Learned Initiatives

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Galveston District

- Developing Protocol for a Gulf Coast Response to Hurricanes
- Developing an Improved Communication Plan with USCG, NOAA, Industry, and the Corps Action Team Members (CAT)
- Revising our District Hurricane Plan to Include Lessons Learned at the Field & Administrative Level
- Corps Participation in Coast Guard Port Coordination Team Meetings

# McClellan-Kerr Arkansas River Navigation System



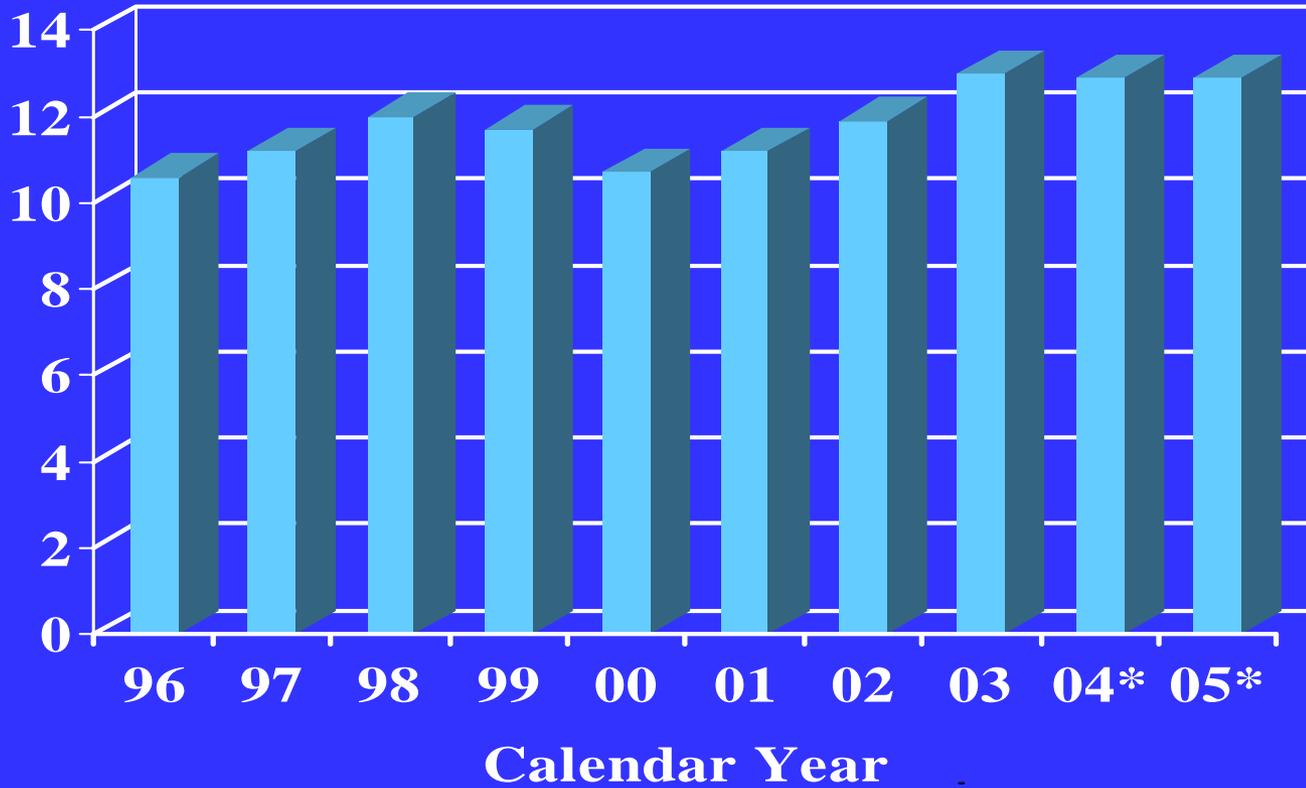


# McClellan-Kerr Arkansas River Navigation System

## ANNUAL TONNAGES - 10 Year History



Million Tons



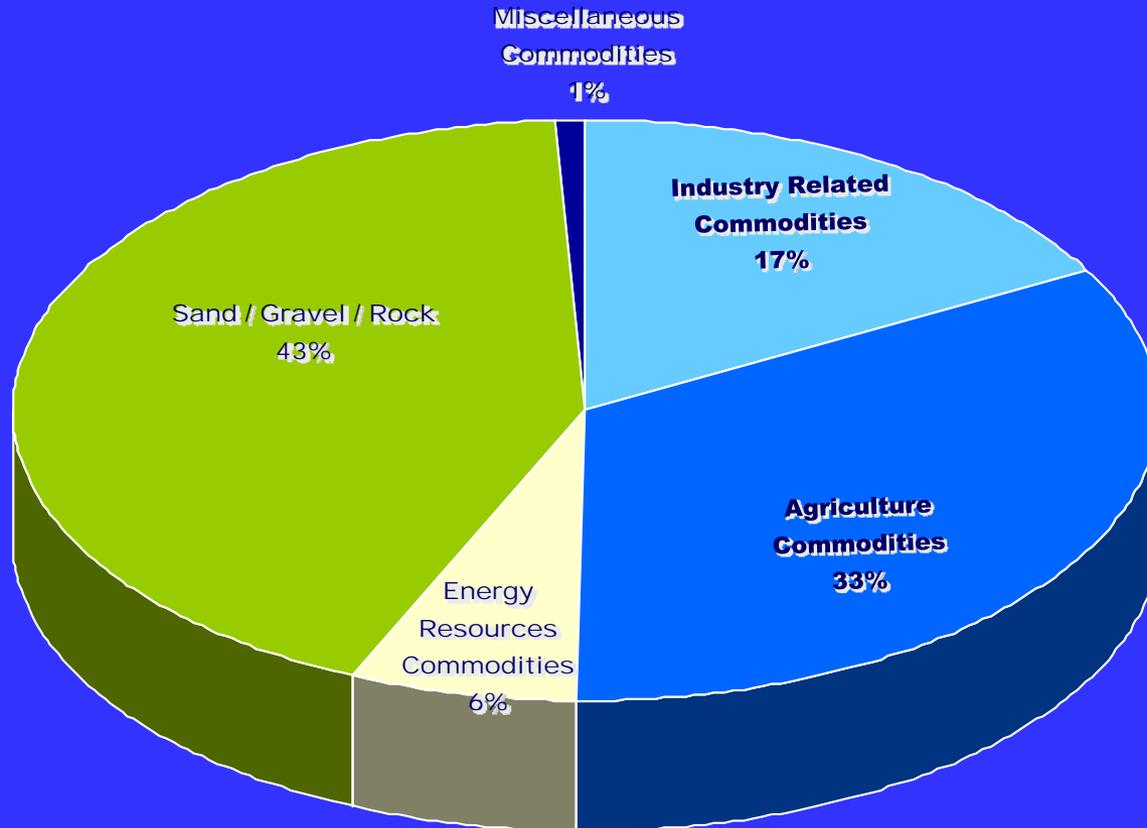
EST\*



# MCCLELLAN-KERR Arkansas River Navigation System COMMODITY TYPES



## 2005 Tonnage - 12,926,289





# MCCLELLAN-KERR Arkansas River Navigation System COMMODITY TYPES



## 2006 Tonnage - Jan-Apr 5,020,324

