GALVESTON DISTRICT – OVERVIEW

- ~300 full time employees
- 50,000 sq-mile district boundary
- Galveston District Missions
  - Navigation
  - Flood Risk Management
  - Regulatory
- 18 Counties – Coastal Bay Estuaries
- Texas Ports and Waterways moved 600M+ tons of Commercial Cargo during 2014
- 3 Strategic Ports
  - Maintenance Dredge 20MCY / YR
NAVIGATION MISSION

Provide safe, reliable, efficient and environmentally sustainable waterborne transportation systems (channels, harbors, and waterways) for movement of commerce, national security needs, and recreation.
The USACE Flood Risk Management Program (FRMP) works across the agency to focus the policies, programs and expertise of USACE toward reducing overall flood risk. This includes the appropriate use and resiliency of structures such as levees and floodwalls, as well as promoting alternatives when other approaches (e.g., land acquisition, flood proofing, etc.) reduce the risk of loss of life, reduce long-term economic damages to the public and private sector, and improve the natural environment.
GALVESTON DISTRICT – NAVIGATION PROGRAM

- Sabine-Neches Waterway
- Houston-Galveston-Texas
- Freeport Harbor
- Matagorda Ship Channel
- Corpus Christi Ship Channel
- Channel to Victoria
- Cedar Bayou
- Chocolate Bayou
- Channel Port Mansfield
- Channel to Harlingen
- Brazos Island Harbor
Texas #2 in Nation in Maritime Commerce
Texas Ports moved 538M+ tons at $320B in 2013

<table>
<thead>
<tr>
<th>Galveston District Ports</th>
<th>National Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houston</td>
<td>(2)</td>
</tr>
<tr>
<td>Beaumont</td>
<td>(4)</td>
</tr>
<tr>
<td>Corpus Christi</td>
<td>(6)</td>
</tr>
<tr>
<td>Texas City</td>
<td>(15)</td>
</tr>
<tr>
<td>Port Arthur</td>
<td>(20)</td>
</tr>
<tr>
<td>Freeport</td>
<td>(32)</td>
</tr>
<tr>
<td>Matagorda</td>
<td>(48)</td>
</tr>
<tr>
<td>Galveston</td>
<td>(52)</td>
</tr>
<tr>
<td>Brownsville</td>
<td>(67)</td>
</tr>
<tr>
<td>Victoria</td>
<td>(70)</td>
</tr>
</tbody>
</table>

- Gulf Intracoastal Waterway (3)
- GIWW-TX 73M+ tons at $43B in 2013

21.3% Nation’s Import/Export/Domestic Tonnage
- 24.8% of Nation’s Total Export tonnage
- 27.5% of Nation’s Total Import tonnage
Top 5 U.S. Inland Waterways

(million tons)
Navigation Operations & Maintenance Funding

![Bar chart showing funding for fiscal years 2007 to 2016. The chart compares the President's budget and final allocation.](chart.png)
Fiscal Year 2016: $155,150,000

- Maintenance Dredging & Associated Activities
- Placement Areas Improvements & Beneficial Use Applications
- Hydrographic Surveying
- Repair Coastal Structures
- Reporting Channel Conditions
- Removal of Hazards to Navigation
- Coordination with other Institutions & Agencies
PARTNERSHIPS

New Work & Maintenance Dredging
Texas Coastal Ocean Observation Network - TCOON
Gulf Coast Joint Hurricane Response Protocol
USACE eHydro Webpage & NOAA Online Charts
Beneficial Use of Dredged Material
Hurricane Flood Protection Systems
New Work & Maintenance Dredging

Channel Deepening & Widening

20+ MCY / YR of Maintenance Material
Texas Coastal Ocean Observation Network

- U.S. Army Corps of Engineers
- National Oceanic & Atmospheric Administration
- Texas General Land Office
- Texas Water Development Board
- Texas A&M University – Corpus Christi
  Conrad Blucher Institute for Survey & Science
DATA COLLECTION PLATFORMS

TCOON Sentinel Platform (Galveston, TX)

TCOON 4-Pile Platform (Packery Channel, TX)
<table>
<thead>
<tr>
<th></th>
<th>USACE</th>
<th>NOAA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Hydrographic Surveying</td>
<td>- National Weather Service</td>
</tr>
<tr>
<td></td>
<td>- Maintenance Dredging</td>
<td>- Navigation Response Teams</td>
</tr>
<tr>
<td></td>
<td>- Removal of Hazards to Navigation</td>
<td></td>
</tr>
<tr>
<td>USCG</td>
<td>- District / Sector Commands</td>
<td>Dredging Equipment</td>
</tr>
<tr>
<td></td>
<td>- Aids to Navigation (AtoNs)</td>
<td>- Government Owned</td>
</tr>
<tr>
<td></td>
<td>- Bridge Management</td>
<td>- Contractor</td>
</tr>
<tr>
<td>Brownwater Industry</td>
<td>- Gulf Intracoastal Canal Assn.</td>
<td>Salvage Equipment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Government Owned</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Contractor</td>
</tr>
<tr>
<td>Pilot Associations</td>
<td></td>
<td>Maritime Administration</td>
</tr>
</tbody>
</table>
Navigation on the Texas Coast

Coastal Custodians

The USACE Galveston District plays a key role in America’s well-being by keeping waterways open for navigation and commerce. A priority is deepening and widening waterways, such as ports, ship channels, and the Gulf Intracoastal Waterway, for the safe and expedient accommodation of commercial waterborne traffic. The Galveston District is directly responsible for maintaining more than 3,000 miles of channel, including 270 miles of deep draft and 750 miles of shallow draft. Dredges are constantly at work keeping vital marine arteries open for waterborne traffic carrying cargo ranging from crude oil to coffee. Other priorities include construction of jetties or breakwaters to protect harbor and inlet entrances and the locks along the Gulf Intracoastal Waterway at the crossing of the Brazos and Colorado rivers.

In the photo: The Port of Houston ranks first in the nation in foreign waterborne tonnage; first in

US Army Corps of Engineers

MISSION STATEMENT
The U.S. Army Corps of Engineers' navigation mission is to provide safe, reliable, efficient and environmentally sustainable waterborne transportation systems (channels, harbors, and waterways) for movement of commerce, national security needs, and recreation.

The Mission of the Galveston District Navigation Branch is to manage federal navigation projects along the Texas coastal region.

HYDROGRAPHIC SURVEYS
The products are reproduced from geospatial information prepared by the U.S. Army Corps of Engineers. GIS data and product accuracy may vary. Data may be developed from sources of differing accuracy, accurate only at certain scales, based on modeling or interpretation, incomplete while being created or revised, etc. Using GIS products for purposes other than those for which they were created may yield inaccurate or misleading results. The Corps of Engineers reserves the right to correct, update, modify, or replace GIS products without notification.

The information depicted on the survey maps represent the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time. These conditions are subject to rapid change due to shoaling events. A prudent mariner should not rely exclusively on the information provided here. Required by 33 CFR 209.325.

Hydrographic Survey
CLICK ICON(S) FOR MAP
DOWNLOAD PAGE LINK

Beneficial Use of Dredged Material

**Texas General Land Office**
**US Army Corp of Engineers**
**Beneficial Use Partnership**

---

**Beneficial Use of Dredged Material (BUDM), a CorpsGLO Partnership Success**

- **Bessie Heights Marsh** – USACE, GLO and the Sabine Neches Navigation District partnered in 2006 to utilize dredged material beneficially from the Sabine Neches Waterway for marsh creation within Bessie Heights. Approximately 70-acres of marsh was constructed with 500,000 cubic yards of dredged material. There is an opportunity for future marsh creation at Bessie Heights as this portion of the SNWW is dredged on a 5 to 7 year frequency.

- **Texas Point National Wildlife Refuge** – In 2000, USACE, GLO and the Texas National Wildlife Refuge partnered to restore approximately 40 acres of coastal wetlands and mudflats.

- **Rollover Beach** – USACE, GLO and Galveston County have been partnering for several decades to place between 100,000 and 200,000 cubic yards of sand from the Gulf Intracoastal Waterway onto the shoreline of Rollover Beach. This beneficial use occurs on an annual basis. GLO and Galveston County finances the incremental cost for pumping the additional distance to the beach.

- **Pierce Marsh** – In 2015, USACE, GLO and several state and federal resource agencies partnered to restore emergent estuarine marsh in the vicinity of West Galveston Bay with maintenance dredged material originating from the Gulf Intracoastal Waterway (GIWW). Additional beneficial use opportunities within Pierce Marsh will be available with future GIWW maintenance dredging requirements.

- **Galveston Beach** – In 2015, USACE, GLO and Galveston County Park Board (GCPB) forged a partnership to place approximately 500,000 cubic yards of sand from the Galveston Entrance Channel to Galveston Beach. GLO and GCPB financed the incremental cost to transport the material from the Ocean to the Beach. This partnership is anticipated to continue, provided that non-Federal funding is made available when channel maintenance dredging is required; 2-year frequency.

- **South Padre Island** – In 2000, USACE; GLO and the City of South Padre Island began working in partnership to place between 100,000 – 600,000 cubic yards of dredged material originating from the Brazos Island Harbor (Brownsville) Entrance Channel onto the shoreline of South Padre Island. This beneficial use occurs every 12 – 24 month depending on shoaling conditions.

Although GLO did not provide direct funding to the remaining beneficial use projects identified in the figure, GLO staff were active team members from project inception through project completion. GLO support in these projects included: expertise in coastal processes, historical knowledge of projects, and approvals for real estate; as GLO owns submerged lands in Texas.
Beneficial Use of Dredged Material
Houston – Galveston Entrance Channel & Galveston Beach

Sand dredged from between jetties transported via hopper dredge to beach (portion of overall contract)

Beach placement location
Construction—Great Lakes Dredge & Dock
Dredge Terrapin Island
Texas City Hurricane Flood Protection

Post Ike Aerial Photos 9/20/08