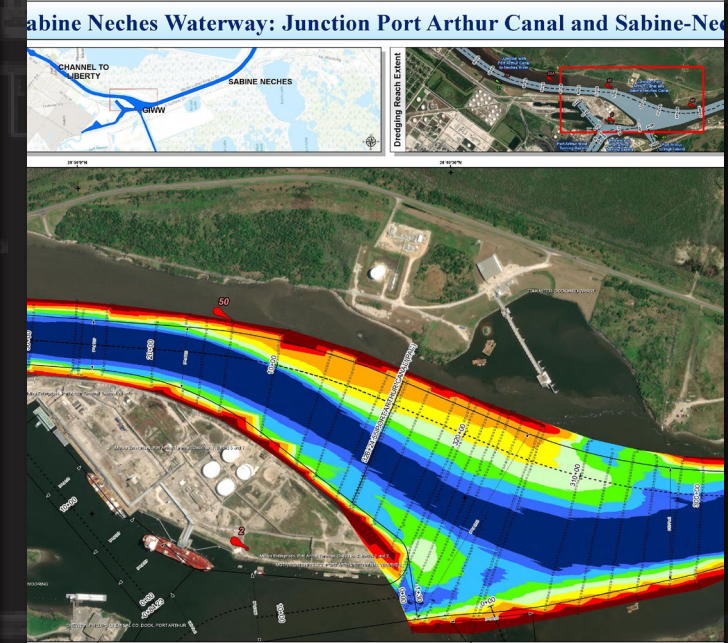
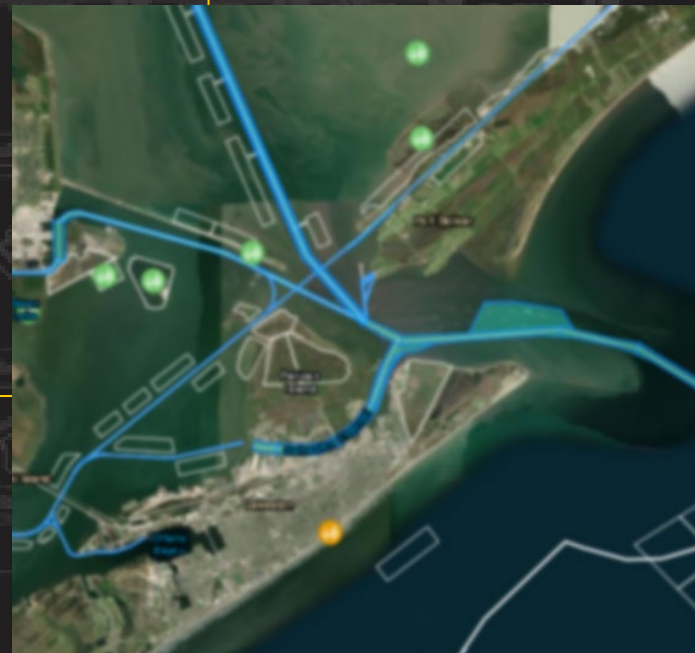


USACE GALVESTON DISTRICT DREDGING MEETING

Waterways Management Section
GIS Products and Services Overview

Brittany Tiemann
Acting Chief of WMS
Brittany.L.Tiemann@usace.army.mil

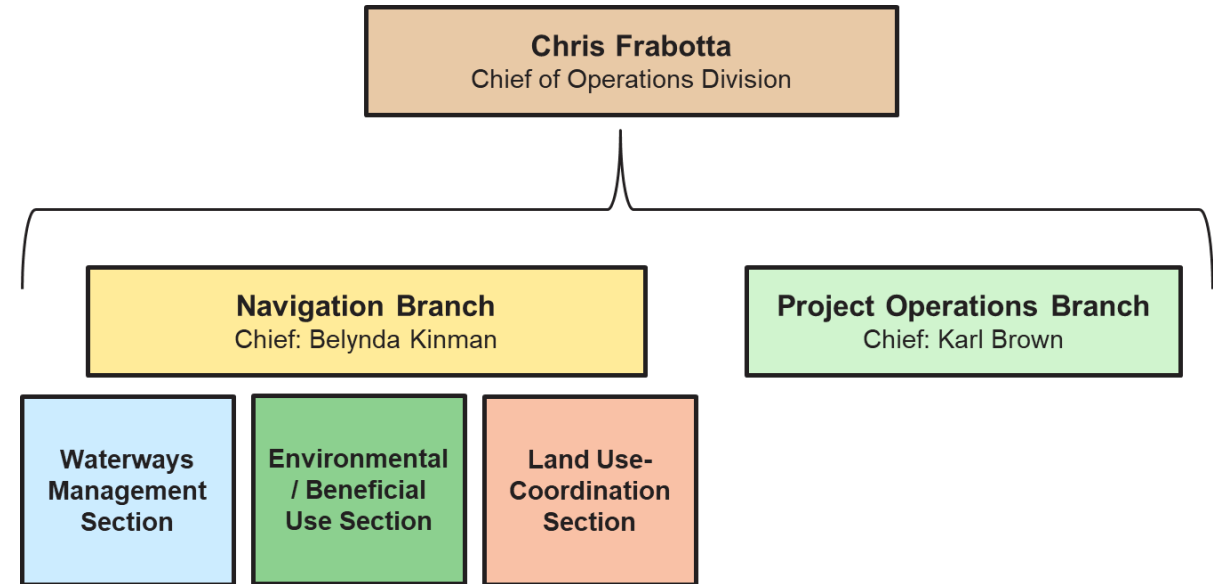


US Army Corps
of Engineers®



WATERWAYS MANAGEMENT SECTION

The Galveston District Waterways Management Section (WMS) provides Geographic Information Systems (GIS), and Data Visualizations Services (DVS) support to the Galveston District's Operations Division while also being responsible for publishing the hydrographic survey maps & data through the USACE Enterprise eHydro system.



WATERWAYS MANAGEMENT SECTION

National Datasets

National Channel Framework

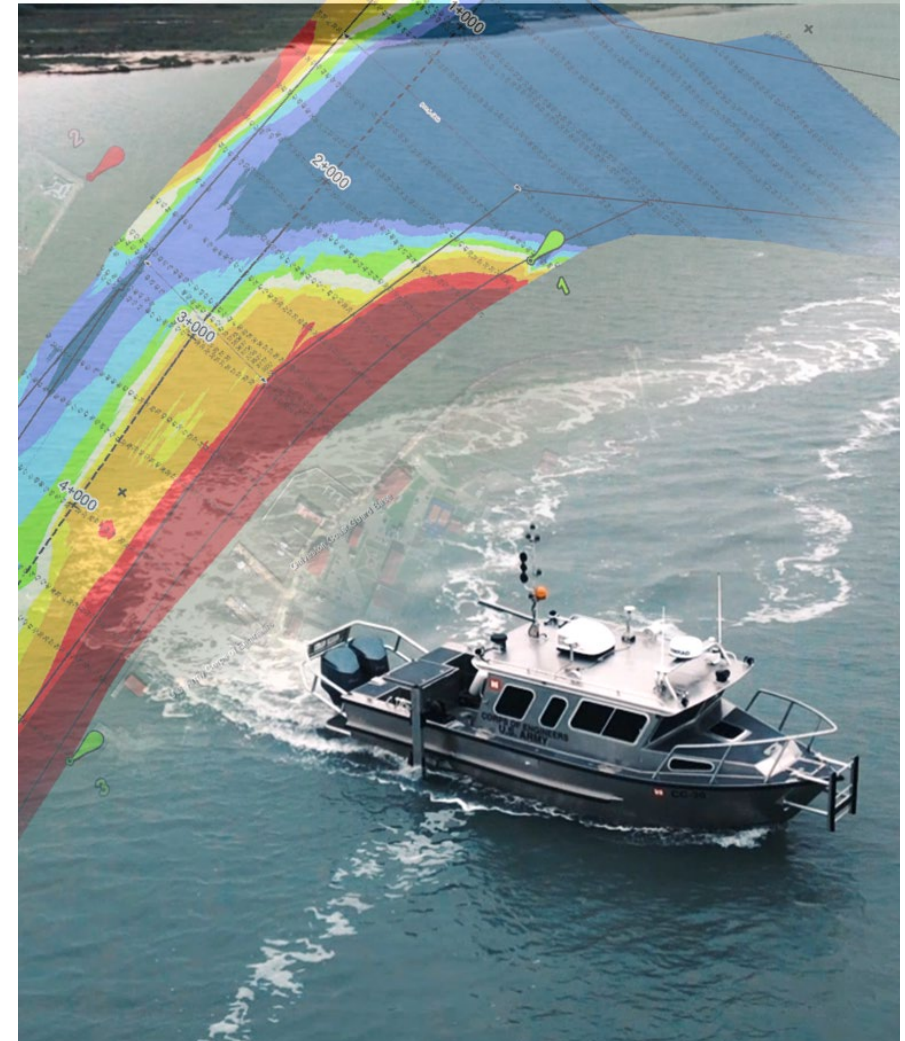
- The enterprise Geographic Information System (eGIS) geodatabase of high-and medium-tonnage Congressionally authorized navigation channels maintained by the US Army Corps of Engineers (USACE). It serves as the basis for the National Oceanic and Atmospheric Administration's (NOAA) paper and Electronic Navigation Charts (ENCs)

National Sediment Management Framework

- The National Sediment Management Framework (NSMF) is a USACE enterprise-level GIS layer of dredge material placement area (PA) and sediment borrow area boundaries.

eHydro Survey Data and Products

- The U.S. Army Corps of Engineers developed eHydro to provide enterprise performance-based analyses and budgeting for coastal navigation channels through geospatial data to be used for, uniform method of data dissemination and comparison of latest conditions on coastal navigation channels.





WEB GIS PRODUCTS DEMONSTRATION

Operations Dashboard

Central Place for all USACE SWG
Operations Division Web Products

<https://www.swg.usace.army.mil/Missions/Navigation/Navigation-Projects-Contracts/>

OPERATIONS DASHBOARD

The Operations Dashboard provides location-aware data visualization and analytics for a real-time operational view of the SWG Navigation program for leadership, Operations Managers, partners and stakeholders.

- Contract information updated daily
- Dredge Locations updated near-real time
- Draft Restrictions updated as necessary

USACE Galveston District Operations Dashboard

Select by Project: No category selected | Filter by Fiscal Year: No category selected | Filter by Contract Type: No category selected

Awarded Contracts: **31** | Pre-Awarded Contracts: **39**

FY20: Houston Ship Channel - PA15 Improvements

FY21: NEW WORK: Cedar Bayou Extension

FY22: Houston Ship Channel - Redfish to Beacon 78 & Bayport Flare

FY23: Houston Ship Channel - Placement Area 14 Dewatering

FY23: Galveston Harbor and Channel - Entrance Channel and HSC Bolivar to Redfish

FY23: Gulf Intracoastal Waterway - West Galveston Bay Barrier Island Reconstruction

FY24: NEW WORK: [Awarded by Port] HSC Segment 1C - Bayport to Morgans Point

FY24: Galveston Harbor and Channel - Pelican Island PA Improvements

FY24: Houston Ship Channel - Alexander PA Dewatering

FY24: NEW WORK: Houston Ship Channel - (ECIP) Segment 3, Barbours Cut Channel, Spilman Island & Morgans Point Bulkhead Walls

FY24: Houston Ship Channel - Bayport to Morgans & Bayport Ship Channel Hopper Dredging

FY24: Houston Ship Channel - PA Shoreline Protection (Mid-Bay, PA14, PA15)

FY24: Gulf Intracoastal Waterway - High Island to Causeway w/ CTPB Maintenance Dredging

FY24: Cedar Bayou Maintenance Dredging

INFORMATION CONTAINED HEREIN SHOULD NOT BE BELIED UPON WITHOUT FIRST CHECKING WITH THE OPERATIONS MANAGER ASSIGNED TO THE PROJECT

All Contracts | Awarded | Pre-Award

Chambers County

FY24: Gulf Intracoastal Waterway- High Island to Causeway w/ CTPB Maintenance Dredging

Field	Information
Status	Awarded
Contract Type	Maintenance Dredging
Solicitation Number	W912HY-24-B-0012
Contract Number	W912HY-24-C-0011
Contractor	Callan
Estimated Range (\$)	5-10 Million
Contract Award Amount	6,998,750
Estimated Quantity (CY)	1,400,000
Contract Quantity (CY)	1,000,000
Dredge Name	
Dredge Type	P
Contract Required Depth	17-ft + 1-ft

Contract Info | Contract Milestones

Active Dredges

Dredge Name: **MIKE HOOKS**
 Contractor: **Mike Hooks LLC**
 Type: **Cutter Suction**
 Type Group: **Pipeline**
 Project: **Matagorda Ship Channel**
 Last Position Update: **11/5/2023, 6:00 PM**

Dredge Name: **C.R. McCaskill**
 Contractor: **Weeks Marine**
 Type: **Cutter Suction**
 Type Group: **Pipeline**
 Project: **Houston Ship Channel**
 Last Position Update: **10/31/2024, 12:06 PM**

Dredge Name: **General MacArthur**
 Contractor: **Callan Marine**

Last update: 2 minutes ago

Active Dredges | Draft Restrictions

Esri, Maxar, Earthstar Geographics, and the GIS User Community | Sources: Esri, U.S. Census Bureau | US Army Corps of Engineers Mobile District Operations Division Spatial Data Branch | Un... Powered by Esri

Operations Dashboard | Hydrographic Survey Dashboard | Hydrographic Survey Website | SWG Beneficial Use | USACE National Channel Framework



OPERATIONS DASHBOARD

USACE Galveston District Operations Dashboard

Select by Project
No category selected

Filter by Fiscal Year
No category selected












Filter by Contract Type
No category selected

Awarded Contracts

31

Pre-Awarded Contracts

39

-  **FY20** : Houston Ship Channel - PA15 Improvements
-  **FY21** : NEW WORK: Cedar Bayou Extension
-  **FY22** : Houston Ship Channel - Redfish to Beacon 78 & Bayport Flare
-  **FY23** : Houston Ship Channel - Placement Area 14 Dewatering
-  **FY23** : Galveston Harbor and Channel - Entrance Channel and HSC Bolivar to Redfish
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-  **FY24** : Houston Ship Channel - Bayport to Morgans & Bayport Ship Channel Hopper Dredging
-  **FY24** : Houston Ship Channel - PA Shoreline Protection (Mid-Bay, PA14, PA15)
-  **FY24** : Gulf Intracoastal Waterway - High Island to Causeway w/ CTPB Maintenance Dredging
-  **FY24** : Cedar Bayou Maintenance Dredging

INFORMATION CONTAINED HEREIN SHOULD NOT BE RELIED UPON WITHOUT FIRST CHECKING WITH THE OPERATIONS MANAGER ASSIGNED TO THE PROJECT

All Contracts Awarded Pre-Award



Contract Info

FY24: Gulf Intracoastal Waterway- High Island to Causeway w/ CTPB Maintenance Dredging

Field	Information
Status	Awarded
Contract Type	Maintenance Dredging
Solicitation Number	W912HY-24-B-0012
Contract Number	W912HY-24-C-0011
Contractor	Callan
Estimated Range (\$)	5-10 Million
Contract Award Amount	6,998,750
Estimated Quantity (CY)	1,400,000
Contract Quantity (CY)	1,000,000
Dredge Name	
Dredge Type	P
Contract Required Depth	17-ft + 1-ft

Contract Info Contract Milestones

Active Dredges
-
Draft Restrictions

Active Dredges

- Dredge Name: MIKE HOOKS
Contractor: Mike Hooks LLC
Type: Cutter Suction
Type Group: Pipeline
Project: Matagorda Ship Channel
Last Position Update: 11/5/2023, 6:00 PM
- Dredge Name: C.R. McCaskill
Contractor: Weeks Marine
Type: Cutter Suction
Type Group: Pipeline
Project: Houston Ship Channel
Last Position Update: 10/31/2024, 12:06 PM
- Dredge Name: General MacArthur
Contractor: Callan Marine

Last update: 2 minutes ago

Active Dredges Draft Restrictions

Esri, Maxar, Earthstar Geographics, and the GIS User Community | Sources: Esri, U.S. Census Bureau | US Army Corps of Engineers Mobile District Operations Division Spatial Data Branch | Un... Powered by Esri



Operations Dashboard

Hydrographic Survey Dashboard

Hydrographic Survey Website

SWG Beneficial Use

USACE National Channel Framework



OPERATIONS DASHBOARD

USACE Galveston District Operations Dashboard

Select by Project
No category selected

Filter by Fiscal Year
No category selected














Filter by Contract Type
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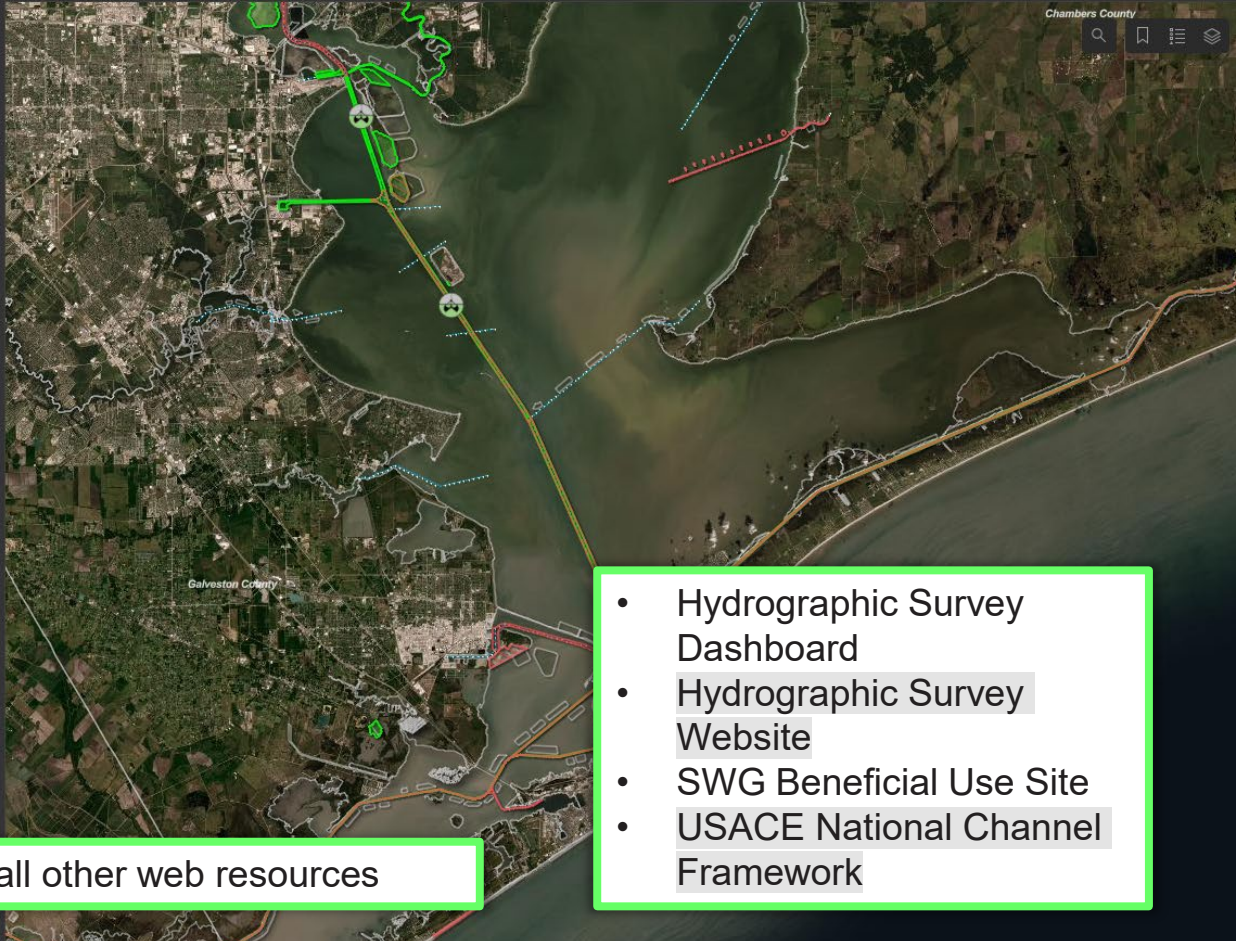
Awarded Contracts

31

Pre-Awarded Contracts

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Contractor: Mike Hooks LLC
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Project: Matagorda Ship Channel
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Type: Cutter Suction
Type Group: Pipeline
Project: Houston Ship Channel
Last Position Update: 10/31/2024, 12:06 PM
- Dredge Name: General MacArthur
Contractor: Callan Marine

Links to all other web resources

- Hydrographic Survey Dashboard
- Hydrographic Survey Website
- SWG Beneficial Use Site
- USACE National Channel Framework

All Contracts Awarded Pre-Award

Esri, Maxar, Earthstar Geographics, and the GIS User Community | Sources: Esri, U.S. Census Bureau | US Army Corps of Engineers Mobile District Operations Division Spatial Data Branch | Un... Powered by Esri

Active Dredges Draft Restrictions



Operations Dashboard

Hydrographic Survey Dashboard

Hydrographic Survey Website

SWG Beneficial Use

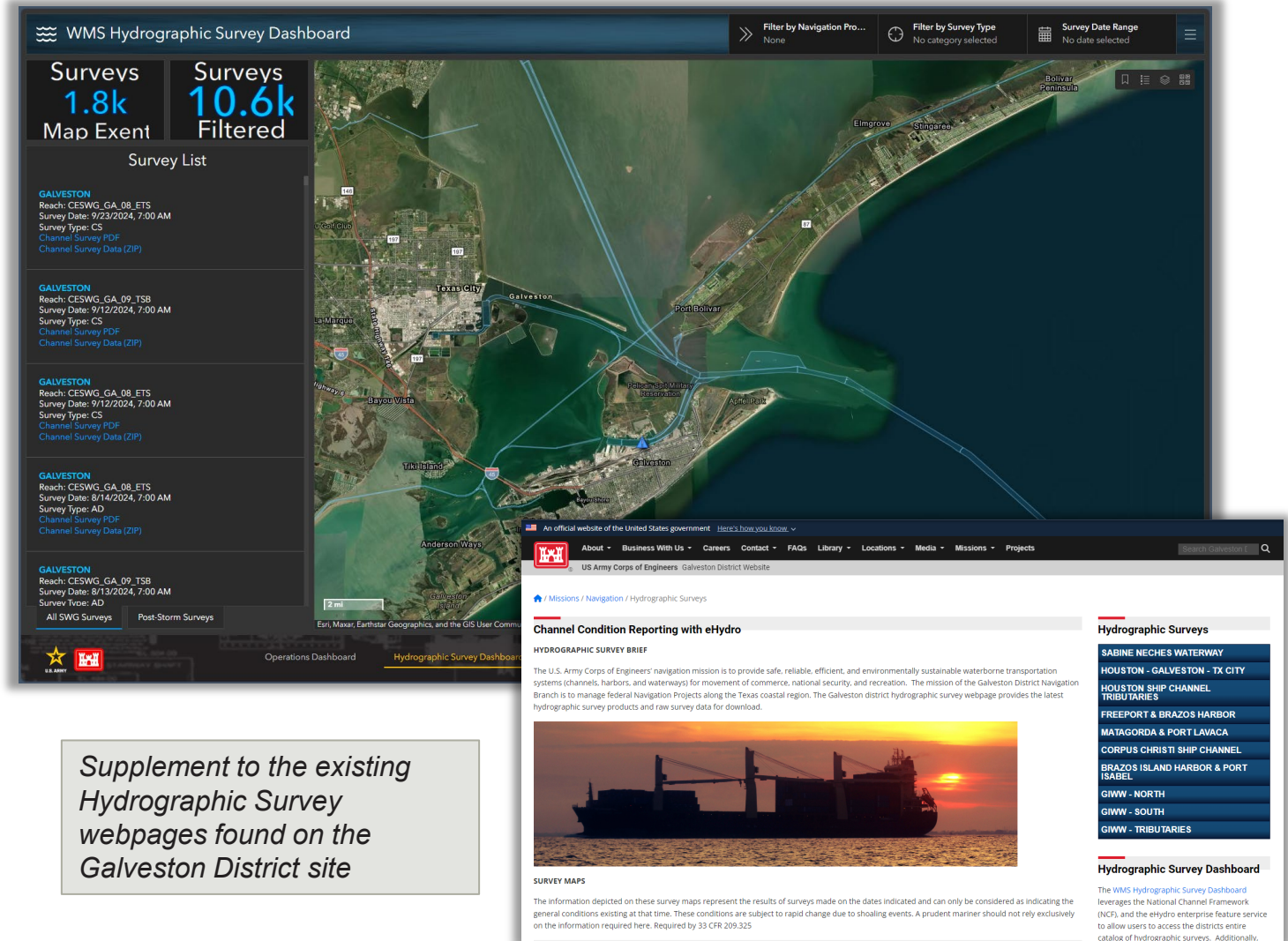
USACE National Channel Framework

HYDROGRAPHIC SURVEY DASHBOARD

Leverages the National Channel Framework (NCF), and the eHydro enterprise data to give access to the districts' entire catalog of hydrographic surveys

Utilized as an emergency management tool for communicating information during a Navigation Restoration event

- Port Status
- Survey Schedule
- Survey Progress
- Draft Restrictions
- Other obstructions as required



The image displays two overlapping screenshots. The top screenshot is the 'WMS Hydrographic Survey Dashboard'. It features a dark blue header with navigation filters for 'Navigation Pro...', 'Survey Type', and 'Survey Date Range'. Below the header, there are two summary boxes: 'Surveys 1.8k Map Extent' and 'Surveys 10.6k Filtered'. A 'Survey List' on the left shows four entries for GALVESTON, each with details on reach, survey date, and type. The main area is a map of the Galveston area with blue lines indicating survey paths. The bottom screenshot is a webpage from the US Army Corps of Engineers Galveston District website. It has a navigation menu and a main heading 'Channel Condition Reporting with eHydro'. Below this is a 'HYDROGRAPHIC SURVEY BRIEF' section with a photo of a ship at sunset. A sidebar on the right lists various waterways and channels, including Sabine Neches Waterway, Houston-Galveston-TX City, and others. A 'Hydrographic Survey Dashboard' link is also present in the sidebar.

Supplement to the existing Hydrographic Survey webpages found on the Galveston District site

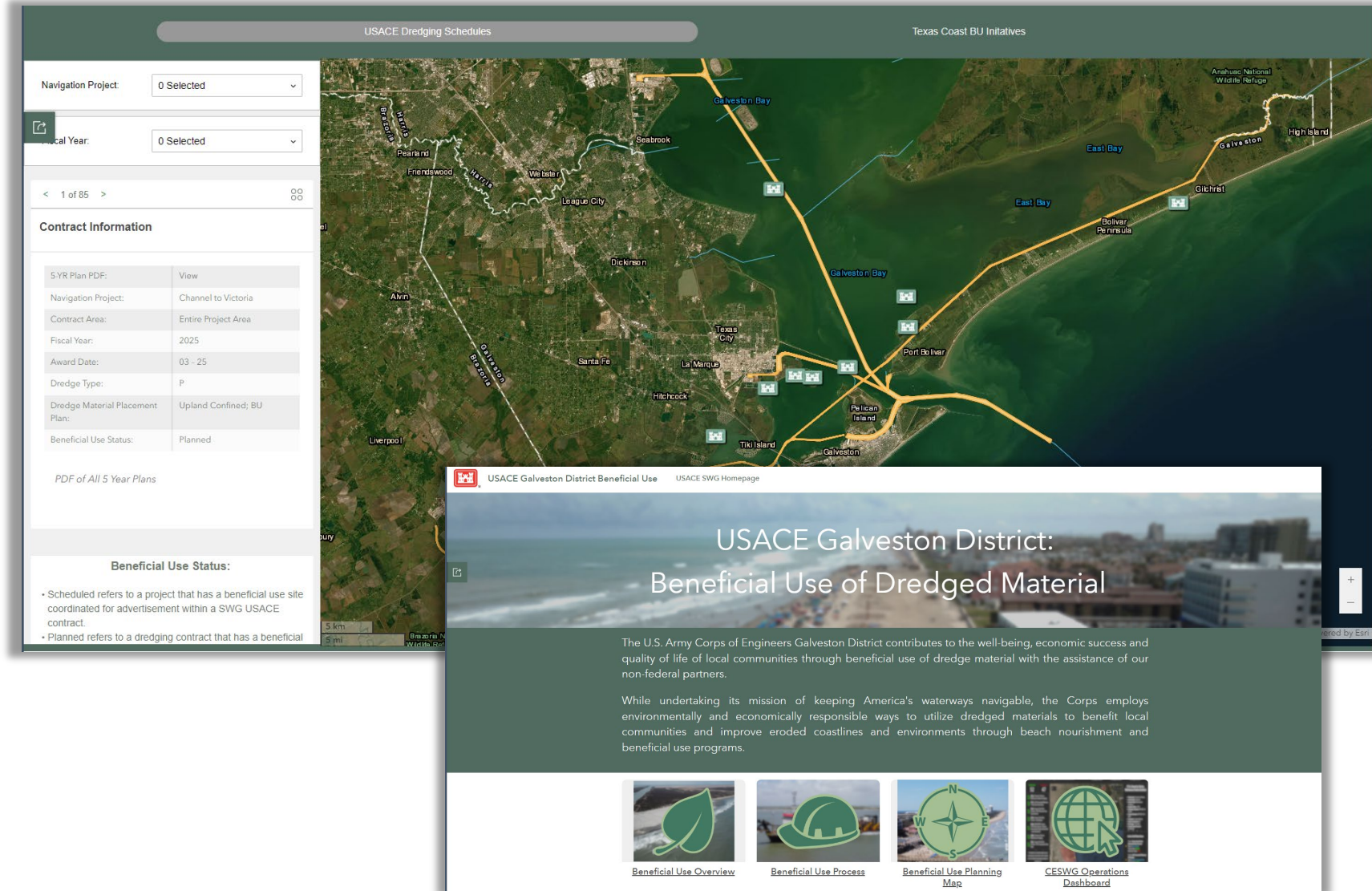


BENEFICIAL USE HUB SITE

The SWG Beneficial Use (BU) site provides a platform for stakeholders to access SWG Operation's ongoing 5-year dredging plans and visualize contracts/plans on a web map

Hub Site also provides:

- Overview of what Beneficial Use is + key USACE documents
- Information on the Beneficial Use Process



USACE Dredging Schedules

Texas Coast BU Initiatives

Navigation Project: 0 Selected

Fiscal Year: 0 Selected

< 1 of 85 >

Contract Information

5-YR Plan PDF:	View
Navigation Project:	Channel to Victoria
Contract Area:	Entire Project Area
Fiscal Year:	2025
Award Date:	03 - 25
Dredge Type:	P
Dredge Material Placement Plan:	Upland Confined; BU
Beneficial Use Status:	Planned

PDF of All 5 Year Plans

Beneficial Use Status:

- Scheduled refers to a project that has a beneficial use site coordinated for advertisement within a SWG USACE contract.
- Planned refers to a dredging contract that has a beneficial

USACE Galveston District Beneficial Use

USACE SWG Homepage

USACE Galveston District: Beneficial Use of Dredged Material

The U.S. Army Corps of Engineers Galveston District contributes to the well-being, economic success and quality of life of local communities through beneficial use of dredge material with the assistance of our non-federal partners.

While undertaking its mission of keeping America's waterways navigable, the Corps employs environmentally and economically responsible ways to utilize dredged materials to benefit local communities and improve eroded coastlines and environments through beach nourishment and beneficial use programs.

Beneficial Use Overview

Beneficial Use Process

Beneficial Use Planning Map

CESWG Operations Dashboard

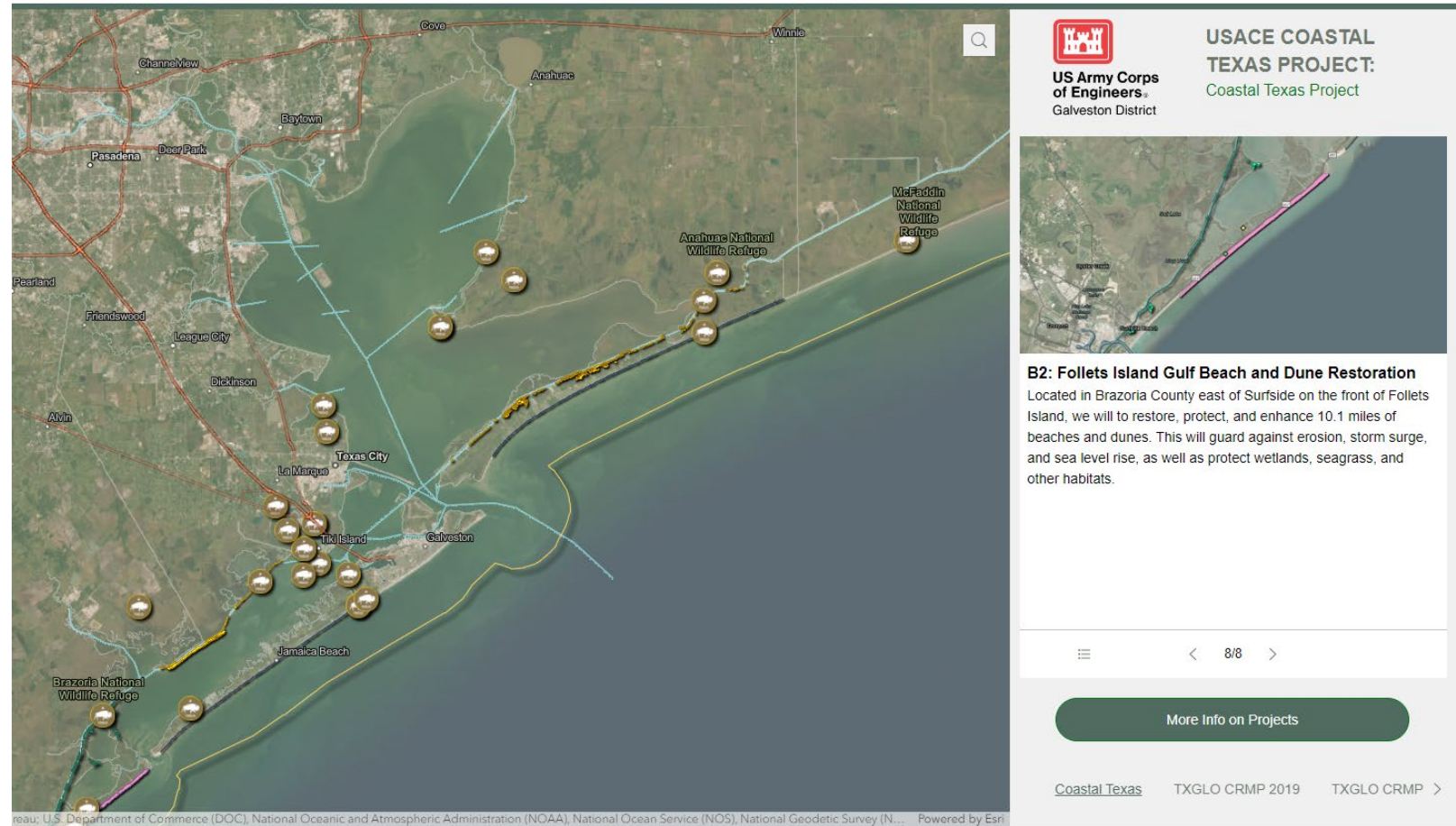
BENEFICIAL USE HUB SITE

Also showcases Texas Coast BU Initiatives: Past (USACE) & proposed projects

- Texas GLO Coastal Resiliency Master Plan Projects,
- USACE Coastal Texas

Future: USACE SWG Channel Sediment Data

- Available as a GIS Point layer or table for reference & download
- Data from 2005 – Present
- Grain size and sand, silt, and clay percentage

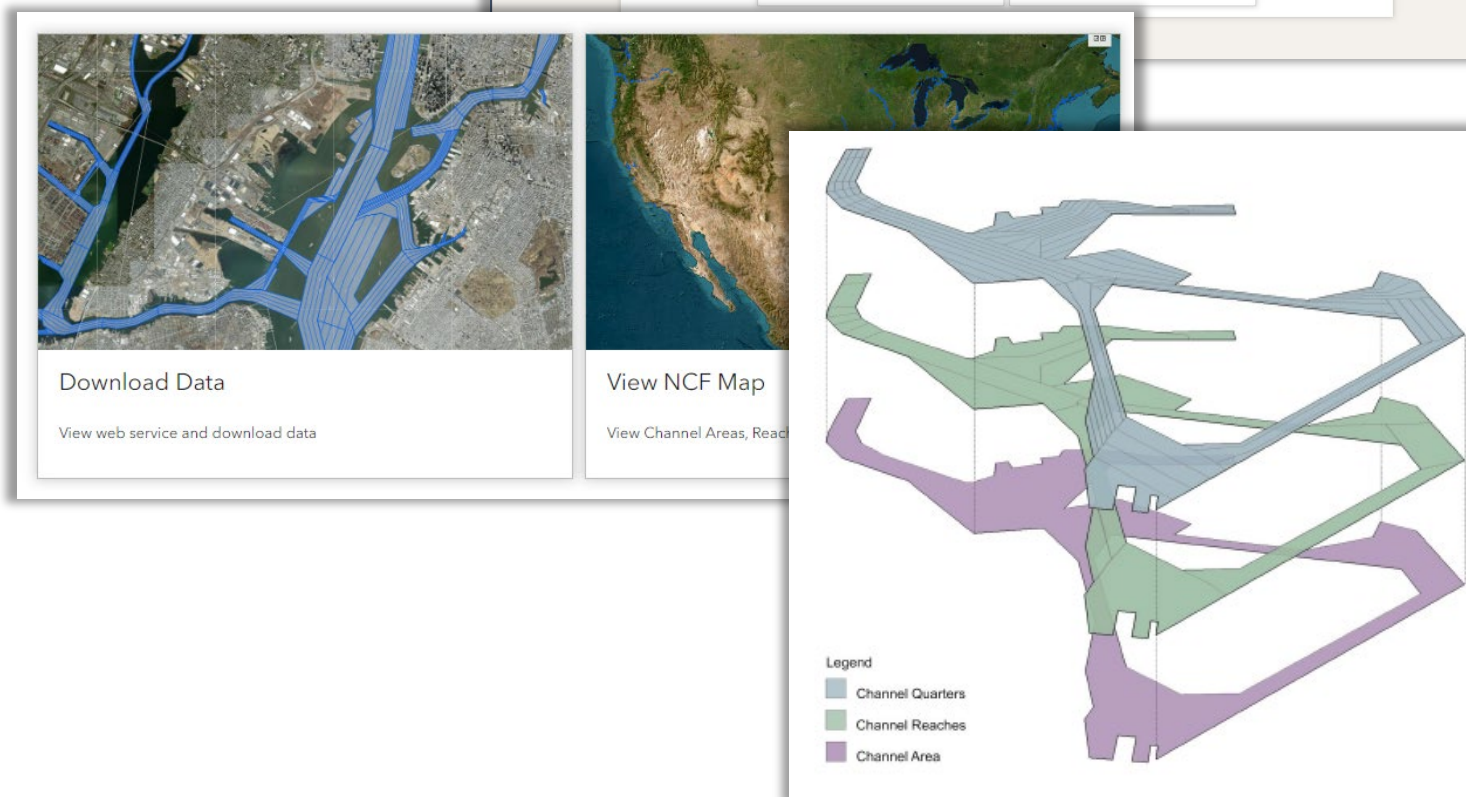
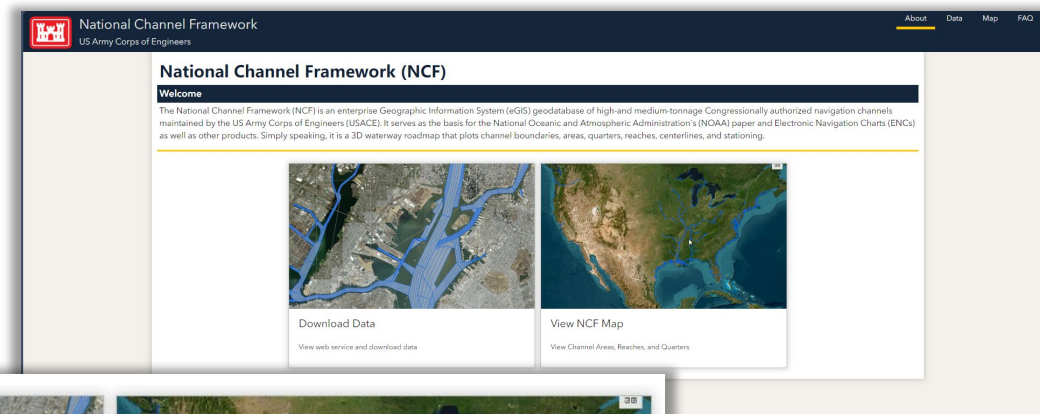


NATIONAL CHANNEL FRAMEWORK (NCF)

Recently included the link to the USACE National Channel Framework site to make it easier to locate and download the NCF.

Downloads Available:

- Channel Lines
 - Centerline
 - Toe line
 - Station Line
- Channel Area
- Channel Reaches
- Channel Quarters



WEB PRODUCTS; SUPPORT

Questions, Assistance,
Suggestions for improvements?
Please contact us at either:

- Brittany.L.Tiemann@usace.army.mil
- ceswg-odn-waterways@usace.army.mil

Galveston District Operations Dashboard

Select by Project
No category selected

Pre-Awarded Contracts

39

Harbor and Channel -
and HSC Bolivar to Redfish

Harbor and Channel -
Improvements

Coastal Waterway- High
/ w/ CTPB Maintenance

Trance Channel & HSC
CAP 204 Beach

Channel & Turning Basin

Coastal Waterway Rollover to
2nd Chocolate Bayou
Dredging

Area MATOC

Harbor and Channel - San
Antonio

Galveston Harbor Channel

Harbor and Channel -
Dredging

HEREIN SHOULD NOT BE RELIED
ON FOR OPERATIONS
PLANNING TO THE PROJECT**

Pre-Awarded



Esri, Maxar, Earthstar Geographics, and the GIS User Community | Sources: Esri, U.S. Census Bureau | US Army Corps of Engineers Mobile District Operations Division Spatial Data Base

Operations Dashboard

Hydrographic Survey Dashboard

Hydrographic Survey Website

SWG Beneficial Use

USACE



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