

An aerial photograph of a coastal landscape. In the foreground, a wide, sandy beach stretches across the frame, with gentle waves lapping at the shore. To the right, a large, shallow body of water, possibly a lagoon or bay, is visible, with a narrow channel or inlet connecting it to the ocean. The background shows a long, narrow strip of land or barrier island extending into the distance, with a dark, vegetated area on its landward side. The sky is a pale, clear blue.

Beneficial Use
Beach Nourishment

Benefits of Beneficial Use

- Sand is considered a highly valuable and limited resource.
- Dredging offers a cost-effective solution to utilize local eroded sediment sources from nearby navigation channels.
- Through coordination, The Galveston District has placed approximately 4.5 million cubic yards of maintenance material for beach nourishment and island building in the past 3 years.



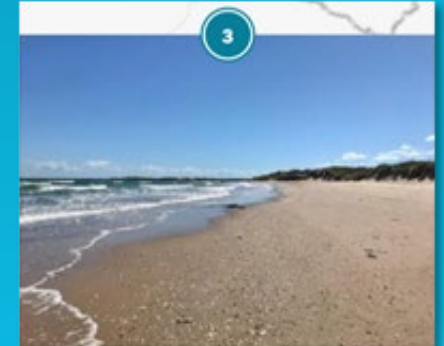
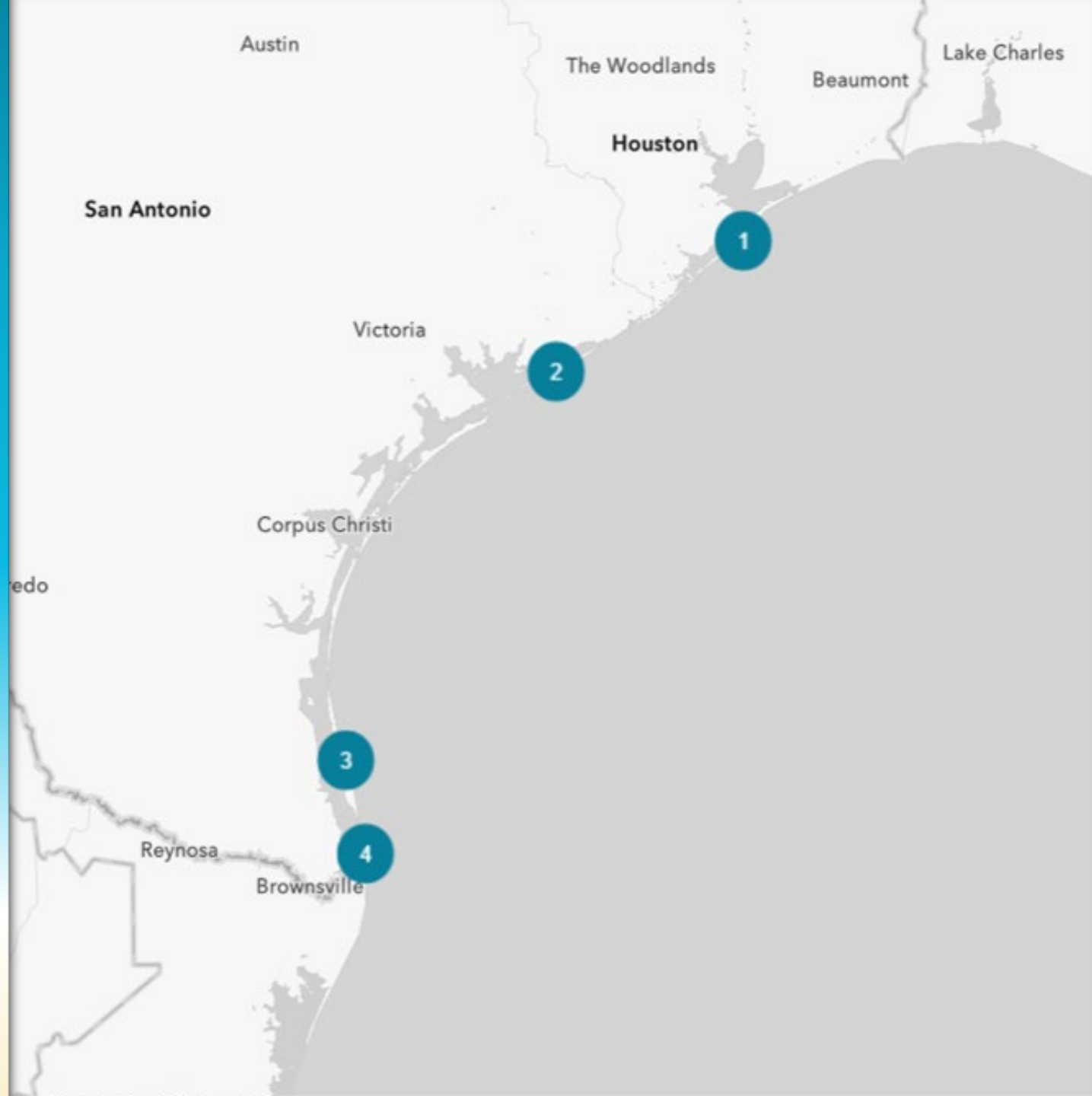
Galveston

Babe's Beach



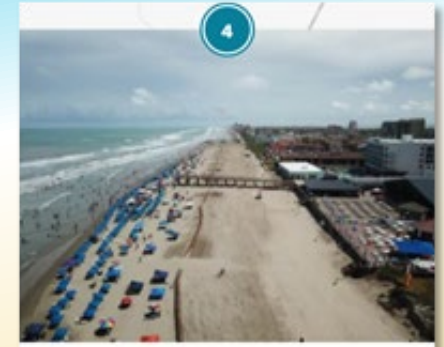
Mouth of the Colorado River

Matagorda Beach



Channel to Port Mansfield

Padre Island National Seashore Beach



Brazos Island Harbor

Isla Blanca Beach and Beneficial Use Placement Area No. 5, City of South Padre Island



Babe's Beach Nourishment

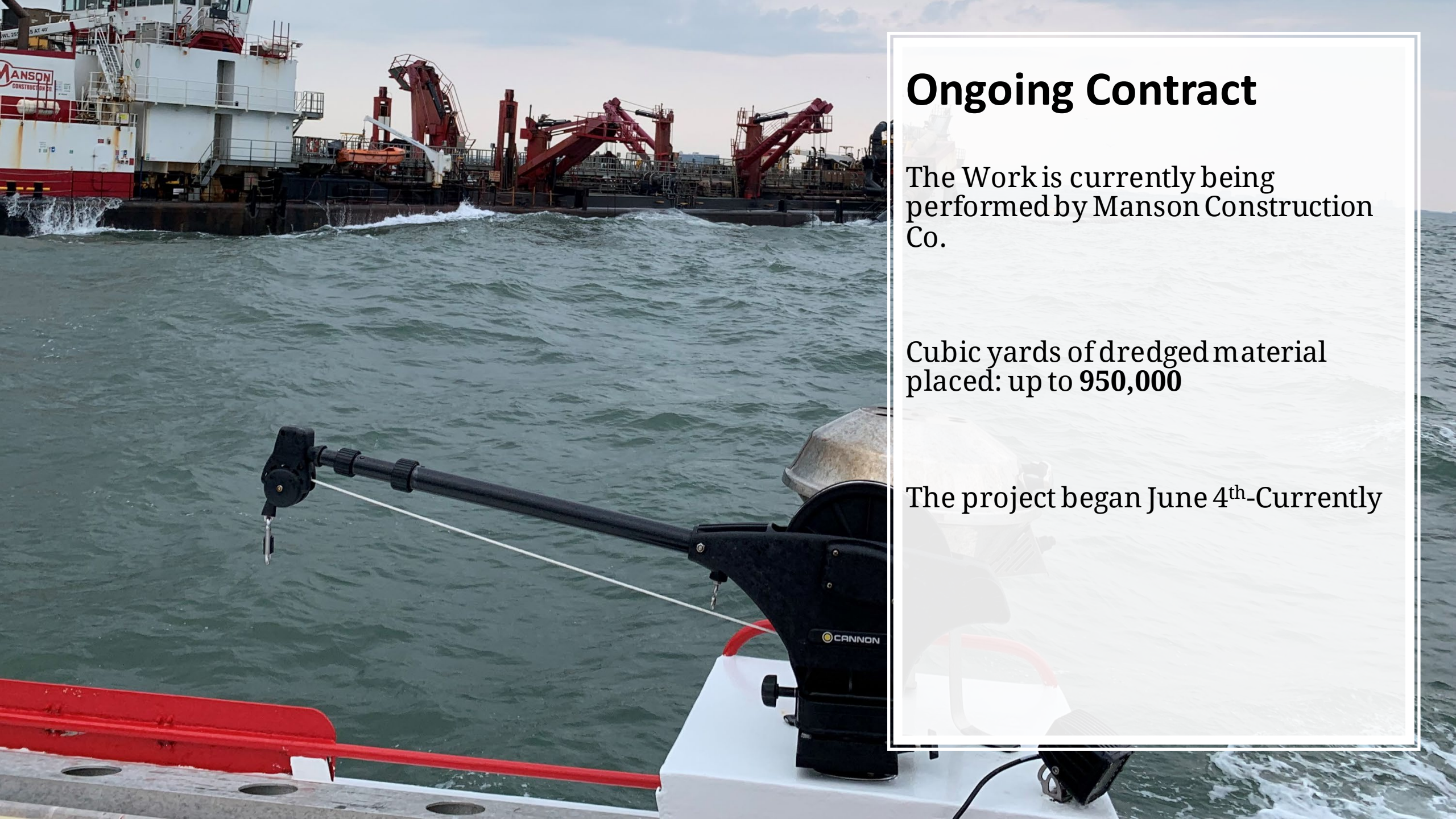
Babe's Beach was created in 2015 and nourished in 2019 and 2021.

Approximately **490,000 CYs** were placed in 2019.

The Galveston District partnered with the Texas General Land Office, the Galveston Park Board of Trustees, and the City of Galveston

Dredged material from the Galveston Harbor and Houston Ship Channel are used to protect Galveston's seawall, add coastal resiliency, and nourish the popular beach.





Ongoing Contract

The Work is currently being performed by Manson Construction Co.

Cubic yards of dredged material placed: up to **950,000**

The project began June 4th-Currently



Matagorda Beach Nourishment

The beach west of the Mouth of the Colorado River was nourished in 2020 and 2021.

In both 2020 and 2021, the Galveston District dredged the entrance channel of the jetty inlet, while in 2020, the contractor dredged the main channel.

Cubic yards of dredged material placed: **445,044** CYs in two years.





Padre Island National Seashore

1

2



Port Mansfield Bird Island

Padre Island National Seashore Beach Nourishment

- Padre Island National Seashore and USACE have been coordinating to find options to address PINS request for beach nourishment.
- After Hurricane Harvey, the Port Mansfield area was awarded supplemental recovery funds, making this beneficial use project possible.
- The project placed **972,480** cubic feet of dredged material.
- The beach is used by nesting seabirds including Piping plover, and red knot.





Port Mansfield Bird Island

The 2021 Channel to Port Mansfield: Bird Island project nourished an existing bird island for colonial nesting waterbird species.

The contract followed a previous contract that constructed the breakwater.

The project placed **1,552,240** cubic yards of dredged material.

Commonly seen colonial waterbird species spotted on the Texas coast include gulls, terns, egrets, black skimmers, roseate spoonbills, and brown pelicans.



Nourishment of Isla Blanca Beach and Beneficial Use Placement Area No. 5, City of South Padre Island

It is difficult to time navigation projects to coincide with environmental and recreational windows.

All parties worked collaboratively together to find an economical, cost-effective, and ecologically responsible solution.

Cubic yards of dredged material placed 55,248



Steps to Success

The 2021 Brazos Island Harbor beach nourishment project was an example of successful coordination that implemented strategies to minimize impacts to endangered species:

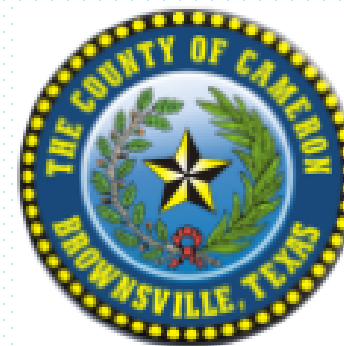
- Trawling before and during the project
- Coordinating with agencies
- On- and offboard endangered species monitoring



The Future of Beneficial Use

- Historically, Galveston District has beneficially used approximately 23% of dredged material.
- The district hopes to utilize 30% of dredged material for beneficial use projects such as beach nourishment in the future.
- Operations Division is in the development stage of creating a beneficial use website and tool to consolidate planning resources for partners and stakeholders.

Partners and Stakeholders



Construction
Supervised By:



US Army Corps of
Engineers
Galveston District

Sponsored By
Office of the
District Engineer

Pipeline Dredging
Port Mansfield Channel
W912HY20C0021

CAUTION - Dredge Pipeline on Beach
Please Stay Clear of Construction Operations

Contractor:
Orion Marine
Construction, Inc.
Port Lavaca, TX.



Contacts:

Lisa Finn-
Environmental Team
Lead.

- Email: Lisa.M.Finn@usace.army.mil

