

GSMFC Artificial Reef Subcommittee, Fall 2023

Texas Artificial Reef Program

Updates

# RESTORATION AND ARTIFICIAL REEF TEAM (RART) UNDER THE ECOSYSTEM RESOURCE PROGRAM (ERP)



## **ESTUARINE**

- 2 Upper Coast
- 1 Lower Coast
- Oysters, marshes, living shorelines, breakwaters, etc.











## **NEARSHORE/OFFSHORE**

- 1 Upper Coast
   Coordinator (R2R +
   Nearshore)
- 1 Lower Coast Coordinator (DSO + Nearshore)

# RIGS TO REEFS

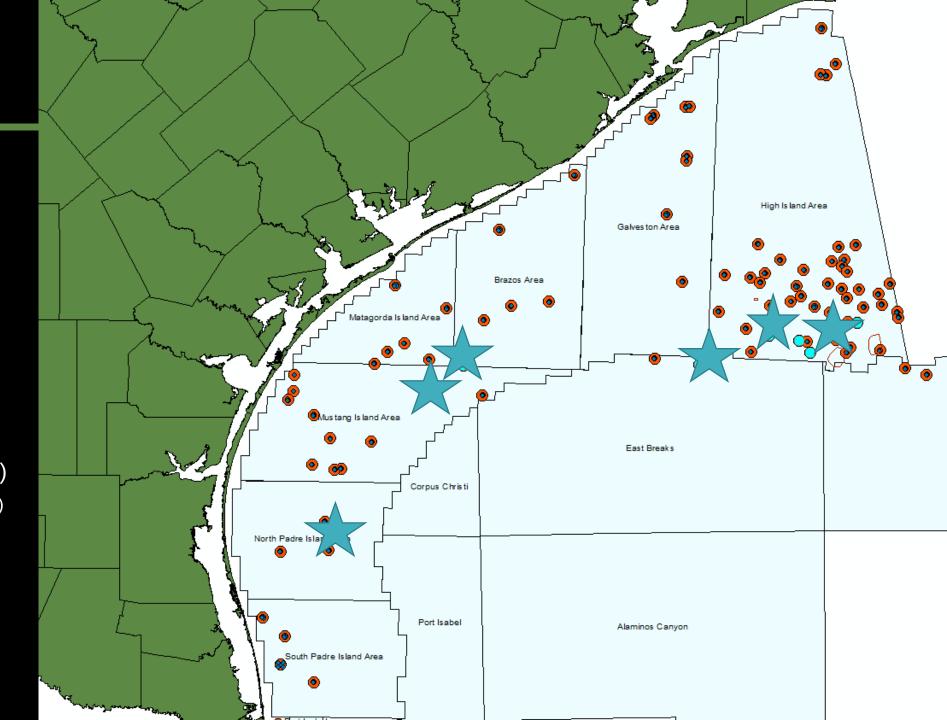
Project Updates



# UPCOMING R2R

**20 STRUCTURES** 

- Apache (Fieldwood Assets)
  - 10 platforms in High Island
- Shell
  - 2 platforms in Padre Island
- Talos
  - 1 platform in Mustang Island
- BP
  - 1 platform in East Breaks
- Quarter North?? (Chevron??)
  - 2 Platforms in East Breaks (??)
  - 1 Platform in High Island (??)
  - 2 Platform in Brazos Area (??)



# **NEARSHORE REEFS**

Project Updates





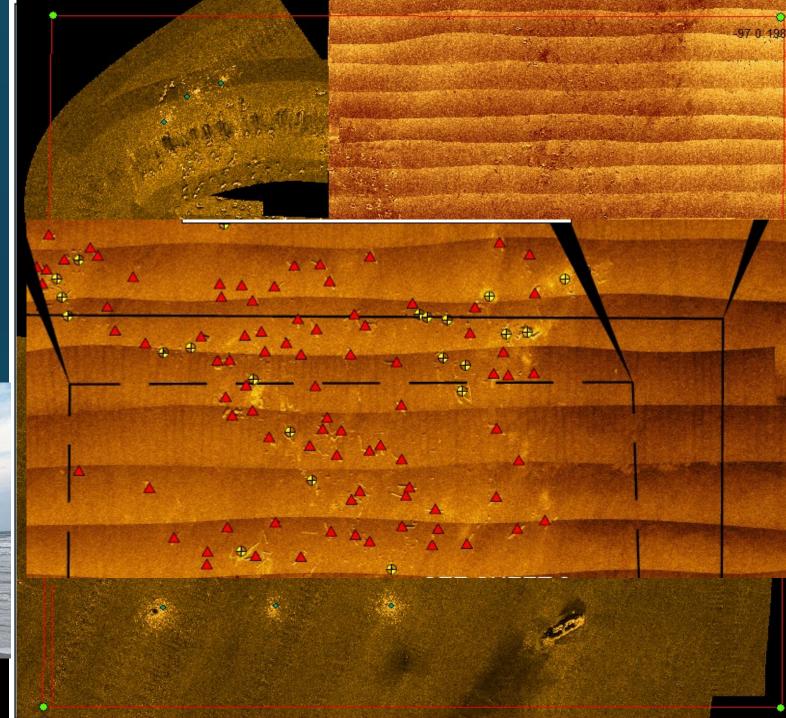
# Sabine Reef

- Partnership with Friends of Sabine
  - COMPLETED 2022:
    - 100 plates and 100 pyramids
      - Coastal Management Program funding
      - ~\$250k
  - HI-20 is "full"
  - Permitting two new sites for partners
    - HI-54 (shallow)
    - HI-54 (deep)
  - Outreach signage at Sabine Boat Ramp

## **BOB HALL PIER**

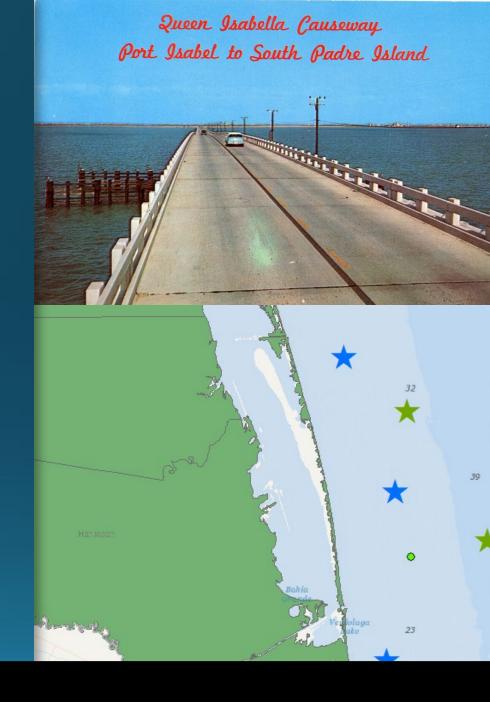
- Summer 2022
- Material placed at MU-775





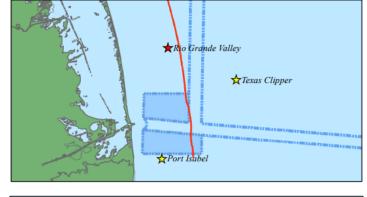
# QUEEN ISABELLA

- GLO and TPWD partnership
- Gulf of Mexico Energy and Security Act (GOMESA) Project Funding
- 105 bridge spans and 421 pilings
- 3 barge loads of deck material
- 320-acre site (permit pending)



## Rio Grande Valley Nearshore Reef Site (PS-1105) - 1650 Acres





# 10.450

## Nearest Point to Point Distances

Distance Offshore: 7.4 nm Safety Fairways: 3.4 nm Anchorage: 7.7 nm Oil & Gas Pipelines or Easement: 8.4 nm State and Federal Boundary: 1.7 nm Obstruction or Platforms: 11.3 nm Nearest Natural Bank: 34.9 nm Distance from Jetties: 13.9 nm

29 March 2021 For informational purposes only

## Legend

other TPWD Reef Sites

Avoidance Area - no material

 Anchorages Vessel Deployed

## Water Depth: 65 ft

Questions: ArtificialReefs@tpwd.texas.gov

GOM Federal / State Line

# Valley

Rio Grande

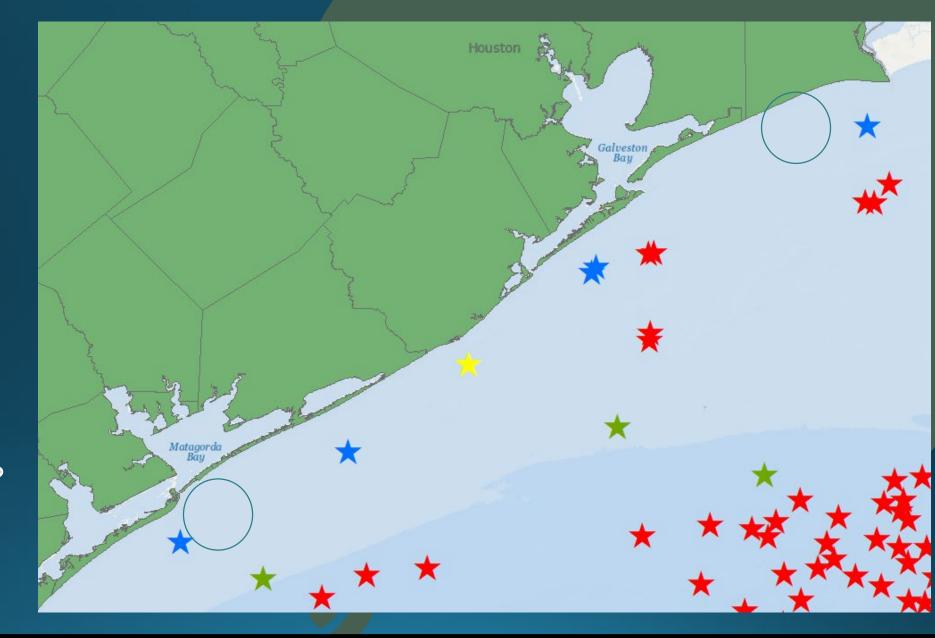
- Partnership with Friends of Rio Grande Valley
  - 1,650-acre reef located 7.4 nm offshore and 13.9 nm from Port Isabel Jetties
  - Water depths 55 75 ft
  - Shrimp boat, tug boat
  - 15,000 tons of concrete rail ties
  - 5,000 tons of concrete
    - 8,000 cinderblocks
  - 300 concrete pyramids
  - 250 low-profile modules

## • 2023 Update

- STILL Working on renewing **USACE** permit
  - 2 shrimp boats awaiting deployment
  - Potentially permitting a new site?

## RESTORE

- \$2,100,000
- Plates and pyramids
  - Port O'Connor
    - Existing reef site?
  - Sabine
    - New reef site?
  - RGV
    - Rail ties
- Deployment in 2025?





# Monitoring and Research

- Summer Cruise 2024
  - Lionfish removal
  - eDNA
  - Coral surveys
  - "Kraken" surveys
  - Natural/artificial reef connectivity
  - Pre-reefing surveys
  - Long-term stations
- Switch to "directed" monitoring rather than random sampling
- Partnership with Flower Gardens Banks NMS
  - + Buoys!

# Current Challenges (and Solutions)



NMFS Consultation



**USACE** Permitting



**Asset Hot Potato** 



Resources