

# 2023 CMP – CEPRA Funding Opportunity Workshop

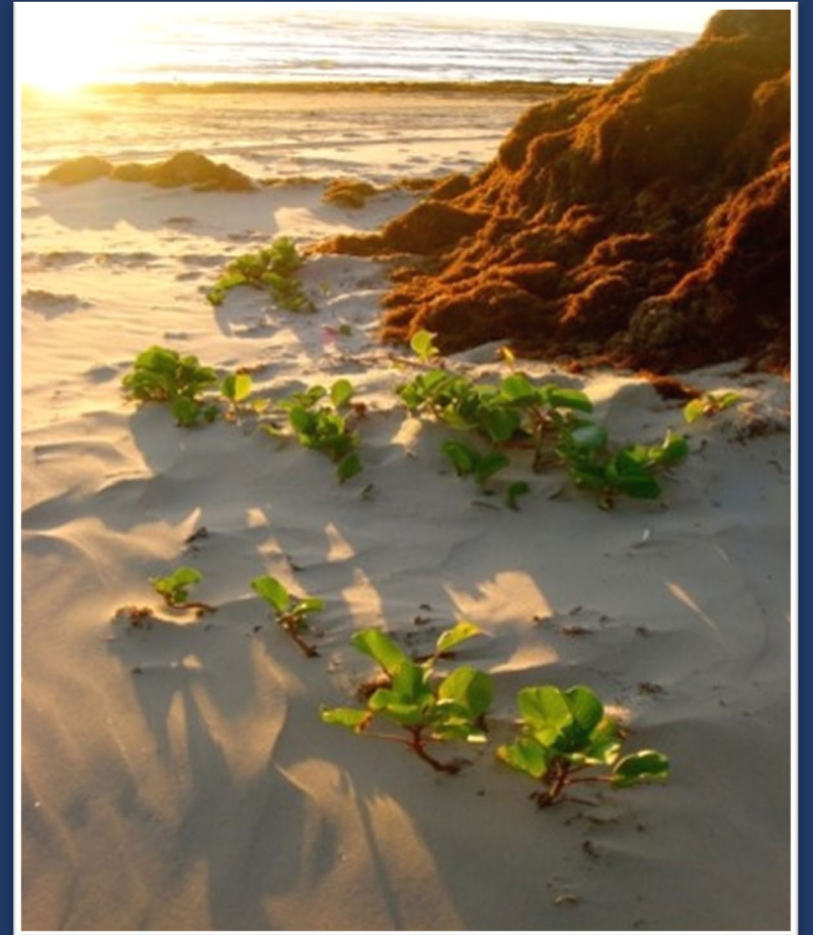


Texas General Land Office • Commissioner Dawn Buckingham, M.D.

# Agenda

---

- **Introductions**
  - Texas Coastal Resiliency Master Plan
  - Oil Spill Funding Opportunity
  - CMP Grant Overview
  - CMP Application Video
- 15 Minute Break
- CEPRA Funding Opportunity Overview
- CEPRA Application Video
- Table Discussions
- Report Out



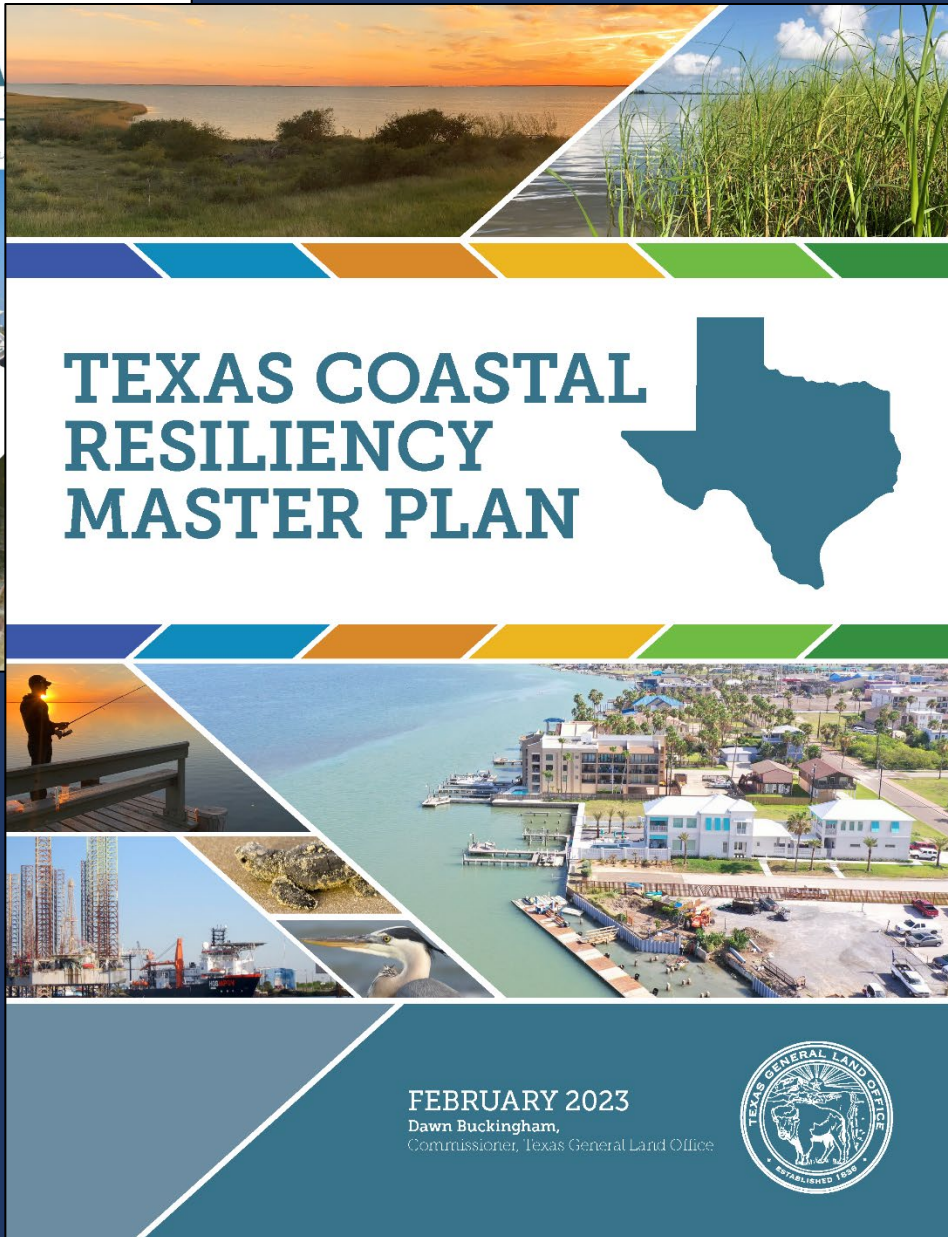
# The 2023 Texas Coastal Resiliency Master Plan



CEPRA & CMP Funding Workshops  
Spring 2023

Joshua Oyer, Coastal Resiliency Program Manager





# Goals and Objectives

1. Identify, select, and fund projects that address the coastal vulnerabilities to restore, enhance, and protect the Texas coast
2. Adapt priorities to accommodate changing conditions through future iterations
3. Communicate the environmental and economic value of the Texas coast to state and national audiences





# Role of this Plan

---

## What this Plan is

- A list of high-priority coastal resiliency initiatives and projects
- An opportunity for the GLO to align coastal resiliency priorities with feedback from stakeholders, coastal experts, and other public agencies

## What this Plan is NOT

- An automatic funding mechanism
  - \* Tier 1 projects are typically prioritized for GLO funding programs*
- A completely comprehensive list of the coastal resiliency projects that are necessary coastwide



## Concurrent State and Federal Efforts on the Texas Coast

### LEGEND

**TEXAS  
COASTAL  
RESILIENCY  
MASTER PLAN**

Led by GLO



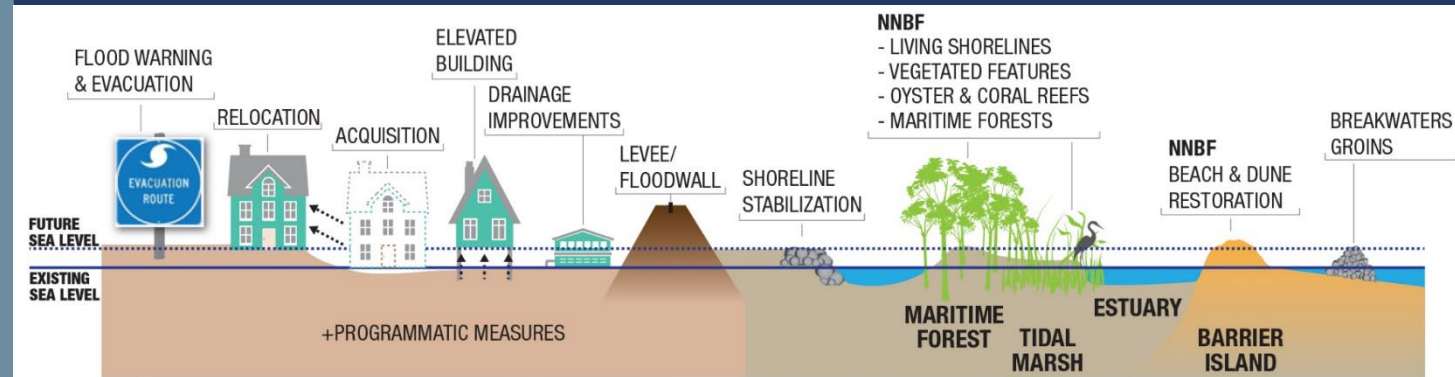
Led by USACE



# Complementary Planning

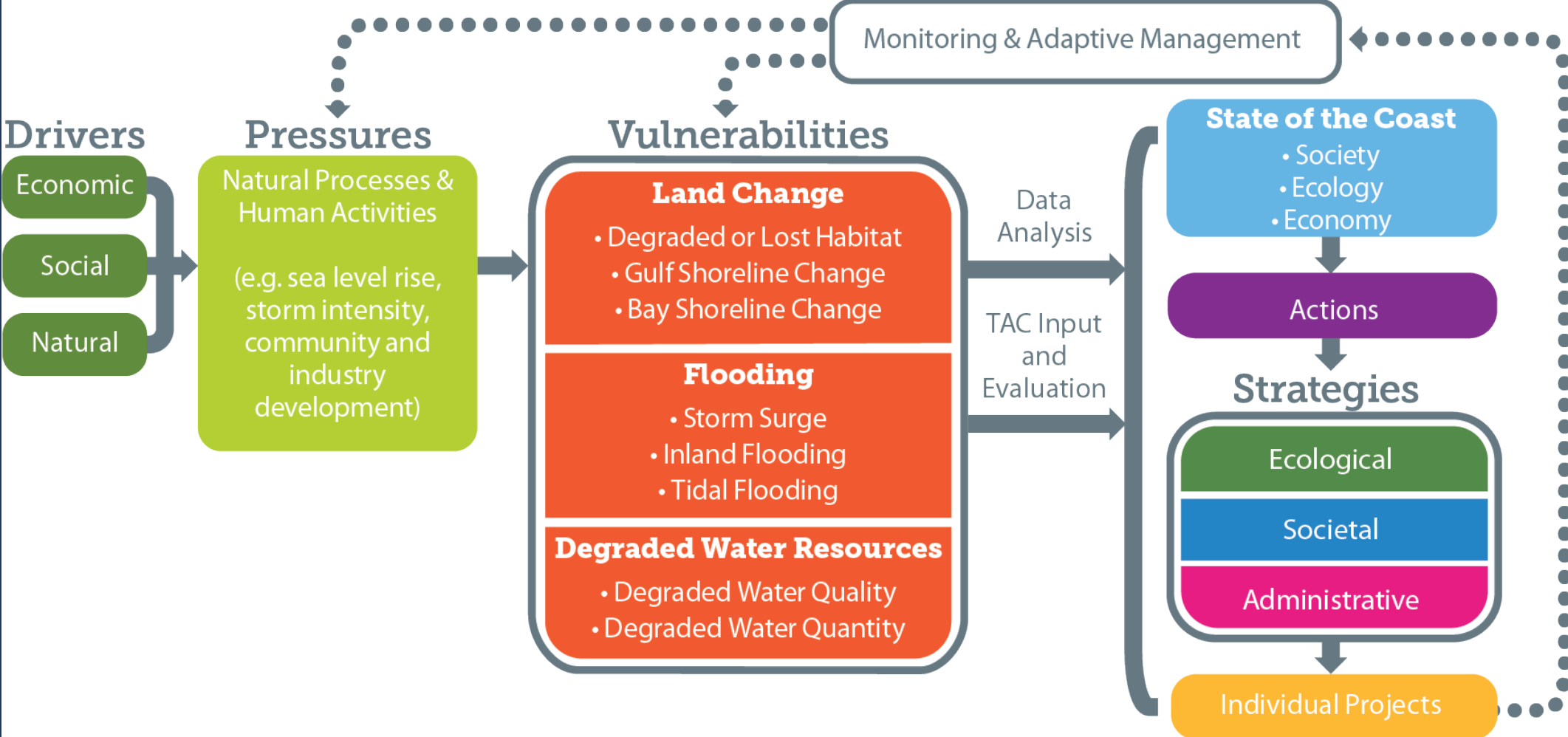
## Coastal Texas Program

- Galveston Bay Storm Surge Barrier System
- South Padre Island Beach Nourishment Project
- Coastwide Ecosystem Restoration (8 projects)

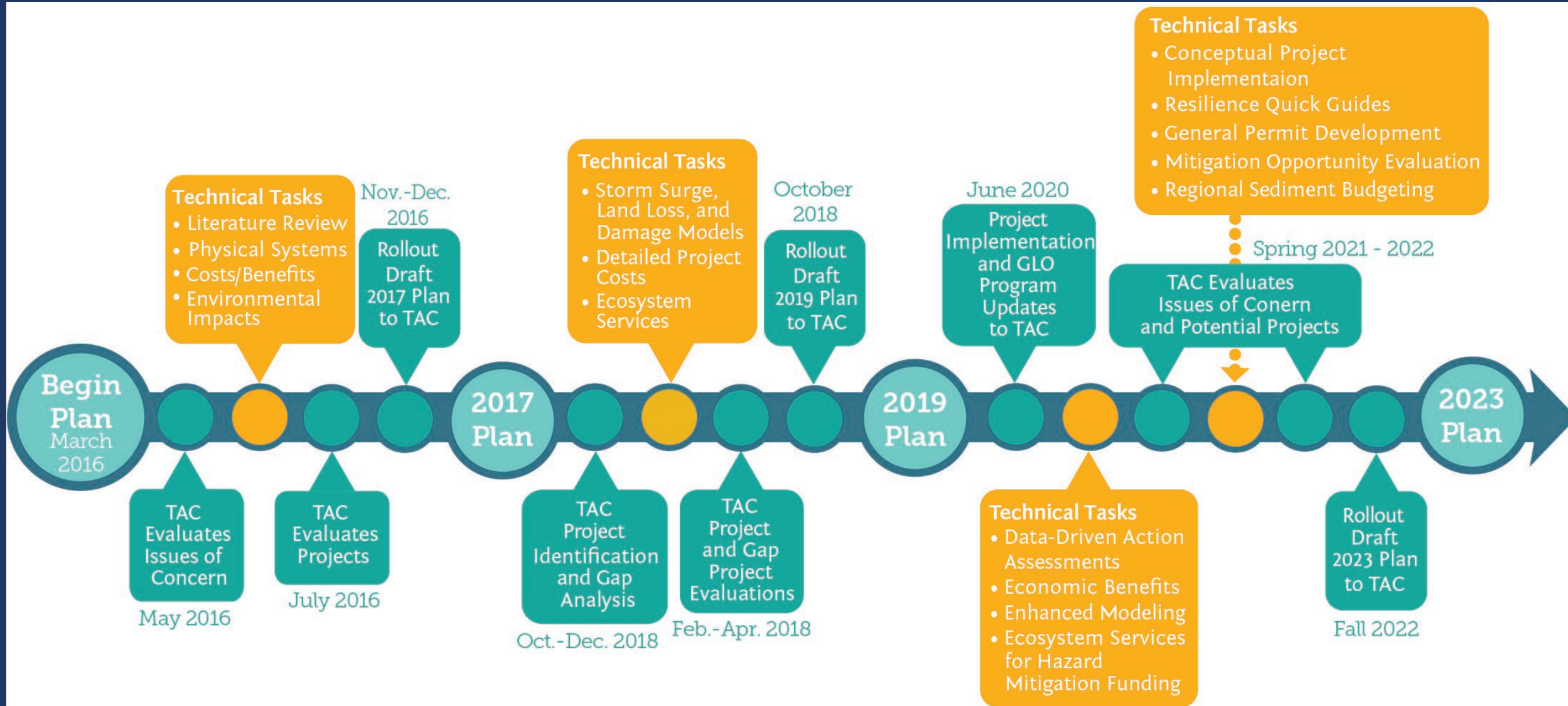




# Coastal Resiliency Framework



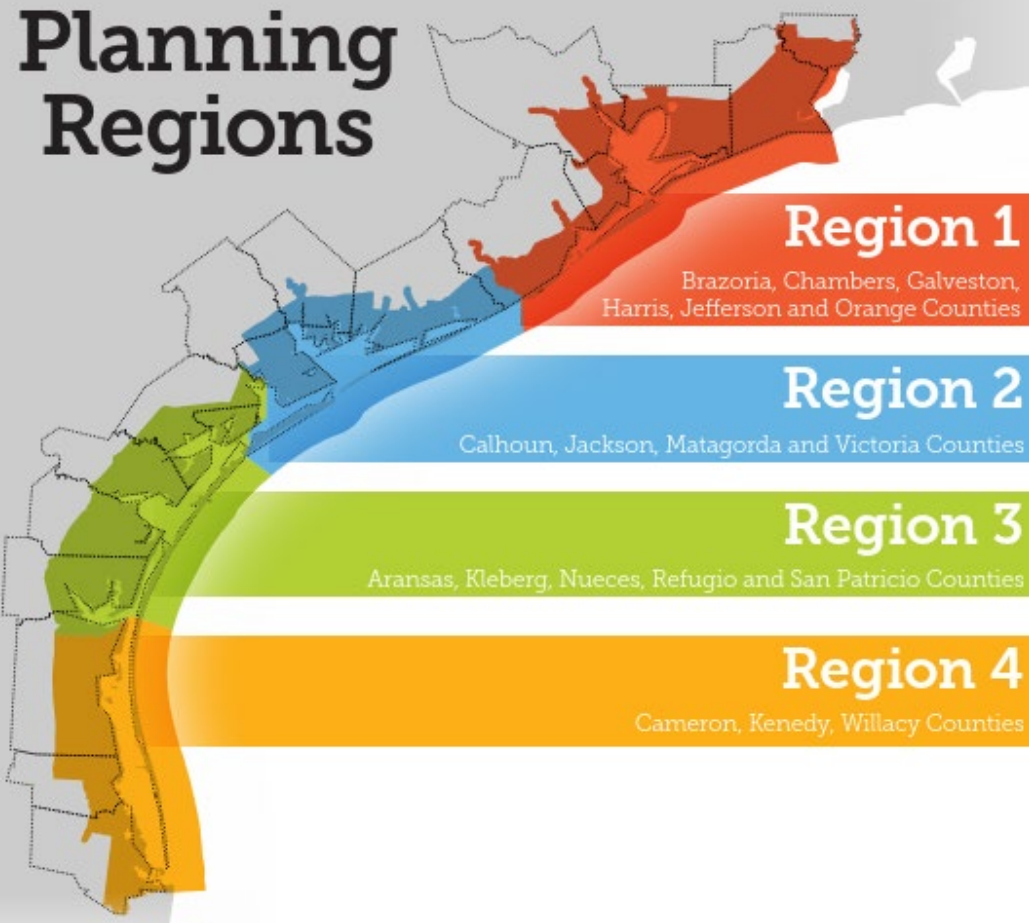
# Stakeholder and Data Informed





# Stakeholder Input

## Planning Regions



### Technical Advisory Committee (TAC)



#### Local Governments and Community Leaders

- Elected officials
- Local government staff
- Councils of government (COGs)
- Metropolitan Planning Organizations (MPOs)
- Other local and regional community leaders



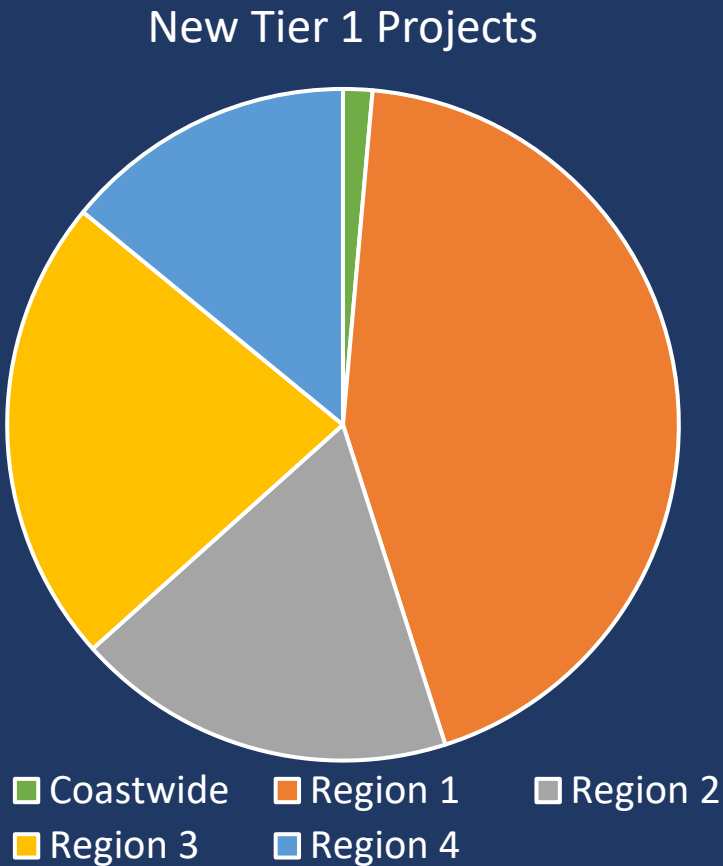
#### Coastal Experts and Practitioners

- State agencies
- Federal agencies
- Universities
- Ports and navigation districts
- River authorities
- Non-profits
- Other technical partners



# TAC Evaluation Statistics (New)

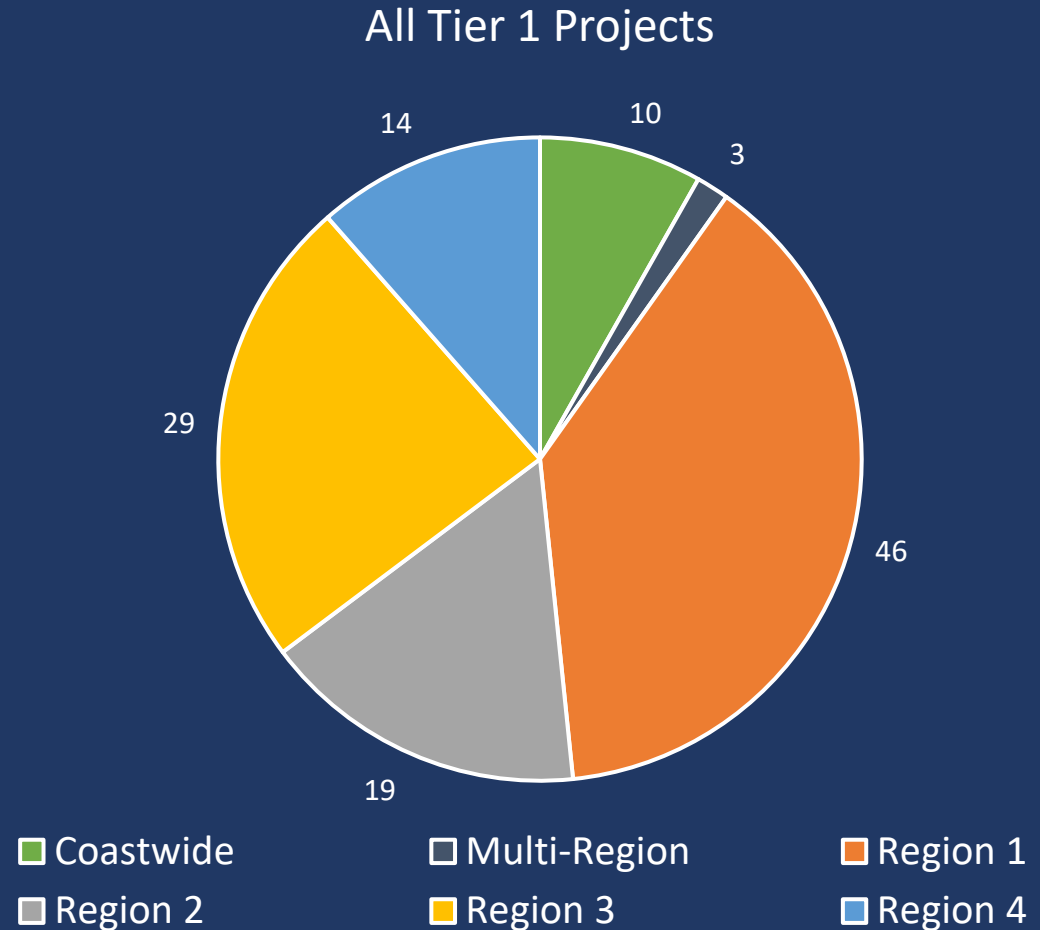
Region	Survey Participants	No. Evaluated Projects	No. T1 Projects (New)
Coastwide	107	11	1
1	66	52	31
2	45	38	13
3	63	50	16
4	32	17	10



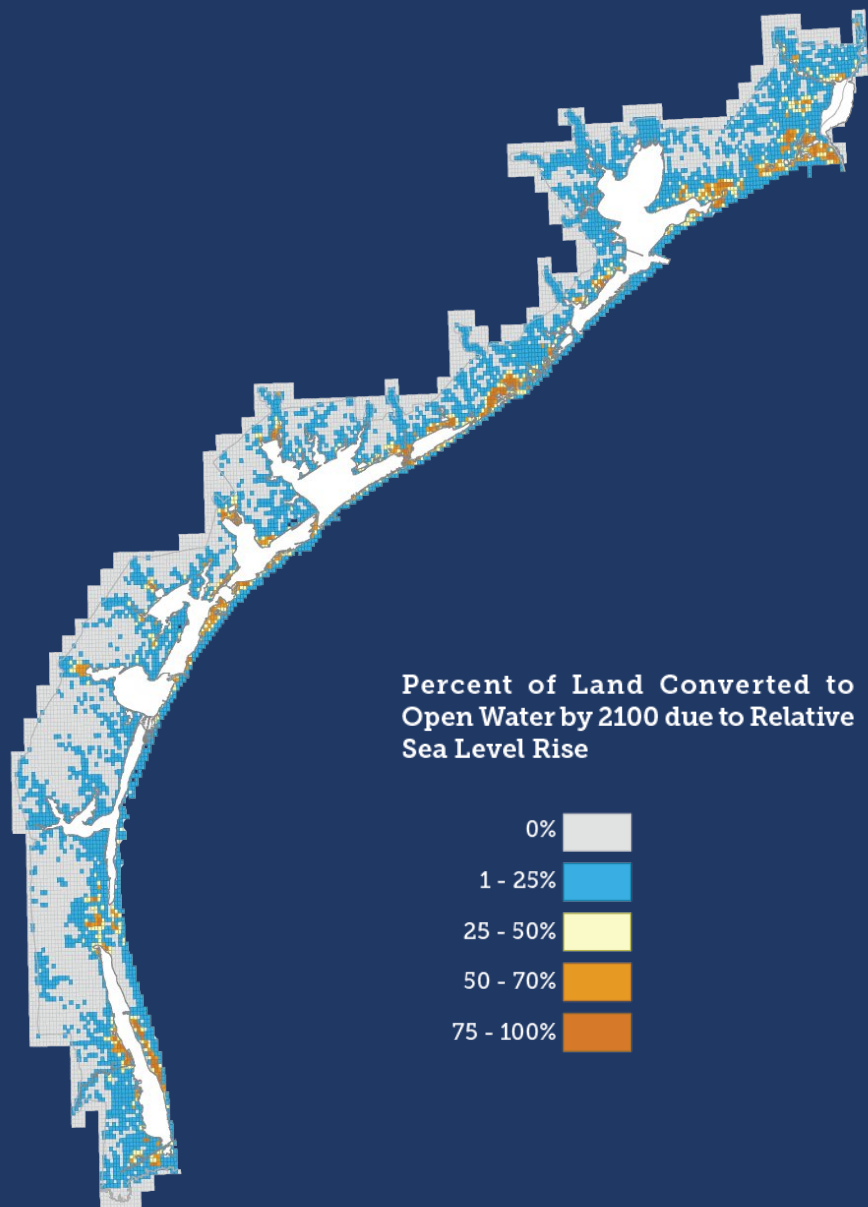


# TAC Evaluation Statistics (All Projects)

- 50 carryover projects from 2019
- 71 new projects from June 2022
- 121 Tier 1 projects for 2023



# Landscape Change Modeling



## 2023 Modeling Enhancements

- ✓ Higher resolution
- ✓ Newer, better elevation information
- ✓ More sea level rise scenarios modeled
- ✓ More storms modeled
- ✓ More comprehensive project modeling
- ✓ Development of geohazards and storm surge vulnerability maps





## Profile-View

Profile view showing wetland components and typical elevations relative to tidal datums.

### HIGH WAVE ENERGY WETLAND (>2 FT WAVES)



### LOW WAVE ENERGY WETLAND (<2 FT WAVES)

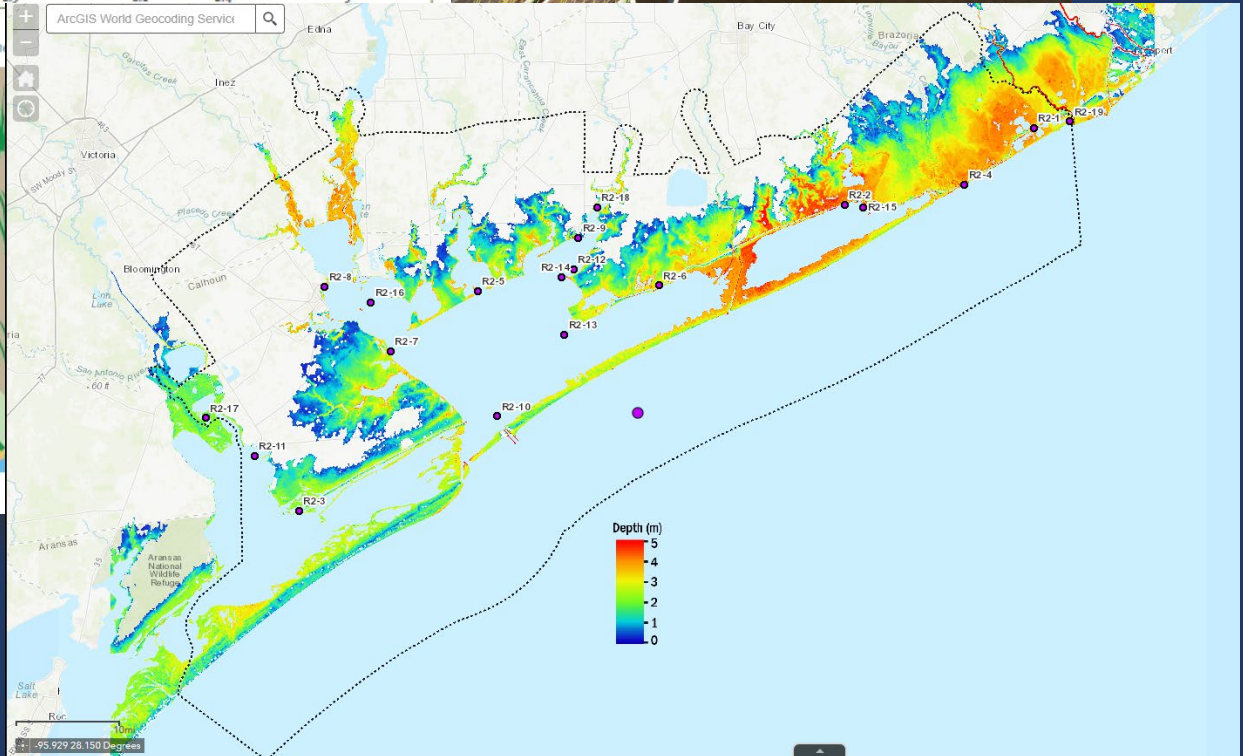
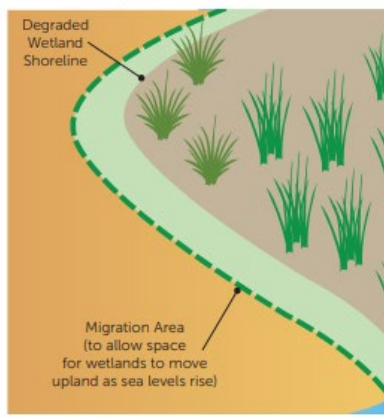


Wetland habitats are estimated to tolerate (by being able to migrate or withstand) a certain depth of RSLR. Estimated amounts of RSLR, in feet, that can be tolerated by Texas wetlands are shown in the table below. These values show the average change in water depth across the whole coast that generates a landcover change for the different wetland types, based on the Sea Level Affecting Marshes Model developed by the Harte Research Institute for the 2023 Texas Coastal Resiliency Master Plan. The model uses mean tide level as the tidal datum.

Wetland Type	Transitional Salt Marsh	Regularly Flooded Marsh	Mangrove	Tidal Flat	Irregularly Flooded Marsh
RSLR Depth (feet)	3.4	2.5	6.1	2.4	3

## Plan-View

Plan view showing wetland components relative to shoreline



# Communication

- Story Maps
- Modeling Data Viewers
- Resiliency Design Guides
- Ecosystem Services for Hazard Mitigation Tool

[www.glo.texas.gov/crmp](http://www.glo.texas.gov/crmp)



# Thank you!

---

Joshua Oyer

Coastal Resiliency Program Manager

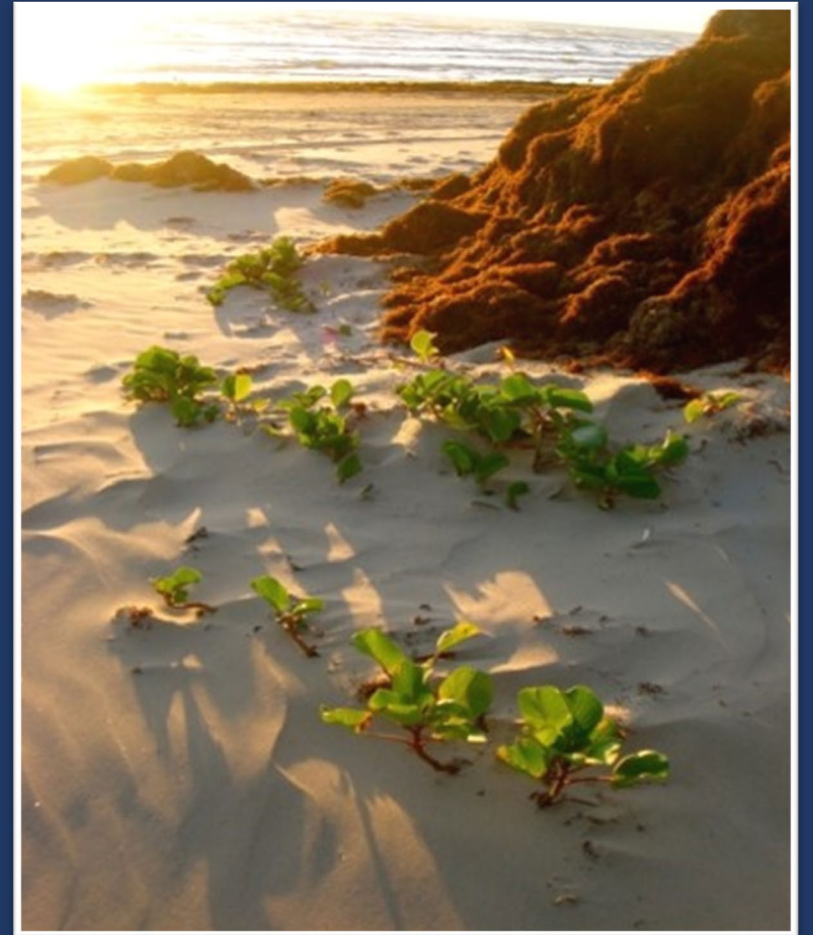
[joshua.oyer@glo.texas.gov](mailto:joshua.oyer@glo.texas.gov)

512-475-5130

# Agenda

---

- Introductions
- Texas Coastal Resiliency Master Plan
- Oil Spill Funding Opportunity
- CMP Grant Overview
- CMP Application Video
- 15 Minute Break
- CEPRA Funding Opportunity Overview
- CEPRA Application Video
- Table Discussions
- Report Out





# Oil Spill Division - R&D Program Funding Opportunity

---

- Established by The Oil Spill Prevention & Response Act of 1991 (OSPRA)
- \$1.25 million allocated for R&D annually through legislative appropriation
- Agreements to collaborate with State Institutions of Higher Education for:
  - Spill Discharge Prevention & Response Technology
  - Response Training
  - Wildlife and Natural Resource Rescue and Rehabilitation
  - Development of Computer Models to Predict the Movements and Impacts of Oil Spills
  - Other purposes consistent with the furtherance of OSPRA
- Coordinated with government and industry partners to minimize duplication of effort
- Funded research areas include bioremediation, HF Radar, remote sensing and mapping projects, mapping of background oil concentrations along the Texas coast, wetland restoration from oil spill impacts, and wave glider research



# FY22-FY23 Funded Projects

- Normalizing Electronics in the Texas Automated Buoy System for consistent data collection
- Characterization of the Texas Coastal Current
- Increased toxicity of dispersants and oil mixtures due to sunlight
- Connectivity: Predicting the exchange of oil between Texas bays and the Gulf of Mexico
- Oil-specific detection capability of canines to differentiate between background oil and newly deposited oils on the Texas coast
- Fate and degradation of residual oils and tar balls in the marine environment
- Development of an Unmanned Surface Vehicle system for oil spill detection and characterization

# FY24-25 Funding Areas of Interest

## **Oil Spill Detection and Environmental Data Collection:**

- Environmental data collection technologies capable of operations 24 hours a day
- Development of readily deployable technologies (drifters, current meters, wave gauges, stream gauges, etc.) to provide near real time information for spill response
- Development of new technologies for use with UAV/ drone systems in field and environmental data collection, and dissemination of data for spill response and preparedness



# FY24-25 Funding Areas of Interest

---

## **Spill Countermeasures:**

- In-situ burn toxicity and bioavailability, including potential benthic community effects
- Models of physical processes to predict the fate and transport of sinking residues
- Research into the testing of dispersants inclusive of efficacy, toxicity and fate

## **In and On-water Containment and Recovery of Spilled Oil:**

- Development of equipment specific to the containment and recovery of both unconventional oils and of submerged oils
- Evaluation of the physical interaction of unconventional oils with Gulf of Mexico shoreline types (sand beaches, salt marshes, tidal flats, etc.)

# FY24-25 Funding Target Dates

- Request for Applications funding announcement *target* date: Mar 01, 2023
- RFA will be posted to the Texas Register, eGrants, and to the GLO website
- Funding Award Notice: Jun 30, 2023
- Earliest Start Date: Sep 01, 2023

Brent Koza  
State Scientific Support Coordinator  
Research & Development  
Texas General Land Office  
Oil Spill Prevention & Response  
361.438.4928

[Brent.koza@glo.texas.gov](mailto:Brent.koza@glo.texas.gov)

<https://www.glo.texas.gov/coast/oil-spill/funding-opportunity/index.html>

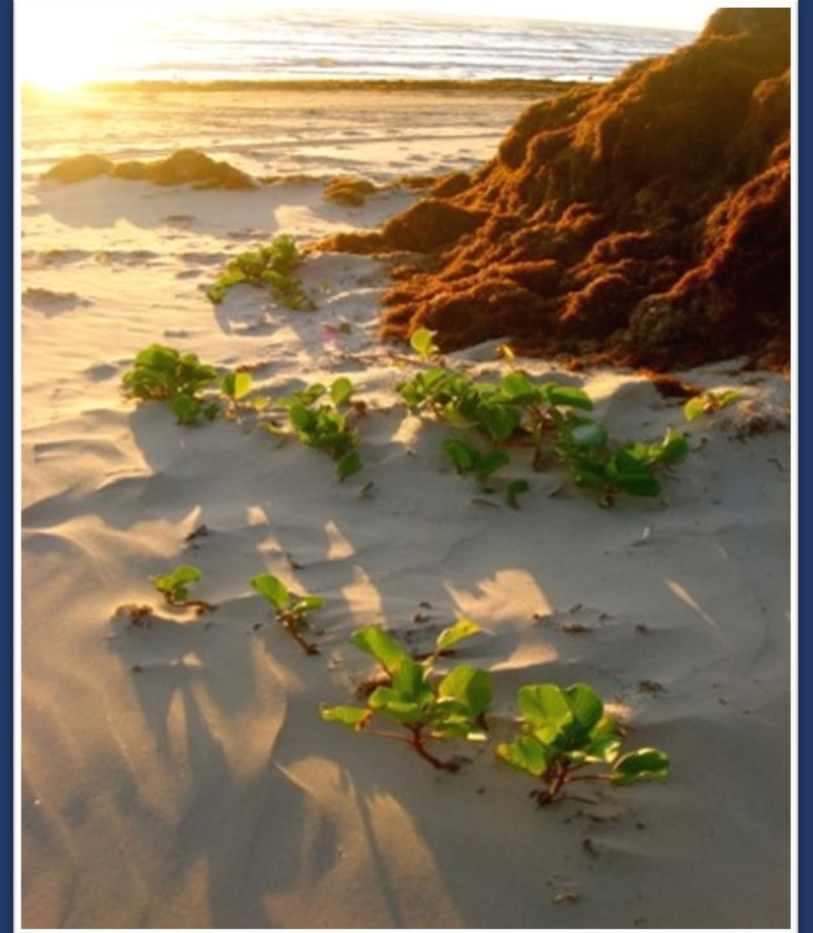
Texas General Land Office  
Commissioner Dawn Buckingham, M.D.



# Agenda

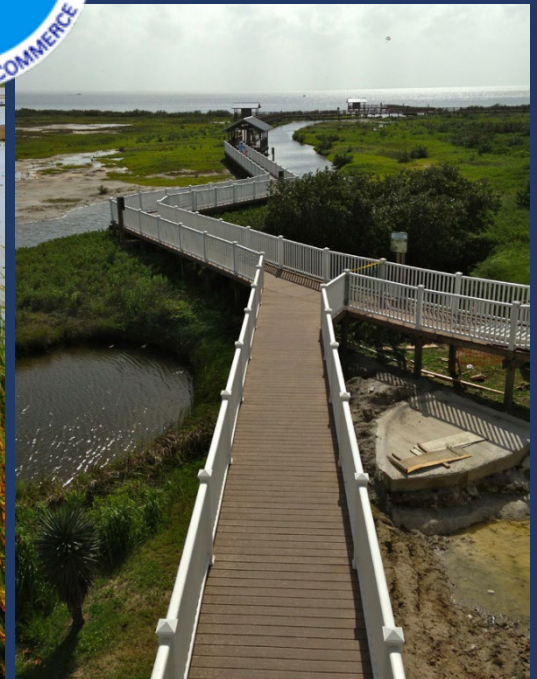
---

- GLO Staff Introductions
- Texas Coastal Resiliency Master Plan
- Oil Spill Funding Opportunity
- **CMP Grant Overview**
- CMP Application Video
- 15 Minute Break
- CEPRA Funding Opportunity Overview
- CEPRA Application Video
- Table Discussions
- Report Out



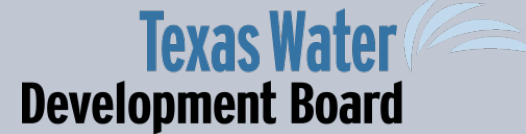


# Texas Coastal Management Program



Texas General Land Office · Commissioner Dawn Buckingham, M.D.

# Coastal Coordination Advisory Committee



Commissioner-appointed committee members include a coastal resident representative, coastal business representative, agriculture representative, and a local elected official.





# CMP Responsibilities

## 1. Grants

- Administer grants funded by NOAA

## 2. Consistency Review

- Review permit applications for consistency with the goals and policies of the CMP (e.g., USACE)

## 3. Permitting Assistance

- Assist individuals, small businesses, and local communities with coastal permitting



# CMP Over The Years

- Cycle 1 – 24 complete
- Cycle 25 – 27 underway
- Cycle 28 projects start this year
- Cycle 29 applications can be submitted starting March 1<sup>st</sup>
- Awarded over \$47 million
- Funded 680 projects
- 440 non-construction projects
- 240 construction projects





# CMP Funding Sources – NOAA

---

- Texas receives approximately \$2 million a year from the National Oceanic and Atmospheric Administration (NOAA)
- 90% of the funds are passed through to local governments and entities to address environmental needs and promote sustainable economic development along the coast



# CMP Funding Sources - GOMESA

- State funds for coastal restoration projects
- Approximately 15% of the GOMESA funds allocated to CMP
- Phase I (2009 – 2016)
  - GLO received \$3.3 million
- Phase II (2017 – 2055)
  - \$40 million in April 2018
  - \$46 million in April 2019
  - \$76 million in April 2020
  - \$53 million in April 2021
  - \$55 million in April 2022
  - ??? in April 2023



# CMP Project Types

## §306/Non-construction Projects

Non-construction projects  
Coastal planning  
Research  
Data Collection

## §306A/Construction Projects

Construction or earth moving activities  
Land acquisition  
Preservation and restoration of coastal  
natural resource areas



# Project of Special Merit (GOMESA)

- Comprehensive, collaborative projects that involve a coordinated stakeholder effort
- Regional partners work together to benefit an entire area
- Fund the full scope of a project
- Preference given to projects that implement a Master Plan project





# Funding by Grant Type

The Land Commissioner is not obligated to award all funds.

Grant Type	Funding Source	Project Funding Range	Match	Total Funding Available	Project Length	Project Start Date
306/ 306A	Federal (NOAA)	\$400,000 max	40%	\$1.8 million	18 months	October 1, 2024
Project of Special Merit	State (GOMESA)	\$200,000 to \$5 Million	0%	~\$8 million	3 years	April 2024



# Eligible CMP Grant Applicants

- Incorporated cities
- County governments
- State agencies
- Public universities
- Subdivisions of the state
- Regional governments
- Galveston Bay Estuary Program
- Coastal Bend Bays and Estuary Program
- Nonprofit organizations
  - Registered §501(C)(3) or §501(C)(4)
  - Office located in Texas
  - Nominated by an eligible applicant





All projects must  
be located within  
the coastal zone.



# CMP Funding Priorities

- Public Access
- Coastal Habitat
- Nonpoint Source Pollution Control
- Sediment Management
- Coastal Storms and Hydrology

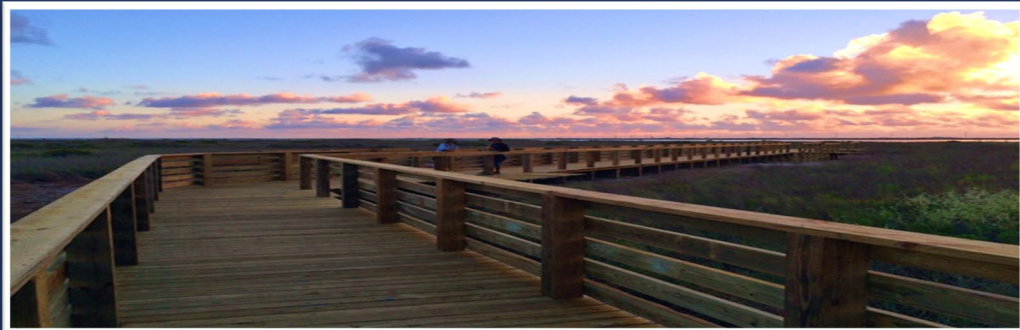




# 306A/Construction Eligibility Requirements

---

- Land must be publicly owned, leased, or protected through easement
- Projects must be maintained for the useful life of the project or at least 20 years
- Nonprofits are eligible to receive §306A funding for projects that involve construction, including marsh restoration, **if projects are on public lands**
- User fees should not be charged for access
- Public access facility must be open to public and comply with ADA



# 306A/Construction Prohibited Projects

---

- May not improve private or federally owned property
- Hard structures for erosion response, generally prohibited
- Mitigation projects UNLESS above and beyond permit requirements
- Purchasing sand for beach nourishment projects





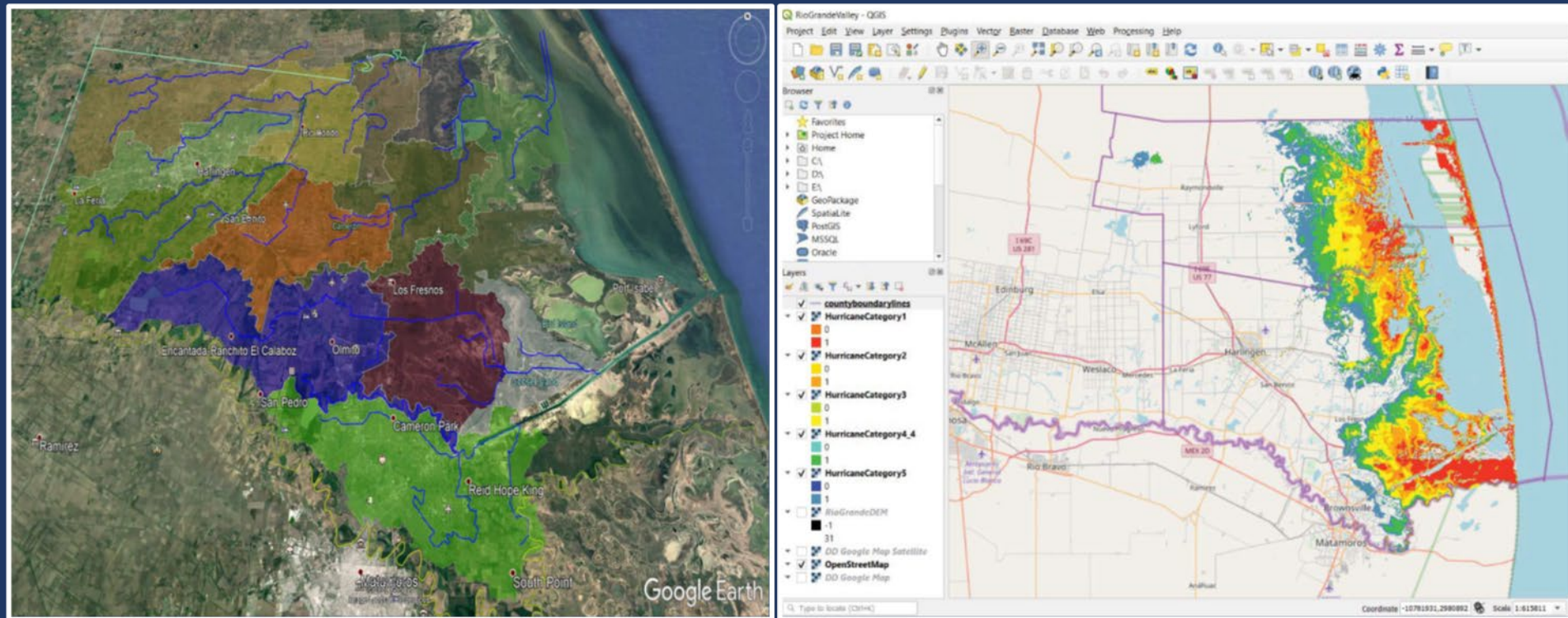
# Hanson Riverside County Park

Brazoria County - NOAA-Funded -Cycle 23



# Storm Surge Flood Maps Development for the LLM Coastal Emergency Management

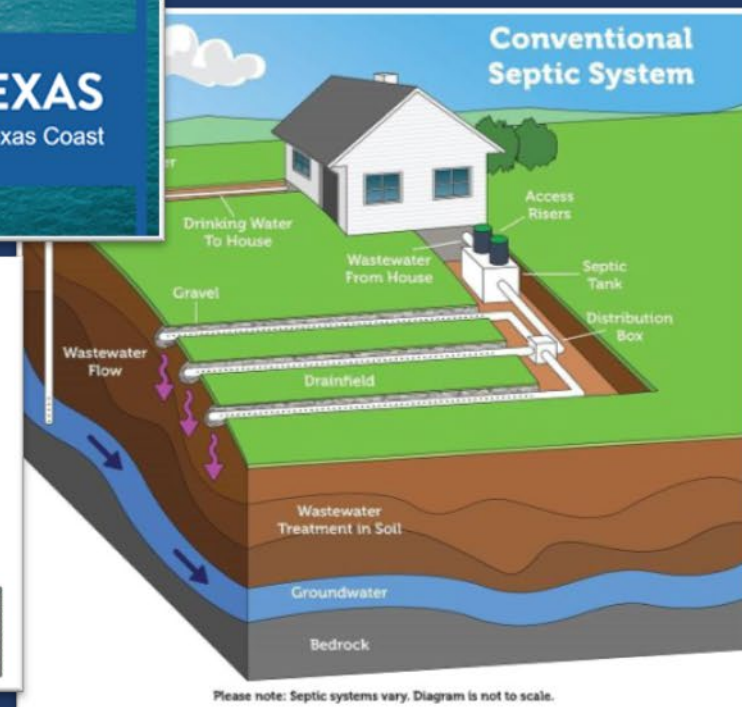
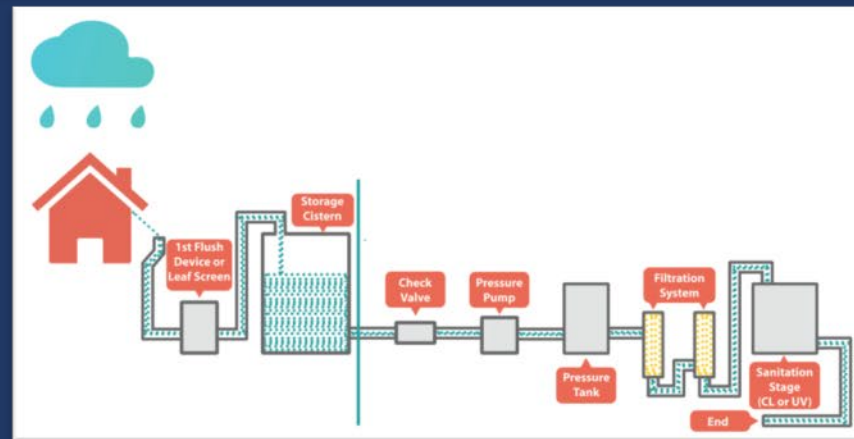
UT – Rio Grande Valley – NOAA Funds - Cycle 23





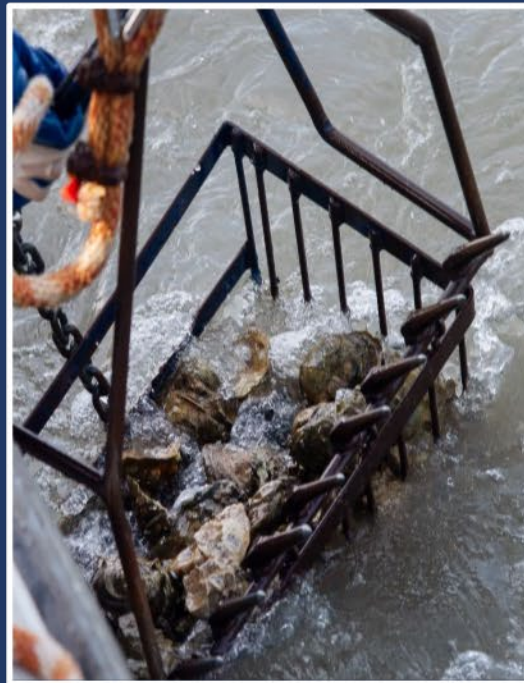
# Clean Coast Texas Collaborative

Texas State University – PSM - Cycle 27



# Closing the loop: Recycling Shells and Restoring Reefs

Texas A&M University – Corpus Christi  
PSM – Cycle 26



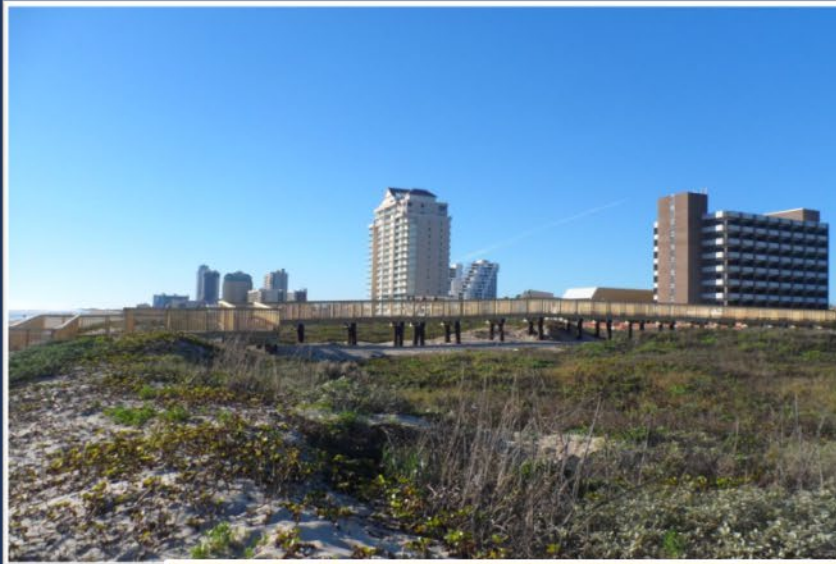
Texas General Land Office  
Commissioner Dawn Buckingham, M.D.





# South Padre Island Dune Walkovers

City of South Padre Island – NOAA Funds



Texas General Land Office  
Commissioner Dawn Buckingham, M.D.



# Key Dates

	<b>NOAA Funded Projects</b>	<b>Projects of Special Merit</b>
June 7, 2023	Pre-proposal due	Final application due
August 2023	Comments and notification letters sent	Comments and initial notification letters sent
October 4, 2023	Final application due	
December 2023	Review team meeting	Final notification letter sent
January/ February 2024	Commissioner decision and final notification letter sent	
April 2024	GLO submits projects to NOAA	Projects eligible to begin
October 2024	GLO receives NOAA approval and projects start	All projects have begun



# CMP Grants Team

Contact us with questions:

Julie McEntire  
Grants Director  
Julie.mcentire@glo.texas.gov  
(512) 475-0216

Andrea Walmus  
Financial Lead  
Andrea.Walmus@glo.texas.gov  
(512) 463-2572

Jessica Chappell  
CMP Project Manager  
Jessica.chappell@glo.texas.gov  
(512) 463-5818

Melissa Smuck  
CMP Project Manager  
Melissa.smuck@glo.texas.gov  
(512) 463-5577

**Application Portal link is here:**

<https://www.glo.texas.gov/coast/grant-projects/funding/index.html>



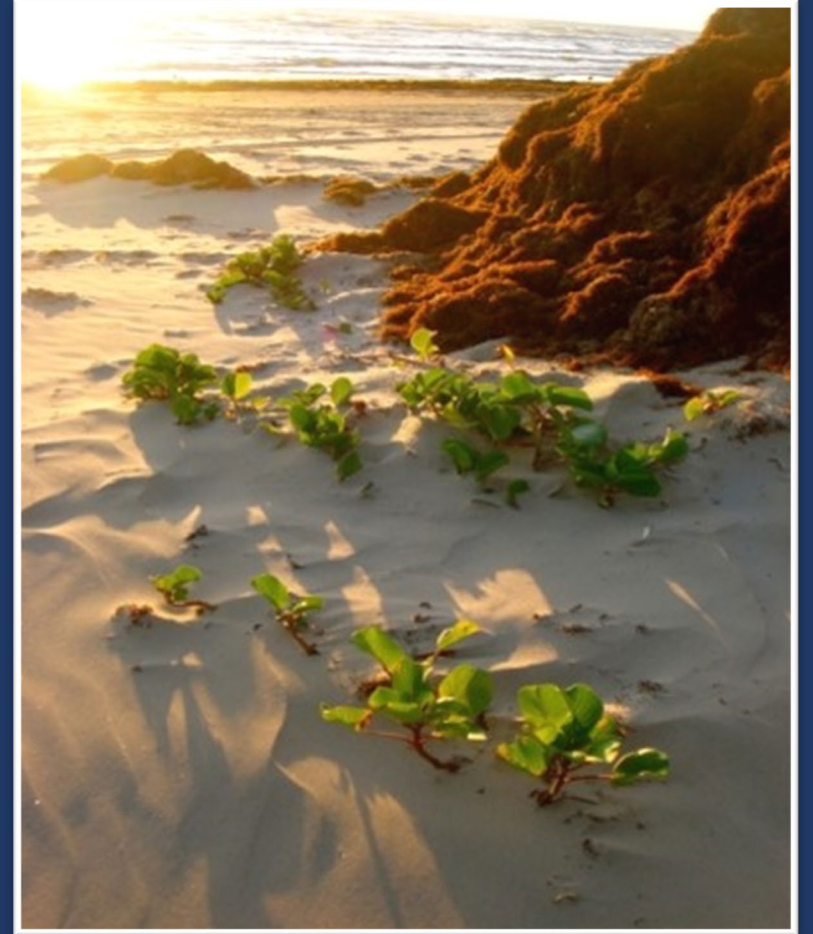
# Questions?



# Agenda

---

- GLO Staff Introductions
- Texas Coastal Resiliency Master Plan
- Oil Spill Funding Opportunity
- CMP Grant Overview
- **CMP Application Video**
- 15 Minute Break
- CEPRA Funding Opportunity Overview
- CEPRA Application Video
- Table Discussions
- Report Out



# CMP Funding Application Portal

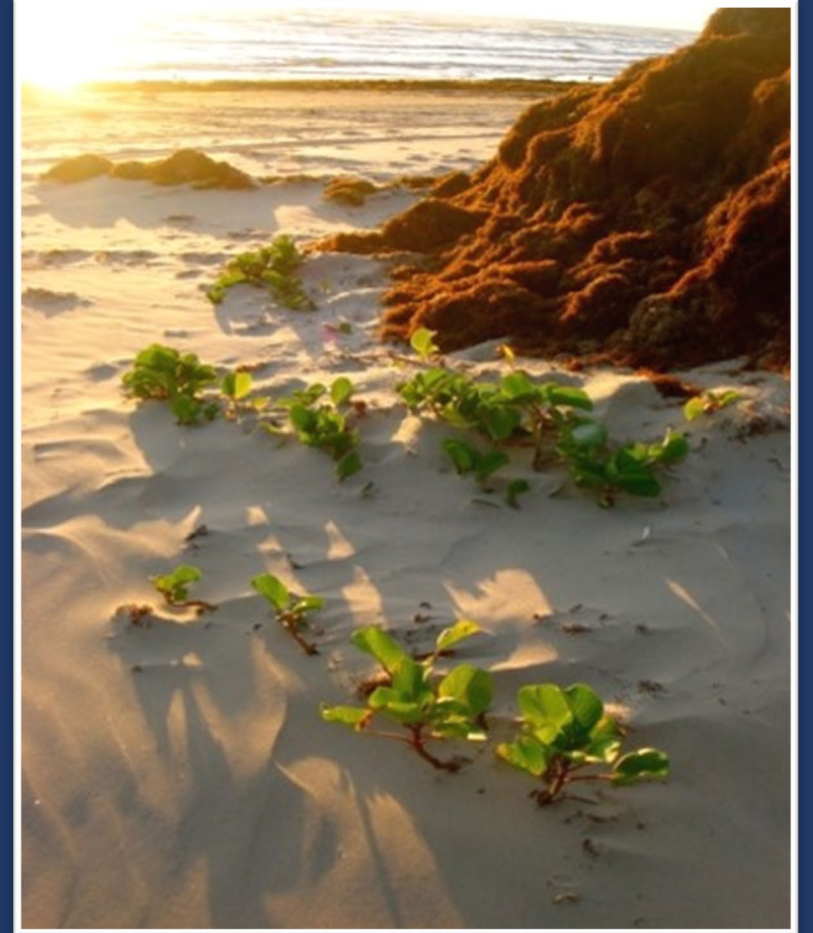
<https://www.glo.texas.gov/coast/grant-projects/funding/index.html>



# Agenda

---

- GLO Staff Introductions
- Texas Coastal Resiliency Master Plan
- Oil Spill Funding Opportunity
- CMP Grant Overview
- CMP Application Video
- **15 Minute Break**
- CEPRA Funding Opportunity Overview
- CEPRA Application Video
- Table Discussions
- Report Out



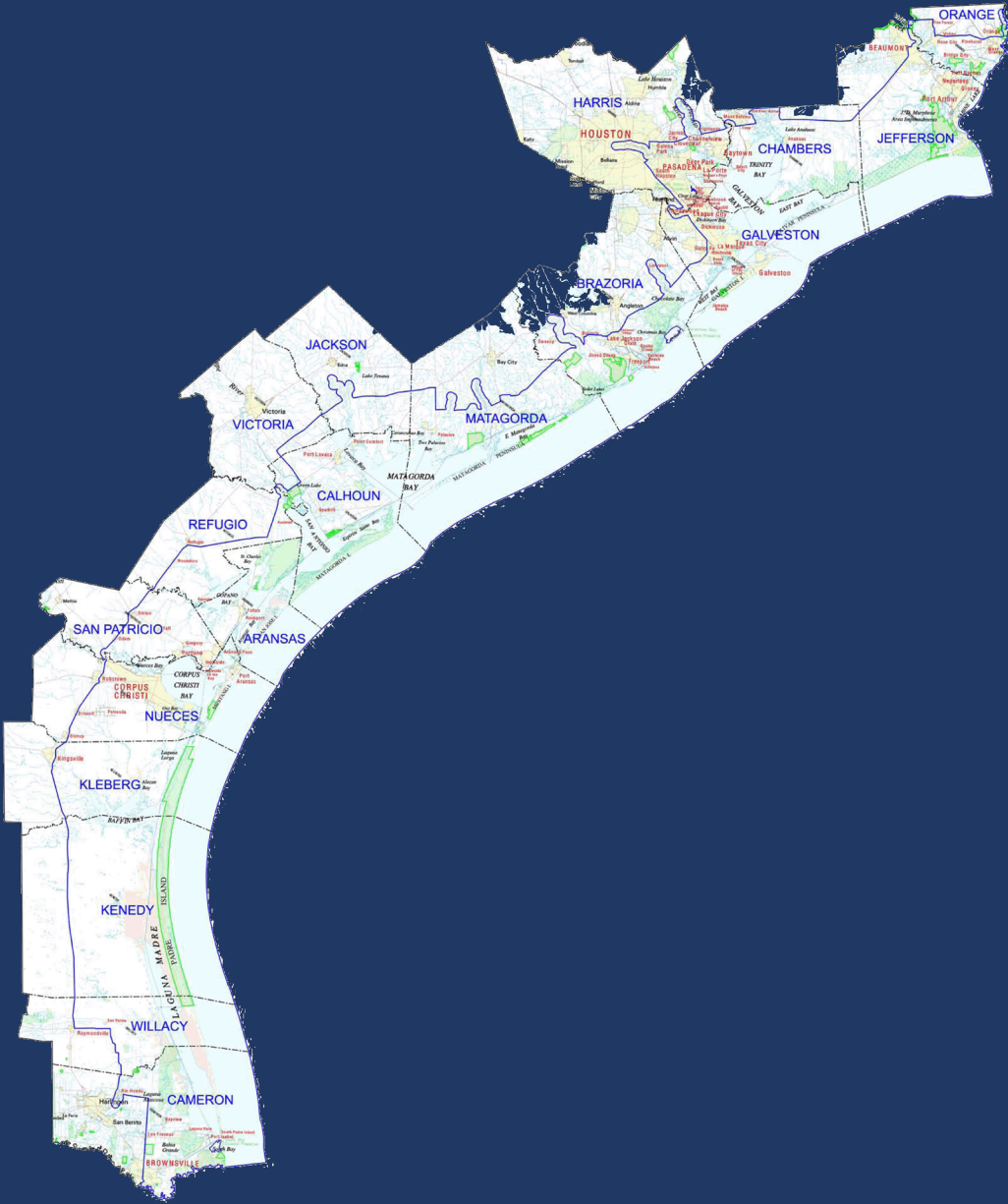


# Coastal Resources CEPRA Program

Texas General Land Office • Commissioner Dawn Buckingham, M.D.

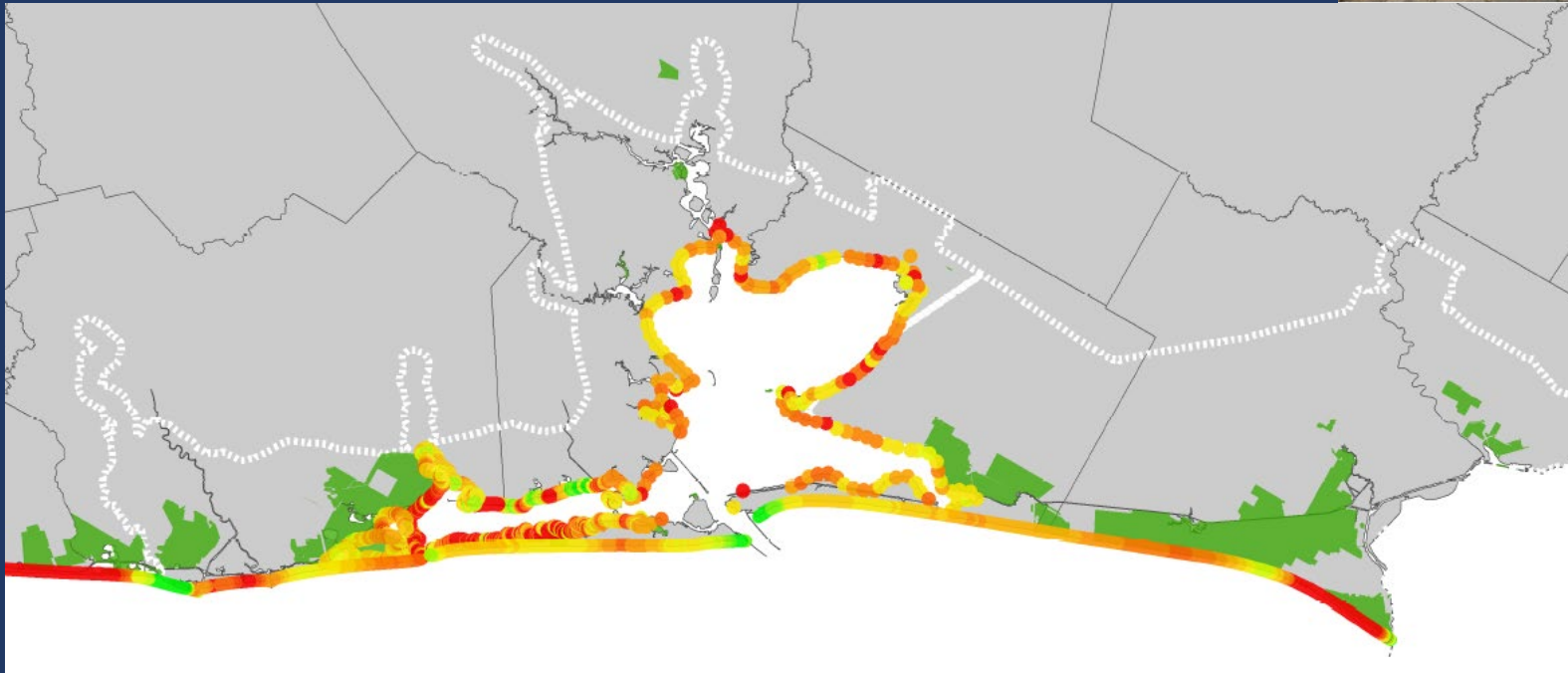
# Stewards of the Texas Coast

- 367 miles of gulf shoreline
- 3,300 miles of bay shoreline
- 18 coastal counties with 6.1 million residents (2010)
- 2 peninsulas and 6 barrier islands (including longest undeveloped barrier island in the world)



# Coastal Erosion Data

## Region 1



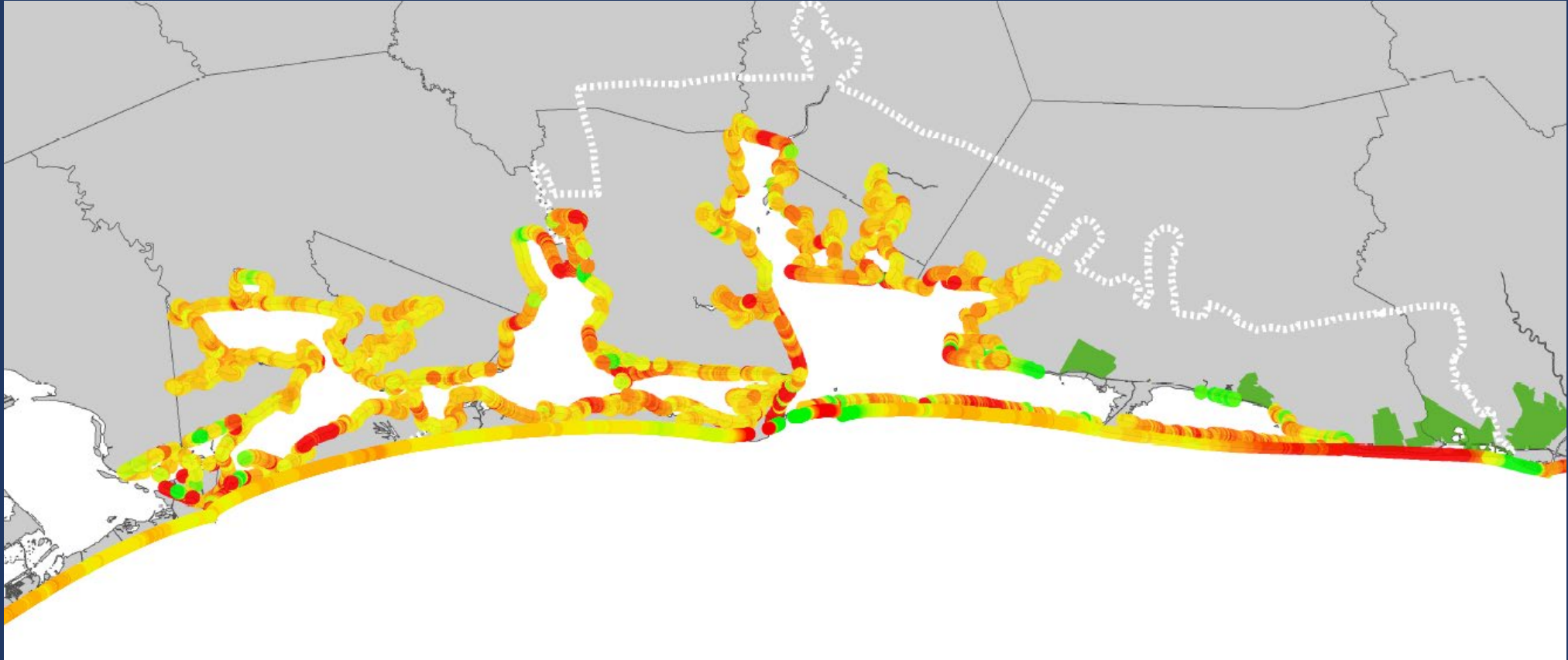
Texas General Land Office  
Commissioner Dawn Buckingham, M.D.





# Coastal Erosion Data

## Region 2

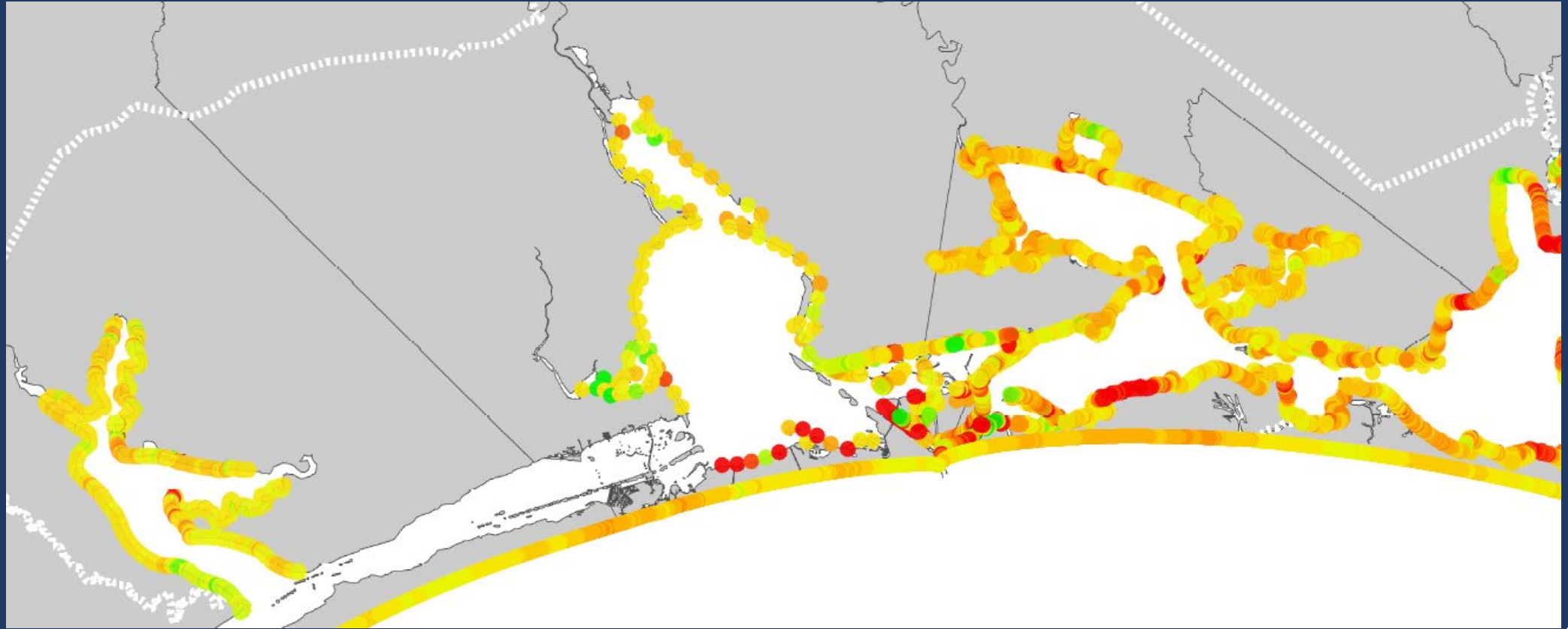


Texas General Land Office  
Commissioner Dawn Buckingham M.D.



# Coastal Erosion Data

## Region 3

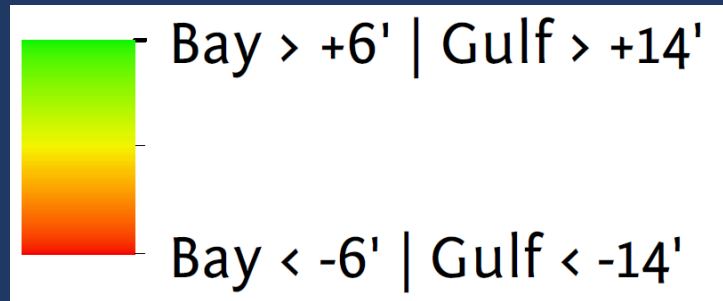
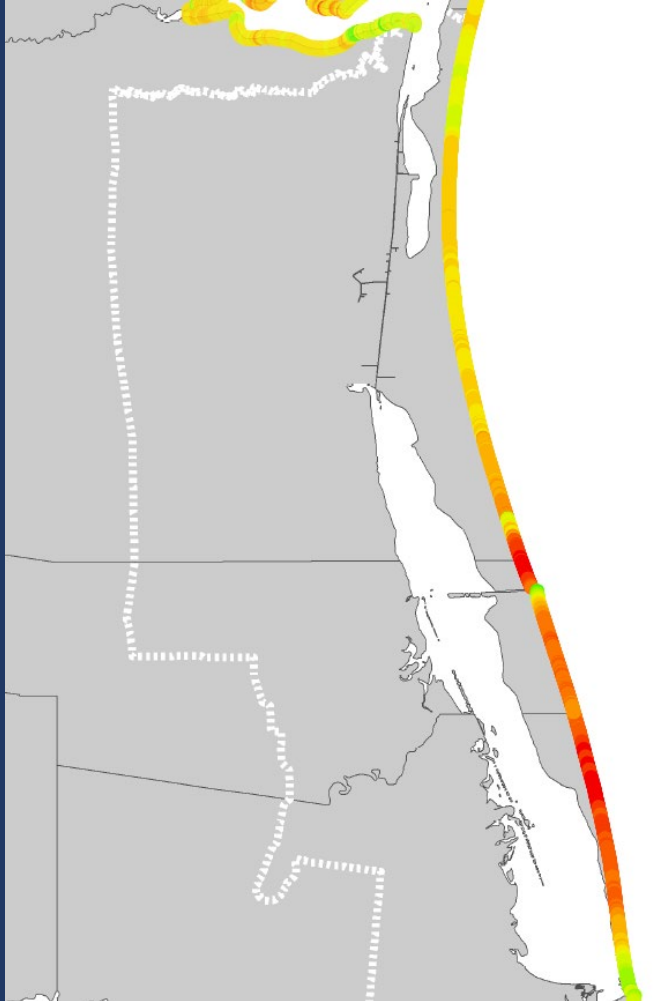


Texas General Land Office  
Commissioner Dawn Buckingham M.D.

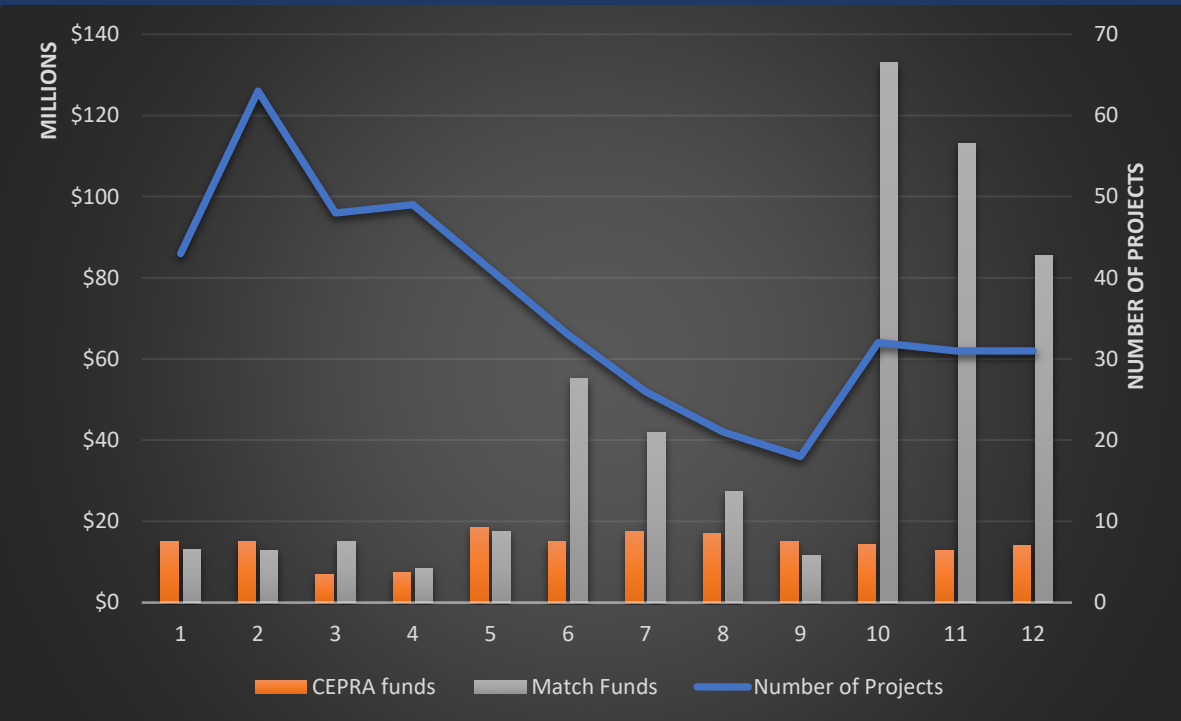


# Coastal Erosion Data

## Region 4



# CEPRA History



1999 – Passage of the Coastal Erosion Planning & Response Act implements the CEPRA program on a biennium cycle that matches state-appropriated funds with local match funds

- **\$168.1M in funding for the state**
- **\$534.5M in funding from project partners**
- **436 projects total**





# The Role of the 2019 Coastal Resiliency Master Plan

- Priority list of Tier 1 projects determined in coordination with coastal stakeholders
- By utilizing the Resiliency Plan, the GLO is better positioned to leverage and capture additional funding streams
- Projects not in the 2019 Plan are applicable for CEPRA funding now
  - Applying for GLO funding for a project not currently identified in the Resiliency Plan allows it to be considered for funding in that cycle while also providing it a pathway to future Resiliency Plan consideration



# CEPRA Project Requirements

- ✓ Located in coastal zone boundary
- ✓ Full site access
- ✓ Gulf facing beaches have erosion rate of  $> 2$  ft/yr
- ✓ Construction possible within two-year funding cycle (preferred)
- ✓ Complies with Open Beaches Act and Dune Protection Act
- ✓ Erosion Response Plan filed (if applicable)
- ✓ Local match
  - Beach Nourishment – 25% min. partner match (can include dune restoration)
  - All other project types require a 40% min. partner match



# CEPRA Project Types

- Data Collection & Studies
- Beach Nourishment - Gulf and Bay Beaches
- Dune Restoration
- Shoreline Stabilization
- Marsh/Habitat Restoration
- Beneficial Use of Dredged Material
- Structure Relocation



# Data Collection & Studies

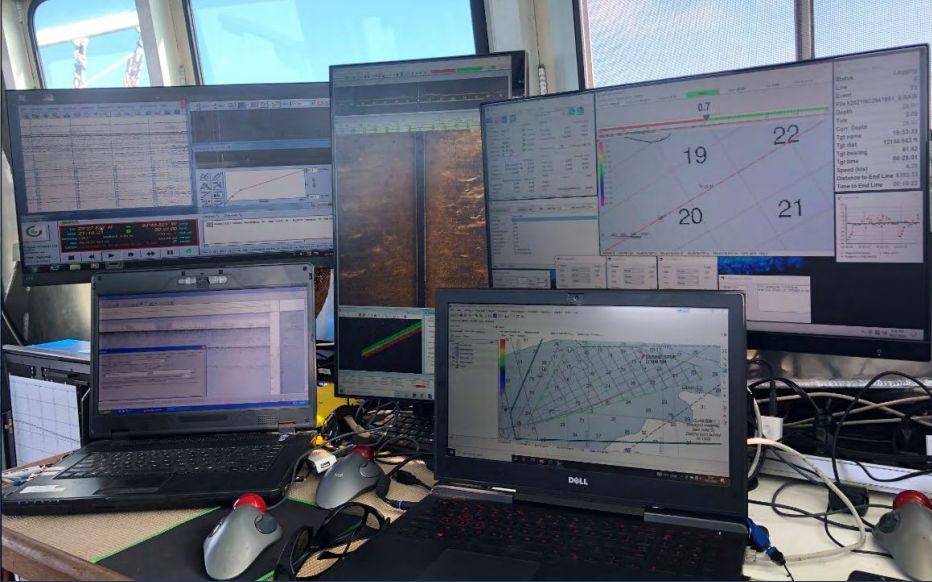


## Data Collection Examples

- Historical Erosion Rates and determination of critically eroding areas
- Aerial Photography
- Geotechnical Investigations for Sand Sources

## Study Examples

- Beach Monitoring and Maintenance Plan
- Sediment Management Plan and Offshore Sediment Surveys
- Economic & Natural Resource Benefit Studies of CEPRA Projects
- Coastwide Projects from the 2019 Resiliency Plan – Longshore Transport Modeling
- Demonstration Projects



HRG  
Computers  
Onboard

Texas General Land Office  
Commissioner Dawn Buckingham M.D.







# Gulf Beach Nourishment

Galveston Island West of Seawall

---



---

## Galveston County, 2014

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.







# Beneficial Use of Dredged Material

South Padre Island  
BUDM from Brownsville Ship Channel

---

---

Cameron County, 2021

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.







# Gulf Beach Nourishment

## Galveston Island

---

## Galveston County, 2021

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.



# Bay Beach Nourishment

Rockport Beach

---



---

**Aransas County, 2016**

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.







# Bay Beach Nourishment

Indianola Beach

---

**Calhoun County, 2003**

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.







# Bay Beach Nourishment

North Beach

---

**Nueces County, 2023**

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.





# Dune Restoration

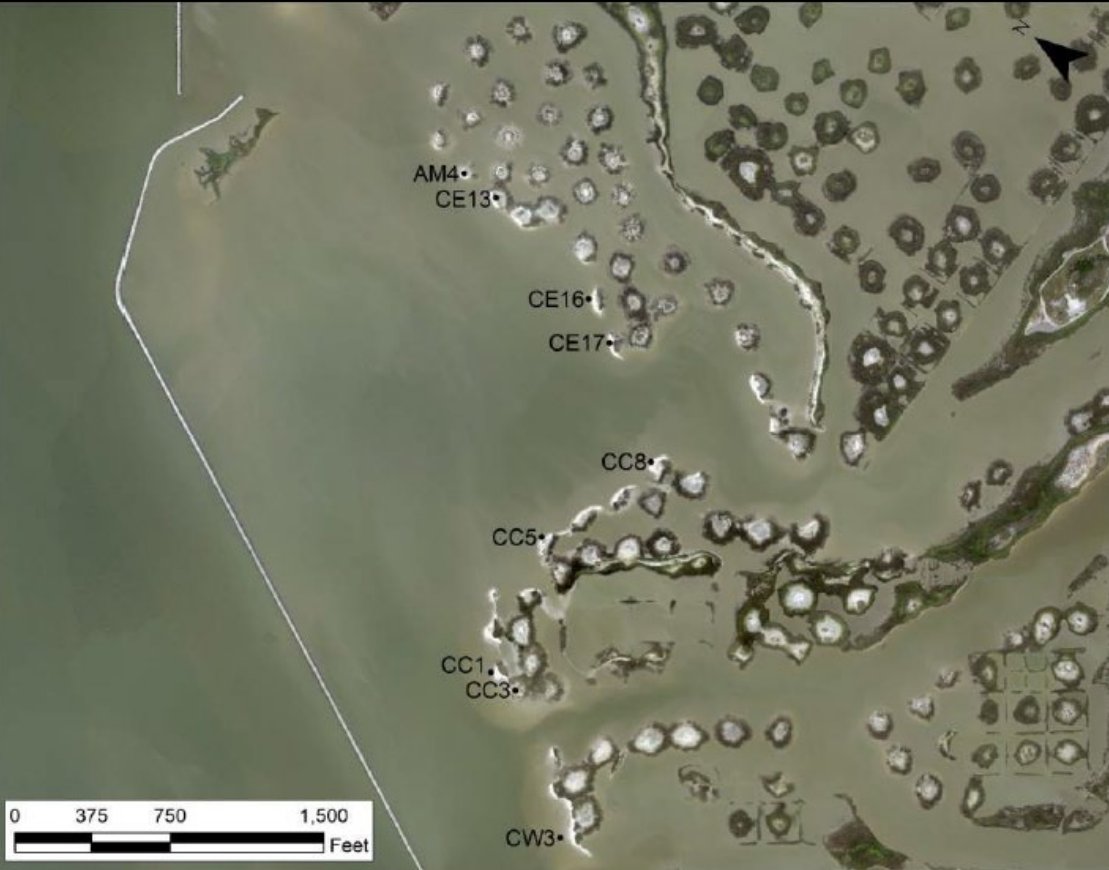


Jefferson County, 2016 and 2022

Texas General Land Office  
Commissioner Dawn Buckingham M.D.







# Marsh/Habitat Restoration

Galveston Island State Park

---



---

## Galveston County, 2022

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.







# Marsh/Habitat Restoration

Causeway Rookery Island

---

---

**Nueces County, 2022**

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.





# Marsh/Habitat Restoration

Nueces Bay Portland Causeway Marsh

---

---

Nueces and San Patricio County, 2015

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.







# Marsh/Habitat Restoration

Arturo Galvan Coastal Park Living Shoreline

---

---

**Cameron County, 2015**

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.





# Shoreline Stabilization

Moses Lake

---

---

**Galveston County, 2015**

---



Texas General Land Office  
Commissioner Dawn Buckingham M.D.





# Shoreline Stabilization

Port Aransas Nature Preserve

---

---

**Nueces County, 2013**

---



Texas General Land Office  
Commissioner Buckingham M.D.



# Shoreline Stabilization

Indian Point

---



---

Nueces and San Patricio County, 2019

---

Texas General Land Office  
Commissioner Dawn Buckingham M.D.







# Beneficial Use of Dredged Material

## Chester Island



## Matagorda County, 2017

Texas General Land Office  
Commissioner Dawn Buckingham M.D.



# CEPRA Cycle 13 Key Dates

---

June 1, 2023

- Submit application by Thursday, June 1 at 5 p.m.

Fall 2023

- Receive notification regarding status categorization of project
- Projects eligible to start







## COASTAL MANAGEMENT

- ▶ Hurricane Preparedness & Planning
- ▶ Open Beaches
- ▶ Rollover Pass
- ▶ Permitting
- ▶ Leasing & Easements
- ▶ Forms
- ▶ Coastal Erosion
- ▶ Environmental Protection
- ▶ Federal Consistency
- ▶ Programs, Tools & Resources
- ▶ NRDA

## COASTAL MASTER RESILIENCY PLAN

- ▶ Overview
- ▶ FAQs
- ▶ Region 1
- ▶ Region 2
- ▶ Region 3
- ▶ Region 4

## GRANT PROJECTS

- ▶ Funding Opportunities
- ▶ Coastal Management Program
- ▶ Coastal Impact Assistance Program
- ▶ Coastal Erosion Planning & Response Act
- ▶ Oil Spill Prevention & Response Research
- ▶ Grant Projects Listing

## HURRICANES & TROPICAL STORMS

- Hanna
- ▶ Rebuilding & Repairing Coastal Structures

## OIL SPILL

- ▶ Overview
- ▶ Programs
- ▶ Derelict Vessels
- ▶ Vessel Registration & Vessel Search
- ▶ Facilities Certification
- ▶ Oil Spill Toolkit
- ▶ Forms



## THE REPUBLIC OF TEXAS CREATED THE GENERAL LAND OFFICE IN 1836.

The oldest state agency in Texas, the GLO was formed to determine who owned what and where after the Texans and Tejanos won independence. Today the General Land Office manages state lands, operates the Alamo, helps Texans recovering from natural disasters, helps fund Texas public education through the Permanent School Fund, provides benefits to Texas Veterans, and manages the vast Texas coast.





**Kevin Frenzel**

CEPRA Program Manager  
[kevin.frenzel@glo.texas.gov](mailto:kevin.frenzel@glo.texas.gov)  
(512) 463-2482

**Thomas Durnin**

Project Manager  
[thomas.durnin@glo.texas.gov](mailto:thomas.durnin@glo.texas.gov)  
(512) 463-1192

**Kelly Brooks**

Project Manager  
[kelly.brooks@glo.texas.gov](mailto:kelly.brooks@glo.texas.gov)  
(512) 463-2198

**Carver Wray**

Project Manager  
[carver.wray@glo.texas.gov](mailto:carver.wray@glo.texas.gov)  
(512) 463-1864

**Kristin Hames**

Project Manager  
[kristin.hames@glo.texas.gov](mailto:kristin.hames@glo.texas.gov)  
(512) 463-9271

**Rita Setser**

Project Manager  
[rita.setser@glo.texas.gov](mailto:rita.setser@glo.texas.gov)  
(512) 463-5029

**Johanna Valente**

Project Manager  
[johanna.valente@glo.texas.gov](mailto:johanna.valente@glo.texas.gov)  
(512) 463-2765

Texas General Land Office  
Commissioner Dawn Buckingham M.D.



# CEPRA Funding Application Portal

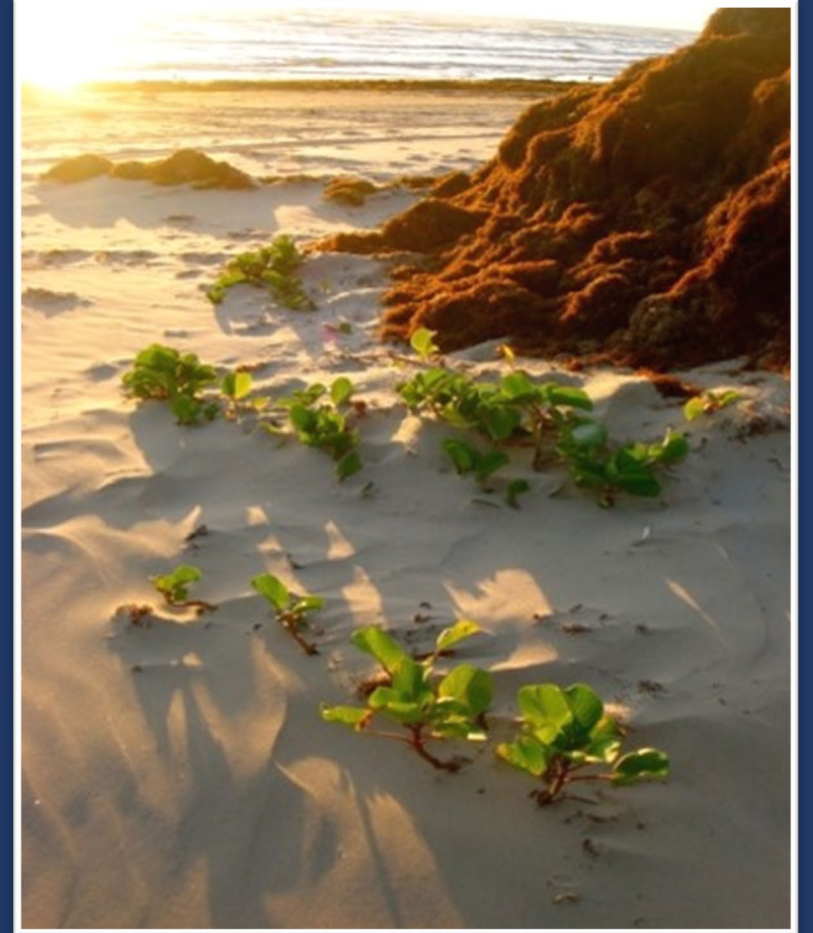
<https://www.glo.texas.gov/coast/grant-projects/funding/index.html>



# Agenda

---

- GLO Staff Introductions
- Texas Coastal Resiliency Master Plan
- Oil Spill Funding Opportunity
- CMP Grant Overview
- CMP Application Video
- 15 Minute Break
- CEPRA Funding Opportunity Overview
- CEPRA Application Video
- **Table Discussions**
- Report Out





# Agenda

---

- GLO Staff Introductions
- Texas Coastal Resiliency Master Plan
- Oil Spill Funding Opportunity
- CMP Grant Overview
- CMP Application Video
- 15 Minute Break
- CEPRA Funding Opportunity Overview
- CEPRA Application Video
- Table Discussions
- **Report Out**

