



TEXAS GENERAL LAND OFFICE
COMMISSIONER DAWN BUCKINGHAM, M.D.

January 6, 2023

Dear Honorable Members of the 88th Legislature:

As the chair of the Coastal Coordination Advisory Committee, and as required by §33.204(f) of the Natural Resources Code, I am pleased to submit the Texas Coastal Management Program (CMP) Biennial Report for FY 2021 – 2022.

The purpose of the CMP is to improve the management of the state's coastal resources and to ensure the long-term ecological and economic productivity of the coast. The CMP is a "networked" program linking the regulations, programs and expertise of local, state and federal entities managing various aspects of coastal resources. The CMP focuses on five primary issues of concern to coastal communities: coastal hazards, wetland protection, water quantity and quality, dune protection and shoreline access. Specifically, the CMP designates coastal natural resource areas, identifies uses or activities that may adversely affect the areas and sets uniform policies to address the effects.

This report includes overviews of key CMP activities, including state and federal consistency, coastal long-term planning and grant administration. Since its inception in 1997, the CMP grant program has funded 663 §306/§306A projects totaling approximately \$52.5 million. Starting in 2020, the CMP began funding projects using Gulf of Mexico Energy Security Act (GOMESA) money. To date, the CMP has awarded 25 GOMESA projects totaling \$40 million. The CMP grant program is essential to supporting other coastal programs at the General Land Office and is often used to leverage funds to complete large-scale projects under the Coastal Erosion Planning and Response Act, National Fish and Wildlife Foundation, RESTORE Act, and Natural Resource Damage and Assessment programs.

Sincerely,

DAWN BUCKINGHAM, M.D.
Commissioner, General Land Office

**TEXAS COASTAL MANAGEMENT PROGRAM
BIENNIAL REPORT**



2021-2022

JANUARY 2023

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Acronyms

BBP Bi-Partisan Budget Act of 2018	CZMP Coastal Zone Management Program	GOMA Gulf of Mexico Alliance
BWEC Boater Waste Education Campaign	DPA Dune Protection Act	HAB Harmful Algal Bloom
CBBEP Coastal Bend Bays and Estuaries Program	EG Exploration Green	HBG Houston Botanic Garden
CCA Coastal Coordination Act	EPA U.S. Environmental Protection Agency	HGNC Houston-Galveston Navigation Channel Expansion Project
CCAC Coastal Coordination Advisory Committee	FOG Fats, Oils and Greases	HPARD Houston Parks and Recreation Department
CCC Coastal Coordination Council	FY Fiscal Year	HRI Harte Research Institute
CEPRA Coastal Erosion Planning and Response Act	GBAN Galveston Bay Action Network	I-Plan Implementation Plan
CITs Coastal Issue Teams	GBEP Galveston Bay Estuary Program	ICT Interagency Coordination Team
CMP Texas Coastal Management Program	GBF Galveston Bay Foundation	IOCs Issues of Concern
CNRAs Coastal Natural Resource Areas Committee Technical Advisory Committee	GIS Geographic Information System	JPAF Joint Permit Application Form Land Commissioner Texas Land Commissioner
CtG Cease the Grease Campaign	GIWW Gulf Intracoastal Waterway	LiDAR Light Detection and Ranging
CZMA Coastal Zone Management Act	GLO Texas General Land Office	Master Plan Texas Coastal Resiliency Master Plan

NERR

National Estuarine Research Reserve

NFWF

National Fish and Wildlife Foundation

NOAA

National Oceanic and Atmospheric Administration

NPS

Nonpoint Source

OBA

Texas Open Beaches Act

OCS

Outer Continental Shelf

PAG

Permitting Assistance Group

PSC

Permit Service Center

RMCs

Resource Management Codes

RESTORE

Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012

SAC

Texas Sunset Advisory Committee

SSO

Sanitary Sewer Outflows

TAC

Texas Administrative Code

TAMU-CC

Texas A&M University-Corpus Christi

TAMU-G

Texas A&M University-Galveston

TAMU-K

Texas A&M University-Kingsville



Introduction



The value of the Texas coast stretches far beyond the 18 coastal counties and 6.1 million residents. With 367 miles of coastline and 3,300 miles of bayfront, the coast is a vital component of the state and national economies, supporting energy and agricultural industries, the port system, commercial fisheries, and tourism. The Texas Coastal Management Program (CMP) works to improve the management of the state's coastal resources and ensure its long-term ecological and economic productivity.

Creation of the Texas Coastal Management Program

In 1972, the U.S. Congress passed the Coastal Zone Management Act (CZMA), which established the federal Coastal Zone Management Program (CZMP). The CZMP is a unique federal-state partnership that provides a basis for protecting, restoring, and responsibly developing the nation's diverse coastal communities and resources. Participation in the CZMP allows a state to conduct federal consistency review and have greater influence over federal actions occurring within the state's coastal area.

In response to issues and concerns raised by coastal citizens, the Texas Legislature passed the Coastal Coordination Act (CCA) in 1991. The CCA directed the Texas General Land Office (GLO) to develop a long-range, comprehensive plan for managing the coast in cooperation with existing statutes and regulations of federal and state agencies, local governments, and coastal citizens. The CCA established the framework for Texas'

participation in the CZMP, created the Coastal Coordination Council (CCC) to establish rules for CMP consistency certification, developed the CMP grant program and set the state's coastal zone boundary to include all or part of 18 coastal counties and more than 8 million acres of land and water.

The Texas CMP was finalized and accepted into the CZMP by the National Oceanic and Atmospheric Administration (NOAA) in 1997. The Texas CMP was established as a networked program linking existing statutes and regulatory programs of eight state agencies, with the GLO serving as the lead. The CMP has three primary objectives, to provide consistency review of permit applications to ensure the proposed action or activity is consistent with the goals and policies of the CMP, to provide permitting assistance to individuals, small businesses, and local communities via two Permit Services Centers (PSC) located along the coast and to administer grants provided by NOAA. Today, the GLO also administers Gulf of Mexico Energy Security Act (GOMESA) funds.

Coastal Coordination Advisory Committee

In 2010, the Governor signed a bill abolishing the CCC and transferring its duties to the GLO's Land Commissioner. The bill authorized the Land Commissioner to make consistency determinations and required the establishment a Coastal Coordination Advisory Committee (CCAC) consisting of representatives from the eight networked agencies and public members to advise the CMP.

1972

U.S. Congress passed the CZMA, establishing the CZMP.

1991

The Texas Legislature passed the CCA.

1997

The CMP was finalized and accepted into the CZMP.

2010

The Council was abolished and its duties transferred to the Land Commissioner. The CCAC was established with representatives from eight networked agencies and four public members.

Today, the CCAC is comprised of the GLO, Railroad Commission of Texas (RRC), Texas Department of Transportation (TxDOT), Texas Commission on Environmental Quality (TCEQ), Texas Parks and Wildlife Department (TPWD), Texas State Soil and Water Conservation Board (TSSWCB), Texas Water Development Board (TWDB), and the Texas Sea Grant College Program (Texas Sea Grant). It also includes four Land Commissioner appointed citizen members representing agriculture, coastal businesses, coastal elected officials, and coastal resident interests.

The CCAC meets multiple times a year to manage coastal and consistency issues. In fiscal years (FY) 2021 and 2022, the CCAC met three times. In addition to meetings, the GLO provides the CCAC with semiannual updates via an emailed newsletter. CCAC members can also participate in four Coastal Issue Teams (CITs) that coordinate on cross-agency issues, including water quality; CMP grants; CMP coastal long-term planning; and regulatory/permitting and water quality concerns.

Water Quality CIT

The Water Quality CIT collaborated to complete the Texas Coastal Nonpoint Source (NPS) Pollution Control Program approval process. This CIT will continue to focus on coordinating program implementation and responding to water quality topics of interest.

CMP Grants CIT

Each year, the CMP awards NOAA and GOMESA grant funds. The CMP Grants CIT reviews and scores grant pre-proposals and final applications and ultimately provides a list of projects recommended for funding to the Land Commissioner each grant cycle.

CMP Coastal Long-Term Planning CIT

The Coastal Long-Term Planning CIT members participate in the development of the Section 309 Assessment and Strategies Report and serve as networked agency representatives that guide the development of the Texas Coastal Resiliency Master Plan (TCRMP). This group may nominate TCRMP Technical Advisory Committee members, screen and discuss feasibility of candidate project concepts and provide strategic development input.

Regulatory/Permitting CIT

The Regulatory/Permitting CIT focuses on federal consistency issues and information exchange on consistency reviews.



Coastal Coordination Advisory Committee



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

Programmatic Impacts



25 Years of CMP

January 2022 marked the 25th anniversary of the Texas CMP. To celebrate the occasion, CMP staff are taking a looking back at the long-term impacts of the program. While the amount of funding the CMP traditionally receives is relatively small at approximately \$2 million a year, the projects and the program's ability to leverage funds have had far reaching, large-scale coastal impacts.

The Texas CMP is unique in that it passes most of its funding to coastal communities through grant competitions. This ensures the issues and priorities that originate from coastal communities drive local solutions. Approximately 90% of the funding received from NOAA and 15% of the GLO's GOMESA money is distributed to entities and organizations along the coast. Over 25 years, CMP projects have accomplished the following:

- Completed 663 projects over 27 grant cycles
- Built 64 overlooks and dune walkovers
- Constructed 8.3 miles of boardwalk and 3.5 miles of nature trail
- Acquired 2,700 acres of coastal land for perpetual preservation
- Built 62 pavilions and 22 restrooms
- Removed invasive species from 2,180 acres and planted 1,455 acres of native vegetation
- Created or restored 13,000 acres of wetlands
- Created 1,970 acres of artificial reef habitat

- Reviewed 10,802 federal consistency projects
- Sponsored hundreds of education and outreach events with thousands of participants

In addition to grant works, the CMP accomplished major programmatic goals. These include receiving full federal approval from NOAA and the Environmental Protection Agency (EPA) of the Texas Coastal NPS Program, funding the original and subsequent iterations of the TCRMP which now provides long-term planning guidance for the entire Texas coast and making strides in streamlining state and federal permitting efforts by creating joint permit applications and a regional general permit (RGP) for piers.

The Next 25 Years

Looking to the next 25 years, the GLO wants to continue expanding coastal impacts. The CMP will further refine grant funding priorities to meet the needs of the coast and the program's networked partners and will leverage funds with other program areas to take on larger-scale, more holistic projects. The CMP plans to work closely with small and under-served coastal communities via education and engagement efforts to ensure their needs are being addressed via community driven solutions. In the long-term, CMP staff will spearhead efforts to develop the Texas Sediment Management Plan which will help understand Texas' sediment needs and create guidance on sediment resource use for future coastal resiliency and restoration efforts.



Highlights and Significant Events



Texas Coastal Nonpoint Source (NPS) Pollution Control Program

In May 2022, the GLO obtained full approval of the Texas Coastal NPS Pollution Control Program from NOAA and the EPA. This approval was a momentous occasion as efforts had been underway to obtain program approval since 2003. The NPS Program focuses on providing technical guidance, community-based retrofit planning, engagement, collaboration, and funding assistance. The ultimate goals are to reduce pollution and enhance coastal water quality management to benefit habitat, tourism, and recreation. To assist with community engagement and messaging, the GLO rebranded the program in 2021. It is now referred to as the Clean Coast Texas (CCT) Program.

The CCT Program aligns with objectives of the CMP and TCRMP and is coordinated with the CMP's networked agencies as well as Texas State University and Texas Community Watershed partners. The program is also integrated with the GLO's Texas Beach Watch and Texas Coastal Ocean Observation Network (TCOON) programs. The CCT Program has chosen a non-regulatory approach and uses technical guidance, planning resources, incentives, and grant funding to gain voluntary compliance with §6217. If voluntary measures are inadequate, regulatory and enforcement action would be necessary.

To accomplish its goals, the CCT Program conducts coastal community engagement through multiple outreach efforts such as workshops, meetings, technical guidance, and online resources. Stakeholders range from elected officials to the public, with emphasis on decision-makers at all levels of local/county government and non-governmental

organizations. Over the next 15-years, GLO staff will work to implement the CCT Program by taking the following steps:

- Maintain website and disseminate materials and documents
- Provide technical guidance, workshops, one-on-one and small group meetings
- Develop retrofit plans and provide local planning resources
- Assist with funding applications and multi-agency funding workshops
- Conduct coordination advisory committee meetings with networked agencies
- Develop collaboration/partnerships with local jurisdictions; host funding workshops
- Connect and co-brand with TCRMP and other programs
- Distribute the Sustainable Stormwater Drainage Manual and Roads/Highways Handbook

- Participate in the State’s Watershed Protection Plan/Total Maximum Daily Load and ensure §6217 management measures are considered
- Engage target areas and determine interests/needs
- Utilize state, federal, and other funding mechanisms to enhance NPS pollutant loading
- Engage communities and pursue guidance manual adoption, ordinance adoption

*More information about the CCT Program can be found here:
www.cleancoast.texas.gov.*

Administering Gulf of Mexico Energy Security Act Funding

The GLO administers GOMESA funds under the CMP and Coastal Erosion Planning and Response Act (CEPRA) programs. The CMP uses GOMESA funding to conserve, restore, enhance, and protect the diversity, quality, quantity, functions, and values of the state’s coastal natural resources. A primary focus for the GOMESA money is to fund high-priority and TCRMP projects that protect coastal natural resources while facilitating multiple human uses of those resources.

To maximize the utilization of GLO GOMESA funds, GLO Coastal Resources began funneling GOMESA money through the CMP and CEPRA programs in 2019. CEPRA receives 65%, CMP 15% and the remaining 20% is used for planning, administration and to facilitate the initiation and completion of other coastal projects. This method of distribution was chosen to streamline the use of funds and avoid creating another funding program. Applicants interested in GOMESA money apply directly to the program of their choice and must comply with the individual program’s requirements. Where appropriate, GOMESA funds are leveraged with other funding sources to enhance collaboration between the program areas and efficiently complete large-scale projects. With ~\$272 million in GOMESA provided to the GLO, roughly \$250 million is slated for use on large-scale, comprehensive habitat protection and restoration projects.

GOMESA funds are allocated through CMP as Projects of Special Merit (PSM). PSMs prioritize comprehensive, collaborative projects involving a coordinated effort among regional stakeholders. PSMs are awarded to applications that reflect an effort on the part of regional entities to work together to create a project that benefits an entire area/region

instead of a site-specific location. PSMs are determined by the CCAC based on member agency needs and priorities. PSMs are funded entirely with GOMESA monies which do not require a match. CMP has been very successful in utilizing GOMESA money with a total of ~\$40 million awarded between 2018 – 2022 to 25 CMP PSMs. Many of these projects leveraged funding with other GLO program areas.

Living Shoreline Initiative

The GLO is working to promote the use of living shorelines as alternatives to traditional, hard shoreline stabilization techniques. To accomplish this goal, CMP staff hosted a series of workshops aimed at educating coastal stakeholders on the benefits of living shorelines and created a one-stop document entitled “A Guide to Living Shorelines in Texas”. This document and its companion, the Living Shoreline Site Suitability Model created by Texas A&M University - Corpus Christi’s (TAMU-CC) Harte Research Institute (HRI), provide information on the variety of living shoreline options, local suitability, installation methodology, common living shoreline vegetation and permitting requirements. Additionally, Tex. Admin. Code 155.1, 155.3 and 155.15 were amended to include a Texas living shoreline definition and to clarify that easements for living shorelines do not need to go before the GLO’s School Land Board for approval and are rent free.

All these resources and more now reside on the new Texas living shorelines website located at: <https://www.glo.texas.gov/livingshorelines/>.

312 Evaluation

The Texas CMP underwent a NOAA 312 Evaluation in August 2022. This periodic evaluation is required under the CZMA and is conducted to ensure the state has 1) implemented and enforced the CMP program as approved by NOAA; 2) addressed the coastal management needs identified in the CZMA; and 3) adhered to the terms of any grants under the CZMA. This was the first 312 Evaluation of the Texas CMP since 2013. CMP staff are awaiting outcomes of the Evaluation that will be detailed in a 312 Findings Report. The Finding Reports is expected in December 2022 and will provide information on any issues observed and necessary actions required to correct the issue. It will also outline the program’s successes and accomplishments.

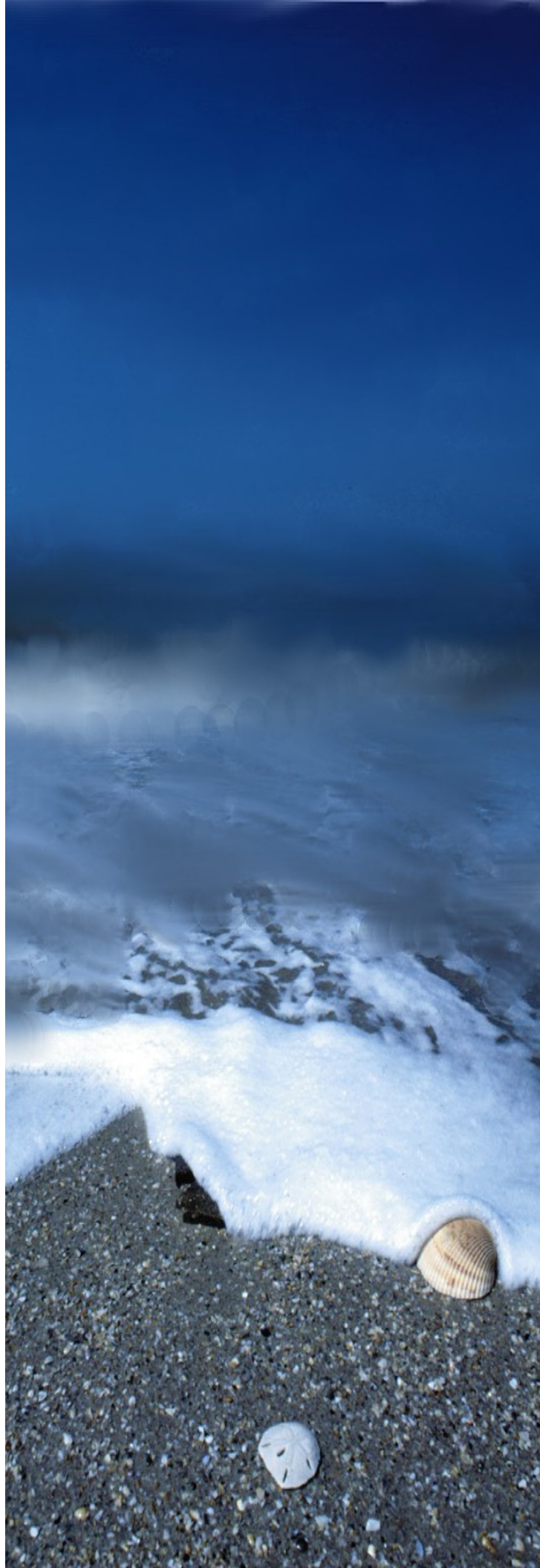
CMP Rule Revisions

The CMP rules were administratively transferred from the CCAC under Part 16, 31 TAC Chapters 501-506 to the GLO under Part 1, 31 TAC Chapters 26 -30. The administrative rule transfer was effective December 1, 2022.

The administrative rule transfer did not update embedded legal citations within the rule text. To address this issue, GLO submitted a proposed rule package for publication in the Texas Register on January 10, 2023. The proposed rules update legal citations and makes minor revisions to reflect current practice in 31 TAC Chapters 26-30. Additionally, the federal consistency procedures now located under 31 TAC Chapter 30 (formerly Chapter 506) are being repealed and simultaneously replaced with new Chapter 30. Proposed new Chapter 30 has been reorganized, streamlined, and updated to be consistent with the federal consistency regulations in 15 CFR Part 930. The proposed new rules also include NOAA's recommendation to add new listed federal financial assistance activities under 31 Tex. Admin. Code §30.12(a)(3). The proposed new rules have been informally approved by NOAA.

Online Application Portal

To streamline financial and project management, the GLO created a new, online application portal that allows applicants to access all available Coastal Resources funding opportunities in one location. The portal replaced a PDF based application and allows CMP and CEPRA staff to review project proposals more efficiently, make funding decisions electronically and notify applicants via a standardized template. Additionally, a new project and financial management database was built for the CMP, CEPRA and Oil Spill programs that allows staff to actively manage projects in one database location. *The online application portal can be found at: <https://www.glo.texas.gov/coast/grant-projects/funding/index.html>.*



Long-Term Coastal Planning

Texas Coastal Resiliency Master Plan (TCRMP)

As the steward of state-owned lands, the GLO is responsible for the management of the Texas coastline and submerged lands. Recognizing that Texas did not have a state-sponsored coastal plan, the Land Commissioner directed the Coastal Protection Division to develop the TCRMP in alignment with the GLO's mission to restore, enhance, and protect the state's coastal resources.

The TCRMP highlights the value of the coast's natural and cultural resources, as well as the specific vulnerabilities that present threats to coastal communities, habitats, and infrastructure. The first iteration of the TCRMP was released in March 2017, with an expanded second installment following in March 2019. While the 2017 TCRMP focused primarily on nature-based projects to mitigate the impacts of coastal hazards, the 2019 TCRMP included consideration of traditional infrastructure improvement solutions. The 2019 TCRMP also included modeling for future coastal conditions, impacts of sea level rise and potential landscape changes, land loss, marsh migration, and the potential for storm surge inundation. Model results can be found here: www.glo.texas.gov/crmp.

Model results further demonstrate the need to plan for these considerations into the future. The GLO will release the next TCRMP in 2023. This version will expand on the sea level rise and storm surge modeling to cover multiple probability scenarios into the year 2100, along with other planning tools and technical enhancements that will aid in conceptualizing, coordinating, expediting, and justifying coastal resiliency projects toward implementation.

The formulation process of the TCRMP is heavily dependent upon input from local stakeholders in the form of a Technical Advisory Committee comprised of coastal experts, community leaders, and decision-makers from state and federal agencies, local governments, universities, non-profits, river authorities, engineering firms, port authorities, and other technical partners. The members provide technical review and consultation throughout the entire planning process, making the TCRMP a truly locally driven and well-supported effort.

The TCRMP will continue to serve as the ongoing, state-led, and long-term coastal planning effort for Texas and act as a guiding document for GLO funding programs, as well as a platform to communicate prioritized actions, strategies, and projects along the Texas coast to state, federal, and local audiences, and to other external funding and implementation partners.

Texas Sediment Management Plan (SMP)

With 80% of the Texas coast eroding, effective and efficient coastal sediment management is pivotal for both community and environmental resiliency. The GLO is working to develop the Texas Sediment Management Plan (SMP) to help understand Texas' sediment needs and create guidance on sediment resource use for future coastal resiliency and restoration efforts. Development of the SMP commenced on October 1, 2021, as the primary focus of the GLO's 2021-2025 §309 Assessment and Strategies Report. The SMP document will identify sediment needs, available resources, and data gaps and create guidance to develop borrow areas; permit borrow areas and placement areas; inventory sediment resources;



allocate sediment resources; monitor sediment resources, budgets, and transport; and provide recommendations to develop or modify policy to protect and responsibly use sediment resources. The SMP will also identify priority areas to focus financial and sediment resources.

GLO staff from the Coastal Protection Program Area, Office of General Counsel, Geospatial Technology Services Division, Energy Resources Division, Assessment Enhancement Program Area and GLO Leasing are currently working together to write the SMP document and complete SMP-related tasks. Tasks include high-level SMP planning, focused data collection and research efforts, and geospatial tool improvements. GLO staff are also working to develop RGPs for beach nourishment. The RGPs are intended to be applicable to all public, critically eroding, Gulf-facing beaches in Texas. To fuel RGP development, two companion studies are underway to (1) characterize sediment grain size along the Texas coast to appropriately match borrow site and native placement area sediment characteristics and (2) investigate the time required for recovery of benthic organisms following beach nourishment events to inform the allowable nourishment frequency.

Additionally, efforts are underway to develop a geographic location description (GLD) to extend the CMP's federal consistency review authority into the Outer Continental Shelf. The GLD will be used to safeguard sediment resources that the GLO may depend on for coastal resiliency projects in the future. GLO staff are working to identify all federal activities for inclusion in the GLD, and geophysical surveys that will inform the boundaries of the GLDs are ongoing.

The GLO hopes to have the first iteration of the SMP completed in 2024.



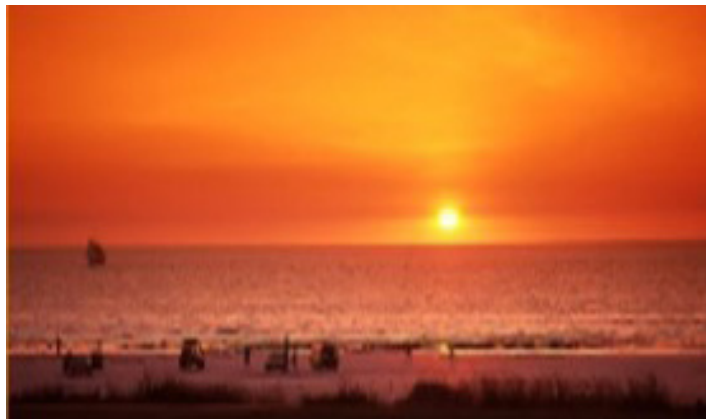
State & Federal Consistency

The Texas CMP combines existing regulatory authorities and builds on the strength of those authorities utilizing the networked program approach with the intention of making coastal decision-making processes more effective and efficient. Each networked agency ensures its proposed actions are consistent with CMP goals and policies through the exercise of statutory authorities when conducting activities in the coastal zone.

The consistency review process ensures the actions of state and federal agencies and limited local government actions are consistent with CMP goals and policies. Three consistency review components exist in the CMP: local consistency, state consistency, and federal consistency.

Local Consistency Review

The issuance of dune protection permits and beachfront construction certificates are the only local government actions that fall under the



CMP. Local government beach/dune permitting authorities that have certified or conditionally certified dune protection and beach access plans are responsible for issuing dune protection permits and beachfront construction certificates for construction activities in the beach/dune system.

The GLO reviews all dune protection permits and beachfront construction certificate applications to ensure compliance with the Open Beaches Act (OBA), Dune Protection Act (DPA), and the GLO Beach Access and Dune Protection Rules. Permitted construction activities must be consistent with CMP goals and policies. For dune protection permits, local governments must certify that the proposed activity will not materially weaken any dune or damage any dune vegetation or reduce the effectiveness of any

dune as a means of protection against erosion and high wind and water. For beachfront construction certificates, local governments must certify that the proposed activity is consistent with the beach access portion of the approved dune protection and beach access plan and determine that the activity does not interfere with or otherwise restrict the public's right to access and use the public beach easement.

FY21 – 477 permits reviewed

FY22 – 460 permits reviewed

State Consistency Review

The CMP provides interagency coordination on significant policy issues and major coastal development projects, allowing networked agencies to manage their own programs on a day-to-day basis. Agency rule certification by the GLO and incorporation of CMP goals and policies into an agency's rules is the primary tool for ensuring a networked agency's actions are consistent with the program and the agency is exercising its networked authorities consistent with the CMP. If an agency's rules are consistent, then its activities should be consistent. Once an agency's rules are certified, the agency may adopt consistency review thresholds limiting the CMP's authority to review its actions. The agencies are responsible for enforcing the provisions of the CMP and are authorized to enforce the permits or authorizations issued.

During FY21 and FY22, the GLO received quarterly reports from the networked agencies for permitting actions, rulemakings, and enforcement actions. During FY22, GLO individually met with several networked state agencies, including TPWD, TCEQ, RRC and TxDOT to enhance agency communication and discuss each agency's state consistency review process. These meetings have addressed consistency review procedures and served to answer process questions between the agencies.

FY 2021

In FY21, the reporting state agencies received 2,943 permit applications, of which 1,924 were reported as approved without conditions, and 556 were reported as approved with conditions. The state agencies submitted and adopted 6 rulemakings and reported 264 enforcement actions.

FY 2022

In FY22, the reporting state agencies received 3,477 permitting applications, of which 1,754 were approved without conditions, and 1,026 were approved with conditions. The state agencies submitted and adopted 4 rulemakings and reported undertaking 287 enforcement actions.

Federal Consistency Review

Approval of the CMP gave Texas the authority to review proposed federal actions and activities that are in or may affect land and water resources in the Texas coastal zone boundary. This process, called federal consistency review, ensures the state's interest is fairly represented and allows the state the opportunity to provide input into policies, procedures, or actions and activities that may affect the management of coastal areas, including:

- Projects requiring a federal license or permit;
- Direct activities proposed by federal agencies; and
- Federal financial assistance to state and local governments.

Federal actions and activities within or outside the Texas coastal zone that affect coastal natural resource areas (CNRA) must be consistent with enforceable policies of the CMP to the maximum extent practicable. If the state finds a given action or activity to be inconsistent, with a few exceptions the action cannot be undertaken. During FY21 and FY22, all the proposed federal agency actions, activities, or financial assistance projects reviewed by staff and considered by the Land Commissioner were deemed consistent with CMP goals and enforceable policies.

During FY21 and FY22, there were four Deepwater Port (DWP) License permit projects proposed along the Texas coast. All projects will be reviewed for federal consistency.

- **The Sea Port Oil Terminal's (SPOT)** DWP application was published in January 2019. SPOT obtained a conditional concurrence for federal consistency June 21, 2021 and approval from the Governor of Texas on October 7, 2022. US Maritime Administration's (MARAD) Record of Decision (ROD) of approval, with conditions, was issued November 21, 2022. The ROD is not a license under the Deepwater Port Act. The conditions described in the SPOT ROD must be addressed prior to the issuance of the DWP license.

- **The Texas GulfLink's (TGL)** DWP application was published in May 2019. A Draft and Supplemental Draft Environmental Impact Statement (EIS) were published in September of 2021 and 2022 respectively. On November 1, 2022, MARAD notified TGL that TGL is

required to provide evidence that ExxonMobil Pipeline has granted or intends to grant TGL permission to use the pipeline as proposed in TGL's application. If an alternative pipeline route must be utilized, further review may be required.

- **The Bluewater Texas Terminal** DWP application was published in May 2019. A Draft EIS was published October 2021. A federal consistency determination will be required.

- **The Blue Marlin Offshore Port**, LLC's DWP application was published October 2020. A draft EIS is expected 2023. A federal consistency determination will be required.

Federal Agency Actions

A federal agency action is a federal license or permit issued by a federal agency that represents the proposed federal authorization, approval, or certification needed by the applicant to begin an action. For example, a U.S. Army Corp of Engineers (USACE) permit for the construction of a pier or boat dock is considered a federal action. During FY21, a total of 159 actions requiring a federal license or permit were reviewed. During FY22, a total of 193 actions requiring a federal license or permit were reviewed.

Federal Agency Activities and Development Projects

A federal agency activity is a function performed by or for a federal agency in exercise of its statutory responsibility. This includes the planning, construction, modification, or removal of a public work, facility, or any other structure, and the acquisition, use, or disposal of land or water resources. For example, maintenance dredging of a navigation channel or changes in federal permitting processes are considered federal activities. During Federal FY21, 23 federal activities were reviewed for consistency, and during Federal FY22, 45 federal activities were reviewed for consistency.

Federal Financial Assistance

Financial assistance projects are state or local applications for federal funding in the form of grants, contractual agreements, and loans. For example, a request for funding for a flood control project is considered a request for financial assistance. Federal agencies may not grant federal assistance until the state CMP concurs. During FY21, 128 financial assistance projects were reviewed. During FY22, 89 financial assistance projects were reviewed.

Permit Streamlining & Assistance

Prior to the creation of the CMP, overlapping jurisdiction between federal and state agencies created redundancies and complicated application processes for common projects, such as residential piers or placement of fill material to construct a building. To mediate the problem, the CMP streamlined the permitting process and improved agency coordination.

A Joint Permit Application Form (JPAF) was created, providing one consolidated application for permits/authorizations from multiple agencies. JPAFs are meant to minimize the length of the permitting process and reduce confusion among applicants regarding which permits are required for a project. State and federal resource agency representatives also began attending monthly Joint Evaluation Meetings (JEM). The meetings, sponsored by the USACE, provide guidance to applicants on CMP policies and agency permitting requirements. In FY22, GLO staff attended four JEMs in the upper coast and six in the lower coast.

Permitting Assistance Group

The Permitting Assistance Group (PAG) was formed to identify and address permitting obstacles; encourage interagency cooperation; offer the public a single point-of-contact for project-specific advice during the permit application process; and serve as a liaison to the CCAC on permitting issues. The PAG is comprised of CCAC members and representatives of federal and state agencies that participate in the permitting process as applicants, permitting entities, or commenters. The PAG addresses requests for preliminary consistency determinations. The PAG did not meet in FY21 or FY22 but will reconvene in early FY23.

Permit Service Center

The Permit Service Centers (PSCs) were created to provide permitting assistance to small businesses, private individuals, and local government organizations for proposed projects within the coastal zone boundary and JPAF boundaries. PSC staff assists applicants in submitting administratively complete JPAFs, providing technical guidance for permits within the coastal zone boundary and troubleshooting applications prior to submission to regulatory agencies. During the regulatory agency review, PSC staff monitors the permit applications, identifies interagency disagreements that hinder permit issuance, and facilitates conflict resolution between permitting agencies and applicants. This process

reduces the length of permit processing and ensures review efficiency.

During FY21, the PSC received 217 JPAFs. The lower coast office processed 57 JPAFs, and the upper coast office processed 136 JPAFs. During FY22, the PSC received 173 JPAFs. The lower coast office processed 57 JPAFs, and the upper coast office processed 113 JPAFs. The PSC met the Legislative Budget Board target of 175 JPAFs in FY21 but did not meet the Legislative Budget Board target of 140 during FY22.

Permit Service Center (Upper Coast)
Texas A&M University-Galveston
Building 3026, Room 123
P.O. Box 1675
Galveston, TX 77553-1675
Toll-free: 866.894.7664
Phone: 409.741.4057
permitting.assistance@glo.texas.gov

Permit Service Center (Lower Coast)
602 N. Staples Street, Suite 240
Corpus Christi, Texas 78401
Phone: 361.886.1630
Fax: 361.888.9305
www.glo.texas.gov/psc

Federal Consistency Coordinator
Texas General Land Office
Coastal Management Program
P.O. Box 12873
Austin, TX 78711-2873
512.463.7497
Federal.Consistency@glo.texas.gov



CMP Grant Program Administration

NOAA Funding

CZMA funds ensure effective administration of the CMP, especially activities to implement and enforce program policies, authorities, and other management techniques. Each year, the GLO receives approximately \$2 million under the CZMA to administer the CMP. The CZMA provides funding for two programs: the administrative and coastal resource improvement program (§306/§306A), and the program enhancement program (§309). The state is required to match the §306/§306A funds at a 1:1 ratio. Match is not required for §309.

§306 projects involve non-construction/earth moving activities such as data collection, planning, mapping, aerial photography, and research. §306A projects are those that involve construction or earth moving activities such as preservation, habitat restoration, and land acquisition.

Section 306/306A Funding

NOAA provided the Texas CMP \$2,415,000 in FY21 and \$2,466,000 in FY22 in §306/§306A funding to administer the CMP. Approximately 77% (\$3,748,372) of the §306/§306A funding was awarded to eligible entities for coastal projects through a competitive grant process. Grant subrecipients were required to contribute a 40% match. The state retained approximately 23% (\$1,132,628) over the two fiscal years for program administration, matching this amount with salaries, fringe benefits, and indirect costs.

Section 309 Funding

NOAA provided the Texas CMP \$530,000 in FY21 and \$530,000 in FY22 in §309 funding to develop and carry out improvements that strengthen the CMP and implement program changes. Section 309 funding must support attainment of one or more of the eight coastal zone enhancement objectives: 1) wetlands, 2) coastal hazards, 3) public access, 4) marine debris, 5) cumulative and secondary impacts, 6) ocean resources, 7) energy and government facility siting, and 8) aquaculture. CMP will use all 309 funding from FY21 until FY25 to develop the Texas SMP. Funded efforts will include sediment characterization studies, pre- and post-beach nourishment benthic invertebrate monitoring studies, sediment workshops, and efforts to develop a beach nourishment regional general permit.

GOMESA Funds

The CMP received 15% of the GLO's GOMESA allocations, approximately \$8,086,085 in FY21 and \$8,260,030 in FY22 to fund a variety of coastal resiliency projects. The CMP utilizes GOMESA monies to fund PSM that reflect an effort on the part of regional entities to work together to create a project that benefits an entire area/region instead of site-specific locations. PSM can be either construction or non-construction based. To date, 25 CMP PSMs totaling \$36 million have been awarded to projects that further large-scale habitat protection and restoration efforts.

CMP Grant Cycle

The GLO opens CMP grant project solicitation on March 1st every year. New cycle guidance, an application and supplemental documents are posted on the GLO's Coastal Funding Opportunities website at the same time. The GLO holds workshops along the coast between March and April to help potential applicants understand the grant application process and current program priorities and provides an opportunity to discuss specific project ideas with CMP staff.

Applicants applying for NOAA funding must submit a pre-proposal to the CMP Review Team for consideration in early June. Applicants applying for a GOMESA funded PSM must submit full final applications in early June. The CMP Grant Review Team meets in July to determine which pre-proposals will receive an invitation to submit a final application in October. The CMP Grant Review Team will also determine which PSMs to select for funding at that time.

Recently Completed CMP Cycles

In December 2020 and 2021, CMP Cycles 22 and 23, respectively, were closed out with the final drawing of funds and submittal of remaining deliverables to NOAA. GLO staff are currently working with subrecipients to close CMP Cycle 24.

Ongoing CMP Cycles

CMP Cycle 25

Cycles 25 commenced on October 1, 2020, with 12 §306 and six §306A projects funded. Cycle 25 also marked the first year GOMESA funds were issued in CMP PSM contracts. A total of five PSMs were executed. As of December 2022, seven of the 18 NOAA-funded projects are complete and two of the PSMs are complete.

CMP Cycle 26

In Cycle 26, 12 §306 and seven §306A projects were selected for NOAA funding out of a total of 45 final applications from an original pool of 88 pre-proposals. Of the 45 final applications, 11 were selected for PSM GOMESA funding. Cycle 26 commenced on October 1, 2021 and GLO staff is conducting general oversight of the CMP and grant tasks to ensure all projects are completed in a timely manner and within budget. Only one Cycle 26 PSM has been completed as of December 2022.

CMP Cycle 27

In Cycle 27, nine §306 and four §306A projects were selected for NOAA funding out of a total of 22 final applications from an original pool of 36 pre-proposals. Additionally, eight projects were selected as PSMs. Cycle 27 commenced on October 1, 2022 and GLO staff is conducting general oversight of the CMP and grant tasks to ensure all projects are completed in a timely manner and within budget.



CMP Cycle 28

CMP began soliciting for Cycle 28 on March 1, 2022. Two in-person workshops, one Corpus Christi and the other in Galveston, and a third virtual workshop were held in April 2022 and gathered 107 attendees. On June 8th, NOAA-funded pre-proposals and PSM final applications were due. 36 pre-proposals and 14 PSM final applications were received. Of the original applicant pool, 21 projects were invited to submit final applications for NOAA funding and the CMP Review Team selected five projects to receive GOMESA PSM money. The five PSMs will begin as early as April 2023. The CMP Review Team will select which applications will receive NOAA funding in January 2023 and the projects will begin on October 1, 2023.



CMP Budget

FY 2021 §306/§306A	State	Sub-recipients	Total
Federal Amount Awarded	\$559,301	\$1,906,669	\$2,466,000
State/Subrecipient Match	\$1,034,552	\$1,431,448	\$2,466,000
Subtotal	\$1,593,853	\$3,338,147	\$4,932,000

§309	State	Sub-recipients	Total
Federal Amount Awarded	\$530,000	\$530,000	\$530,000

GOMESA	State	Sub-recipients	Total
State Amount Awarded	\$8,671,463	\$8,671,463	\$8,671,463

FY 2022 §306/§306A	State	Sub-recipients	Total
Federal Amount Awarded	\$726,313	\$1,759,687	\$2,486,000
State/Subrecipient Match	\$1,343,065	\$1,142,935	\$2,486,000
Subtotal	\$2,069,378	\$2,902,622	\$4,972,000

§309	State	Sub-recipients	Total
Federal Amount Awarded	\$530,000	\$530,000	\$530,000

GOMESA	State	Sub-recipients	Total
State Amount Awarded	\$8,729,655	\$8,729,655	\$8,729,655

NOAA-Based Funding by Entity

Entity	FY21 - Cycle 26		FY22 - Cycle 27	
Local Gov'ts	\$240,000.00	14%	\$554,800.00	37%
Special Districts	\$-	0%	\$-	0%
Nonprofits	\$420,035.00	25%	\$289,602.00	20%
Universities	\$736,498.00	44%	\$637,997.00	43%
State Agencies	\$244,287.00	15%	\$-	0%
Regional Gov'ts	\$36,000.00	2%	\$-	0%
Total	\$1,676,820.00		\$1,482,399.00	

NOAA-Based Funding by County

County	FY21 - Cycle 26	FY22 - Cycle 27
Aransas	\$-	\$-
Brazoria	\$-	\$-
Calhoun	\$193,535.00	\$-
Cameron	\$213,342.00	\$426,632.00
Chambers	\$-	\$-
Galveston	\$220,000.00	\$139,800.00
Harris	\$178,000.00	\$71,083.00
Jackson	\$65,985.00	\$-
Jefferson	\$-	\$99,887.00
Kenedy	\$-	\$-
Kleberg	\$-	\$98,080.00
Matagorda	\$99,634.00	\$99,669.00
Nueces	\$62,500.00	\$257,646.00
Orange	\$-	\$-
Refugio	\$-	\$-
San Patricio	\$99,981.00	\$-
Victoria	\$-	\$-
Willacy	\$-	\$-
Coastwide	\$99,713.00	\$-
Lower Coast	\$-	\$189,602.00
Upper Coast	\$444,130.00	\$100,000.00
Total	\$1,676,820.00	\$1,482,399.00

GOMESA by Entity

Entity	Cycle 25		Cycle 26		Cycle 27	
Local Gov'ts	\$382,432.00	6.31%	\$1,090,477.00	12.58%	\$4,530,254.00	51.89%
Special Districts	\$-	0.00%	\$-	0.00%	\$-	0.00%
Nonprofits	\$1,650,000.00	27.22%	\$2,270,771.00	26.19%	\$1,187,215.00	13.60%
Universities	\$3,185,427.00	52.56%	\$4,595,215.00	52.99%	\$3,012,186.00	34.51%
State Agencies	\$842,998.00	13.91%	\$715,000.00	8.25%	\$-	0.00%
Regional Gov'ts	\$-	0.00%	\$-	0.00%	\$-	0.00%
Total	\$6,060,857.00		\$8,671,463.00		\$8,729,655.00	

GOMESA by County

County	FY20 - Cycle 25	FY21 - Cycle 26	FY22 - Cycle 27
Aransas	\$-	\$-	\$-
Brazoria	\$-	\$-	\$570,768.00
Calhoun	\$-	\$-	\$212,460.00
Cameron	\$842,998.00	\$-	\$852,254.00
Chambers	\$-	\$-	\$-
Galveston	\$1,650,000.00	\$1,090,477.00	\$-
Harris	\$-	\$-	\$-
Jackson	\$-	\$-	\$-
Jefferson	\$-	\$-	\$-
Kenedy	\$-	\$-	\$-
Kleberg	\$1,189,414.00	\$-	\$-
Matagorda	\$-	\$371,116.00	\$-
Nueces	\$382,432.00	\$355,289.00	\$4,177,533.00
Orange	\$-	\$-	\$-
Refugio	\$-	\$-	\$-
San Patricio	\$-	\$-	\$-
Victoria	\$-	\$-	\$-
Willacy	\$-	\$-	\$-
Coastwide	\$1,996,013.00	\$2,493,834.00	\$1,729,425.00
Lower Coast	\$-	\$1,899,655.00	\$747,500.00
Upper Coast	\$-	\$2,461,092.00	\$439,715.00
Total	\$6,060,857.00	\$8,671,463.00	\$8,729,655.00

Project Success Stories



Dollar Bay

The Galveston Bay Foundation (GBF) used CMP Cycle 25 GOMESA funds to purchase approximately 102 acres of coastal habitat adjacent to Dollar Bay in Galveston County. This property, which has been greatly impacted by shoreline erosion, will be preserved in perpetuity to protect the viability of Dollar Bay. In addition to the land purchase, GBF completed 40 acres of invasive species removal as a component of GBF's conservation effort to restore inter-tidal marsh and estuarine habitats in this bay system. This was a Tier 1 TCRMP project (R1-16) and ties into an upcoming CEPR Cycle 12 project, also with GBF, that will conserve approximately 1.5 miles of the Dollar Bay shoreline using a living shoreline.

Redhead Pond

The City of Corpus Christi used Cycle 25 GOMESA funds to acquire 24.43 acres of wetland and upland property adjacent to and contiguous with the existing TPWD Redhead Pond Wildlife Management Area. Redhead Pond is an extremely important freshwater pond used by thousands of wintering redhead ducks. Unfortunately, over the years, this 9-acre pond has become brackish/saline due to a past stormwater re-route project that deprived the pond of freshwater for several decades. The acquisition and subsequent conservation of this ecologically sensitive property will provide a physical continuum of and a buffer around the Redhead Pond Wildlife Management Area and will prevent the land from being developed. It will also allow the City of Corpus Christi to begin a new stormwater re-route project to re-introduce freshwater to Redhead Pond with the goal of converting it back into a freshwater system. The project is consistent with TPWD's "Long Range Plan for Redhead Pond Wildlife Management Area" and was the first CMP PSM to be completed.



South Padre Island Dune Restoration: Phase I

In 2020, the South Padre Island faced severe winter king tides and four named hurricanes that brought significant coastal erosion to the area's dune systems. Without a seawall, the island relies heavily on its dune systems for erosion protection as dunes help stabilize the beach and act as the first line of defense against storm surge. The City of South Padre Island (SPI) utilized Cycle 24 funds to install temporary sand fencing at six sites along the public beach managed by SPI. SPI also planted indigenous vegetation and installed planting signage to educate the public about dune plants and warn that the vegetation should not be disturbed. Through this project, SPI restored the dune system to help prevent further coastal erosion on SPI. Almost immediately after the temporary fencing was installed and the planting was complete in late 2021, the SPI observed sand building up. The fences had trapped around two vertical feet by February 2022.



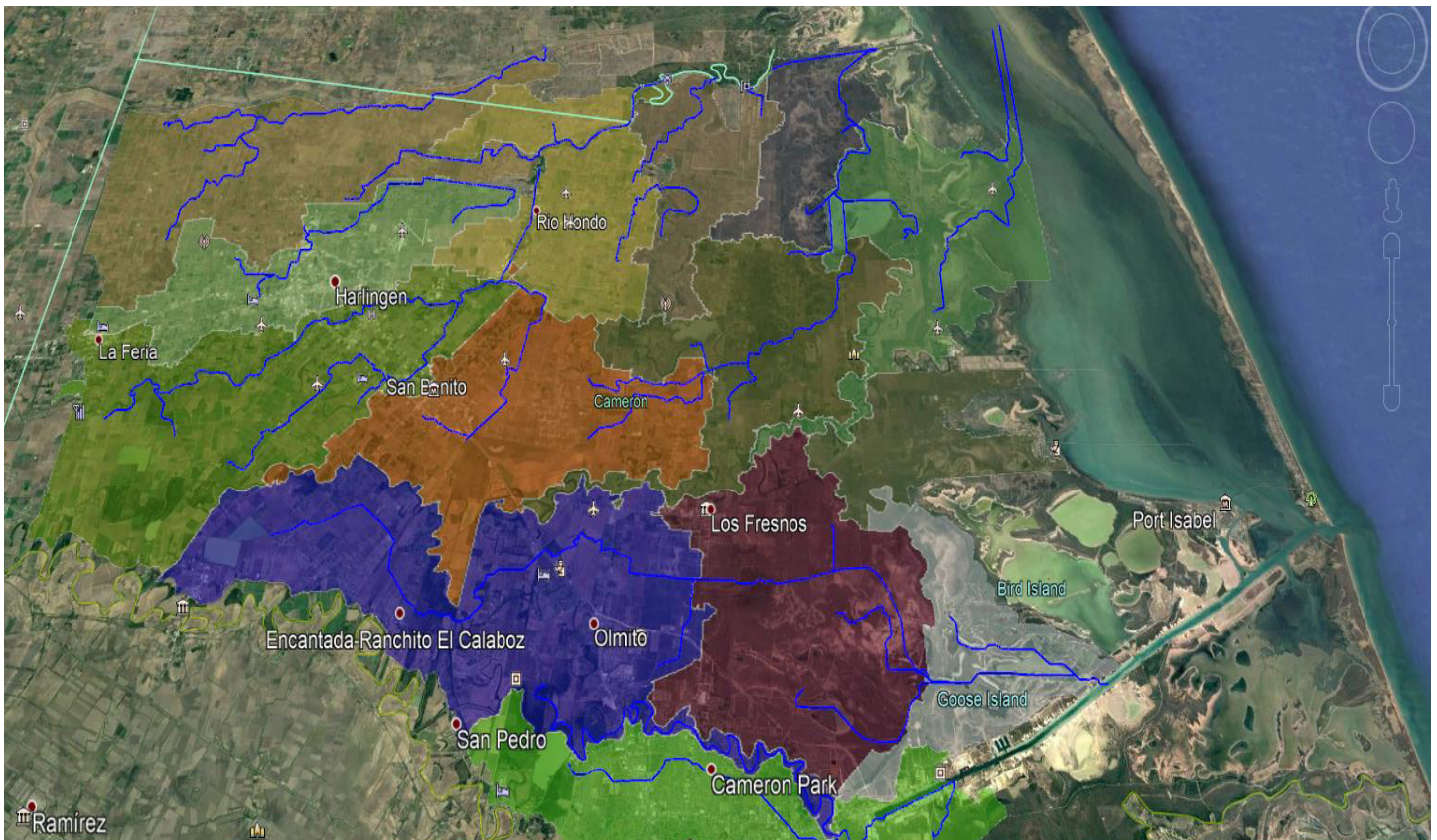
Dagger Island Restoration Project

Dagger Island separates Corpus Christi and Redfish Bays, serving as a protective barrier to valuable habitat, including seagrass, oyster reefs, mangroves, and estuarine marshes. However, Dagger Island has lost over 125 acres of land due to erosion in the past 60 years. To help re-build the island, TPWD constructed two nearshore breakwaters and a 28-acre beneficial use site. TPWD then used funding from CMP Cycle 23 to design and construct a living shoreline landward of the nearshore breakwaters and conduct monitoring. The project transplanted 8,750 saltmeadow cordgrass sprigs to the higher elevations at two sites, and transplanted smooth cordgrass sprigs to both sites behind the breakwaters. TPWD had to replant smooth cordgrass over approximately one acre at one site in July 2021 because of high mortality rates caused by Tropical Storm Marco and Hurricane Laura in August 2020 and Winter Storm Uri in February 2021. The living shorelines created by this project will enhance shoreline stabilization and restore important habitat that is vital to the health of the bay ecosystem.

Storm Surge Flood Maps Development for the Lower Laguna Madre Coastal Emergency Management

Hurricanes and their associated storm surges cause catastrophic impacts along the Texas coast, including severe coastal inundation of roadways. Existing hurricane storm surge forecasting systems and coastal region flood maps provide valuable potential flood information; however, the forecasted watershed inundation zones could be improved by incorporating the results of watershed rainfall-runoff flood routing. These improvements on determining the impact of a hurricane storm surge on coastal inundation could then be used to develop hurricane emergency evacuation routes that consider flooded areas. The University of Texas Rio Grande Valley (UT-RGV) used funds from CMP Cycle 23 to develop storm surge flood maps for 45 hypothetical storm events, including hurricane impact, for the Lower Laguna Madre watershed in south Texas. UT-RGV

then created a website-based emergency evacuation navigation tool to allow emergency first responders and impacted communities the ability to navigate flooded areas safely. By incorporating with the DriveTexas web application, which provides real-time road-side information maintained by TxDOT, the project website (<https://vcore.utrgv.edu/>) shows the detour routes to avoid flooded areas.



NOAA-Funded Cycle 26 Projects

ARANSAS COUNTY

Data Collection for Oyster Mariculture Interactions with Seagrass

Texas A&M University at Corpus Christi (TAMU-CC) will assess the sediment plumes generated by cultivated oyster mariculture and evaluate the effect of the sediment on seagrasses. TAMU-CC will use this data to suggest a buffer distance between oyster mariculture and seagrasses.

CMP Funded: \$102,978.00
Match: \$68,743.00
Total Project: \$171,721.00

Contact: Dr. Kirk Cammarata
6300 Ocean Drive
Corpus Christi, TX 78412
361-825-2468

CALHOUN COUNTY

Bird Island Creation in Carancahua Bay

The National Audubon Society will develop 90% designs and apply for the necessary permits for a new bird rookery island at the mouth of Carancahua Bay. The island will add breeding habitat resilience into the Matagorda Bay system for many aquatic birds.

CMP Funded: \$135,935.00
Match: \$92,023.00
Total Project: \$227,958.00

Contact: Mrs. Alexis Baldera
2407 S. Congress Avenue
Austin, TX 78704
512-967-8116

Restoration of small shell island on Bill Day's Reef to enhance nesting for American Oystercatchers

The San Antonio Bay Partnership will restore a segment of Bill Day's Reef, near Port O'Connor, to create a viable nesting site for American Oystercatchers. The site will be elevated with bagged oyster shell and shell hash to protect nests from wash over during high tides.

CMP Funded: \$12,000.00
Match: \$8,000.00
Total Project: \$20,000.00

Contact: Mr. James Dodson
410 N. Vine Street,
Victoria, TX 77901
361-649-1518

Expansion of King Fisher Beach Park

Calhoun County will expand the boundary of the County's King Fisher Beach Park with the fee simple purchase of nearly 8 acres of grassland adjacent to the park. The additional land will increase the park beach by 600 feet, increase beach access, and protect the shoreline from erosion.

CMP Funded: \$36,000.00
Match: \$24,000.00
Total Project: \$60,000.00

Contact: Commissioner Gary Reese
104 Dallas Avenue
Seadrift, TX 77983
361-785-3141

CAMERON COUNTY

Sea Island Circle Beach Access Amenity Improvements

The City of South Padre Island (SPI) will add amenities to the Sea Island Circle Public Beach Access, including public restrooms, changing rooms, and a rinse station. This project will provide increased access to basic sanitation for South Padre Island beachgoers.

CMP Funded: \$120,000.00
Match: \$80,000.00
Total Project: \$200,000.00

Contact: Ms. Kristina Boburka
4601 Padre Boulevard
South Padre Island, 78597
956-761-3837

Resilient Coastal Dune Ecosystems for Erosion and Habitat Protection at South Padre Island

Texas A&M University at Kingsville will establish plant repositories of native vegetation harvested from local dunes and assess dune integrity and vegetation development in Cameron County. The project will also develop new cost-effective monitoring and analysis tools, along with a proposed dune vulnerability index tailored for Texas coastal managers.

CMP Funded: \$93,342.00
Match: \$72,431.00
Total Project: \$165,773.00

Contact: Dr. Jianhong Ren
700 University Boulevard
Kingsville, TX 78363
361-593-2187

COASTWIDE

Texas Regional Stormwater Wetland Manual: Empowering communities to develop wetlands for resiliency

Texas A&M AgriLife Extension Service will develop a manual that details the how to construct a stormwater wetland. The manual will give communities the knowledge and resources they need to complete a stormwater wetland project to help mitigate localized flood risks.

CMP Funded: \$99,714.00
Match: \$67,281.00
Total Project: \$166,995.00

Contact: Ms. Charriss York
1335 Regents Park Drive
Houston, TX 77058
218-614-5508

GALVESTON COUNTY

Pocket Park #3 Improvements

The City of Galveston (the City) will construct a pedestrian path leading from the parking area to the beach and resurface the gravel parking area at Pocket Park #3. This will ensure the City is compliant with the City's Beach Access Plan and minimize adverse effects to the due system.

CMP Funded: \$120,000.00
Match: \$80,000.00
Total Project: \$200,000.00

Contact: Mr. Russell Cole
P.O. Box 779
Galveston, TX 77553
409-797-3621

Beach-nesting Bird Demography & Public Engagement on the Texas Gulf Coast

The American Bird Conservancy will promote the survival of declining coastal breeding birds through protecting coastal natural resource areas and collecting and analyzing demographic data for targeted bird species. The Conservancy will do this by protecting sensitive breeding areas and monitoring birds' response to management actions through collecting demographic data.

CMP Funded: \$100,000.00
Match: \$198,429.00
Total Project: \$298,429.00

Contact: Richard Gibbons
2011 Silver Moon Drive
Missouri City, TX 77459
225-614-4008

Galveston Bay Foundation Oyster Shell Recycling Program Phase 4: Sun Curing Research & Collaboration

Galveston Bay Foundation (GBF) will continue their oyster shell recycling program by collecting shells from participating restaurants and sun-curing them before being returned to the Galveston Bay. GBF will also expand their program to include research on sun curing practices and provide additional shell collection services for restaurants in Houston's inner loop.

CMP Funded: \$100,000.00
Match: \$66,744.00
Total Project: \$166,744.00

Contact: Mrs. Shannon Batte
1725 Highway 146
Kemah, TX 77565
832-536-2265

HARRIS COUNTY

UHCL Habitat Restoration and Nature Trail

The Environmental Institute of Houston (EIH) at the University of Houston at Clear Lake will determine the most effective restoration method for Texas' coastal grassland habitat. EIH will also restore 1.5 acres of grassland and install a trail to lead to the restored habitat.

CMP Funded: \$78,000.00
Match: \$66,019.00
Total Project: \$144,019.00

Contact: Ms. Wendy Reistle
2700 Bay Area Boulevard
Houston, TX 77058
281-283-3045

JACKSON COUNTY

Texas Coastal Nutrient Input Repository - Phase I Lavaca Bay

The Texas Water Resources Institute at Texas A&M AgriLife will produce a centralized portal of modeled surface-water nutrient loads entering Lavaca Bay. These data will improve understanding of the linkages between nutrient inputs and bay ecosystems that may be extended to other Texas estuaries.

CMP Funded: \$65,986.00
Match: \$43,991.00
Total Project: \$109,977.00

Contact: Mr. Michael Schramm
578 John Kimbrough Boulevard
College Station, TX 77843
979-458-9191

MATAGORDA COUNTY

Mapping Optimal Locations for Oyster Aquaculture: I. Remote Sensing and Field Observations

Texas A&M University at Corpus Christi will create a map of favorable habitats for oyster farming in terms of substrate and surface-groundwater discharge in Matagorda Bay. The study will complement and inform current aquaculture site-selection tools and lead to more successful aquaculture efforts and economic success.

CMP Funded: \$99,635.00
Match: \$66,427.00
Total Project: \$166,062.00

Contact: Dr. Mohamed Ahmed
6300 Ocean Drive
Corpus Christi, TX 78412
361-825-3278

NUECES COUNTY

Texas Gulf Region CWMA: Dune Management & Restoration on Mustang Island, Phase II

Coastal Bend Bay and Estuary Program (CBBEP) will remove invasive Brazilian peppertree from an impacted dune habitat on Mustang Island and restore the dunes by replanting and/or reseeding treated areas. CBBEP will coordinate this project with the other partners of the Texas Gulf Region Cooperative Weed Management Area.

CMP Funded: \$30,000.00
Match: \$40,965.00
Total Project: \$70,965.00

Contact: Ms. Leigh Perry
615 N Upper Broadway
Corpus Christi, 78401
361-336-0310

Redhead Pond Invasive Species Management

Friends of Redhead Pond and Environmental Stewardship Association will remove invasive plant species to improve the diversity of native plants and wild bird populations at Redhead Pond. Friends will target Brazilian peppertree and will monitor the removal sites for native plant growth.

CMP Funded: \$32,500.00
Match: \$23,617.00
Total Project: \$56,117.00

Contact: Dr. Robert Vega
2202 Woodcrest Drive
Corpus Christi, TX 78418
361-429-0661

UPPER COAST

The effects of Rollover Pass closure on tidal wetland plant assemblages and associated fauna

Texas A&M University at Galveston (TAMU-G) will monitor the long-term response of aquatic plant and animal communities to the closure of Rollover Pass. TAMU-G will also monitor salinity to help understand freshwater inflow needs to East Bay.

CMP Funded: \$100,000.00
Match: \$66,668.00
Total Project: \$166,668.00

Contact: Dr. Anna Armitage
1001 Texas Clipper Road
Galveston, TX 77553
409-740-4842

Construction and Enhancement of Artificial Reefs in the Northern Gulf of Mexico

Texas Parks and Wildlife Department will deploy substantial amounts of artificial reef habitat at the Sabine Reef. The project will create reef habitat for both juvenile and adult fish within the same region.

CMP Funded: \$244,287.00
Match: \$213,213.00
Total Project: \$457,500.00

Contact: Dr. Emma Clarkson
1409 Waldron Road
Corpus Christi, TX 78418
361-694-0226

Evaluating the trophic value of beneficial uses restoration sites for coastal birds

Texas A&M University at Galveston will assess the value of the beneficial-uses restoration sites in the Salt Bayou ecosystem for migratory and resident waterfowl and shorebirds, using invertebrate assemblages as a proxy for habitat quality. This dataset will inform future restoration practices by identifying the features of sites that best support waterfowl and shorebirds.

CMP Funded: \$99,843.00
Match: \$66,564.00
Total Project: \$166,407.00

Contact: Dr. Laura Jurgens
1001 Texas Clipper Road
Galveston, TX 77554
409-740-4918

WILLACY COUNTY

Fred Stone Park Amenities Enhancements

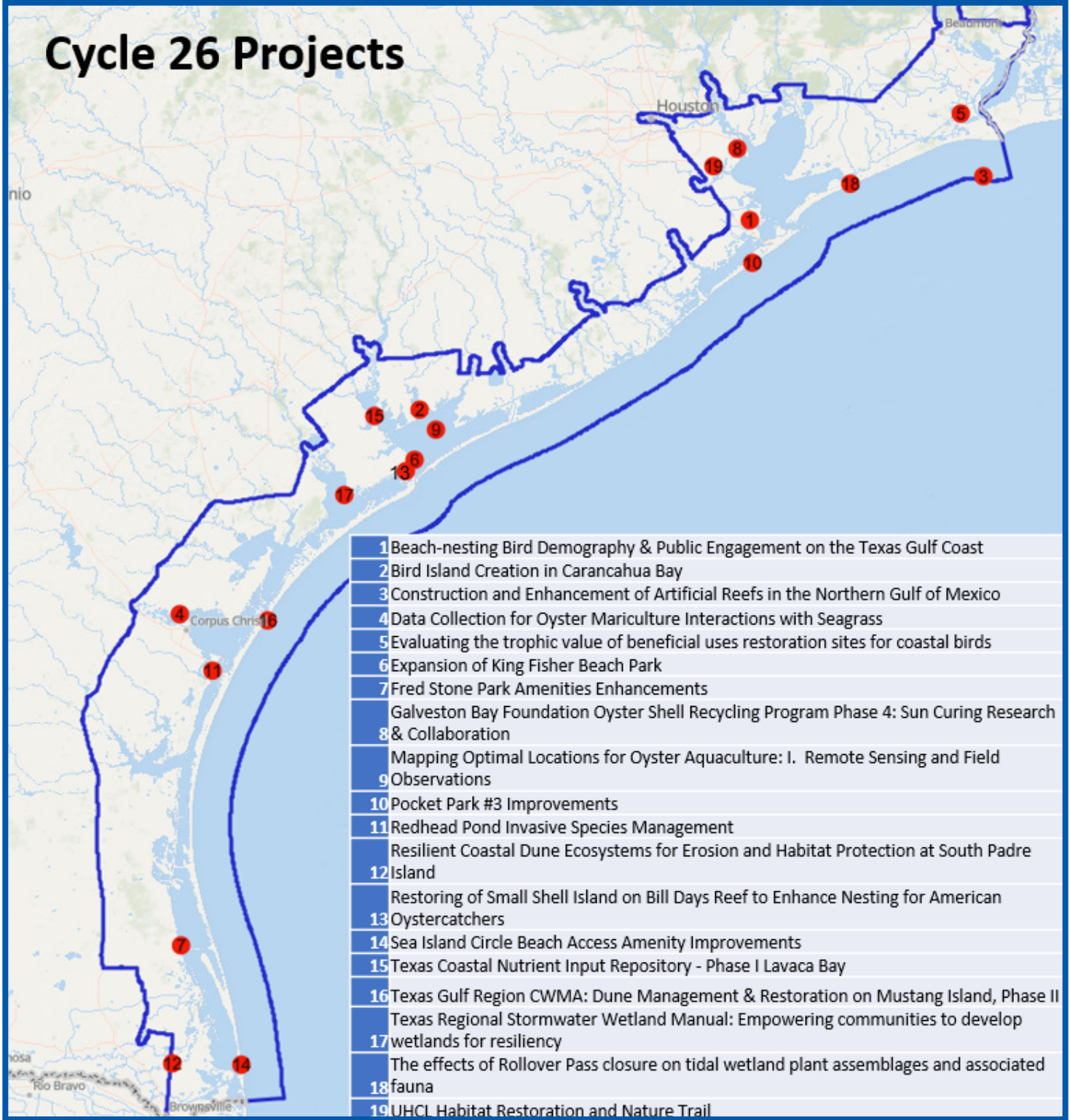
Willacy County (the County) will install new 40' x 40' ADA restroom facilities with a rinse station, build an 18,000 square foot parking lot with 50 spaces and six (6) ADA parking lot with 50 spaces and six (6) ADA parking spaces, restore 1,600 linear feet of access road and associated sidewalk, and install appropriate safety lighting. In making these improvements, the County hopes to provide safe public access and attract more people to the park.

CMP Funded: \$213,900.00
Match: \$142,600.00
Total Project: \$356,500.00

Contact: Ms. Jessica Rodriguez-Gracida
576 W. Main Street
Raymondville, TX 78580
956-689-3393



Cycle 26 Projects



NOAA-Funded Cycle 27 Projects

ARANSAS COUNTY

Evaluating Health Risks of Fecal Pollution in Little Bay

Texas A&M AgriLife will perform quantitative microbial risk assessment to assess source-specific human health risks in recreational waters by utilizing recently published enterococci and bacterial source tracking data.

CMP Funded: \$70,000.00
Match: \$46,667.00
Total Project: \$116,667.00

Contact: Mr. Lucas Gregory
578 John Kimbrough Boulevard
College Station, TX 77843
979-845-7869

CAMERON COUNTY

Cameron County Beach Access #3 Accessibility Infrastructure

Cameron County will construct new amenities at Beach Access # 3, which were designed and permitted under CMP Cycle 24. The amenities include a sidewalk and dune walkover and will be American with Disabilities Act compliant.

CMP Funded: \$120,000.00
Match: \$80,000.00
Total Project: \$200,000.00

Contact: Mr. Augusto Sanchez Gonzalez
1390 W. Expressway 83
San Benito, TX 78586
956-247-3500

Fantasy Circle Beach Access Improvements

The City of SPI will design and construct a permanent restroom and a wooden, removable drive-over at the Fantasy Circle beach access point.

CMP Funded: \$120,000.00
Match: \$120,000.00
Total Project: \$240,000.00

Contact: Ms. Kristina Boburka
321 Padre Boulevard
South Padre Island, TX 78597
956-761-3837

COASTWIDE

Texas High School Coastal Monitoring Program

This project will help further understanding of short-term (seasonal, yearly, and storm impacts) and long-term (decadal and storm recovery) changes to the coastal environment. The University of Texas – Bureau of Economic Geology (UT-BEG) will collect data and photos of beach and dune systems. This information will be used by coastal managers and scientists. This project is funded using Cycle 27 Admirative funds with no match required.

Project Total: \$75,000.00

Contact: Dr. Tiffany Caudle
University Station, Box X
Austin, TX 78713
512-475-9572



GALVESTON COUNTY

Fort Travis Public Restroom Project

Galveston County will design and construct a restroom building that will include rinse stations, educational signage about protected wildlife, the historical significance of Fort Travis, and a kiosk for events and coastal warnings/information.

CMP Funded: \$140,250.00
Match: \$93,500.00
Total Project: \$233,750.00

Contact: Ms. Julia Diaz
4102 FM 519
La Marque, TX 77568
409-770-8808

HARRIS COUNTY

Exploration Green Stormwater Wetland Water Quality Baseline Study

Texas A&M AgriLife will generate data on the stormwater treatment wetlands being created at Exploration Green, using CMP Cycle 23 funds, in the Clear Creek watershed. The data will be collected by sampling three outfall locations and provided to decision makers at Exploration Green Conservancy and Clear Lake City Water Authority.

CMP Funded: \$71,083.00
Match: \$47,390.00
Total Project: \$118,473.00

Contact: Ms. Christina Taylor
1335 Regents Park Drive
Houston, TX 77058
979-399-4009

JEFFERSON COUNTY

Identify Potential BMP Tools to Reduce Bacteria Loading into Nueces River

Lamar University will analyze existing field surveys of on-site sewage facilities and water quality data to identify the critical area for bacteria loading in the basin. The project will also identify bacteria pathways and develop a coupled model to assess the best management practices to mitigate and reduce the bacteria loading.

CMP Funded: \$99,887.00
Match: \$66,598.00
Total Project: \$166,495.00

Contact: Ms. Qin Qian
211 Redbird Lane
Beaumont, TX 77710
409-880-7559

KLEBERG COUNTY

A Study of the Laguna Salada Ecosystem to Support Baffin Bay Restoration

Texas A&M University – Corpus Christi will complete a targeted study of water quality in the Laguna Salad and provide nutrient management recommendations. This study will help identify pollutant sources (natural or human-derived), algal response to nutrient inputs from different sources, and overall water quality conditions with the overall goal of helping control brown tide blooms in the larger Baffin Bay system.

CMP Funded: \$98,080.00
Match: \$65,435.00
Total Project: \$163,515.00

Contact: Dr. Michael Wetz
6300 Ocean Drive
Corpus Christi, TX 78412
361-825-2132

MATAGORDA COUNTY

Matagorda Bay Shoreline Resilience: Restoring Seagrass

The Matagorda Bay Foundation will complete Phase I of a seagrass restoration pilot project. Phase I includes completing the project design, applying for all necessary federal and state permits, developing a sampling protocol, conducting baseline site sampling, and assessing CCAC seagrass restoration needs.

CMP Funded: \$138,241.00
Match: \$93,950
Total Project: \$232,191.00

Contact: Mr. Bill Balboa
15918 County Road 946
Brazoria, TX 77422
361-781-2171

Freshwater Inflow Standards for East Matagorda Bay

Texas A&M AgriLife will inform the development of freshwater inflow standards for East Matagorda Bay by quantifying the amount of freshwater entering the bay from the Lake Austin watershed. Once the inflow is quantified, researchers can determine how much supplemental water is required to sustain the bay during droughts.

CMP Funded: \$99,669.00
Match: \$66,449.00
Total Project: \$166,118.00

Contact: Mr. Rusty Feagin
2138 Texas A&M University
College Station, TX 77843
979-862-2612

NUECES COUNTY

Controls of Subsurface Geology on Barrier Island Breaching

Texas A&M University – Corpus Christi (TAMU-CC) will work to better understand how geological and stratigraphic features effect dune morphology and coastal breaching on northern parts of Padre Island. Specifically, TAMU-CC will investigate how these features vary spatially, how spatial variability controls dune morphology, and where northern Padre Island is more likely to become breached.

CMP Funded: \$99,999.00
Match: \$66,666.00
Total Project: \$166,665.00

Contact: Dr. Mohamed Ahmed
6300 Ocean Drive
Corpus Christi, TX 78412
361-825-3278

Mustang Island State Park Geoenvironmental Atlas

The University of Texas – Bureau of Economic Geology will create geoenvironmental atlases for Mustang Island and Galveston Island State Parks that highlight the geologic, geomorphic, and wetland features and coastal hazards unique to the parks. The atlases will be comprised of printable, digital, and web products and text discussing the context of major atlas elements.

CMP Funded: \$82,647.00
Match: \$55,219.00
Total Project: \$137,866.00

Contact: Dr. Tiffany Caudle
University Station, Box X
Austin, TX 78713
512-475-9572

Public Access Enhancements for the Encinal Peninsula (Flour Bluff)

This City of Corpus Christi (the City) will complete a feasibility and structural engineering assessment for renovating an abandoned railroad trestle over Oso Bay to create a trail connecting to the Oso Bay Wetlands Preserve. The City will also complete a master plan to include land use and amenities for the trail.

CMP Funded: \$175,000.00
Match: \$117,060.00
Total Project: \$292,060.00

Contact: Mr. Tyler Florence
1609 N. Chaparral
Corpus Christi, TX 78401
361-826-3132



UPPER COAST

Community Outreach Through Oyster Shell Recycling and Citizen Science

Galveston Bay Foundation will continue the expansion of the Oyster Shell Recycling Program and increase community engagement by recruiting additional restaurant partners and implementing three citizen science programs: oyster gardening, reef monitoring, water quality monitoring.

CMP Funded: \$100,000.00

Match: \$66,667.00

Total Project: \$166,667.00

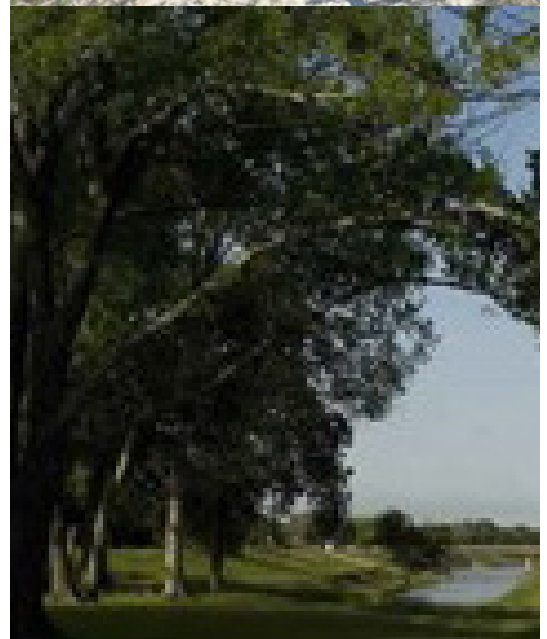
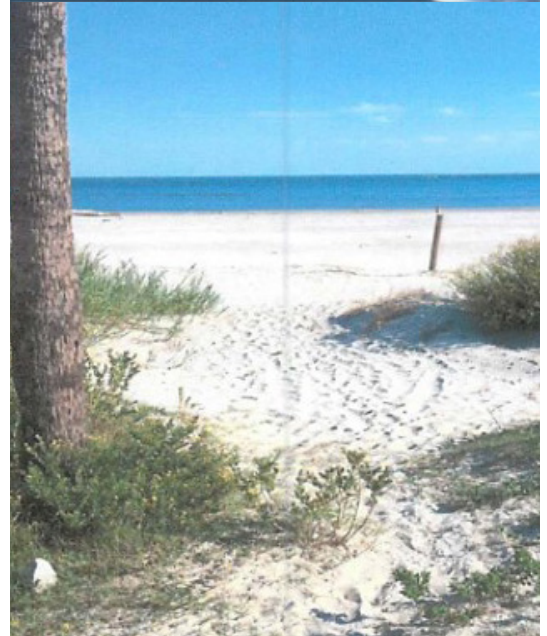
Contact: Ms. Shannon Batte
1725 Highway 146
Kemah, TX 77565
832-536-2265

Historical Shoreline Movements in Galveston, Trinity, Easy and West Bays on the Upper Texas Coast

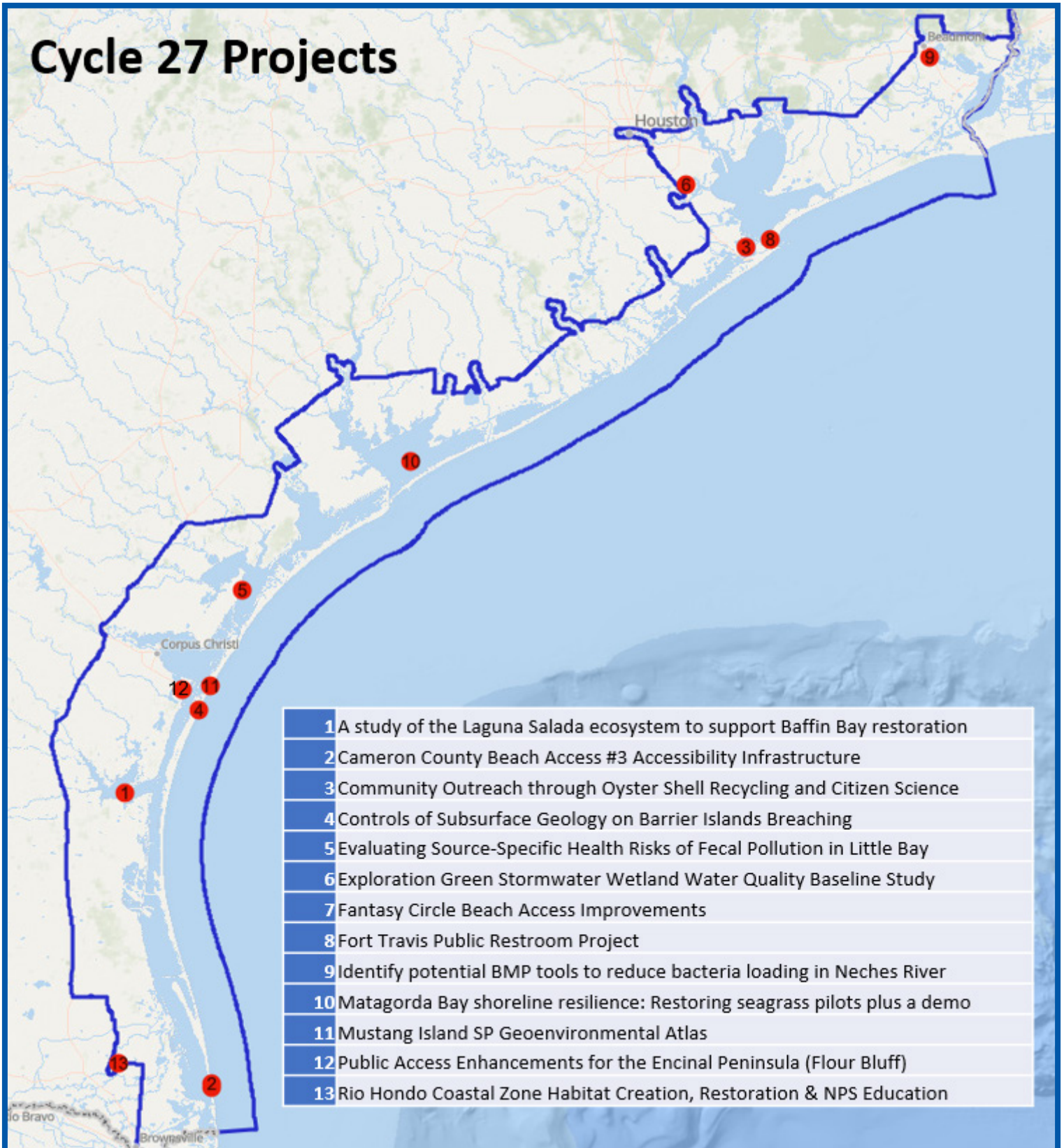
The University of Texas – Bureau of Economic Geology will update rates of shoreline movement, characterize shoreline types, and assess vulnerability to sea-level change along bay shorelines within the Galveston Bay system. This project will be funded using Cycle 27 administrative funds that do not require match.

Project Total: \$108,821.00

Contact: Dr. Tiffany Caudle
University Station, Box X
Austin, TX 78713
512-475-9572



Cycle 27 Projects



Projects of Special Merit - Cycle 25



CAMERON COUNTY

Removal of the Derelict Queen Isabella Causeway – Creation of an Artificial Reef in the Southwest Gulf of Mexico

Texas Parks and Wildlife Department will use CMP funds to develop engineering and design plans for the removal of the of the Queen Isabella Causeway in South Padre Island, TX. The causeway is in a severe state of disrepair and presents a hazard to boaters and the public.

Project Total: \$842,998.00

Contact: Jessica Chappell
1700 N. Congress Avenue
Austin, TX 78701
512-463-5818

COASTWIDE

Assessing Coastal Change in Support of the 2023 Texas Coastal Resiliency Master Plan

Texas A&M University – Corpus Christi’s Harte Research Institute will build upon the 2019 TCRMP. This project will further demonstrate potential benefits of TCRMP projects by modeling before and after project impacts to the coast. Results from this project will feed into the development of the 2023 TRCMP. This project implements TCRMP project R0-1.

Project Total: \$996,013.00

Contact: Dr. James Gibeaut
6300 Ocean Drive
Corpus Christi, TX 78412
361-825-2060

The Texas Coastal Collaborative - A dynamic approach to hazard mitigation, resiliency & NPS control

Texas State University will take a dynamic approach to hazard mitigation, resiliency, and coastal NPS pollution control. This project will focus on best practices for NPS pollution control and community ordinance adoption. This project implements TCRMP project R0-8.

Project Total: \$1,000,000.00

Contact: Mr. David Dornak
601 University Drive
San Marcos, TX 78666
512-213-7389

GALVESTON COUNTY

Dollar Bay Land Acquisition

The Galveston Bay Foundation will acquire 102 acres of wetlands at 50% appraised value around Dollar Bay. Upon acquisition, the wetlands on the property will be restored with funds from NFWF, CEPR, and others. This project implements the TCRMP project R1-16.

Project Total: \$1,650,000.00

Contact: Mr. Matthew Singer
1100 Hercules Avenue
Houston, TX 77058
281-332-3381

KLEBERG COUNTY

An Integrated Assessment of Nutrient Loadings to Baffin Bay, Texas

Texas A&M University – Corpus Christi will quantify nutrient loadings to Baffin Bay from multiple potential sources to identify the main sources of nutrients to help prioritize watershed restoration activities. This project implements TCRMP project R3-25.

Project Total: \$1,189,414.00

Contact: Dr. Michael Wetz
6300 Ocean Drive
Corpus Christi, TX 78412
361-825-2132

NUECES COUNTY

Redhead Pond Acquisition Project

The City of Corpus Christi will acquire 24 acres of Redhead Pond (wetlands) in Corpus Christi. This project is expected to result in improved water quality, reduced nonpoint source pollution, and re-establishment of freshwater marshes.

Project Total: \$382,432.00

Contact: Mr. Guillermo De Anda
1201 Leopard Street
Corpus Christi, TX 78411
361-826-2489



CYCLE 26 PROJECTS OF SPECIAL MERIT

COASTWIDE

A Comprehensive Assessment of Texas Coastal Ecosystems & Economies to Inform Ecological Restoration

Texas A&M University – Corpus Christi’s Harte Research Institute will develop ecosystem health report cards for various Texas Bays. The new bay-specific and coastwide Report Cards represent vital prioritization and planning tools for coastal restoration in Texas with utility for projects in the TCRMP.

Project Total: \$453,385.00

Contact: Dr. Michael Wetz
6300 Ocean Drive
Corpus Christi, TX 78412
361-825-2132

Freshwater Inflows to Texas Bays and Estuaries: A State-Wide Review, Synthesis, and Recommendations

Texas A&M University – Corpus Christi will conduct a synthesis of freshwater inflows to Texas bays and estuaries and publish the results in a book. Stakeholders, scientists, environmental nonprofits, resource agencies, and others implementing projects in the TCRMP can use this new volume as a tool for coastal resource management decision-making.

Project Total: \$1,325,449.00

Contact: Dr. Paul Montagna
6300 Ocean Drive
Corpus Christi, TX 78412
361-825-2040

Modernizing Texas Beach Watch Technology System

The GLO will modernize the Beach Watch system and expand its capabilities to allow predictive modeling which will provide real-time, modeled information for the beach patron. Upgrades would also allow for cell phone text notifications and improvements in data viewer mapping, location, and related geospatial services.

Project Total: \$715,000.00

Contact: Ms. Lucy Flores
1700 Congress Avenue
Austin, TX 78701
512-463-5134

GALVESTON COUNTY

Recovering Access and Restoring Resilience at Stewart Beach Park on Galveston Island

The Park Board of Trustees of the City of Galveston will develop roadways within Stewart Beach Park, install perimeter ditch work, make beach access improvements, create emergency and service vehicle access areas, plant native vegetation in the new ditches and slopes to absorb water, create swales, and stabilization of areas within the park. This science-based project will bring solutions to enhance resilience intended to reduce/or eliminate lost user days, and recapture previously lost access.

Project Total: \$1,090,477.00

Contact: Mrs. Sheryl Rozier
601 Tremont Street
Galveston, TX 77550
409-797-5138

LOWER COAST

Beneficial Use Master Plan -- Texas GLO Regions 3 (Coastal Bend) and 4 (Lower Coast)

Ducks Unlimited, Inc. will create a master plan for beneficial use of dredge material along the lower Texas coast. Developing a beneficial use master plan will provide the foundation for future restoration projects for decades.

Project Total: \$796,656.00

Contact: Dr. Todd Merendino
915 Front Street
Richmond, TX 77469
832-451-4801

Restoring Colonial Waterbird Populations on the Texas Coast

Coastal Bend Bay and Estuary Program will (1) manage rookery islands to maintain viability for current nesting birds; (2) monitor rookery islands to ensure nesting activities are proceeding as expected; and (3) complete engineering and design to restore degraded rookery islands in three bay systems along the lower Texas coast.

Project Total: \$1,102,999.00

Contact: Ms. Rosario Martinez
615 N Upper Broadway
Corpus Christi, TX 78401
361-336-0308

MATAGORDA COUNTY

Dog Island Acquisition

The Matagorda Bay Foundation will acquire 1,000 acres of mixed coastal habitat in Matagorda Bay and engage in engineering and design of infrastructure to support wildlife viewing, youth and adult education, research, and paddle sports. This acquisition will conserve Dog Island's resources, prevent habitat fragmentation, maintain connectivity, and sustain the biodiversity of native and migratory species that rely on the 8-mile-long wildlife corridor.

Project Total: \$371,116.00

Contact: Mr. William Balboa
15918 County Road 946
Brazoria, TX 77422
361-781-2171

NUECES COUNTY

Closing the loop: Recycling shells and restoring reefs for resilience and recovery

Texas A&M University – Corpus Christi (TAMU-CC) will extend their shell recycling program to include reef restoration. To do this, TAMU-CC will conduct three tasks: 1) reclaim shucked oyster shell from their seafood industry partners. 2) use recycled oyster shells to restore oyster reef complex in St. Charles Bay, and 3) host biannual community events for coastal residents and visitors to participate in hands-on reef restoration.

Project Total: \$355,289.00

Contact: Dr. Jennifer Pollack
6300 Ocean Drive
Corpus Christi, TX 78412
361-825-2041

UPPER COAST

Threat of Rising Sea Level & Water Tables to Texas Coastal Septic Systems: An Integrated Study

Texas A&M University – Corpus Christi will conduct a risk assessment and prediction of the vulnerability of on-site sewage facilities' functionality to climate and human-induced changes and their importance as NPS from the Bolivar Peninsula to Matagorda Beach. Integration of data and models will help lead to implementation of management measures to enable better control of NPS to ensure resilient coastal systems.

Project Total: \$927,131.00

Contact: Dr. Dorina Murgulet
6300 Ocean Drive
Corpus Christi, TX 78412
361-825-2309

Prediction of Texas wetland erosion through remote sensing, field surveys, and numerical modeling

Texas A&M University will establish a long-term, comprehensive wetland erosion time-series and to develop a predictive numerical model using this time-series to evaluate short- and long-term wetland erosion for key estuaries in Texas. The product will be a reliable design and evaluation tool for coastal wetland restoration projects in Texas.

Project Total: \$714,742.00

Contact: Dr. Kuang-An Chang
400 Harvey Mitchell Parkway South
College Station, TX 77845
979-845-4504

High Frequency Radar for Texas Bays and Ports

The University of Texas at El Paso will commission two high frequency radar networks in Galveston Bay and Sabine Lake. High frequency radar networks provide near real-time surface current data that is applicable to coastal hydrodynamic characterizations and enables more accurate modeling and assessment of pollutant transport, fate and water quality mechanisms.

Project Total: \$819,219.00

Contact: Dr. Rosa Fitzgerald
500 W. University Avenue
El Paso, TX 79968
915-747-7530



CYCLE 27 PROJECTS OF SPECIAL MERIT

BRAZORIA COUNTY

Assessing flow and sediment dynamics of Lower Brazos and San Bernard Basins

The University of Texas at Arlington and Texas A&M University - Galveston will undertake field campaigns and modeling experiments to help attain a clearer understanding of flow connectivity and sediment dynamics along the Brazos River, the San Bernard River, Caney Creek, and the surrounding area. The project will include 1) collection of sediment core and bathymetric data from the Brazos River mouth to Cedar Cut; 2) configuration of coupled hydrologic-hydrodynamic and sediment transport models for the region; 3) assessment of freshwater inflows along San Bernard River during floods; and 4) scenario analyses for flooding, sediment, and San Bernard River mouth stability.

Project Total: \$570,768.00

Contact: Dr. Yu Zhang
416 Yates Street
Arlington, TX 76019
817-272-1874

CAMERON COUNTY

Lower Laguna Madre Hydrodynamic Characterization

Cameron County, in partnership with Research Applied Technology Education Services, Inc., will expand the River and Estuary Observation Network-Rio Grande Valley's network of Real-Time-Hydrologic-Systems stations with the addition of six additional stations to continuously measure tidal stage height, meteorological parameters, water velocity profiles, and water quality.

Project Total: \$852,254.00

Contact: Mr. Augusto Sanchez Gonzalez
1390 W Expressway 83
San Benito, TX 78586
956-247-3530

CALHOUN COUNTY

Hydrologic restoration of the Welder Flats Marsh for Whooping Cranes

Texas A&M AgriLife will conduct hydrologic monitoring and data collection as well as GIS analysis to aid in engineering design of culverts and water control structures to restore hydrologic connectivity between the east of west marshes of Welder Flats.

Project Total: \$212,460.00

Contact: Dr. Thomas Huff
534 John Kimbrough Boulevard
College Station, TX 77845
682-459-7939

COASTWIDE

The Clean Coast Texas Collaborative Years 3 & 4

Texas State University will lead the Clean Coast Texas (CCT) Collaborative team in environmental outreach and education, comprehensive planning, local policy development, and engineering design and construction of green stormwater infrastructure projects to help reduce non-point source pollution. The CCT Collaborative team will also work with four new target communities to facilitate the adoption of the Sustainable Stormwater Manual and establish local ordinances and comprehensive plans.

Project Total: \$1,729,425.00

Contact: Mr. David Dornak
601 University Drive
San Marcos, TX 78666
512-213-7389

LOWER COAST

Gulf Reef Rehabilitation

Friends of the Rio Grande Valley Reef will accumulate 9,250 tons of donated, concrete materials at a site at the Port of Brownsville. Materials will then be deployed at the low-relief nursery reef off the coast of South Padre Island to expand and improve habitat for juvenile red snapper and other reef dwellers. Final location of deployed materials will be documented using side-scan SONAR.

Project Total: \$747,500.00

Contact: Mr. Gary Glick
419 West US 83
Pharr, TX 78577
512-923-1904

NUECES COUNTY

Assessment of seagrass habitat and stability in Texas coastal waters

University of Texas at Austin will conduct seagrass monitoring along the entire Texas coast. Over 700 stations along the coast will be visited to measure abundance, canopy height, biomass, species composition, condition, sediment carbon storage, and water quality at seagrass sites. This project will also conduct experimental acoustic monitoring of seagrass productivity and biomass to observe sub-diurnal fluctuations.

Project Total: \$499,533.00

Contact: Dr. Kenneth Dutton
750 Channel View Drive
Port Aransas, TX 78373
361-749-6744

Packery Channel Nature Park Shoreline Enhancement

Nueces County Coastal Parks Department (the County) will improve Packery Channel Park by constructing a resilient living shoreline to fight erosion and a raised pier structure to enhance public access. This project will include survey and permitting, analyses to aid in final construction plan designs, 100% engineering design, and construction/installation of a living shoreline in the Packery Channel Nature Park.

Project Total: \$3,678,000.00

Contact: Ms. Meagan Jones
P.O. Box 18608
Corpus Christi, TX 78480
361-414-6631

UPPER COAST

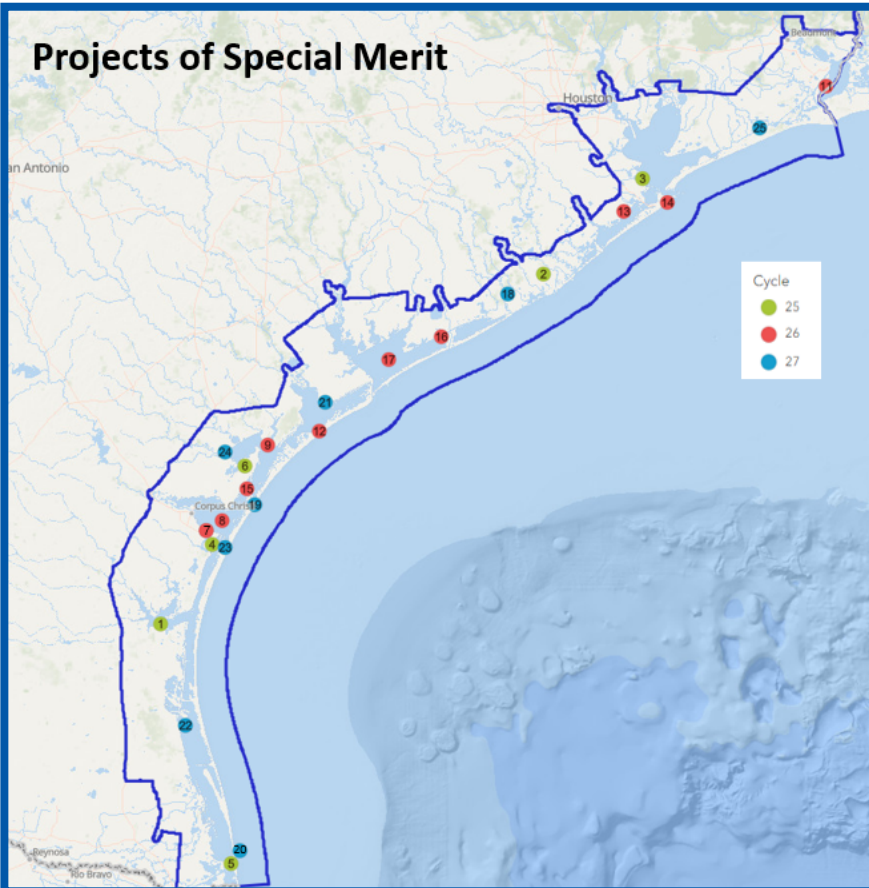
Updating the National Wetland Inventory in Coastal Texas

Ducks Unlimited will produce updated wetland maps from Galveston to the Texas-Louisiana border using the most current available imagery, data, and mapping techniques, as the wetland inventory of the region is severely outdated. Work will include aerial imagery and data compilation, fieldwork for validation of wetland classification, and production of a wetland inventory that can be used as a baseline for evaluating habitat conditions and management strategies.

Project Total: \$439,715.00

Contact: Mathew Halliday
915 Front Street
Richmond, TX 77469
734-623-6041

Projects of Special Merit



Project Name

1	An integrated assessment of nutrient loadings to Baffin Bay, Texas
2	Assessing Coastal Change in Support of the 2023 Texas Coastal Resiliency Master Plan
3	Dollar Bay Wetland Creation, Restoration and Acquisition (R1-16)
4	Redhead Pond - Adjacent Tract(s)Acquisition
5	Removal of derelict Queen Isabella Causeway - Creation of an Artificial Reef in SW Gulf of Mexico
6	The Texas Coastal Collaborative - A dynamic approach to hazard mitigation, resiliency and NPS control
7	A Comprehensive Assessment of Texas Coastal Ecosystems & Economies to Inform Ecological Restoration
8	Beneficial Dredge Use Master Plan -- Texas GLO Regions 3 (Coastal Bend) and 4 (Lower Coast)
9	Closing the loop: Recycling shells and restoring reefs for resilience and recovery
10	Freshwater Inflows to Texas Bays and Estuaries: A State-Wide Review, Synthesis, and Recommendations
11	High Frequency Radar for Texas Bays and Ports
12	Modernizing Texas Beach Watch Technology System
13	Prediction of Texas wetland erosion through remote sensing, field surveys, and numerical modeling
14	Recovering Access and Restoring Resilience at Stewart Beach Park on Galveston Island
15	Restoring Colonial Waterbird Populations on the Texas Coast
16	The Dog Island Project
17	Threat of Rising Sea Level & Water Tables to Texas Coastal Septic Systems: An Integrated Study
18	Assessing flow and sediment dynamics of Lower Brazos and San Bernard Basins
19	Assessment of seagrass habitat and stability in Texas coastal waters
20	Gulf Reef Rehabilitation
21	Hydrologic monitoring and modeling to aid restoration of the Welder Flats Marsh for Whooping Cranes
22	Lower Laguna Madre Hydrodynamic Characterization
23	Packery Channel Nature Park Shoreline Enhancement
24	The Clean Coast Texas Collaborative Years 3 and 4
25	Updating the National Wetland Inventory in Coastal Texas

Program Coordination

The CMP serves as an umbrella for the management of the Texas Coast. Through networking with state and federal natural resource agencies and other entities, the effectiveness of protection, restoration, and enhancement of CNRAs can be accomplished.

Regulatory Partnerships

Interagency Coordination Teams

In the early 1990s, the USACE developed the Interagency Coordination Team (ICT) concept as part of the Houston-Galveston Navigation Channel Expansion Project. The ICT, consisting of state and federal resource agencies and the Port of Houston Authority, was created to address key environmental issues and concerns associated with the project. Other non-governmental organizations, including the Galveston Bay Foundation, local residents, commercial fishermen, and recreational boaters, participated in ICT meetings, providing advice and feedback.

To identify solutions to key issues associated with the project, the ICT formed several subcommittees, composed of ICT members with scientific expertise in various environmental disciplines. Subcommittees GLO and CMP staff participate on include the Beneficial Uses Group, the Gulf Intracoastal Waterway (GIWW) Laguna Madre maintenance dredging group, the Gulf Intracoastal Waterway (GIWW) Laguna Madre maintenance dredging group, the Matagorda Ship Channel subcommittee and the Sabine-Neches Waterway Improvement Project and the Sabine Pass to San Luis Pass Shoreline Erosion Project.

Open Beach and Dune Protection Program

The Beach and Dune Protection Program enforces the OBA, DPA, and related administrative rules to ensure protection of CNRAs and accessibility for all beach users.

Bureau of Ocean Energy Management

The GLO performs consistency on Outer Continental Shelf leases and plan reviews and for activities located in significant sediment resources area blocks for activities that may impede access to sediment resources.

Bureau of Safety and Environmental Enforcement

The GLO performs consistency review for activities located in significant sediment resource area blocks for activities that may impede access to

sediment resources.

Funding Partnerships

Coastal Erosion Planning and Response Act Program (CEPRA)

In 1999, the Texas Legislature established the CEPRA program to reduce and minimize erosion impacts to public beaches and dunes, wetlands, the GIWW, homes, businesses, and public infrastructure, thereby protecting the state's natural resources and economic future. As a cost-sharing program, CEPRA funding is used to leverage federal, state, local, and private resources. The CEPRA program matches up to 75 percent of funding for beach nourishment and dune restoration projects and up to 60 percent of funding for wetland and habitat restoration projects, shoreline protection projects, and erosion studies.

Gulf of Mexico Energy Security Act (GOMESA)

In 2006, President Bush signed the Gulf of Mexico Energy Security Act to enhance the Outer Continental Shelf oil and gas leasing activities and revenue sharing in the Gulf of Mexico. Alabama, Louisiana, Mississippi and Texas share lease revenues for coastal restoration and conservation projects and hurricane protection. The GLO administers the funds for projects along the Texas coast.

National Fish and Wildlife Foundation (NFWF)

In early 2013, a U.S. District Court approved two plea agreements resolving certain criminal cases against British Petroleum and Transocean which arose from the 2010 Deepwater Horizon explosion and oil spill. The agreements directed a total of \$2.544 billion to the NFWF to fund projects benefiting the natural resources of the Gulf Coast that were impacted by the spill. In November 2020, NFWF made its final awards from the Gulf Environmental Benefit Fund in the state of Texas. This fund has supported 61 projects, with a total value of \$203.5 million. These projects leveraged approximately \$238 million in other funding, creating a total impact of more than \$441 million for the Texas coast. These projects were selected following extensive consultation with the TPWD, TCEQ, GLO, the U.S. Fish & Wildlife Service and NOAA. The projects in Texas addressed high-priority conservation needs. They represented important efforts to protect and enhance natural and living resources along the vast Texas coast.

Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE)

In July 2012, the Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE) directed 80 percent of funds from penalties assessed for the Deepwater Horizon oil spill to the Gulf States to fund environmental and economic development projects. Texas is expected to receive at least \$550 million in RESTORE funds through 2033. Commissioner Baker at the TCEQ was designated by Governor Abbott as the Texas trustee for the funds.

Deepwater Horizon Natural Resource Damage Assessment (NRDA)

The Texas Trustee Implementation Group has released two restoration plans with a total of 26 restoration projects to compensate for injuries to natural resources caused by the oil spill. These plans allocated just under \$85 million in projects focusing on wetland, coastal, and nearshore habitats; nutrient reduction; and oyster, sea turtles, and bird restoration. Texas is expected to receive \$238 million in NRDA funds through 2031.

Program Partnerships

Texas Beach Watch Program

The EPA funds the Texas Beach Watch Program for water quality monitoring at Texas recreational beaches. Results of water sampling and advisories are posted on the Texas Beach Watch website at: <https://cgis.glo.texas.gov/Beachwatch/index.html>

Mission-Aransas National Estuarine Research Reserve System (NERR)

In 2006, NOAA included the Mission-Aransas National Estuarine Research Reserve (NERR) within its network of coastal sites designated for research, monitoring, education, and stewardship. The University of Texas, Marine Science Institute manages the Mission-Aransas NERR, composed of approximately 190 acres of coastal habitat, including tidal flats, seagrass beds, mangroves, and oyster reefs. Through the CZMA, NOAA provides funding, guidance, and assistance to the Mission-Aransas NERR to protect and study the estuarine system. Three GLO representatives serve on the Mission-Aransas NERR Advisory Board, collaborating with partners on issues related to coastal resources, energy, and coastal leasing.

Texas Sea Grant College Program

Texas Sea Grant College Program is a partnership between NOAA and Texas A&M University. The program addresses issues within coastal communities to support healthy coastal environments and economies.

Texas Sea Grant provides scientific research of coastal and marine resources and conducts outreach to educate the public and guide communities in decision making. A GLO representative serves on the Texas Sea Grant Advisory Committee, collaborating with partners to improve the understanding and stewardship of Texas coastal and marine resources.

Gulf of Mexico Alliance (GOMA)

The Gulf of Mexico Alliance (GOMA) is a partnership between federal and state agencies, academic organizations, non-profit organizations, and businesses in Alabama, Florida, Louisiana, Mississippi, and Texas. GOMA provides an opportunity for partners to identify and discuss the Gulf of Mexico's priorities and needs, promote collaboration between scientific and technical experts and resource managers, and minimize duplicative efforts. The GLO participates in GOMA Priority Issues Teams that discuss water quality, habitat conservation and restoration, ecosystems integration and assessment, nutrients and nutrient impacts, coastal community resilience, and environmental education and outreach. The GLO also represents Texas on the Regional Planning Body for the Gulf of Mexico.

University of Texas – Bureau of Economic Geology (UT-BEG)

Under CEPR (Texas Natural Resources Code, Chapter 33, Subchapter H), the GLO is charged with monitoring historical shoreline change rates in consultation with the UT-BEG. Shoreline change rates are essential for identifying critical erosion areas and other vulnerable areas where coastal protection projects are needed. CMP frequently funds work with UT-BEG that result in the collection of beach and dune morphology data.

Galveston Bay Estuary Program

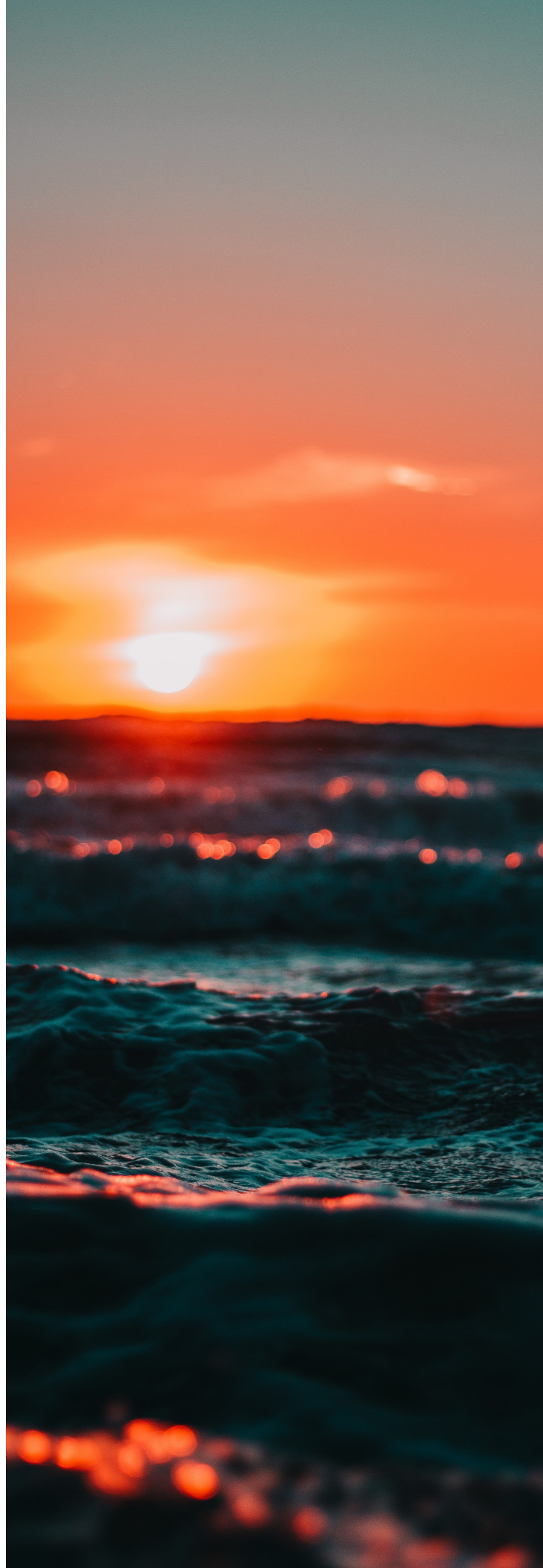
As a non-regulatory program administered through TCEQ, the Galveston Bay Estuary Program (GBEP) coordinates and facilitates partnerships to implement the Galveston Bay Plan and provides comprehensive ecosystem management to preserve the Bay's multiple uses. GBEP partners with local, state, and federal governments, regional authorities, non-government organizations, academic organizations, recreational fisheries, businesses, and industries to identify issues, solutions, and actions to support the Bay's needs. A GLO representative serves on GBEP's coordinating body, the Galveston Bay Council, assisting in plan implementation and ensuring program effectiveness.

Coastal Bend Bays and Estuaries Program

The Coastal Bend Bays and Estuaries Program (CBBEP) is a non-profit organization dedicated to improving the health of bays and estuaries in the Texas Coastal Bend. CBBEP oversees a voluntary partnership, consisting of resource managers, local, state, and federal governments, bay users, environmental organizations, and private industries and ensures implementation of the Coastal Bend Bays Plan. GLO staff serve on various plan implementation teams, providing oversight and guidance for ongoing projects, monitoring, and research initiatives, identifying program needs, and recommending projects for inclusion in CBBEP's annual work plans.

Coastal States Organization

This organization represents the Texas CMP on national legislative and policy issues relating to the sound management of coastal and ocean resources. The GLO member was designated by the Governor.



Education & Outreach

Various publications are created and distributed to educate the public about coastal issues and the technology available to aid in the protection and improved management of CNRAs. Publications are evaluated and updated as needed to fill information gaps and reflect current areas of focus on the coast.

Reports

Coastal Management Program 2021 - 2022 Biennial Report

A biennial report published for the Texas Legislature that includes CMP program initiatives, updates on the total number of consistency reviews conducted, PSC activities, and reports on the grant program.

CEPRA Report to the 87th Texas Legislature

A report submitted to the Texas Legislature summarizing critical erosion areas, erosion response projects, and economic and natural resource benefits.

Beach Monitoring and Maintenance Plan

A FEMA prerequisite to receive funding under the Public Assistance program for the mitigation of damages to engineered beaches impacted by future federally approved disasters.

Coastwide Erosion Response Plan

A report that identifies critical coastal erosion areas and prioritizes coastal erosion response studies.

Storm Surge Suppression Study Report

A report that examines the feasibility of reducing the vulnerability of the upper Texas coast to storm surge and flood damages to protect the life, health, and safety of the community and provide environmental and economic resilience.

2019 Texas Coastal Resiliency Master Plan

A comprehensive long-term planning framework that supports the resilient ecologic and economic management of the Texas coast.

Sabine Pass to Galveston Bay, Texas Coastal Storm Risk Management and Ecosystem Restoration

A Draft Integrated Feasibility Report and Environmental Impact Statement

examining coastal storm risk management and ecosystem restoration problems and opportunities within six counties along the Upper Texas coast.

Coastal Texas Study

A plan that assesses the feasibility of constructing coastal storm risk management and ecosystem restoration projects along the Texas coast. Guidebooks, Manuals, Brochures, Newsletters, etc.

Guide to Living Shorelines in Texas

A comprehensive guide to the design, permitting and installation of a living shoreline project along the Texas coast.

Dune Protection and Improvement Manual for the Texas Gulf Coast, 6th Edition

A manual providing guidelines for coastal municipalities, counties, and homeowners for construction subject to the OBA and DPA.

Texas Beach Accessibility Guide

A guide for local governments adopting and implementing beach accessibility measures for persons with disabilities, January 2011.

Texas Homeowner's Handbook to Prepare for Coastal Natural Hazards

A handbook, developed with the Texas Sea Grant College Program, advising homeowners on methods to protect people and property from natural disasters. The handbook explains the importance of flood insurance and provides useful web links and disaster preparation checklists.

Shoring Up the Future for the Texas Gulf Coast

An overview report that highlights the ecological and economic features along the Texas coast and identifies the primary issues of concern threatening sustainability.

Guidance for Sustainable Stormwater Drainage on the Texas Coast for Nonpoint Source Pollution & Flood Management, Third Edition

A guidance manual that provides information that can be used by Texas coastal communities to improve stormwater management efforts.

2023 Treasures of the Texas Coast Calendar

A twelve-month calendar printed and distributed by the Adopt-A-Beach (AAB) program to promote the annual children's art contest, raise public awareness of the importance of the Texas coast, and educate citizens about the harmful impacts of marine debris.

Adopt-A-Beach Clean Up Brochures

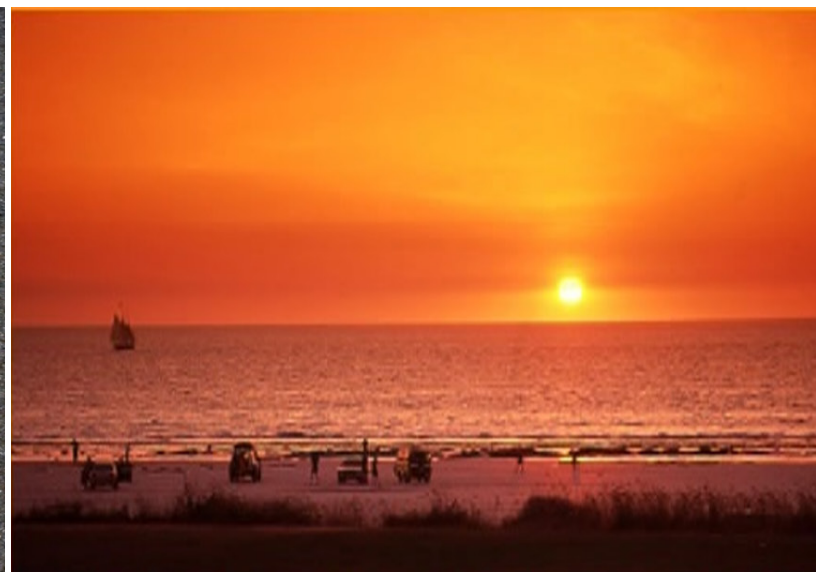
A brochure providing information on Adopt-A-Beach's semiannual beach clean ups as well as a brief history of the Adopt-A-Beach program and how to purchase an Adopt-A-Beach license plate.

Adopt-A-Beach Newsletter

A semiannual newsletter that features news and information about past and future clean-ups, program initiatives, and the children's art contest.

Coastal Resources Newsletter

A semiannual newsletter containing news and updates from divisions of the GLO's Coastal Resources department.



Websites

Clean Coast Texas

Provides Texas coastal communities information on how to protect their water quality and is maintained by the Texas Coastal NPS Pollution Control Program, <https://cleancoast.texas.gov>.

Coastal Habitat Restoration GIS

An interactive, online archive, qualitative analysis, and mapping tool that provides visualization of beach profile survey data and aerial imagery from the CEPRA Program, in support of the Beach Monitoring and Maintenance Plan, <http://www.cbi.tamucc.edu/CHRGIS/>.

Digital Coast, NOAA

Provides coastal data, tools, and training for the coastal management community. Content is derived from several sources and is vetted by NOAA, <http://coast.noaa.gov/digitalcoast/>.

Federal Consistency Website

Provides information on the federal consistency process and is a one-stop-shop for all federal consistency guidance and application needs, <https://www.glo.texas.gov/coast/coastal-management/federal-consistency/index.html>.

GLO GIS Maps & Data

Links to dynamic interactive mapping websites, providing access to a vast collection of coastal data, <http://www.glo.texas.gov/land/land-management/gis/>.

Land & Lease Mapping Viewer

An interactive land lease mapping program that provides access to vast collections of land and energy related data, including upland and submerged Original Texas Land Survey boundaries, Permanent School Fund land, upland and coastal leases, oil and gas well locations, and current imagery, <http://gisweb.glo.texas.gov/glomapjs/index.html>.

Living Shorelines Website

Provides Texans with a one-stop educational resource detailing how and why to use living shorelines as an alternative to traditional shoreline stabilization techniques,

<https://www.glo.texas.gov/livingshorelines/>.

Sea Level Rise

Provides a series of technical tools and future scenarios to support the practical understanding of impacts to the environment and to human coastal communities that may result from Sea Level Rise and related climate hazards, including storm surge, in the Gulf of Mexico region, <http://slr.stormsmart.org>.

Severe Storm Prediction, Education, & Evacuation from Disasters Center

Provides information to facilitate the creation and dissemination of knowledge to better address severe storm impacts and evacuation strategies in the Gulf Coast area, <http://www.sspeed.rice.edu>.

Shoreline Change Atlas

Provides long-term historical shoreline change rates of the Texas coast, <https://coastal.beg.utexas.edu/shorelinechange2012/>.

Texas Coastal Ocean Observation Network (TCOON)

Publicly accessible website that houses data collected through the Texas Coastal Ocean Observation Network (TCOON), a unique network of scientific data collection platforms used to amass critical data pertaining to wind and water, cbiweb.tamucc.edu/TCOON/.

Texas Natural Resources Information System (TNRIS)

Provides a collection of maps, photos, documents, and other spatial datasets acquired from multiple sources, including state, federal, and local agencies, <https://tnris.org/>.

Coastal GIS Data Sets

Texas Coastal Sediments Geodatabase

A systematic inventory and clearinghouse of sediment samples and related geotechnical information for the Texas coast.

Coastal Grants and Projects Geodatabase

This database stores all GLO-administered coastal projects and serves as an efficient geospatial infrastructure for assisting future coastal planning efforts through data query, mapping, and spatial analysis of various types of coastal projects. The GLO is currently in the process of updating the database and building a public facing viewer.

Texas Coastal Access Points Geodatabase

A spatial database and interactive online mapping application of all beach and bay access points along the Texas coast. Find Your Perfect Beach at TxCoasts.com.

Offshore Structures Inventory

A cooperative effort between multiple GLO divisions—Coastal Resources, Oil Spill Prevention & Response, Construction Services, Energy Resources, and Geospatial Technology Services—to identify, verify, and catalog all hazardous derelict structures in state waters, bays, and the Gulf of Mexico out to the extent of state jurisdiction. A version of the Offshore Oil & Gas Structures GIS layer is available for download.

Resource Management Codes (RMC)

Assigned to state-owned tracts in Texas bays and estuaries, and Gulf of Mexico waters, representing development guidelines for activities within the tracts. RMCs protect sensitive natural and cultural resources by providing recommendations for minimizing adverse impacts from mineral exploration and development activities. The GLO is currently in the process of updating the RMCs, as well as building a new mapping viewer, which will have additional data and capabilities to assist in smaller-scale planning within the state-owned tracts.

Coastal Aerial Imagery and Lidar Elevation Data

Acquired annually or semi-annually for the Texas gulf coast and bay shorelines, and as needed following natural disasters. These datasets can be used to monitor coastal projects and provide up-to-date beach use numbers to justify funding allocations for beach renourishment.

Aerial imagery and Light Detection and Ranging (Lidar) 3D elevation data datasets allow the GLO to conduct dune morphology, structure assessments, project reviews, and development of updated shoreline change data.

Colonial Waterbird Nesting Sites (Rookeries) Data

Updated rookeries data for the Texas coastal zone. The layer incorporates data derived from an annual census and available rookeries data mapped by various entities during the last four decades.

Coastal Beach Inspections

Each quarter of the state fiscal year, the GLO Beach/Dune team inspects beach access points, updates report data, and takes photographs of designated beaches along the Texas coast for the Beach Maintenance Reimbursement Program. The beach inspections are required under Texas Administrative Code, Title 31 Natural Resources and Conservation. If applicable, the locations and photographs of beach violations are captured. At the end of each quarter, photos and reports are incorporated in the GLO Content Management System in Microsoft SharePoint.

Oil Spill Toolkit

The Oil Spill Toolkit houses Area Contingency Plans, maps of Texas and other gulf states, response plans, incident command system forms, NOAA job aids, oceanographic and meteorological information, and much more.

Storm Damage Assessment Tools

GLO Coastal Field Operations collects data along the coast related to coastal lease assessments, damaged structures, and identified debris locations, and adds these datasets in real time to the GLO State Operations Response Mapper (STORM Viewer). In addition, the Geospatial team creates and maintains new tools to collect, display, and analyze storm data: damage assessment operations dashboards, photo viewers, disaster declaration maps, and a post-disaster damage/debris reporting form.

Beach Adopters

Texas Beach Adopters enables groups and businesses to adopt and clean a stretch of beach throughout the year. The Geospatial team maintains an

online Beach Adopters map, showing the designated stretches of beach and adopters for each area.

Texas Beach Watch

The program regularly tests coastal waters for bacteria levels of Enterococcus, common in rain runoff and often spiking after periods of heavy rain. When a sample shows the level of Enterococcus above the EPA standard for safe swimming, an advisory is issued for the beach corresponding to that testing site. The results are then published to the interactive Texas Beach Watch map.

Living Shoreline

The Living Shoreline Site Suitability Model can be utilized to predict where a living shoreline may be suitable and to identify the best living shoreline methods to use, given the unique conditions at a specific section of coastline.



Appendix

CMP Goals

To protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of CNRAs;

To ensure sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone;

To minimize loss of human life and property due to the impairment and loss of protective features of CNRAs;

To ensure and enhance planned public access to and enjoyment of the coastal zone in a manner that is compatible with private property rights and other uses of the coastal zone;

To balance the benefits from economic development and multiple human uses of the coastal zone, the benefits from protecting, preserving, restoring, and enhancing CNRAs, the benefits from minimizing loss of human life and property, and the benefits from public access to and enjoyment of the coastal zone;

To coordinate agency and subdivision decision-making affecting CNRAs by establishing clear, objective policies for the management of CNRAs;

To make agency and subdivision decision-making affecting CNRAs efficient by identifying and addressing duplication and conflicts among local, state, and federal regulatory and other programs for the management of CNRAs;

To make agency and subdivision decision-making affecting CNRAs more effective by employing the most comprehensive, accurate, and reliable information and scientific data available and by developing, distributing for public comment, and maintaining a coordinated, publicly accessible GIS of maps of the coastal zone and CNRAs at the earliest possible date;

To make coastal management processes visible, coherent, accessible, and accountable to the people of Texas by providing for public participation in the ongoing development and implementation of the CMP; and

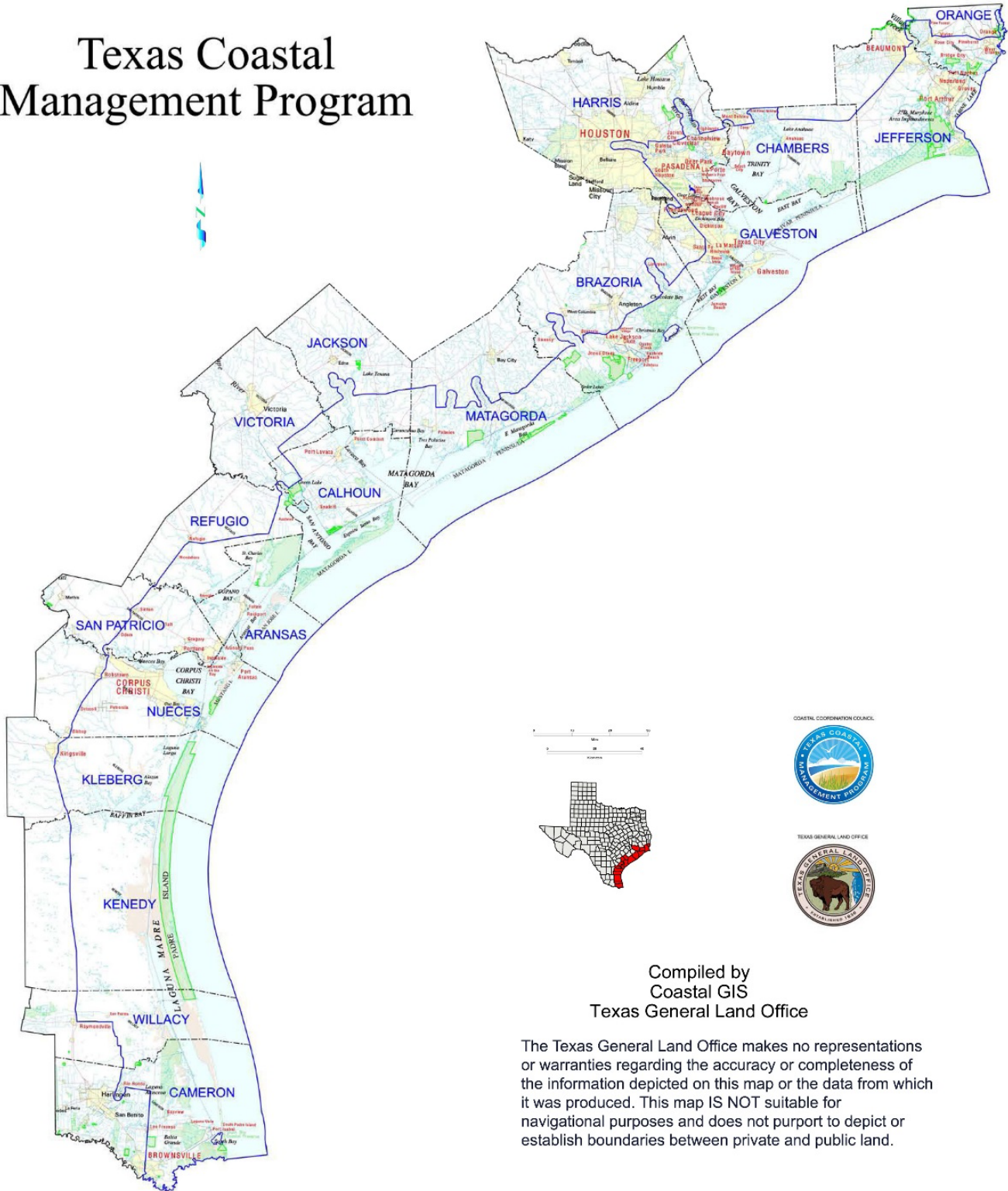
To educate the public about the principal coastal problems of state concern and technology available for the protection and improved management of CNRAs.

CMP Policies

- §26.15 Policy for Major Actions
- §26.16 Policies for Construction of Electric Generating and Transmission Facilities
- §26.17 Policies for Construction, Operation, and Maintenance of Oil and Gas Exploration and Production Facilities
- §26.18 Policies for Discharges of Wastewater and Disposal of Waste from Oil and Gas Exploration and Production Activities
- §26.19 Policies for Construction and Operation of Solid Waste Treatment, Storage, and Disposal Facilities
- §26.20 Policies for Prevention, Response and Remediation of Oil Spills
- §26.21 Policies for Discharge of Municipal and Industrial Wastewater to Coastal Waters
- §26.22 Policies for Nonpoint Source Water Pollution
- §26.23 Policies for Development in Critical Areas
- §26.24 Policies for Construction of Waterfront Facilities and Other Structures on Submerged Lands
- §26.25 Policies for Dredging and Dredged Material Disposal and Placement
- §26.26 Policies for Construction in the Beach/ Dune System
- §26.27 Policies for Development in Coastal Hazard Areas
- §26.28 Policies for Development Within Coastal Barrier Resource System Units and Otherwise Protected Areas on Coastal Barriers
- §26.29 Policies for Development in State Parks, Wildlife Management Areas or Preserves
- §26.30 Policies for Alteration of Coastal Historic Areas
- §26.31 Policies for Transportation Projects
- §26.32 Policies for Emission of Air Pollutants
- §26.33 Policies for Appropriations of Water
- §26.34 Policies for Levee and Flood Control Projects

Texas Coastal Boundary Zone

Texas Coastal Management Program



COASTAL COORDINATION COUNCIL

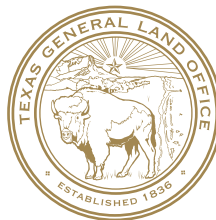


TEXAS GENERAL LAND OFFICE



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Coastal GIS
Texas General Land Office

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1.866.894.3578 (Lower Coast Office)
1.866.894.7664 (Upper Coast Office)
permitting.assistance@glo.texas.gov
<http://www.glo.texas.gov/coast/coastal-management/permitting/index.html>

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