FY 2025

Bipartisan Infrastructure Law Annual Work Plan

COASTAL BEND BAYS & ESTUARIES PROGRAM

Protecting our bays & estuaries

BIPARTISAN INFRASTRUCTURE LAW
FY 2025 Annual Work Plan

September 12, 2024

COASTAL BEND BAYS & ESTUARIES PROGRAM

www.cbbep.org

MAILING:
P.O. Box 23025
Corpus Christi, TX 78403-3025

PHYSICAL:
1305 N Shoreline Blvd, Ste 205
Corpus Christi, TX 78401

TABLE OF CONTENTS

LIST OF TABLES

PROGRAM OVERVIEW

The Coastal Bend Bays & Estuaries Program (CBBEP) was formed as a nonprofit to ensure that there is a thriving bay system in the Texas Coastal Bend that supports a high-quality life and is sustained for generations to come. For over twenty years, the organization has been driven and guided by local stakeholders whom recognize our interdependence on the bay system and place a high value on protecting and restoring our bays and estuaries. As part of the National Estuary Program, the CBBEP is a nonregulatory, voluntary partnership effort working with industry, environmental groups, bay users, governments, and resource managers to improve the health of the bay system. Public participation by individuals and organizations is encouraged. A mix of local governments, private industry, and state (Texas Commission on Environmental Quality, Texas General Land Office, and Texas Parks & Wildlife Department) and federal (United States Environmental Protection Agency and United States Fish and Wildlife Service) agencies provide program funding. The CBBEP also seeks private grants/donations and additional governmental funding.

The CBBEP project area encompasses the estuarine environment of 75 miles of the south central Texas coastline, and includes the 12 counties of the region known as the Coastal Bend. This 514 square mile area of water includes all bays, estuaries, and bayous in the Copano, Aransas, Corpus Christi, Nueces, Baffin, and upper Laguna Madre bay systems, which together represent three of the seven major Texas estuaries.

The CBBEP's mission is to protect the bays and estuaries of the Coastal Bend, while supporting continued economic growth and public use of the bays. Major milestones for the CBBEP include:

- In 1994, the Corpus Christi Bay National Estuary Program is established and a multi-year, stakeholder-driven planning effort begins to develop the *Coastal Bend Bays Plan;*
- *Coastal Bend Bays Plan* is approved in 1998;
- In 1999, the CBBEP is established as a nonprofit organization, responsible for overseeing implementation of the *Coastal Bend Bays Plan;*
- CBBEP's Coastal Bird Program is established in 2000 to halt declines of heron, egret, pelican, tern, and other colonial waterbird populations;
- In 2003, CBBEP begins acquiring property in the Nueces River Delta to create the Nueces Delta Preserve;
- CBBEP's environmental education program, now called Delta Discovery, begins using the Nueces Delta Preserve in 2007 to educate students, teachers, and families about the importance of conserving our bays and estuaries;
- In 2016, CBBEP began working with stakeholders to develop the *Coastal Bend Bays Plan, 2nd Edition*, which received approval from EPA in January 2021;
- In November 2021, funds from the Bipartisan Infrastructure Law were designated for use by the National Estuary Programs;
- In 2023, CBBEP began implementation of its FY22/23 and FY24 Bipartisan Infrastructure Law Annual Work Plans and drafted an Equity Strategy that will help CBBEP ensure that benefits and investments from BIL funding flow to disadvantaged communities.
- In June 2023, CBBEP received notice from EPA that our Equity Strategy was approved for the purpose of waiving the non-federal match requirement for FY 2024-2026 Bipartisan Infrastructure Law funding.

HISTORY AND ACCOMPLISHMENTS

Efforts to improve the health and productivity of the Coastal Bend bays and estuaries began in the 1990's and resulted in the region being designated as an "estuary of national significance." This eventually led to the establishment of the Corpus Christi Bay National Estuary Program, which in turn initiated a multi-year, community-based planning effort to identify the problems facing the bay system and to develop a long-term"Comprehensive Conservation and Management Plan" (CCMP) that outlined how to address the major priorities and issues.

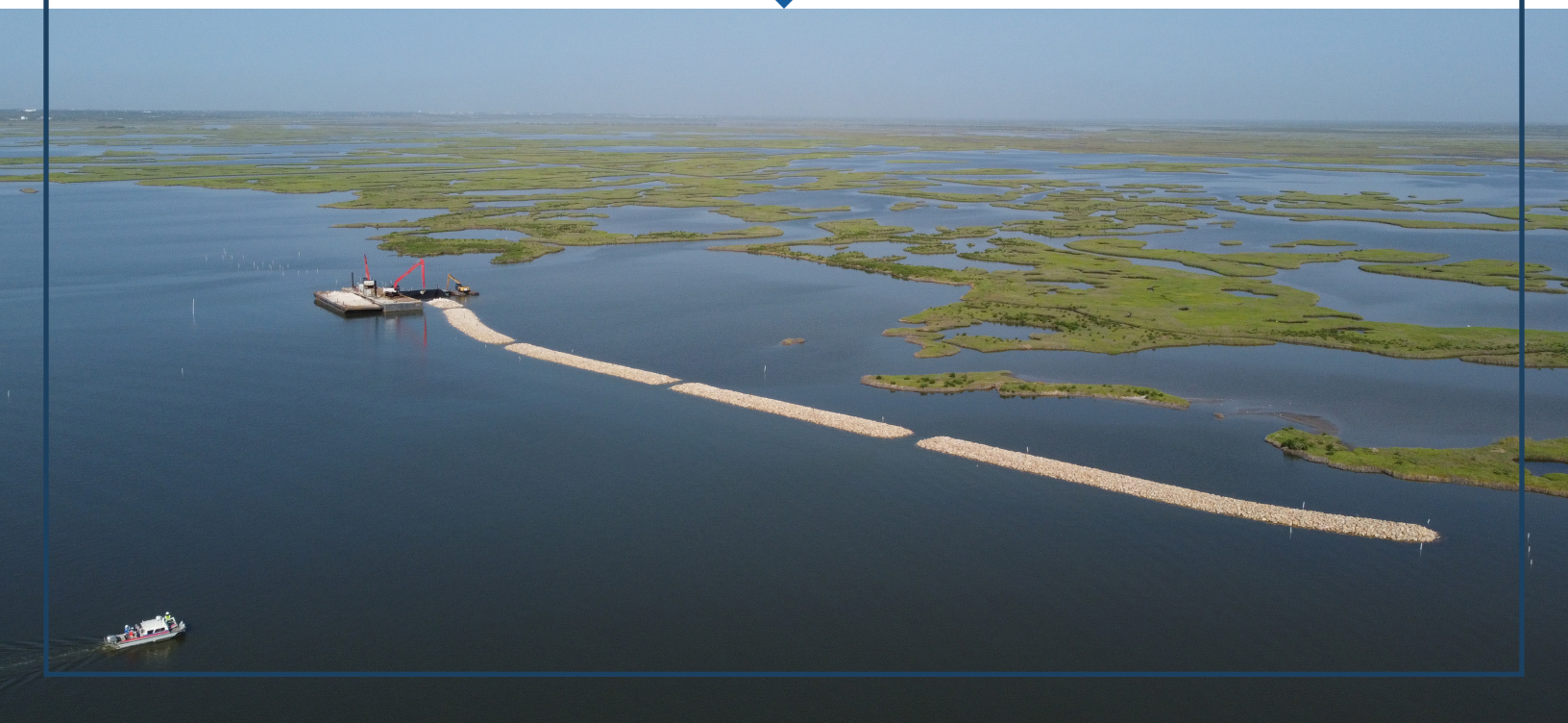
The CCMP, often referred to as *The Coastal Bend Bays Plan*, identified specific actions that would benefit the bay system and the users of the bays. It was designed to complement and coordinate existing resource management programs and plans, and it received approval in 1998. The action plans were developed and refined through a series of workshops and committees that involved more than 325 individuals representing over 100 organizations. Federal and state agencies

played an important role in the development of *The Coastal Bend Bays Plan*. However, stakeholders wanted to localize and take ownership of *The Bays Plan* as it moved forward into the implementation phase. Therefore, the CBBEP was created in 1999 as a non-profit organization with the specific role of implementing *The Bays Plan*, which calls for the protection and restoration of the health and productivity of the bays and estuaries, while still supporting continued economic growth and public use of the bays. The CBBEP recognizes that its action plans cannot remain static and must be modified to respond to the changing needs of communities, incorporate new programmatic, scientific, and technological advances, and address new environmental challenges. In 2016, the CBBEP initiated a new collaborative effort to revise *The Bays Plan* in order to incorporate developments that have occurred since the previous plan was drafted and to ensure that new priorities are being addressed. The *Coastal Bend Bays Plan, 2nd Edition* received EPA approval in January 2021.

The priority issues identified in *The Bays Plan, 2nd Edition* are: (1) alteration of freshwater inflow into bays and estuaries; (2) condition of living resources, (3) loss of wetlands and estuarine habitats, (4) degradation of water quality, (5) altered estuarine circulation, (6) increasing amounts of bay debris, (7) selected public health issues, (8) declining coastal bird populations, (9) resilient coastal ecosystems and human communities that can adapt to changing conditions, (10) implementation of effective adaptive management practices at CBBEP properties, and (11) well-educated public to be wise stewards of the environment. *The Bays Plan, 2nd Edition* addresses these priority issues under the following categories of action plans: (1) Human Uses, (2) Maritime Commerce and Dredging, (3) Habitat and Living Resources, (4) Coastal Birds, (5) Land Conservation and Stewardship, (6) Water and Sediment Quality, (7) Freshwater Resources, (8) Public Education and Outreach, (9) Delta Discovery, and (10) Coastal Resilience.

Since 1999, the CBBEP has been working to create a Texas Coastal Bend with cleaner water and sediment, healthier habitats and wildlife, greater public access, and a more aware and engaged public. With the help of numerous partners, the CBBEP has restored thousands of acres of marsh habitat, with projects stretching from Matagorda Island down to the Laguna Madre. We have also developed an education program that provides outdoor, hands-on learning experiences for thousands of students, teachers, and families every year. We have implemented projects that help provide betters access to our bays for both residents and visitors, and we have partnered with local governments, agencies, and landowners to address water quality issues, such as harmful algal blooms, stormwater, and bacteria. We also started an important program to both study and address the issues associated with our declining coastal bird populations, and we of course cannot forget our land acquisition projects which have protected close to 14,000 acres of valuable coastal habitats. The sections below highlight some of the successes of the CBBEP in recent years.

IN 2023, A ROCK BREAKWATER WAS CONSTRUCTED along the Nueces Delta Preserve shoreline to reduce ongoing wind and wave erosion. The positioning of the breakwater was specifically set to block the wind driven waves coming across the bay before they meet the marsh. By the end of construction, 3,600 linear feet of breakwater stands between the bay and the marsh system, keeping erosion out and sediment in.



Habitat and Wildlife

Healthy bay and estuarine habitats provide the critical foundation for sustainable environments and thriving economies. These habitats help maintain wildlife and plant populations, improve water quality, support fishing activities, enhance local tourism, and reduce the impact of coastal hazards, such as flooding and storm surge. Coastal population growth, development, and rising sea levels threaten coastal habitats and wildlife, and this effect will continue unless projects are implemented to address these ongoing threats.

Matagorda Bay West Marsh Restoration and Protection: When Hurricane Harvey passed over Matagorda Island in 2017, the marsh was reorganized and infrastructure on the Island was destroyed. The infrastructure that was destroyed did not just include buildlings, water control structures and levees used by staff at the Aransas National Wildlife Refuge to manage the "West Marsh" area were also destroyed. In 2023, construction crews made their way out to the Island to start working on repairs, but tough conditions on the Island brought logistical difficulties and delays. Crews laid the levees and road before them as they followed the crumbling path deeper into the marsh. Utilizing recycled road material from the Island's retired World War II infrastructure from its tenure as an Air Force training base and bombing range, construction crews sourced road material from old runways and taxiways. Construction on the island was wrapped up in August 2024, just in time for the Whooping Cranes to return for the winter.

WORKING IN PARTNERSHIP WITH THE ARANSAS NATIONAL WILDLIFE REFUGE, CBBEP repaired damaged levees and culverts in the West Marsh area of Matagorda Island. The levees and culverts help the Refuge staff manage the West Marsh area for the benefit of Whooping Cranes and other wildlife.

Nueces Bay Shoreline Protection and Restoration: High tides and low winds provided many days of ideal conditions for barging 35,000 tons of rock from White's Point to the Nueces Delta shoreline, where it was placed on geotextile materials. The positioning of the breakwater was specifically set to block the wind driven waves coming across the bay before they meet the marsh. By the end of construction, 3,600 linear feet of breakwater stands bewteen bay and the marsh system, keepin erosion out and sediment in. The breakwater represents the first phase of a larger restoration of the Nueces Delta, which will see dredge material placed beneficially by the US Army Corps of Engineers within the marsh in the fall of 2024.

Protection and Restoration of Rookery Islands: CBBEP continues our ongoing efforts to restore rookery islands in several different bay systems throughout the Coastal Bend. CBBEP is the engineering/design and/or permitting phase for protection and restoration of five major rookery islands: Triangle Tree Island, Tern Island, Deadman Island, Long Reef Island, and Benny's Shack Island. CBBEP has secured construction funds for four of these islands: Triangle Tree, Tern Island, Deadman Island, and Benny's Shack. Once engineering/design and permitting are complete, bidding and construction will begin for these four islands.

Black Rail Occupancy: The Eastern Black Rail was listed as threatened under the Endangered Species Act in 2020 primarily due to loss of habitat. The Eastern Black Rail is a secretive marsh bird and the smallest rail species found in North America. Because of the secretive nature of this bird, very little is known about the occurrence of black rails within the Coastal Bend region. CBBEP is supporting inventory and monitoring efforts to improve our understanding of distribution and abundance of existing black rail populations. Surveys are being conducted using Automated Recording Units and environmental DNA (eDNA) and vegetation and wetland characteristics are collected at each site for later analyses. Data is currently being collected and analyzed in 2024.

CBBEP IS WORKING WITH PARTNERS TO RESTORE almost 11 acres of oyster reef habitat at Ayres Point. Oysters are ecosystem engineers that protecting coastal communities from erosion, improving water quality, providing habitat for fishes and invertebrates, and serving as a food source for both animals and humans.

Ayres Point Oyster Reef Restoration: Working collaboratively, CBBEP, Flatsworthy, Mission-Aransas National Estuarine Research Reserve, Harte Research Institute at Texas A&M University - Corpus Christi, Texas Parks & Wildlife Department, and Coastal Conservation Association have identified a potential project that will restore and enhance the resilience of oyster reefs in the Mesquite Bay Complex, while also preventing further erosion of valuable coastal habitats on Matagorda Island. The project goal is to restore oyster reef complex in an area known as Ayres Point. CBBEP has contracted with an engineering firm to evaluate the project location and produce an alternatives analysis and preliminary design for the proposed restoration and protection alternative. Efforts are currently underway and should be completed in late 2024. Construction funds are also being sought for the next phase of the project which will result in almost 11 acres of restore oyster reef.

Land Conservation and Stewardship

Despite their tremendous value, coastal habitats are threatened and at risk of being developed. The CBBEP Land Conservation Program has identified areas in need of protection within the Coastal Bend and is working with partners to conserve these valuable habitats. The Land Conservation Program has acquired either fee simple title or conservation easements for close to 14,000 acres of freshwater and saltwater marsh, forested wetlands, mudflats, riparian corridors, and native upland habitat. The CBBEP also works to manage these lands responsibly and sustainability for the long-term benefit of both wildlife and people.

TPWD Sanctuary Program: In partnership with Texas Parks & Wildlife Department, the Land Conservation Program started a four-year Coastal Bird Sanctuary Program along the mid-Texas Coast that is designed to give migrating waterfowl a safe spot to land. Wetlands along the Texas coast have been impacted by development and changes in water supply, leaving less usable habitat for roosting or breeding birds while they are in the area. Between decreasing available habitat and increasing pressure on usable habitats, the ability to fully support populations for their return migrations is continuing to decline. In the first year of the Program, landowners from three counties created over 1,140 acres of non-huntable wetland habitat by placing 10-18 inches of water on ther rice fields from November to March. Many species of waterfowl, sandhill cranes, wading birds, and shorebirds were seen utilizing the sanctuaries during the peak pressure of the 2023 waterfowl season.

CBBEP AND TPWD ARE COLLABORATING TO CREATE COASTAL SANCTUARIES for migrating birds. In the first year of the program, landowners from three counties created over 1,140 acres of non-huntable wetland habitat by leaving 10 - 18 inches of water on their fallow fields through March.

Packery Flats Cleanup: CBBEP hosts cleanups at the Packery Flats Coastal Habitat area on the backside of Mustang Island. The goal of these events is to enhance the stewardship of Coastal Bend habitats and wildlife through public engagement. The one-thousand-acre protected area boasts extensive intertidal habitats that are heavily utilized by fish and wildlife and also have many features that are appealing for recreation. These recreational activities can often result in debris in unwanted areas. CBBEP is currently in its sixth consecutive year of the Packery Flats Cleanup. During the first three years, the event was hosted annually to coincide with National Estuaries Week during the fall. For three consecutive years, CBBEP has added a second event that is scheduled for the late winter/early spring. This area has seen increased use by visitors in recent years, and the amount of debris now justifies two cleanup events. While hosting two clean-ups in 2024, over 145 volunteers gave a combined total of 435 hours to help rid the roadsides and marsh of trash. Volunteers were able to collect over 3,840 pounds of litter and debris out of the four miles of sensitive habitat.

Flour Bluff Conservation Easement: In a southeastern corner of the Cayo del Oso shoreline, hidden behind thickets of salt cedar and huisache from the water and newly developed subdivisions from just about every other side, lay a piece of land that has always existed on the edge. Sloped coastal prairie stopped by a sliver of muddy shoreline separating green growth from chocolate waters. Neighboring landmarks have come and gone, built by man and removed by nature as hurricanes and time can derail even the best laid plans. Now under the protection of a conservation easement, this 48.74-acre tract of land can finally rest and begin the journey back to its natural state. Reversing 50 years of use is the next phase of life for this range of oaks looking down on the Oso Bay shoreline, still standing on the edge.

IN 2023, CBBEP ACCEPTED A DONATED CONSERVATION EASEMENT on a 48.74-acre tract of land in Flour Bluff along the shoreline of Oso Bay.

Water Quality and Freshwater Inflows

Water quality is important to estuarine productivity, wildlife habitats, and the economic vitality of the Coastal Bend. Maintaining water quality is challenging as populations increase and development continues, but it is possible through proper planning, pollution prevention programs, and other best management practices. CBBEP collaborates with partners to implement projects, programs, and planning efforts that seek to get ahead of water quality problems. We also work with partners on efforts to ensure that our bays and estuaries receive the optimal amount of freshwater inflows they need to maintain productive ecosystems.

Nueces Tidal Segment Stakeholder Group: Citizens along the Nueces River tidal segment have been noticing more water quality concerns along their stretch of river. In 2022, these concerns were brought to CBBEP staff in hopes of receiving attention and action to clean up the situation. It became clear that resolving the water quality ailments was going to take time and a large collaborative effort. During 2023, a stakeholder group comprised of residents, researchers, and resource managers was established to create a space for discussion and collaboration between everyone involved. Representatives from Texas Parks & Wildlife Department's Kills and Spills Team, City of Corpus Christi Water Works, water quality experts from the Harte Research Institute (HRI) and Center for Coastal Studies (CCS) at Texas A&M University - Corpus Christi, staff from the Nueces River Authority, CBBEP project managers, and several residents gathered to share perspectives, experiences, research results, and historical data from that stretch of the river. Moving into 2024, two data collection projects will look at water quality in the river. HRI will be

A STAKEHOLDER GROUP COMPRISED OF RESIDENTS AND RESEARCHERS was established in 2023 to create a space for discussion and collaboration regarding water quality concerns in the Nueces River Tidal Segment.

conducting a bioassay study to determine what nutrients are driving the algal blooms, while the CCS will be working to characterize the water quality along the tidal segment by taking samples at five locations on the river.

Expansion of Outreach to Wastewater Treatment Plants in San Patricio and Refugio Counties: CBBEP has been partnering with the Nueces River Authority (NRA) to conduct outreach and offer assistance to the domestic wastewater treatment plants (WWTPs) that discharge into the tributaries of Baffin Bay to help identify and address possible equipment, personnel, and capacity needs. In 2023, NRA and CBBEP expanded the program to include San Patricio and Refugio counties. NRA will work to form relationships with elected officials and WWTP operators to provide free assessments of WWTPs on a voluntary basis to identify and address infrastructure needs in both wastewater collection and treatment systems. The ultimate goal is to provide guidance towards improving these facilities to reduce threats to water quality in local waterways. Within Refugio County there are five (5) WWTP including Austwell, Bayside, Refugio, Tivoli, and Woodsboro. For San Patricio County, there are eleven (11) operational WWTP including Aransas Pass, Gregory, Ingleside, Mathis, Odem, Portland, Edroy, Sinton, St. Paul, Taft, and Lake Corpus Christi State Park. This project is ongoing in 2024.

Port Bay Water and Sediment Sampling: Nestled between Copano and Corpus Christi Bay, a smaller bay system stretches west between booming refineries and port industry, duly dubbed 'Port Bay'. The land surrounding the bay to the north was once used by the Sherwin Alumina plant as a site to deposit waste generated by producing aluminum from bauxite. These deposit sites, commonly referred to as tailing ponds, have been a concern for residents for many years, their red dust tailings visible on windy days and from satellite. In 2017, Hurricane Harvey stirred things up all along the Texas coast, closing bay passes and reshaping rookery islands. The storm surge and wind driven disturbances raised further concern that the elements in the tailing ponds had been moved across the levees and into the open bay and are now posing ecological and human risks to the area. Sampling efforts came to a close in 2023, and the results were not as dire as some speculated. After sampling soil, groundwater, bay water, bay sediment, and oyster tissue from severeal sites in Port Bay, the level of contaminants was found to fall below critical levels of concern.

Harmful Algal Bloom Monitoring: With Harmful Algal Blooms (HABs) becoming more common in Texas bay systems, the need for more proactive monitoring measures has become salient in recent years. These HAB events have wide felt impacts, affecting tourism, mariculture economies, and posing human health problems. With only two HAB monitoring stations previously on the Texas Gulf Coast, the blooms are often in full swing by the time they are recognized, leaving little time to warn coastal communities. In 2023, with funding from, HRI added four new sampling stations in Port and Copano bays monitoring salinity, temperature, dissolved oxygen, pH levels, as well as inorganic nutrients, organic carbon and dissolved nitrogen, chlorophyll, and other HAB identifiers. As the sampling stations are established, citizen scientists have been invited to get involved and trained to conduct sample collections themselves, allowing them to understand and preserve the natural resources in their own backyards. Sampling at these stations will be completed in 2024.

OSSF Assistance Program: There are numerous areas within the Coastal Bend where poorly functioning On-site Sewage FAcilites (OSSFs) are believed to be contributing bacteria and nutrients to receiving waterbodies. CBBEP is implementing an OSSF Assistance Program to try and address nutrient and bacteria problems in targeted watersheds by inspecting, repairing, and replacing OSSFs that are failing or non-existent, focusing on underserved communities with limited resources. CBBEP has contracted with NRA to administer the program. To date the OSSF Assistance Program has received 104 applications from residents that are eligible for assistance through CBBEP's BIL FY22/23/24 funding. Current funding can repair or replace 40 of those systems, and priority is based on proximity to stream. Inspections for the 40 systems have been completed and a bid package is being prepared for the replacements. CBBEP continues to work with partners to find additional funding sources to address the remaining applications.

Coastal Birds

South Texas is the cradle and crossroads for an array of resident and migratory birds. A variety of coastal habitats support millions of shorebirds, waterfowl, and wading birds. CBBEP's Coastal Bird Program has worked to conserve coastal birds and their habitats, identifying and addressing conservation needs through on-the-ground management actions, research, and education and outreach. The Program has a strong track record of bringing innovative management, diversified partnerships, and science-based decision-making to bird conservation on the Texas coast.

CBBEP'S COASTAL BIRD PROGRAM STAFF monitor for the presence of shorebirds in the wind-tidal flats of Boca Chica in south Texas.

Rookery Island Monitoring & Management: The Coastal Bird Program focuses on implementing successful waterbird management actions to reverse declines in colonial nesting waterbirds – this includes installing protective signs, removing exotic vegetation, planting native shrubs, and eliminating nest predators. Consistent, annual efforts are vital in properly managing rookery islands. It takes numerous seasons of intense management to improve island habitat. Staff have also focused on monitoring islands for nesting success, engaging with the community, and coordinating volunteers.

Shorebird Monitoring and Stewardship: The Coastal Bird Program continues to expand our conservation and research efforts on migratory shorebirds. We conduct research to better understand migratory connectivity and annual movements, abundance/distribution, reproductive success, and critical habitats of imperiled shorebirds. As more is discovered, it is apparent that a number of them are suffering major population declines, making conservation, monitoring, and research efforts a priority.

Upland Shorebird Initiative: In 2023, CBBEP began a new initiative to work with partners and producers to assess conservation practices that benefit upland shorebirds. The project focuses on evaluating benefits of wetland management, prescribed fire, and incentive programs. The project results will provide opportunities to integrate shorebird needs into upland (quail) and wetland (waterfowl) management regimes.

Colony Island Network Design and Implementation: CBBEP is collaborating with the Harte Research Institute on a project to develop a prioritization tool that accounts for bio-geo-physical constraints, as well as economic feasibility and social factors, to help managers prioritize a network of islands on the Texas coast for which island creation or rehabilitation would provide the maximum conservation benefit for colonial waterbirds.

STUDENTS ENJOY A FIELD TRIP at the Nueces Delta Preserve.

Environmental Education

CBBEP is committed to fostering the next generation of environmental stewards. To fulfill this commitment, the CBBEP has created the Delta Discovery Program which provides opportunities for students, teachers, and families to connect with the outdoors at the Nueces Delta Preserve. Delta Discovery strives to remove educational roadblocks by offering

programs to local communities at no cost. In recent years, the pandemic has impacted CBBEP's ability to host many of our traditional educational programs, but our staff continue to adapt and find new ways to connect students, teachers, and families with nature.

Student Field Trips: In FY 2024, the Delta Discovery Program welcomed roughly 3,622 students and teachers out at the Nueces Delta Preserve for hands-on, discovery-based field trips that get them out in nature and help reinforce the concepts they learn in the classroom. Staff also reached an additional 2,420 students and teachers through classroom presentations at local schools and outreach booths at school science nights.

Training Educators: CBBEP's Delta Discovery Program facilitates multiple workshops each year that focus on equipping teachers and educators with the skills, curriculum, and materials they need to strengthen science teaching as it relates to the environmental resources of the Coastal Bend. To date in FY 2024, Delta Discovery has hosted 27 educators at two workshops - one focused on Head Start educators and another focused on "Wildflowers and Thorns." Two more workshops are planned for the summer of 2024 and will be complete before the next fiscal year.

COASTAL BEND EDUCATORS PARTICIPATE in the "Wild Flowers and Thorns Workshop" hosted by CBBEP's Delta Discovery Program at the Nueces Delta Preserve.

Community Programs: CBBEP's Delta Discovery Program provides families with the opportunity to visit the Nueces Delta Preserve and participate in programs like Nature Story Times, Delta Discovery Days, and Home School Days. All programs are designed to create conservation-minded families that are connected to nature and have a desire to protect it. To date in FY 2024, CBBEP hosted 19 community outreach events at the Nueces Delta Preserve and had 292 participants. An additional five events are scheduled to be completed in the summer of 2024, prior to the start of the next fiscal year. Delta Discovery staff and expert volunteers also focus on providing programs that bring the learning to the community. Through various other community events throughout the Coastal Bend, staff reached around 508 individuals to date in FY 2024.

Coastal Issue Forums: CBBEP continues to support the Coastal Bend Bays Foundation's efforts to host monthly public forums that bring together diverse community interests to discuss regional resource management issues and seek solutions. Recent Coastal Issue Forums have focused on Coastal Bend air quality, building a sustainable yard and restoring your soil, oyster mariculture, and water quality in the Nueces River.

Public Access & Nature Tourism

To ensure that people continue to benefit from a safe, clean bay system, it is important to promote stewardship of our bay resources and to plan for the increasing number of people who visit the Coastal Bend to enjoy its natural resources. Well-planned and well-managed access areas help curtail resource damage, while providing enough parks and facilities for the growing number of users. It is also important to inform the citizens of our community and the millions of visitors about how to enjoy the resources without degrading them. Ensuring that the waters are safe to swim in and that the fish, crabs, and shrimp are safe to eat are also extremely important goals.

GUESTS VISITING THE AUSTWELL BOAT RAMP now have access to new picnic tables to utilize while visitng the area and enjoying San Antonio Bay.

Public Access Enhancements: In striving to improve public access to our bays and estuaries, several public parks saw improvements in 2023. Guests who visit Hans & Pat Suter, West Guth, and Lakeview Parks around Corpus Christi can now connect deeper with the natural world around them with the installation of educational signage at the parks. These signs educate visitors on the flora and fauna nearby and the appropriate way to interact with the wildlife. The city of Austwell lies on Hynes Bay and had it's only bay access point destroyed by Hurricane Harvey in 2017. Over the past year, four covered steel pavilions and solid core recycled picnic tables were added to the Austwell Boat Ramp facilities. With these structures in place, public use of the bays and estuaries is improved and encouraged.

Litter Control at Padre Island National Seashore: Padre Island National Seashore, the longest stretch of undeveloped barrier island in the world lies just south of Corpus Christi and stretches to the Mansfield cut. Welcoming nearly 500,000 guests annually brings many opportunities to clean the beach of litter and debris during their visits. By offering free trash bags at every beach access point and along the shoreline, PINS and their guests are battling marine debris one bag at a time.

Up2U PLUS: Building on the successful Up2U campaign and two years of full dumpsters, Up2U+ began it's final year in the Coastal Bend with a busy schedule lined up. Up2U+ continued its mission to clean five watersheds of trash and bulk debris by rolling out large dumpsters that rotate from one community to another. Each dumpser is left for over a week, allowing members of the community several opportunities to bring their debris for disposal. Items like old refrigerators, tires, wires, construction debris, dilapidated furnitures, or landscaping waste are all eligible for free disposal. By eliminating barriers that lead to illegal dumping like cost and accessibility, cleaning popular dumping sites, and improving community awareness of the impacts of illegal dumping, the campaign will lead to community-wide changes in the reduction and prevention of illegal dumping.. To date the Up2U+ program has removed 525 tons of bulk waste, metals and debris and 7,840 tires from the environment.. The project will continue through 2024 and is funded by a grant from the EPA Gulf of Mexico, Trash Free Waters Program.

INTRODUCTION

This FY 2025 Bipartisan Infrastructure Law Annual Work Plan, which has been prepared in accordance with guidance provided by the EPA titled "National Estuary Program Bipartisan Infrastructure Law Funding Implementation Memorandum for Fiscal Years 2022-2026," addresses priority projects which will be implemented using funds from the Bipartisan Infrastructure Law, also known as the "Infrastructure Investment and Jobs Act of 2021" (IIJA) or "BIL." This Work Plan only addresses funds being provided through the BIL, and additional projects, using funds from a combination of other sources, including EPA-320 funds, can be found in the CBBEP FY 2025 Comprehensive Annual Work Plan.

The FY 2025 BIL funds will accelerate and enhance CBBEP's ability to implement actions identified in the *Coastal Bend Bays Plan, 2nd Ed*. These BIL funds will also allow CBBEP to develop and strengthen partnerships necessary to make the most effective use of these new funds. This FY 2025 Annual Work Plan describes several implementation projects, as well as project management support, that will be undertaken pending approval and receipt of BIL funds. Additional projects and other administrative support, using EPA-320 funds and non-EPA grant funds, will also be implemented in FY 2025.

All data and information produced under the auspices of the CBBEP and this BIL Work Plan will adhere to standardized formats and be made publicly accessible. A public participation strategy, refined under "The Bays Plan" chapter of the *Coastal Bend Bays Plan, 2nd Edition* will continue to guide public participation efforts regarding implementation of action plans. The list of Priority Issues, refined through public input and characterization projects will continue to serve as the focus for implementation. The CBBEP implementation teams, Coordination Team, and Bays Council will also continue to play a key role in identifying issues and supporting implementation of the priorities as listed in *The Bays Plan*. The implementation teams continue to identify, initiate and select project ideas for inclusion in the CBBEP work plans, and these teams will play a role in both the development and implementation of BIL-funded projects. The current teams are: Habitat & Living Resources Team; Human Uses Team; Maritime Commerce & Dredging Team; Water & Sediment Quality Team; and Environmental Education & Outreach Team. The Bays Plan Coordination Team, consisting of all the chairs of the Implementation Teams and key members of the Bays Council, coordinates the Annual Work Plan recommendations to the CBBEP Bays Council.

In addition to the efforts described above, CBBEP has also developed an "Equity Strategy" to guide our efforts to more meaningfully engage the communities in which we are working, particularly with respect to communities that have experienced, or continue to experience, disproportional environmental health and climate change burdens. The purpose of the equity strategy is to ensure that CBBEP is reviewing potential projects and utilization of BIL funds through the lens of equitable and fair access to the benefits from environmental programs for all individuals. The Equity Strategy defines disadvantaged communities in the CBBEP Program Area and outlines how CBBEP will utilize BIL funds to increase investments in these communities and ensure that benefits flow to them. The Equity Strategy is a component of CBBEP's BIL Long-Term Plan that describes the key activities we will pursue with the five years of available BIL funds. Both documents are available on CBBEP's website, and the Equity Strategy received approval from the EPA on June 20, 2023. This approval waives the non-federal match requirement outlined in Section 320 of the Clean Water Act for CBBEP's FY 2024-2026 BIL funding.

PERIOD OF PERFORMANCE

The execution of the tasks associated with this work plan will occur over a 5-year period, which is anticipated to begin November 1, 2024, and to end October 31, 2029.

EPA PROGRAM COORDINATOR AND PROJECT OFFICER

Huy Vu
CBBEP Program Coordinator
EPA Region 6, Mail Code: WDAM
1201 Main Street, Suite 500
Dallas, Texas 75270

Teresita Mendiola
CBBEP Project Officer
EPA Region 6, Mail Code: WDAM
1201 Main Street, Suite 500
Dallas, Texas 75270

FY 2022/2023 AND FY 2024 BIL ACCOMPLISHMENTS

The FY2022/2023 BIL Annual Work Plan was submitted for approval on October 24, 2022, and funds for the Work Plan were awarded to CBBEP in February 2023. The FY2024 BIL Annual Work Plan was submitted on September 11, 2023, and funds were awarded in November 2023. CBBEP continues to work on implementing the projects identified in both Work Plans. The following brief discussions are an overview of the 17 previously funded BIL projects and their current status:

2313 Tern Island Protection and Restoration, Phase II

Project Manager: Adrien Hilmy

The objective of this project is to increase the amount of bird nesting habitat on Tern Island by completing the engineering design, permitting, and construction of a rock breakwater around the perimeter of the Island and expanding the acreage of Tern Island through the placement of imported fill material behind the newly constructed breakwaters.

Status: The project is underway and progressing well.

Execute Contract	02/01/2023
Preliminary Engineering/Design	11/30/2023
Permit and Lease	11/30/2024
Final Engineering/Design	11/30/2025
Bid Documents	06/30/2025
Construction	06/30/2026
Monitoring	09/30/2026
Progress Reports	semi-annually
Draft Final Report	12/30/2026
Final Report	01/31/2027

2335 Copano Bay Shoreline Protection and Restoration, Phase I

Project Manager: Kathryn Tunnell

The project will fund the completion of a feasibility study and alternatives analysis by a qualified engineering firm for an approximately 1.6 mile section of eroding shoreline in Copano Bay. The area contains valuable coastal marsh and tidal flat habitats that provide critical habitat for migratory waterfowl, shorebirds, waterbirds, fish, shrimp, crabs and other wildlife. Recent observations also show use of this area by the endangered Whooping Crane. However, the shoreline is rapidly eroding and these valuable habitats are being lost at an alarming rate.

Status: The project is in progress.

Execute Contract	02/28/2023
Data Collection	10/31/2023
Site Visit	10/31/2023
Stakeholder Meetings	09/30/2024
Feasibility Study and Alternatives Analysis	09/30/2024

Progress Reports ..... semi-annually
Draft Final Report 12/31/2024
Final Report 01/31/2025

2336 OSSF Assistance Program, Phase I

Project Manager: Kathryn Tunnell

There are numerous areas within the Coastal Bend where poorly functioning OSSFs are believed to be contributing bacteria and nutrients to receiving waterbodies. The OSSF Assistance Program will address nutrient and bacteria problems in targeted watersheds by inspecting, repairing, and replacing OSSFs that are failing or non-existent, focusing on underserved communities with limited resources. CBBEP will contract with NRA to administer the program, and they will be responsible for working with licensed septic service providers to complete thirty (30) OSSF inspections and pumpouts, and twenty-seven (27) OSSF systems that are repaired or replaced. The NRA will also deliver information to homeowners related to OSSF function and maintenance.

Status: The project is underway and is progressing well.

Execute Contract 02/28/2023
OSSFs inspected, repaired, and/or replaced 09/30/2025
Progress Reports ..... semi-annually
Draft Final Report 12/31/2025
Final Report 01/31/2026

2337 Training Program for Wastewater Operators in the Baffin Bay Watershed

Project Manager: Kathryn Tunnell

Poorly managed Wastewater Treatment Facilities in the Baffin Bay Watershed have contributed to point source discharges of wastewater and bacteria and nutrient pollution into Baffin Bay tributaries. This project will implement a Training Program for Wastewater Operators (Training Program) in the Baffin Bay Watershed. CBBEP will contract with NRA to administer the Training Program. As part of the Training Program, NRA will provide twice-monthly assessments and operations assistance at a minimum of five wastewater facilities that discharge into the primary tributaries of Baffin Bay. Through these assessments, NRA will provide recommendations and teaching guidance for implementing the recommendations and will monitor improvements through physical inspection and supervised use of equipment and effluent sampling by the facility. They will help train the existing operators to improve the procedures at each plant at no expense to the facility operators.

Status: The project is underway and progressing well.

Execute Contract 02/28/2023
Site Visits and Operations Assessments ..... twice-monthly, Mar 2023 - Mar 2025
Progress Reports ..... semi-annually
Draft Final Report 12/31/2025
Final Report 01/31/2026

2338 Access Improvements and Trail Development at the Held-Moran Sanctuary

Project Manager: Kathryn Tunnell

The Held-Moran Sanctuary is a 92-acre nature sanctuary located within the City of Corpus Christi that is owned and managed by the Audubon Outdoor Club of Corpus Christi (AOC). The Sanctuary is composed of seasonal ponds, live oak mottes, sweet bay, and other native trees and scrubs that support a diversity of wildlife, including numerous migratory birds and other native animals. Objectives for the project include constructing off-street, gravel parking lot on Mediterranean Drive with enough space for four to five cars; designing and installing a half-mile loop-trail from the proposed parking area; and repairing and replacing damaged bollard and cable system that is designed to limit access to the interior of the property by motorized and/or wheeled vehicles.

Status: The project is underway and progressing well.

Off-street Parking Lot 09/30/2024
Half-mile Loop Trail 09/30/2024
Repaired/Replaced Bollard and Cable System 09/30/2024
Progress Reports ..... semi-annually
Draft Final Report 12/31/2024
Final Report 01/31/2025

2339 Aransas Bay Bird Island Restoration, Phase II

Project Manager: Leigh Perry

Long-term data shows that the majority of colonial waterbirds in Texas are declining, some as much as 60-70%. On the Texas coast, including within the Mission-Aransas Estuary, suitable nesting habitat is thought to be the most limiting factor for the majority of the colonial waterbird species. The objectives of this project are to increase the amount of bird nesting habitat in the Aransas Bay System by completing the final engineering/design and construction of a rock breakwater around the perimeter of Deadman Island and expanding the acreage of the Island through the placement of imported fill material behind the newly constructed breakwaters. CBBEP is currently working with project engineers on Phase I of the project (data collection, 70% design, permitting support). Once Phase I is completed, CBBEP will contract with engineers for Phase II work which will utilize BIL funding (final engineering/design and construction management).

Status: The project is in progress. Phase II of the project is expected to begin in November 2024.

Execute Contract 03/31/2023
Final Engineering/Design 12/31/2024
Bid Documents 06/30/2025
Construction 01/31/2026
Monitoring 08/31/2026
Progress Reports ..... semi-annually
Draft Final Report 12/30/2026
Final Report 01/31/2027

2340 Town of Bayside Shoreline Protection and Public Access, Phase II

Project Manager: Kathryn Tunnell

Refugio County is currently in the process of completing Phase I of this project, which includes improvements to the County-owned and operated boat ramp and consists of demolishing existing wooden deck, framing, and existing timber piles. Phase I also consists of dredging the boat ramp area, relocating dredged material, constructing a new wooden dock, and placing crushed concrete gravel topped with concrete rip-rap. The objective of Phase II is to complete the preliminary engineering and design and permitting for a shoreline protection structure. The project will seek to reduce and prevent erosion over time at Bayside City Park, while also creating and restoring habitat for aquatic and avian species and improving public access opportunities.

Status: The project is in progress.

Execute Contract 02/28/2023
Data Collection 11/30/2023
Site Visit 11/30/2023
Stakeholder Meetings 03/31/2024
Preliminary Engineering and Design 03/31/2024
Progress Reports ..... semi-annually
Draft Final Report 12/31/2024
Final Report 01/31/2025

2341 CBBEP Climate Change Risk-based Adaptation Plan and Equity Strategy

Project Manager: Kathryn Tunnell

The objective of this project is to develop a climate change risk-based adaptation plan that contains effective solutions that CBBEP and our partners can implement to better manage potential risks from a changing

climate. CBBEP will use EPA's "Being Prepared for Climate Change: A Workbook for Developing Risk-Based Adaptation Plans" as a guide to climate change adaptation planning. The project will also focus on developing an equity strategy that ensures CBBEP is reviewing potential projects and utilization of our funds through lens of equitable and fair access from our programs to all individuals. The equity strategy will specifically outline how BIL funds will be utilized to increase investments in disadvantaged communities and the benefits that flow to them.

Status: The project is underway and progressing well.

Execute Contract	02/28/2023
Data Collection	10/31/2023
Stakeholder Meetings	09/30/2023
Risk-based Adaptation Plan	05/30/2024
Equity Strategy	05/30/2024
Progress Reports	semi-annually
Draft Final Report	07/31/2024
Final Report	08/31/2025

2342 Coastal Bend Regional Wastewater Treatment Facility Feasibility Study

Project Manager: Adrien Hilmy

The wastewater treatment plants (WWTP) in western Nueces County are old and the mechanical equipment is failing. The facilities struggle to meet permitted parameters. The result is often noncompliance with state issued permits which has led to fines and enforcement proceedings. The receiving streams as well as the Nueces and Baffin Bays are experiencing negative impacts due to the lesser quality wastewater effluent containing higher levels of nutrients and E. coli bacteria. This project will address these nutrient and bacteria problems by conducting a feasibility study for the proposed construction of a regional wastewater treatment plant, servicing the rural communities of western Nueces County. The study will include a proposed location for the facility as well as proposed routes for transmission mains, estimate of probable cost of the project, design and specification services for infrastructure improvements, and assistance with the pre-permitting process.

Status: Complete.

Execute Contract	02/28/2023
Feasibility Study Report	10/31/2023
Progress Reports	semi-annually
Draft Final Report	12/31/2023
Final Report	01/31/2024

2404 Monitoring Success of Dredge Material Placement at the Nueces Delta

Project Manager: Aaron Baxter

The U.S. Army Corps of Engineers (USACE) is proposing beneficial placement of dredged material from the Corpus Christi Ship Channel Deepening and Widening Project within Nueces Bay and the Nueces Delta Preserve. New work dredged material would be hydraulically pumped overland to the identified areas and strategically placed in marsh areas that have subsided to become open water in an effort to raise the substrate elevation sufficiently to allow and encourage the reestablishment of the marsh vegetation. Material would also be beneficially used as sacrificial erosion protection on either side of the 3,600-foot breakwater structures being constructed by CBBEP near the Nueces Delta shoreline. This project will conduct pre/post elevation and vegetation surveys related to the dredge placement project at the Nueces Delta Preserve and develop an adaptive management plan that will assist CBBEP in their long-term management efforts associated with the dredge placement project.

Status: The project is underway and progressing well.

Execute Contract	12/01/2023
QAPP Submitted	12/31/2023

Pre-construction monitoring data collected ..... TBD based on construction start date
Site monitoring during material placement ..... biweekly during construction
Post-construction monitoring data collected ..... TBD based on construction completion date
Adaptive Management Plan 1/31/2025
Progress Reports ..... semi-annually
Draft Final Report 1/31/2025
Final Report 2/28/2025

2412 Hans and Pat Suter Wildlife Refuge Enhancements

Project Manager: Kathryn Tunnell

This project will greatly improve access to Hans and Pat Suter Wildlife Refuge, a popular park and wildlife viewing location within the City of Corpus Christi Parks and Recreation System. This site has historically been popular with birdwatchers, local conservation groups, and the community. However, the Refuge is in disrepair and needs improvements to remain accessible for public use. The last major improvements were completed in 2010. The project scope includes engineering and design for ADA compliant trail system at the park, conversion of a section of the trail system from asphalt to ADA-compliant concrete trails.

Status: The project is in progress.

Execute Contract 12/01/2023
Bid Solicitation 12/31/2024
Erosion Protection 12/31/2025
Trail Construction 12/31/2025
Progress Reports ..... semi-annually
Draft Final Report 01/31/2026
Final Report 02/28/2026

2417 Held-Moran Sanctuary Accessibility Improvement and Trail Development, Phase II

Project Manager: Kathryn Tunnell

The Held-Moran Sanctuary is a 92-acre nature sanctuary located within the City of Corpus Christi that is owned and managed by the Audubon Outdoor Club of Corpus Christi (AOC). The Sanctuary is composed of seasonal ponds, live oak mottes, sweet bay, and other native trees and scrubs that support a diversity of wildlife, including numerous migratory birds and other native animals. Phase II of the accessibility improvements includes installing an ADA-compliant trail, interpretive signage, and establishing a fire break on the southwest boundary.

Status: The project is in progress and progressing well.

Bid Solicitation..... 1/31/2024
Trail Construction.. ..... 12/31/2024
Firebreak..... 12/31/2024
Progress Reports..... Semi-annually
Draft Final Report..... 7/31/2025
Final Report..... 8/31/2025

2422 Flour Bluff Wetlands Invasive Species Control

Project Manager: Aaron Baxter

The objective of this project is to perform habitat restoration activities, specifically, removal of invasive plant species, to improve the diversity of native plants and wildlife populations at the wetlands located on the Flour Bluff Independent School District (FBISD) campus. The reduction in both Brazilian peppertrees and guinea grass at this location will help reduce seed sources for other habitat areas along Laguna Shores. Also, the project will serve as an excellent education demonstration project that the students at FBISD, at all grade levels, will be able to observe and actively participate in conservation.

Status: The project is in progress and progressing well.

Execute MOU 12/01/2023
Bid Solicitation 04/30/2024
Invasive Species Treatment and Removal 11/30/2024
Progress Reports..... Semi-annually
Draft Final Report..... 1/31/2025
Final Report..... 2/28/2025

2428 OSSF Assistance Program, Phase II

Project Manager: Kathryn Tunnell

Areas around the lower Nueces River, Nueces River Tidal segment, and several Colonias located within the Baffin Bay and Oso creek watersheds are believed to be contributing bacteria and nutrients to their waterbodies from poorly functioning OSSFs. Many of these OSSFs were installed before regulations existed and were not properly designed. Phase II of this project will continue and expand on the impacts of the FY22/FY23 OSSF Assistance Program by inspecting, repairing, and/or replacing eleven (11) OSSFs that are failing or non-existent, focusing on underserved communities with limited resources.

Status: The project is in progress and progressing well.

Execute Contract..... 12/01/2023
OSSF's inspected, repaired, and/or replaced..... 9/30/2025
Progress Reports..... Semi-annually
Draft Final Report..... 12/31/2025
Final Report..... 1/31/2026

2435 Ocean Acidification Monitoring in Aransas Ship Channel

Project Manager: Kathryn Tunnell

Ocean acidification is reflected by the decrease in pH caused by the uptake of atmospheric carbon dioxide (CO_2). Atmospheric CO_2 levels have been increasing steadily since the industrial revolution. This is an important issue because the decline of these organisms would have many cascading effects, such as changing marine food web structure, decreasing shellfish fishery production, and decreasing coral reef production. To further study the acidification phenomenon in estuarine settings, this project will resume monitoring high-temporal resolution pH and partial pressure of carbon dioxide (pCO_2) using two in situ sensors. These high-resolution data will allow researchers to examine both the short-term (daily to monthly) variations and long term (interannual) changes in water carbonate systems in the Aransas Ship Channel, which connects estuarine water with the northwestern Gulf of Mexico.

Status: The project is in progress.

Execute Contract 12/01/2023
QAPP Submitted 12/31/2024
Monitoring ..... 4/1/2024 - 3/31/2025
Progress Reports ..... semi-annually
Draft Final Report 04/30/2025
Final Report 05/31/2025

2438 Green Stormwater Infrastructure Demonstration Project at Keach Family Library, Robstown, TX

Project Manager: Adrien Hilmy

The Clean Coast Texas Collaborative is a dynamic team of experienced engineers, scientists, planners, and educators who work to provide capacity and incentives to coastal communities that lack the expertise and/or resources to successfully implement Coastal NPS priority projects. The Collaborative currently has Memoranda of Agreement (MOA) with several communities in the Coastal Bend for the construction of demonstration scale green stormwater infrastructure at multiple locations. With support from CBBEP, Texas State University will expand this effort and develop an MOA with Nueces County to construct a demonstration-scale rain garden at the Nueces County Keach Family Library in Robstown, TX. This bioretention

project will help reduce pollutant loading and stormwater impacts and serve as a valuable educational resource for area teachers and environmental educators.

Status: The project is in progress and progressing well.

Execute Contract 12/01/2023
100% Engineering Design 01/31/2024
Bid Solicitation 03/31/2024
Construction Services Contract 06/30/2024
Construction 06/30/2025
Progress Reports ..... semi-annually
Draft Final Report 07/31/2025
Final Report 08/31/2025

2441 Up2U PLUS Program Support

Project Manager: Kathryn Tunnell

The goal of Up2U PLUS is to keep bulk trash from reaching our waterways. This three-year program began in 2022 with funding from the EPA through their Trash Free Waters Program and removes barriers that often lead to illegal dumping (cost, accessibility) by providing dumpsters for communities to dispose of bulk waste and tires. The program has already been implemented in Bishop, Riviera, Mathis, Banquete, St. Paul, Tradewinds, Bayside, and Austwell. Disposal fees were included in the Trash Free Waters grant, but due to the rising cost of disposal and the popularity of the program, dumpster events are costing significantly more than anticipated. This project will provide for additional program support and disposal fees for dumpster events

Status: The project is in progress and progressing well.

Execute Contract 12/01/2023
Up2U PLUS Waste Disposal 12/31/2024
Progress Reports ..... semi-annually
Draft Final Report 01/31/2025
Final Report 02/28/2025

FY 2025 IMPLEMENTATION OF PROJECTS

Project activities for the FY 2025 BIL Annual Work Plan have been selected for their contribution towards implementation of the *Coastal Bend Bays Plan, 2nd Edition*, as well as towards EPA's BIL goals. CBBEP is proposing to utilize BIL funding to implement eight (8) important projects addressing enhancements at local nature areas, shoreline protection of barrier island habitats and rookery islands, access enhancements at CBBEP's enviornmental education facilities, wastewater infrastructure improvements, implementation of green stormwater infrastructure techniques, and research on the impacts of ocean acidification on oyster reefs. CBBEP will not be using FY 2025 BIL funds for promotional items, food items, or travel. Specific ways in which each project meets both *Coastal Bend Bays Plan* and BIL goals are outlined in more detail in the project descriptions.

All projects are grouped under the following two tasks:

Task 1.0 Bays Plan and BIL Implementation

The following eight (8) projects will be implemented using FY 2025 BIL funding:

#2512 Lamar Burton Wetlands Enhancement and Aransas Woods-Lamar Burton Wetlands Cattail Reduction
#2513 Laguna Shores Hike and Bike Trail Amentities, Phase I
#2520 Shoreline and Wetland Protection at Cohn Preserve Phase II
#2527 Temporal Changes in Aragonite Saturation State in Oyster Reefs
#2528 Baffin Bay Wastewater Treatment Plants - Agua Dulce Assessment
#2534 Protection and Restoration of Benny's Shack Islands, Phase II
#2535 Nueces Delta Preserve Infrastructure Enhancements
#2538 Rain to Resource Project – Rainwater Harvesting at the San Antonio & Aransas Pass Railroad Depot

Task 2.0 Project Management

The FY 2025 BIL Annual Work Plan is designed to ensure that adequate staff support is available to manage and administer the BIL-funded projects listed above. Funds in the amount of $94,742 will be allocated towards the salary and fringe for a Project Manager.

TASK 1 - BAYS PLAN AND BIL IMPLEMENTATION

Eight (8) projects will be implemented using FY 2025 BIL funds, and each of these projects is described in detail on the following pages.

Project #2512 Lamar Burton Wetlands Enhancement and Aransas Woods-Lamar Burton Wetlands Cattail Reduction

Performing Organization: Aransas First Land Trust

Project Partners: US Fish and Wildlife Service, Aransas County, and Coastal Bend Bays & Estuaries Program

Total Project Funding: $87,000

BIL Funding: $33,000

Bays Plan, 2nd Edition Actions: TR 1.1, TR 2.1, HLR 1.1

Project Status: New

Estimated Completion Date: 01/31/2027

Objectives:

The primary goal of this project is to enhance wetland productivity and wildlife viewing opportunities at two sites managed by Aransas First. Specific objectives include (1) cattail treatments at both the Lamar Burton Wetlands Preserve and Aransas Woods and (2) wetland enhancements at the Lamar Burton Wetlands Preserve.

Need:

Wetland Enhancements: The 105-acre Lamar Burton Wetland Sanctuary (owned by Aransas First), became publicly accessible in 2024 with the recent installation of a parking area, trails, signage, and one uncovered and two covered observation kiosks. The observation areas overlook 58 acres of freshwater wetlands. The upper eight acres, only intermittently inundated with no cattails, and with solar well, has become an important Whooping Crane and Sand Hill Crane feeding area. The remaining 50 acres, where the covered observation kiosks are located, are over 90% covered with cattails, impairing its value as a shallow water area for wading birds and wintering ducks and other wildlife. In addition, this decreases its value as a public access area for wildlife observation and education.

US Fish and Wildlife Service (USFWS), Aransas First, and Aransas County all also have an interest in enhancing the wetlands at the Lamar Burton Wetland Sanctuary. USFWS wishes to increase wetland capacity for wildlife; Aransas First wants to enhance and preserve it, while making it safer for public access and education; and Aransas County would like to utilize it to better manage storm water from an adjacent subdivision. Currently, the southwest edge of the wetland has no elevated berm to use as a dry, safe walking trail to access the northern edge of the wetland where the second and third observation kiosks are located. The proposed project will (1) deepen the area along the south and southwest portion of the wetland to about 30-40 ft wide, 24-30 inches deep (enough to discourage cattail growth) and (2) remove the dead vegetation debris on and deepen by 6-12inches the adjacent wetland portion. Aransas County will also build drainage appropriate swales and culverts to direct excess wetland flood waters to Newcomb Bend.

Cattail Reduction: Since 2002, Aransas First has managed Aransas Woods (jointly owned by TxDOT, City of Rockport, and Aransas First) as Coastal Birding Trail Site# 47. This site contains approximately 22 acres of wetland on two large depressions that are more than half covered with cattails, and two smaller ones that are almost completed covered and currently allow no observation of wildlife. Aransas First also owns and manages the 105-acre Lamar Burton Wetland Sanctuary described in detail above. Both sites would benefit from implementation of cattail management, creating more diverse habitats and enhancing wildlife viewing opportunities. Funds were used in September 2023 to implement Phase 1 of cattail treatment at both sites. This involved the cutting and/or crushing of about half of the cattails in each area. Phase 1 was then completed in the Spring 2024, with an herbicide treatment. Phase 2 will continue the ongoing efforts by Aransas First and other partners to implement cattail management measures at both sites.

Project Deliverable Description:

Deliverables for this project will include a contract with Aransas First Land Trust, wetland enhancement, and cattail reduction. Deliverables also include semi-annual progress reports, draft final report, and final report.

Project Outcomes:

Outcomes of the project include the restoration of coastal wetland habitat through the treatment of invasive vegetation (i.e., cattails). The project will ultimately result in enhanced plant and wildlife diversity at two currently impacted sites in Aransas County. The project will also result in enhanced wildlife viewing opportunities through wetland management techniques that include the creation of a berm that will also serve as a walking trail.

Support of BIL NEP Priorities:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: The need to support efforts to minimize impacts from invasive species is listed as a priority action (HLR 2.6) in the *Coastal Bend Bays Plan, 2nd Ed*. Specifically, the project will focus on treating and removing cattails at the Lamar Burton Wetland Sanctuary and the Aransas Woods site. The project will also support CBBEP's larger goal of restoring and enhancing degraded habitats where feasible (HLR 1.2). The need to maintain, manage, and expand tourism and recreational opportunities in a way that enhances the local economy and protects the natural resources of the bays is also identified as a priority goal in the *Coastal Bend Bays Plan, 2nd Ed*. The project will focus on providing an improved, well-managed public access site (TR 2.1). This action specifically calls for CBBEP to work with its Human Uses Implementation Team to develop and implement strategies that provide improvements to existing public access sites. The project was brought to CBBEP through the Human Uses Team by the Aransas First Land Trust and it was prioritized for implementation by Team members. The project will also support the development and implementation of management strategies that reduce or avoid impacts from recreational uses (TR 3.1). The Plan specifically calls for projects that help mitigate the impacts of human intrusion on important critical habitats through implementation of trail systems and educational signs.

Ensure that benefits reach disadvantaged communities: This project will enhance wetland productivity and wildlife viewing opportunities at two sites managed by Aransas First Land Trust in Aransas County. Both Lamar Burton Wetlands and Aransas Woods are located within designated 'disadvantaged communities' as identified by CBBEP's approved Equity Strategy. Specific burdens for these communities include Climate Change, Energy, Health, Workforce Development, and Legacy Pollution. Tract numbers for disadvantaged communities include: 48007950100, 48007950500.

Leverage additional resources: CBBEP and our partners have a strong history of leveraging and supporting program implementation with additional federal and non-federal resources. The proposed project will leverage $18,000 in funds from the USFWS and $36,000 in-kind support from Aransas County.

Project Deliverables/Schedule:

Execute Contract	12/01/2024
Wetland Enhancement	11/30/2025
Cattail Reduction	11/30/2026
Progress Reports	semi-annually
Draft Final Report	12/31/2026
Final Report	01/31/2027

Project Budget:

BIL Funds	$ 33,000
USFWS	$ 18,000
Aransas County	$ 36,000 (In-kind)
TOTAL	$ 87,000

Project #2513 Laguna Shores Hike and Bike Trail Amenities, Phase I

Performing Organization: Friends of Redhead Pond

Project Partners: Coastal Bend Bays & Estuaries Program, City of Corpus Christi, Texas Parks & Wildlife Department, Flour Bluff Independent School District, Flour Bluff Citizens Council

Total Project Funding: $133,000

BIL Funding: $133,000

Bays Plan, 2nd Edition Actions: TR 1.1, TR 2.1, TR 3.1

Project Status: New (Phase I)

Estimated Completion Date: 12/01/2025

Objectives:

The primary objective of the proposed project is to contract for civil engineering services associated with the proposed pedestrian trail system identified in the City of Corpus Christi's Flour Bluff Area Development Plan and associated restroom and parking areas located on approximately 55 acres in the Flour Bluff community of Corpus Christi, TX (between Hustlin Hornet Drive and Glenoak Drive on the west side of Laguna Shores Road).

Need:

The proposed project will provide the first step in design and construction of a hike and bike trail that will serve to improve public access for wildlife viewing and fishing at a series of ponds located along Laguna Shores Drive. Through the development of the Flour Bluff Area Development Plan and numerous community meetings held by Flour Bluff Citizens Council and facilitated by the National Park Service Technical Assistance team, citizens prioritized several nature areas/ preserves with wetland ponds along Laguna Shores Drive that could be enhanced for public access, while minimizing wildlife and habitat disturbances. They also developed the conceptual design for a designated path (with interpretative signage) that would not only help visitors access the site safely but would provide education on the importance of the area for shorebirds and waterfowl and decrease the habitat degradation that occurs from uncontrolled access and vehicle rutting in the sand flats and wetland portions of the properties.

For the proposed project, CBBEP will partner with the Friends of Redhead Pond to complete a feasibility study for the hike and bike trails that connect the City of Corpus Christi's conservation area at Duncan Pond to Redhead Pond Wildlife Management Area (WMA). The feasibility study will also look at placement of interpretive signage, parking, and restrooms. During the project period, the Friends of Redhead Pond will continue to control invasive species and promote a native vegetation establishment at the site.

Project Deliverable Description:

Deliverables for this project will include a contract with the Friends of Redhead Pond, two stakeholder meetings, data collection, and a feasiblity study for public accesss enhancements at several nature areas located on Laguna Shores Road. Deliverables also include semi-annual progress reports, draft final report, and final report.

Project Outcomes:

The expected outcomes of this project are chosen alternatives for pulbic accesss enhancements (e.g., designated paths/ trails, interpretive signage, parking areas, and restrooms) and access control. Construction will occur in later project phases of the project and will ultimately help visitors access natura areas along Laguna Shores Road safely, while also providing education on the importance of the area for shorebirds and waterfowl and decrease the habitat degradation that occurs from uncontrolled access and vehicle rutting in the sand flats and wetland portions of the properties.

Support of BIL NEP Priorities:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: The need to maintain, manage, and expand tourism and recreational opportunities in a way that enhances the local economy and protects the natural

resources of the bays is identified as a priority goal in the *Coastal Bend Bays Plan, 2nd Ed.* The project will focus on providing an improved, well-managed public access site (TR 2.1). This action specifically calls for CBBEP to work with its Human Uses Implementation Team to develop and implement strategies that provide improvements to existing public access sites. The proposed project was brought to CBBEP through the Human Uses Team and it was prioritized for implementation by the Team members. The project will also support the development and implementation of management strategies that reduce or avoid impacts from recreational uses (TR 3.1).

Ensure that benefits reach disadvantaged communities: This project will complete a feasibility study for hike and bike trails and amenities adjacent to Redhead Pond Wildlife Management Area and Flour Bluff Independent School District (FBISD) in the Flour Bluff community of Corpus Christi, Texas. Although the site itself is not designated a 'disadvantage community', it is directly adjacent to a disadvantaged tract as identified by the CBBEP's approved Equity Strategy and the community, FBISD, and it's students will all benefit from this project by increasing individuals' ability to access, enjoy, and learn from coastal habitats. Flour Bluff Primary, Elementary, and Intermediate schools are designated Title I by the Texas Education Agency. Specific burdens for these communities include Climate Change. Tract Numbers for disadvantaged communities: 48355003002, 48355003001.

Project Deliverables/Schedule:

Execute Contract	12/01/2024
Request for Proposals	01/31/2025
Stakeholder Meeting	02/15/2025
Data Collection	02/01/2025 - 05/31/2025
Feasibility Study	09/15/2025
Progress Reports	semi-annually
Draft Final Report	11/30/2025
Final Report	12/31/2025

Project Budget:

BIL Funds	$133,000
Other Funds	$ -
TOTAL	$133,000

Project #2520 Shoreline and Wetland Protection at Cohn Preserve, Phase II

Performing Organization:	The Nature Conservancy
Project Partners:	Texas General Land Office, US Fish and Wildlife Service, Coastal Bend Bays & Estuaries Program
Total Project Funding:	$575,000
BIL Funding:	$125,000
Bays Plan, 2nd Edition Actions:	HLR 1.1, HLR 1.2, CR 1.1, CR 1.2
Project Status:	Phase II
Estimated Completion Date:	12/31/2025

Objectives:

The primary goal of the project is to slow down existing erosion and enable a more efficient, cost-effective, complementary construction option of the shoreline protection design identified in Phase 1. The objectives of this project include: (1) design and permit Phase 2 (early shoreline protection) and (2) construct early shoreline protection.

Need:

CBBEP is currently working with The Nature Conservancy (TNC), USFWS, and Texas General Land Office (GLO) to review alternatives for shoreline protection and breach closure and permitting regulatory coordination at the Cohn Preserve (Phase 1), located on the bayside of Mustang Island. The purpose of the "Shoreline and Wetland Protection at Cohn Preserve - Phase 2" project is to implement a stopgap project to address ongoing erosion to the current shoreline, south of the existing breach at Cohn Preserve while continuing the Phase 1 project. The Phase 2 stopgap project will be part of the larger shoreline protection system (initiated in Phase 1) being designed for the Cohn shoreline, north and south of the breach.

Phase 2 consists of design/permitting and installation of rip rap or other similar product at the mean tide level of the Preserve shoreline. The Cohn Preserve is owned and managed by TNC, who is currently working in partnership with CBBEP, USFWS, GLO, and a project engineer to implement Phase 1 of the project (funded from GLO Coastal Erosion Planning and Response Act, Cycle 12 and matched by CBBEP). Phase 1 consists of site data collection, alternatives analysis, preliminary engineering design (30%), and permitting for a living shoreline project. Phase 1 will require an individual construction permit from the US Army Corps of Engineers (USACE). Experience has shown that individual construction permits can take more than two years, and in the meantime the site continues to erode and lose sediment at an alarming rate. A review of aerial photographs from 2010, 2015, and 2020 indicate that over the 10-year period the shoreline eroded between 15 and 90 feet, with the largest impact being in 2017 at the breach along the northern shoreline during Hurricane Harvey.

For this reason, CBBEP and TNC are proposing a Phase 2 stopgap project that can be more quickly permitted and implemented earlier than Phase 1 to stop the persistent erosion while the larger shoreline protection system undergoes regulatory coordination

Project Deliverable Description:

Project deliverables include executed contract wiht The Nature Conservancy, design documents, permitting, bid solicitation, construction contract, and installation of rip rap or other similar product at the mean tide level of the Cohn Preserve shoreline. Additional deliverables include semi-annual progress reports, draft final report, and final report.

Project Outcomes:

The expected outcome of this project is the installation of a stopgap erosion protection solution (rip rap or other similar product) at the Cohn Preserve that will decrease the ongoing erosion and sediment/marsh loss at the site. Once

implemented, the erosion control solution will protect approximately XX acres of barrier island marsh habitat that is critical for protecting nearby communities, including Corpus Christi, from storm surge, waves, and sea level rise. The marsh habitats also provide foraging, breeding, and nursery grounds for numerous estuarine and marine species.

Support of BIL NEP Priorities:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: The need to increase and preserve the quantity, quality, and diversity of habitats and living resources in the Coastal Bend is identified as a priority goal in the *Coastal Bend Bays Plan, 2nd Ed.* The proposed project will specifically focus on both preserving functional, natural habitats (HLR1.1) and restoring and enhancing degraded habitats and creating new habitats where feasible (HLR 1.2). By implementing a stopgap project that can be more quickly permitted and implemented to stop the persistent erosion at the Cohn Preserve while the larger shoreline protection system undergoes regulatory coordination, the project will enhance efforts and activities to implement site-specific plans for restoration and enhancement of degraded habitats and/or creation of new habitats.

Build the adaptive capacity of ecosystems and communities: The marsh area at Cohn Preserve that would be protected by this project is located on Mustang Island, one of Texas's Gulf barrier islands, extending roughly 18 miles in length from Port Aransas on the north to Packery Channel on the south. The Island has experienced significant degradation of its coastal wetlands, which is expected to become more pronounced as sea levels continue to rise along the Texas Gulf Coast. In addition to providing foraging, breeding, and nursery grounds for numerous estuarine and marine species, the marsh habitats at the Cohn Preserve provide nearby communities, including the City of Corpus Christi, with enhanced protection and buffering from the growing impacts of sea-level rise, floods, storm events, and other environmental stressors. As the shoreline erodes and marsh habitat is lost, its ability to provide benefits (i.e. storm protection) to surrounding communities also changes. Human communities face risks to sea level rise and storm surge and those impacts from "today's" storm surge will be substantially amplified by climate-enhanced sea level rise in the future. The absence of marsh habitat on Mustang Island will only serve to amplify the impacts of storm surge and increase the damages potentially suffered by human communities in future storm events.

Leverage additional resources: CBBEP has a strong history of leveraging and supporting program implementation with additional federal and non-federal resources. The proposed project will leverage $450,000 in funds from the USFWS, GLO, and TNC, as outlined below.

Project Deliverables/Schedule:

Execute Contract	01/31/2025
100% Engineering Design	03/30/2025
Bid Solicitation	04/30/2025
Construction Services Contract	05/31/2024
Construction	07/31/2025
Progress Reports	semi-annually
Draft Final Report	11/30/2025
Final Report	12/31/2025

Project Budget:

BIL Funds	$125,000
USFWS	$ 75,000
GLO	$357,000
The Nature Conservancy	$ 18,000
TOTAL	$575,000

Project #2527 Temporal Changes in Aragonite Saturation State in Oyster Reefs

Performing Organization:	University of Texas Marine Science Institute
Project Partners:	Harte Research Institute at Texas A&M University - Corpus Christi, Coastal Bend Bays & Estuaries Program
Total Project Funding:	$187,506
BIL Funding:	$68,506
Bays Plan, 2nd Edition Actions:	HLR 1.1, HLR 1.3, WSQ 1.1, WSQ 2.2, WSQ 3.1
Project Status:	New
Estimated Completion Date:	07/31/2026

Objectives:

The main objective of this proposal is to improve the understanding of Aragonite saturation state (Ωarag) in the Mission-Aransas Estuary (MAE) and its response to hydrological variability and biogeochemical processes (respiration) at a series of natural and restored oyster reefs on a seasonal basis, including periods after significant freshwater inflow. The specific objectives are (1) measure the carbonate system parameters (pH, total alkalinity, dissolved inorganic carbon, and calcium ion concentration, which will be used to calculate Ωarag in MAE using seasonal discrete sampling; (2) quantify the contributions of freshwater inflow, evaporation, mixing, and respiration to the Ωarag variability in MAE using mass balance and statistical models; (3) assess the vulnerability of MAE to ocean acidification.

Need:

Aragonite saturation state is a key parameter that reflects the suitability of water column for calcifying organisms, including oysters (larval stage shell is made of aragonite) and corals in coastal areas and pteropods in the open ocean. Ocean acidification, caused by increasing atmospheric CO2, along with coastal eutrophication, reduces Ωarag and poses a threat to marine ecosystems and fisheries. Estuaries are particularly vulnerable to ocean acidification due to their complex hydrology because of varying inflow scenarios, and biogeochemical behaviors due to the input of nutrients and land-derived organic matter, both of which can modulate Ωarag in response to freshwater inflow, evaporation, mixing, and respiration.

MAE is a shallow, semiarid estuary in the northwestern Gulf of Mexico, which hosts important habitats for oysters and other shellfish species. MAE experiences large variations in freshwater inflow due to climate variability and extreme events, such as droughts and hurricanes, which can affect its carbonate chemistry and Ωarag dynamics. However, the current knowledge of Ωarag in MAE is limited and based on sporadic measurements that do not capture its full spatiotemporal variability and drivers, especially the areas where both natural and artificial reefs are located.

Methodology for the project includes: (1) quarterly water sampling will take place at the reef locations along the salinity gradient for analysis of total alkalinity, dissolved inorganic carbon, pH and calcium ion concentration and nutrients. Additional sampling is also planned post large pulse of freshwater inflow; (2) Ωarag will be calculated using the CO_2SYS program based on water sample data; (3) a multiple linear regression model to partition the Ωarag variability using the measured carbonate system parameters and other environmental variables; and (4) characterize oyster population at each reef location (e.g., oyster density, size, spat density) for comparison with water carbonate chemistry conditions.

Project Deliverable Description:

Project deliverables include executed contract with the University of Texas Marine Science Institute; quarterly sampling for total alkalinity, dissolved organic carbon, pH, calcium ion concentrations, and nutrients; characterization of oyster population at sampling site; and data analysis such as mass balance and statistical models. Additional deliverables include approved QAPP, semi-annual progress reports, draft final report, and final report.

Project Outcomes:

This project will provide the first comprehensive and high-quality dataset of Ωarag for both natural and artificial reefs in MAE, which will fill a critical gap in the regional and global ocean acidification monitoring network. In addition, this project will reveal the spatiotemporal patterns and drivers of Ωarag variability in MAE and how they are influenced by hydrological variability and biogeochemical processes. The results of this study will be used to evaluate the vulnerability of MAE to ocean acidification and the potential impacts on oyster growth and survival, which will inform the management and restoration of this valuable ecosystem service and resource.

Support of BIL NEP Priorities:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: The need to support studies to better project and understand the local biological, chemical, physical, and ecological effects of changing climatic conditions is identified as a priority goal (CR 1.1) in the *Coastal Bend Bays Plan, 2nd Ed.* The Plan specifically calls for efforts to facilitate research and monitoring of key abiotic parameters related to climate variability, including pH and CO_2. The proposed project will directly support these needs by collecting data on total alkalinity, dissolved inorganic carbon, pH and calcium ion concentration and nutrients. The project will also inform future management and restoration of this valuable ecosystem service and resource, therefore also supporting CBBEP's efforts to increase and preserve the quantity, quality, and diversity of habitats and living resources (HLR 1.1).

Ensure that benefits reach disadvantaged communities: This project will improve the understanding of aragonite saturation state which is key parameter in determining suitability of a water column for oysters. All sampling sites are in Aransas and Copano Bays and are within designated 'disadvantaged communities' as identified by the CBBEP's approved Equity Strategy. Oysters are an important component of a balanced ecosystem and indicatory of environmental heath. Tract Numbers for disadvantaged communities: 48007950100, 48391950400.

Build the adaptive capacity of ecosystems and communities: Changing climatic and environmental conditions pose major threats to our nation's estuaries. Changes in sea level, shifts in salinity and pH, changes in air and water temperature, and alterations in precipitation result in the potential loss of habitats and associated species, as well as adverse impacts to local economies, development, and infrastructure. In order to improve the resiliency of these important ecosystems and the communities that rely on them, we must increase our understanding of local changes in key data parameters relating to climate variability, strengthen our knowledge of climate impacts on ecosystem structure and function, and use new data and information in modeling efforts to better predict future impacts of climate on local resources. The proposed project will provide important data and information related to ocean acidification that local resource managers can use to better understand and respond to potential impacts on estuarine and marine organisms, including species that are commercially important such as oysters and shrimp..

Project Deliverables/Schedule:

Execute Contract	12/01/2024
QAPP submitted	12/31/2024
Field Sampling	02/01/2025 - 05/30/2026
Progress Reports	semi-annually
Draft Final Report	06/30/2026
Final Report	07/31/2026

Project Budget:

BIL Funds	$ 68,506
TCEQ 604b BIL Funds	$119,000
TOTAL	$187,506

Project #2528 Baffin Bay Wastewater Treatment Plant - Agua Dulce Assessment

Performing Organization: Nueces River Authority

Project Partners: Coastal Bend Bays & Estuaries Program

Total Project Funding: $134,750

BIL Funding: $134,750

Bays Plan, 2nd Edition Actions: NPS 1.3

Project Status: New

Estimated Completion Date: 04/30/2026

Objectives:

The primary objective of this project is to improve water quality in Petronila Creek and Baffin Bay through the identification of improvements at the Agua Dulce Wastewater Treatment Plant (WWTP) and completion of a funding application to implement improvements.

Need:

This project will conduct an engineering assessment of the Agua Dulce WWTP System. Agua Dulce is one of the 13 wastewater treatment plants that discharges into Petronila Creek and ultimately into Baffin Bay. The Agua Dulce WWTP System is in need of major repairs, and the community does not have the population base or tax base to fund the repairs. Similar to other small, rural communities, Agua Dulce suffers from not having city engineers with the ability to do WWTP assessments. They also lack the staff needed to put together competitive funding applications to seek money for the improvements. This project will assess the Agua Dulce WWTP and prepare an application for the Texas Water Development Board - State Revolving Fund Clean Water Fund. This will allow the community of Agua Dulce the ability to make the improvements needed at the WWTP to improve the quality of the discharge.

Project Deliverable Description:

Deliverables for this project includ a contract with the Nueces River Authority, request for proposals for engineering services, contract for engineering services, assessment report of the Agua Dulce WWTP, and application for funds needed to implement recommendations. Additional deliverables include semi-annual progress reports, draft final report, and final report.

Project Outcomes:

The expected outcome of this project is improved water quality in the Coastal Bend, specifically Petronila Creek and Baffin Bay, through load reductions of both bacteria and nutrients.

Support of BIL NEP Priorities:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: The need to maintain and/or enhance water and sediment quality and understand total loadings, transport pathways, and biological/ecological effects of loadings to the bay system are identified as priority goals in the *Coastal Bend Bays Plan, 2nd Ed. T*he Plan specifically calls for efforts to support the implementation of plans and projects to improve water and sediment quality in identified segments (WSQ 1.1). More specifically, the project will further the support of assessments and planning that address problematic levels of fecal pollution and other water quality issues identified by stakeholders for specific portions of the project area that are of concern (i.e., Baffin Bay).

Ensure that benefits reach disadvantaged communities: This project will conduct an engineering assessment of the Agua Dulce WWTP System. The Agua Dulce WWTP is located within a 'disadvantaged community' as identified by the CBBEP's approved Equity Strategy. Specific burdens for these communities include Climate Change, Housing, and Legacy Pollution. Tract Numbers for disadvantaged communities: 48355005900.

Build the adaptive capacity of ecosystems and communities: Climate change is considered to be one of the main challenges to wastewater systems in future decades. More extreme weather events, including both increased flooding from storm events and periods of intense drought, are leading to challenging conditions at wastewater treatment plants. Large volumes of stormwater can easily overwhelm treatment plants and lead to combined sewer overflows when the capacity of a sewage system has reached its limit. This results in wastewater being released with little or no treatment. While periods of intense drought can also affect the quantity and quality of treated water, leading to complications in operations, damage to systems, and increased costs. Changing climatic conditions will be considered as part of the planning and design phase of the project, in order to ensure that the new regional facility and the communities that are dependent upon it are resilient to changing climatic conditions.

Project Deliverables/Schedule:

Execute Contract 12/01/2024
Request for Proposals for Engineering Services 12/15/2024
Execute Contract with Engineer 02/01/2025
Asessment Report 09/30/2025
TWDB Funding Application 03/15/2026
Progress Reports ..... semi-annually
Draft Final Report 03/31/2026
Final Report 04/30/2026

Project Budget:

BIL Funds	$134,750
Other Funding	$ --
TOTAL	$134,750

Project #2534 Protection and Restoration of Benny's Shack Islands, Phase II

Performing Organization: Coastal Bend Bays & Estuaries Program

Project Partners: Texas General Land Office

Total Project Funding: $6,260,000

BIL Funding: $60,000

Bays Plan, 2nd Edition Actions: CB 1.1, HLR 1.1, HLR 1.2

Project Status: Phase II

Estimated Completion Date: 05/30/2027

Objectives:

The proposed project will Increase the amount of nesting habitat available for colonial waterbirds within the Lower Laguna Madre by protecting and restoring Benny's Shack Islands. Specific objectives include: (1) complete final engineering and design and bid document development; (2) complete bidding process for protection and restoration; (3) construct chosen restoration and protection alternative; and (4) conduct post-restoration monitoring to determine usage of restored island by colonial waterbirds.

Need:

Texas colonial waterbirds typically nest in spring/summer months in dense groups on small islands in the southern Texas bays. Threats such as development, habitat loss, and human disturbance are taking their toll on population numbers. Long-term data show that the majority of colonial waterbird populations in Texas are declining, some by as much as 60-70%. The rookery islands known as Benny's Shack have historically supported a large number of nesting waterbirds, but erosion on the northern shoreline due to winds from severe cold fronts is causing the loss of nesting habitat. The high rate of erosion has led to the loss of very old mature brush that supports a diverse community of nesting wading birds, making this a project of great urgency.

Benny's Shack Islands consist of two islands, North and South Island, and are located in the open water of the Lower Laguna Madre with significant fetch for wave development. The islands have undergone erosion in past years as evidenced by the large bluffs and land loss, especially on the northern side of the islands. While both islands have shown erosional issues, the proposed restoration and protection project will focus primarily on the South Island due to the dense seagrass distributions on the North Island that limit expansion of the Island and construction access.

Using previous GLO funding, CBBEP contracted with an engineering firm to complete Phase I of the project, which included an alternatives analysis, data collection, preliminary design (70%), and submission of a permit application for Benny's Shack Islands. CBBEP is ready to begin Phase II of the project which will involve construction of the chosen design. The chosen alternative will expand the existing South Island 2.9 acres north to re-establish land lost from erosion and sea level rise. It will also include the construction of a shoreline protection structure through the construction of a 1,975-foot traditional breakwater to armor the existing island and any expanded island space. This project was designed to reduce damage to the surrounding habitats and avoid encroachment into a nearby dredge placement area, while still providing protection to vulnerable shorelines and expansion of existing habitats. Specifically, expansion is oriented to avoid the majority of seagrass patches to the north of the Island.

Once completed, the project will ultimately protect, enhance, and expand habitat for numerous species of nesting colonial waterbirds. Following construction, CBBEP will conduct monitoring to gauge the success of the project in terms of bird usage (e.g., yearly bird surveys to document total number of breeding pairs and number of active nests). CBBEP will also inspect the integrity of the breakwater structures through site visits and a final grade survey.

Project Deliverable Description:

Deliverables for this project will include final engineering/design documents, bid package, construction contract, and implementation of a shoreline protection solution. Deliverables will also include semi-annual progress reports, draft final report, and final report.

Project Outcomes:

The expected outcomes of this project are the protection of Benny's Shack Island from ongoing erosion and expansion of the existing Island footprint by 3.70 acres acres through the placement of fill material. This will ultimately result in increased nesting habitat, helping to reverse declines in colonial waterbird populations.

Support of NEP BIL Prioirties:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: The need to conserve coastal birds and the habitats they depend upon is identified as a priority goal in the *Coastal Bend Bays Plan, 2nd Ed.* The proposed project will specifically focus on implementing successful waterbird management actions to reverse declines in colonial nesting waterbirds in the Coastal Bend (CB 1.1) by supporting efforts to restore and enhance existing rookery islands and/or create new islands (CB 1.1.- Step 4). The project also supports CBBEP's broader habitat restoration goals of restoring and enhancing degraded habitats and creating new habitats where feasible (HLR 1.2).

Ensure that benefits reach disadvantaged communities: This project will increase the amount of nesting habitat available for colonial waterbirds at Benny's Shack Island, which is located within a 'disadvantaged community' as identified by the CBBEP's approved Equity Strategy. Colonial waterbirds are an important component of a balanced ecosystem and indicatory of environmental heath. Specific burdens for these communities include Climate Change, Energy, Health, Housing, Transportation and Workforce Development. Tract Numbers for disadvantaged communities: 48489950700.

Build the adaptive capacity of ecosystems and communities: During the past decade alone, the erosion of bird nesting islands has been exacerbated by the acceleration of relative sea-level rise in Texas coastal waters. Some bay systems have experienced the near complete disappearance of all nesting islands over that time. Tropical storms, such as Hurricane Harvey in 2017, have contributed to major losses in the quantity and quality of island nesting sites, including the complete destruction of the vegetation used as nesting substrate on some islands. These and other events have reshaped the utilization patterns of nesting islands across the Coastal Bend area by colonial waterbirds. Consequently, these changes have increased the need for active ecological restoration actions needed to maintain suitable and resilient nesting habitat. Island creation projects are expensive, requiring extensive engineering, permitting, equipment mobilization and construction costs. However, they are considered essential to address the declines in waterbird populations. By examining sea level rise and storm events during the engineering/design process, the proposed project will increase the resiliency and adaptive capacity of Benny's Shack Islands and the species that depend on it to provide a safe place to nest and raise their young.

Leverage additional resources: CBBEP has strong history of leveraging and supporting program implementation with additional federal and non-federal resources. CBBEP has requested $6,200,000 in funding from the TGLO-CEPRA program.

Project Deliverables/Schedule:

Execute Contract	05/31/2025
100% Engineering/Design	09/30/2025
Bid Solicitation	05/30/2026
Construction Services Contract	07/31/2026
Construction	02/28/2027
Progress Reports	semi-annually
Draft Final Report	04/30/2027
Final Report	05/31/2027

Project Budget:

BIL Funds	$ 60,000
TGLO-CEPRA	$6,200,000
TOTAL	$6,260,000

Project #2535 Nueces Delta Preserve Infrastructure Enhancements

Performing Organization: Coastal Bend Bays & Estuaries Program

Total Project Funding: $197,802

BIL Funding: $197,802

Bays Plan, 2nd Edition Actions: TR 1.1, TR 2.1, TR 3.1

Project Status: New

Estimated Completion Date: 12/31/2025

Objectives:

The project objective is to ensure accessibility for all individuals to the educational programs offered at CBBEP's Nueces Delta Preserve by providing ADA-compliant trails, boardwalks, pier, and wildlife observation platforms.

Need:

The Nueces Delta Preserve is an 11,000-acre property owned by CBBEP and is located primarily in San Patricio County. The Preserve is comprised of diverse and highly productive habitats, including wetlands and prairies. CBBEP's Land Conservation Program implements responsible and sustainable management techniques (e.g., prescribed fire, hydrologic restoration) at the Preserve to ensure that it continues to provide long-term benefits to both wildlife and people. CBBEP also operates our environmental education program, known as Delta Discovery at the Preserve, providing opportunities for students, teachers, and families to experience nature.

Current infrastructure at the Preserve includes educational classrooms, screened pavilions, restrooms, and boardwalks/trails that are used by Delta Discovery for our educational programs. CBBEP is looking to enhance public access by providing ADA compliant access trails, boardwalks, and wildlife observation platforms at the Nueces Delta Preserve. CBBEP will also construct an ADA compliant pier that can be used to gather water samples and increase outdoor education opportunities located on the Rincon Bayou at the Nueces Delta Preserve.

Project Deliverable Description:

Deliverables for this project will include installation of ADA-compliant trails, boardwalks, pier and wildlife observation platforms. Deliverables also include work order for engineering services, request for proposals, construction services contract, semi-annual progress reports, draft final report, and final report.

Project Outcomes:

The project will ensure accessibility to all individuals participatig in the educational programs offered at CBBEP's Nueces Delta Preserve. Ultimately, this will enhance CBBEP's ability to prepare tomorrow's future leaders to be responsible stewards by providing them with knowledge and understanding of our bays and estuaries.

Support of BIL NEP Priorities:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: CBBEP's Delta Discovery Program implements hands-on, discovery-based programs that help students learn about essential coastal and estuarine concepts and strengthen their critical thinking, team building, and problem solving skills. The main audience for Delta Discovery programs are PK-12 students and teachers. Curriculum is discovery-based and aligned with state/national standards, providingstudents a connection between classroom instruction and practical application through outdoor experiences. Field trips are primarily conducted at CBBEP's Nueces Delta Preserve. The proposed enhancements will directly support all of CBBEP's goals related to our environmental education program: provide authentic discovery-based experiences for PK-12 students and beyond that are aligned to cross-curricular state/national standards (DD 1.1); provide professional development and resources for educators that allow them to connect classroom instruction with real-world application (DD 1.2); identify and promote partnership opportunities with like-minded organizations to develop and/or deliver programs that support the Delta Discovery mission of environmental education and coastal watershed protection (DD 1.3); and provide outdoor learning opportunities that facilitate hands-on investigations of and experiences in the natural environment (DD 2.1).

Ensure that benefits reach disadvantaged communities: This project will enhance public access by providing ADA compliant access trails, boardwalks, and wildlife observation platforms at the Nueces Delta Preserve, which is located within a 'disadvantaged community' as identified by the CBBEP's approved Equity Strategy. Specific burdens for communities include Climate Change and Transportation and Workforce Development. Tract Numbers for disadvantaged communities: 48409010900.

CBBEP has placed a high priority on providing its environmental education programming free of charge to ensure that cost and accessibility do not prohibit Title 1 schools from participating. To be qualified as a Title 1 school, at least 40% of the student body must qualify for a free or reduced lunch. Based on the Journalist's Resource analysis for fiscal year 2018 that combines data from the Census and the U.S. Department of Education, out of the 45 school districts in the Coastal Bend region, schools in 44 of the districts receive some amount of Title I funding. When looking at the 23 schools that participated in education and outreach programming with CBBEP between 2017 and 2021, all were located in school districts receiving Title 1 funding. In FY 2025, CBBEP will continue serving students and teachers from Title 1 schools within the Coastal Bend.

Project Deliverables/Schedule:

Execute Work Order	01/31/2025
Construction Services Contract	06/30/2025
Construction	10/31/2025
Progress Reports	semi-annually
Draft Final Report	11/30/2025
Final Report	12/31/2025

Project Budget:

BIL Funds	$197,802
Other Funds	$ -
TOTAL	$197,802

Project #2538 Rain to Resource Project - Rainwater Harvesting at the San Antonio & Aransas Pass Railroad Depot

Performing Organization:	Clean Coast Texas
Project Partners:	Coastal Bend Bays & Estuaries Program, Harte Research Institute at Texas A&M University - Corpus Christi, Rockport Cultural Art District
Total Project Funding:	$63,000
BIL Funding:	$63,000
Bays Plan, 2nd Edition Actions:	NPS 1.1, NPS 1.5, WSQ 1.1, FW 1.3
Project Status:	New
Estimated Completion Date:	11/30/2025

Objectives:

The project objective is to implement a rainwater harvesting project at the historic San Antonio and Aransas Pass Railroad Depot that provides water for the site's landscaping, while also serving as a powerful educational tool that showcases the benefits of rainwater harvesting.

Need:

The Clean Coast Texas Collaborative is a program of the Texas General Land Office and is a primary initiative of the Texas Coastal Nonpoint Source Program and began implementation in January 2021. The Collaborative is a dynamic team of experienced engineers, scientists, planners, and educators who work to provide capacity and incentives to coastal communities that lack the expertise and/or resources to successfully implement Coastal NPS priority projects. The Collaborative supports environmental outreach and education, comprehensive planning, local/regional policy development, green stormwater infrastructure projects, floodplain management, on-site sewage facility maintenance, and funding strategies to support the adoption of Texas Coastal Nonpoint Source Program priorities.

The Collaborative is currently working to implement a green infrastructure project in Rockport, Texas to benefit Little Bay. The Rain to Resource project includes rainwater harvesting and irrigation systems at the historic San Antonio and Aransas Pass Railroad Depot located in Rockport, Texas. The average Texan uses about 100 gallons of water per day. Over time, this usage can stress Texas's water resources. One solution to this problem is rainwater harvesting, which collects rainwater into a storage container for outdoor watering or indoor use with the proper filtration system. Rainwater harvesting systems normally have a total storage capacity ranging from 1,000 to over 11 ,000 gallons. The proposed rainwater harvesting system can hold 2,000 gallons, having the potential to collect 26,000 gallons per year. Water collected from this rainwater harvesting tank is used to water the landscape.

Rainwater harvesting systems protect Little Bay and our water supply by: (1) reducing demand for fresh treated water; (2) reducing stormwater runoff and flooding by capturing rain from rooftops; and (3) reducing the amount of pollutants from sediments, pet waste, and car oils from entering Little Bay. By installing the system at a tourist attraction, the project will also serve as an educational tool for visitors about the benefits of rainwater collection and its uses.

Project Deliverable Description:

Deliverables for this project will include construction of a rainwater harvesting system at the historic San Antonio and Aransas Pass Railroad Depot located in Rockport, Texas. Additional deliverables include executed contract, designs, bid solicitation, construction services contract, semi-annual progress reports, draft final report, and final report.

Project Outcomes:

The expected outcomes of this project include reduced demand for fresh treated water, reduced stormwater runoff and flooding, and enhanced water quality in Little Bay through load reductions of pollutants from sediments, pet waste, and car oils. The project will also serve as a valuable educational resource for area residents and visistors, demonstrating the benefits of green stormwater infrastructure projects, in particular rainwater harvesting.

Support of BIL NEP Priorities:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: The need to assist local governments, small businesses, industries, and organizations in their efforts to reduce loadings to the bays and estuaries is identified as a priority action (NPS 1.1) in the *Coastal Bend Bays Plan, 2nd Ed*. The project also supports actions in the Plan related to improving the quality of urban stormwater runoff (NPS 1.5). The Plan specifically calls for CBBEP to work with partners to implement nonpoint source pollution best management practices, particularly green stormwater infrastructure projects, that are designed to filter out pollutants and/or prevent pollution by controlling it at is source. By capturing rainwater and reducing the need for treated fresh water at the site, the proposed project will also support CBBEP's efforts to optimize environmental flows to the bays and estuaries of the Coastal Bend (FW 1.3). The *Coastal Bend Bays Plan, 2nd Ed*. specifically highlights the need to work with partners to encourage water conservation measures.

Ensure that benefits reach disadvantaged communities: This project will construct a rainwater harvesting system at the historic San Antonio and Aransas Pass Railroad Depot located in Rockport, Texas to reduce freshwater demand and reduce pollutant loading and stormwater impacts to Little Bay. The project will also serve as a valuable educational resource for area residents and visistors, demonstrating the benefits of green stormwater infrastructure projects, in particular rainwater harvesting. The project is located within a designated 'disadvantaged community' as identified by the CBBEP's approved Equity Strategy. Specific burdens for this community include climate change and health. Tract Numbers for the disadvantaged community include: 48007950300.

Build the adaptive capacity of ecosystems and communities: Climate change poses a major threat to our nation's coastal communities, and in Texas specifically it is expected to intensify the historical pattern of highly variable climate. For the Coastal Bend region, alterations in freshwater inflows, changes in estuarine ecosystem structure and function, more frequent and longer-lasting droughts, increased salinity, saltwater intrusion, and changes in habitat and species ranges are expected. The region is already experiencing the effects of some climate change stressors, including more intense rainfall events with longer, dry periods in between. As the frequency and intensity of droughts increases, it is important to implement water conservation measures like rainwater harvesting that will reduce the demand for treated water at sites. CBBEP is working with partners to implement projects that demonstrate how green infrastructure technqiues, like rainwater harvesting, can benefit local climate resiliency. The proposed project will build resiliency in Aransas County by implementing a green infrastructure project that water deamand and stormwater runoff.

Project Deliverables/Schedule:

Execute Contract 12/01/2024
Bid Solicitation 01/15/2025
Construction Services Contract 03/01/2025
Construction ..... 03/15/2025 - 05/15/2025
Progress Reports ..... semi-annually
Draft Final Report 10/31/2025
Final Report 11/30/2025

Project Budget:

BIL Funds	$63,000
Other Funding	$ --
TOTAL	$63,000

TASK 2 - PROJECT MANAGEMENT

To support the administration and management of BIL-funded projects, CBBEP will utilize $94,742 of BIL funds to support salary and fringe for a project management position. The Project Manager will provide organizational and logistical support BIL-funded projects and will ensure that all tasks and deliverables are completed.

FY 2025 BIL Funds: $94,742

Completion date: 5/31/2027

COMPETENCY STATEMENT

Competency for generating environmental measurement data under US EPA (Agency) funded assistance is demonstrated at the Coastal Bend Bays & Estuaries Program through the maintenance of quality assurance project plans for data collection activities that involve Environmental Information Operations (EIO), and through the approved Quality Management Plan that provides descriptions of the quality policies, including all requirements described in EPA CIO2105-S-02.1.

SUMMARY

The CBBEP has been working on implementing the *Coastal Bend Bays Plan* for over 25 years, successfully completing projects that restore the water quality and ecological integrity of the Coastal Bend region. The *Coastal Bend Bays Plan* has provide a strong, structured framework for the delivery of investments, and CBBEP's collaborative, locally driven approach has over time generated large returns on each federal dollar invested, delivering habitat protection and restoration and water quality enhancement projects. The FY 2025 BIL funds will accelerate and enhance CBBEP's ability to implement actions identified in the *Coastal Bend Bays Plan, 2nd Ed*. These BIL funds will also allow CBBEP to develop and strengthen partnerships necessary to make the most effective use of these new funds.

This FY 2025 Annual Work Plan describes several implementation projects, as well as project management support, that will be undertaken pending approval and receipt of BIL funds. All work under this Cooperative Agreement is scheduled for completion by August 31, 2029. Of the total funds identified in the Work Plan budget, $909,800 is new FY 2025 BIL funding, and $6,823,000 is leveraged funds from other funding sources to be provided by the CBBEP and partners. Detailed budget information and deliverables can be found in the following tables.

CBBEP's approved Equity Strategy sets a numeric target of at least 50 percent of BIL NEP funding dollars to be invested in projects and activities that will benefit disadvantaged communities, as defined by CBBEP's alternative definition. CBBEP anticipates that 76 percent of FY 2025 BIL funds will benefit disadvantaged communities.

TABLE 1: FY 2025 BIL Annual Work Plan Milestone Summary and Schedule

PERIOD OF PERFORMANCE: November 1, 2024 – October 31, 2029

TASK 1 - PROJECT IMPLEMENTATION	
Project #2512 Lamar Burton Wetlands Enhancement and Aransas Woods-Lamar Burton Wetlands Cattail Reduction	
Execute Contract	12/1/2024
Wetland Enhancement	11/30/2025
Cattail Reduction	11/30/2025
Progress Reports	semi-annually
Draft Final Report	12/31/2026
Final Report	1/31/2027
Project #2513 Laguna Shores Hike and Bike Trail Amentities, Phase I	
Execute Contract	12/1/2024
Request for Proposals	1/31/2025
Stakeholder Meeting	2/15/2025
Data Collection	2/1/2025 - 5/30/2025
Feasibility Study	9/15/2025
Stakeholder Meeting	10/15/2025
Progress Reports	semi-annually
Draft Final Report	11/1/2025
Final Report	12/1/2025
Project #2520 Shoreline and Wetland Protection at Cohn Preserve, Phase II	
Execute Contract	1/31/2025
100% Engineering Design	3/30/2025
Bid Solicitation	4/30/2025
Construction Services Contract	5/30/2025
Construction	7/31/2025
Progress Reports	semi-annually
Draft Final Report	11/30/2025
Final Report	12/31/2025
Project #2527 Temporal Changes in Aragonite Saturation State in Oyster Reefs	
Execute Contract	12/1/204
QAPP Submitted	1/10/2025
Field Sampling	2/1/2025 - 5/30/2026
Progress Reports	semi-annually
Draft Final Report	6/30/2026
Final Report	7/31/2026

TABLE 1 (cont'd): FY 2025 BIL Annual Work Plan Milestone Summary and Schedule

PERIOD OF PERFORMANCE: November 1, 2024 – October 31, 2029

Project #2528 Baffin Bay Wastewater Treatment Plant - Agua Dulce Assessment	
Execute Contract	12/1/2024
Request for Proposals	12/15/2024
Execute Contract for Engineering Services	2/1/2025
Assessment Report	9/30/2025
TWDB Application	3/15/2026
Progress Reports	semi-annually
Draft Final Report	3/30/2026
Final Report	4/30/2026
Project #2534 Protection and Restoration of Benny's Shack Islands, Phase II	
Execute Contract	5/30/2025
100% Engineering Design	9/30/2025
Bid Solicitation	5/30/2026
Construction Services Contract	7/31/2026
Construction	10/30/2026
Progress Reports	semi-annually
Draft Final Report	4/30/2027
Final Report	5/31/2027
Project #2535 Nueces Delta Preserve Infrastructure Enhancements	
Execute Work Order	1/31/2025
Construction Services Contract	6/30/2025
Request for Proposals	????
Construction	10/31/2025
Progress Reports	semi-annually
Draft Final Report	11/30/2025
Final Report	12/31/2025
Project #2538 Rain to Resource Project - Rainwater Harvesting at the San Antonio & Aransas Pass Railroad Depot	
Execute Contract	12/1/2024
Bid Solicitation	1/15/2025
Cosntruction Services Contract	3/1/2025
Construction	3/15/2025 - 5/15/2025
Progress Reports	semi-annually
Draft Final Report	1/31/2025
Final Report	2/28/2025
TASK 2 - Project Management	
Project Management	5/31/2027

TABLE 2: FY 2025 BIL Annual Work Plan Project Funding Summary

TASK	BIL 2025
Task 1 - Project Implementation	
#2512 - Lamar Burton Wetlands Enhancement and Aransas Woods-Lamar Burton Wetlands Cattail Reduction	$33,000
#2513 - Laguna Shores Hike and Bike Trail Amenities, Phase I	$133,000
#2520 - Shoreline and Wetland Protection at Cohn Preserve, Phase II	$125,000
#2527 - Temporal changes in aragonite saturation state in oyster reefs	$68,506
#2528 - Baffin Bay Wastewtaer Treatment Plant - Agua Dulce Assessment	$134,750
#2534 - Protection and Restoration of Benny's Shack Islands, Phase II	$60,000
#2535 - Nueces Delta Preserve Infrastructure Enhancements	$197,802
#2538 - Rain to Resource Project - Rainwater Harvesting at the San Antonio & Aransas Pass Railroad Depot	$63,000
Task 2 - Project Management	$94,742
TOTAL	**$909,800**

TABLE 3: Estimated Travel Allocations for BIL FY 2025

PLEASE NOTE: No food/per diem is included for BIL travel funds.

In-state														
	Staff	Trips	Days	Hotel Nights	Overnight or Day	Location	Airfare	Car Rental	Fuel	Meals	Hotel	Parking	Mileage ($0.58)	Total
Subtotal							$0	$0	$0	$0	$0	$0	$0	$0

Out of State														
	Staff	Trips	Days	Hotel Nights	Overnight or Day	Location	Airfare	Car Rental	Fuel	Meals	Hotel	Parking	Mileage ($0.58)	Total
Subtotal							$0	$0	$0	$0	$0	$0	$0	$0