FY 2024

Bipartisan Infrastructure Law Annual Work Plan

COASTAL BEND BAYS & ESTUARIES PROGRAM

Protecting our bays and estuaries

BIPARTISAN INFRASTRUCTURE LAW
FY 2024 Annual Work Plan

Revised October 11, 2023

COASTAL BEND BAYS & ESTUARIES PROGRAM

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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 and 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 February 2023, CBBEP began implementation of its FY22/23 Bipartisan Infrastructure Law Annual Work Plan 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.

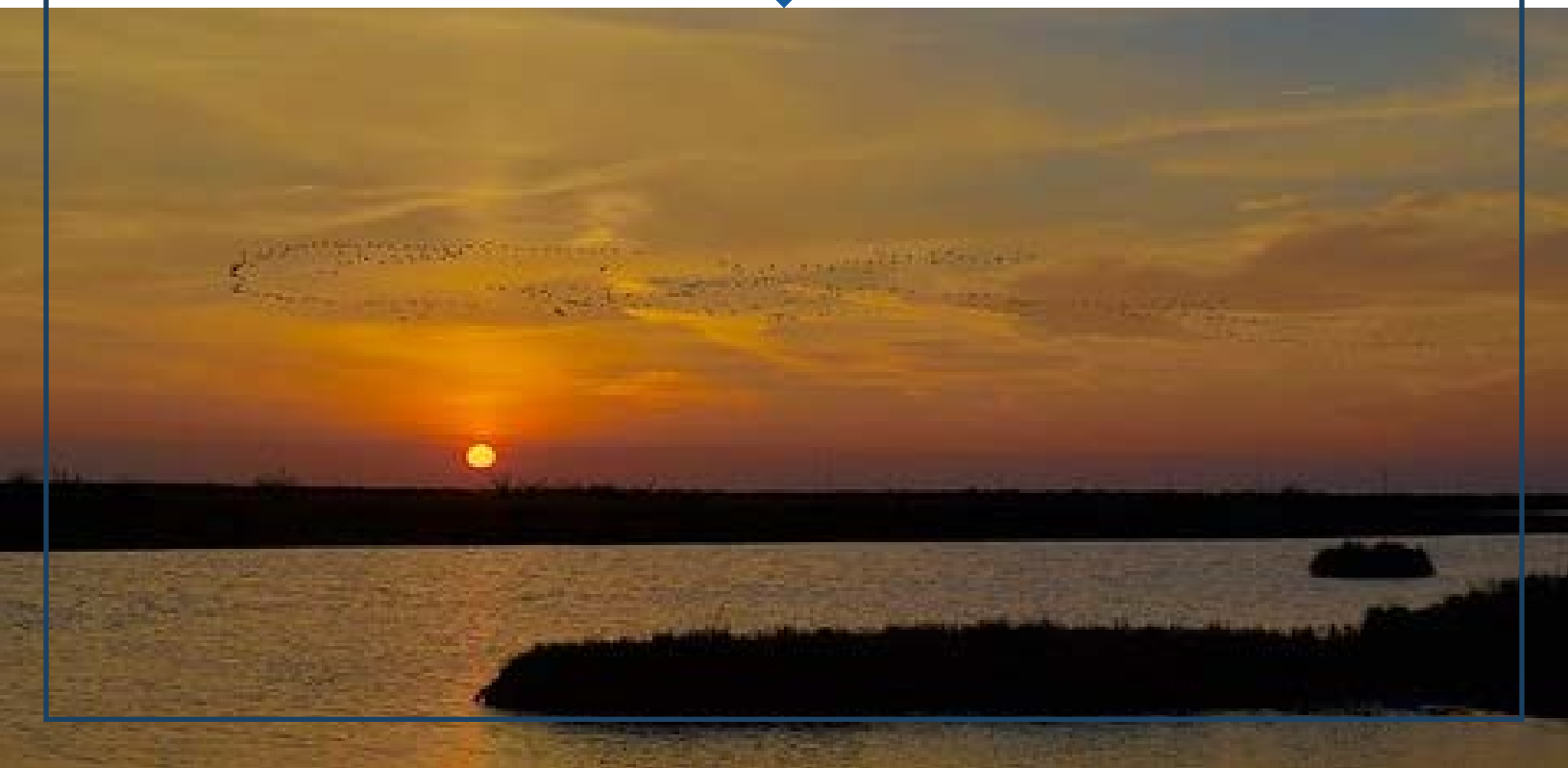
The CCMP, often referred to as *The Coastal Bend Bays Plan*, identified specific actions that would benefit the bay system and the users of the bays. It was designed to complement and coordinate existing resource management programs and plans, and it received approval in 1998. The action plans were developed 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.

PHOTO OF BIRDS FLYING OVER THE NUECES DELTA PRESERVE. The Nueces Delta Preserve is the highlight of CBBEP's land conservation efforts. Located near Odem, Texas, the Preserve contains around 11,000 acres of diverse habitats, including wetlands and coastal prairies.



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.

Texas Diamondback Terrapin Research: Diamondback terrapins are still poorly understood in Texas, and as a result, cannot be adequately managed. The largest obstacle facing state resource managers is a lack of location data for this species. Traditional sampling methods are intensive and expensive, and due to limited funding, only a few select locations have been adequately sampled for the presence of terrapins. CBBEP partnered with the Center for Coastal Studies at Texas A&M University – Corpus Christi to develop an environmental DNA (eDNA) assay specific to diamondback terrapins that would make it possible to detect the presence of this species by analyzing water samples taken from various coastal habitats. The project was completed in 2023.

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 six major rookery islands: Triangle Tree Island, Tern Island, Deadman Island, Long Reef Island, Benny's Shack Island, and Pita Chain Islands. CBBEP has secured construction funds for three of these islands: Triangle Tree, Tern Island, and Deadman Island. Once engineering/design and permitting are complete, bidding and construction will begin for these three islands.

ROOKERY ISLAND RESTORATION continues to be a major focus of CBBEP's habitat restoration efforts. Staff are currently working on protection and restoration efforts for six different rookery islands. The birds shown below are utilizing a recently restored island in Nueces Bay.

Seagrass Monitoring Program: CBBEP's Seagrass Monitoring Project is part of the Texas seagrass monitoring program, an effort that contributes to the monitoring of 95% of all seagrasses found in Texas. CBBEP's funding is specifically used to focus on assessments in Corpus Christi Bay and the Upper Laguna Madre, and in recent years, the monitoring area was expanded to also include Baffin Bay, an area of interest for many stakeholders because of

ongoing water quality issues (i.e., excessive nutrients, harmful alga blooms, fish kills). The monitoring is conducted by UTMSI and includes assessments of seagrass distribution by species, nutrient patterns, growth length, densities, and other water quality parameters. Results are all made publicly available on the monitoring program website.

Supporting Conservation of Oyster Reefs: In the Texas Coastal Bend, Second Chain of Islands, Ayres Reef, Third Chain of Islands, Cedar Reef, and Carlos Reef (referred to collectively as 'Mesquite Bay Reefs') are historically productive oyster reefs that support colonial waterbird populations and attenuate waves from passing vessels passing between the Mission-Aransas and Guadalupe Estuaries. However, in recent years, reduced oyster densities and overall degradation of reef habitat have been observed, likely due to the effects of Hurricane Harvey and ongoing commercial harvest activities (i.e. dredging). Second Chain of Islands, Third Chain of Islands, and Carlos Reef appear to have experienced the greatest declines, thus there is strong interest in protecting, conserving, and restoring the remaining Mesquite Bay Reef habitat. CBBEP partnered with the Harte Research Institute to assess historical data and collect new data to support the development of future conservation and restoration strategies for Mesquite Bay Reefs. The project was completed in 2022.

OYSTERS ARE ECOSYSTEM ENGINEERS, 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. CBBEP is working with partners on oyster reef conservation and restoration efforts.

Nueces Delta Shoreline Protection and Restoration: The Nueces Delta is experiencing rapid erosion that is causing the loss of significant marsh habitat for a variety of estuarine species, including juvenile fishes, shrimp, and crabs that support important commercial and recreational fisheries. CBBEP has received just over $4.3 million in funding from the National Fish and Wildlife Foundation - Gulf Environmental Benefit Fund and the Texas General Land Office - Coastal Erosion Planning and Response Act Program to construct 3,900 linear feet of breakwater to protect 650 acres of marsh habitat along the face of the Nueces Delta shoreline. CBBEP bid the project in March 2023 and expects construction to take place during the summer of 2023.

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.

Gulf Coast Conservation Initiative: Since 2013, CBBEP has partnered with USFWS, NRCS, TNC, and other conservation partners on a project called the Gulf Coast Conservation Initiative (GCCI). GCCI's purpose is to enhance or restore habitat for Whooping Cranes, Northern Aplomado Falcons, Attwater's Prairie Chickens, Sprague's Pipit, and other associated migratory bird species. Restoration techniques typically implemented on chosen properties include controlling vegetation (e.g., prescribed burns and herbicide treatments) and restoring water flows (e.g., water well installation and hydrologic restoration, such as culvert repairs). In 2022, CBBEP partnered with the Aransas National Wildlife Refuge through the GCCI to control invasive species.

Packery Flats Cleanup: CBBEP hosts annual 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. Recreational use of the area along with its proximity to Highway 361 often results in harmful trash and debris. CBBEP is currently in its fifth 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. In the last two 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. The most recent events have involved hundreds of volunteers.

CBBEP HOSTS ANNUAL CLEANUPS at the Packery Flats Coastal Habitat - these events are popular with local residents and often draw in hundreds of volunteers of all ages.

Texas Mid-Coast Initiative: In 2022, CBBEP continued its partnership with Ducks Unlimited and the Guadalupe Blanco River Trust to implement the "Texas Mid-Coast Initiative," a Wetland Reserve Enhancement Partnership project through the Natural Resources Conservation Service. The project seeks to conserve nearly 700 acres of priority wetland habitats for migratory birds and other state and federally listed species through restoration and enhancement efforts. CBBEP's Land Conservation Program is working closely with partners to help identify willing landowners and develop effective project ideas that will conserve and restore wetland habitats.

Water Quality and Freshwater Inflows

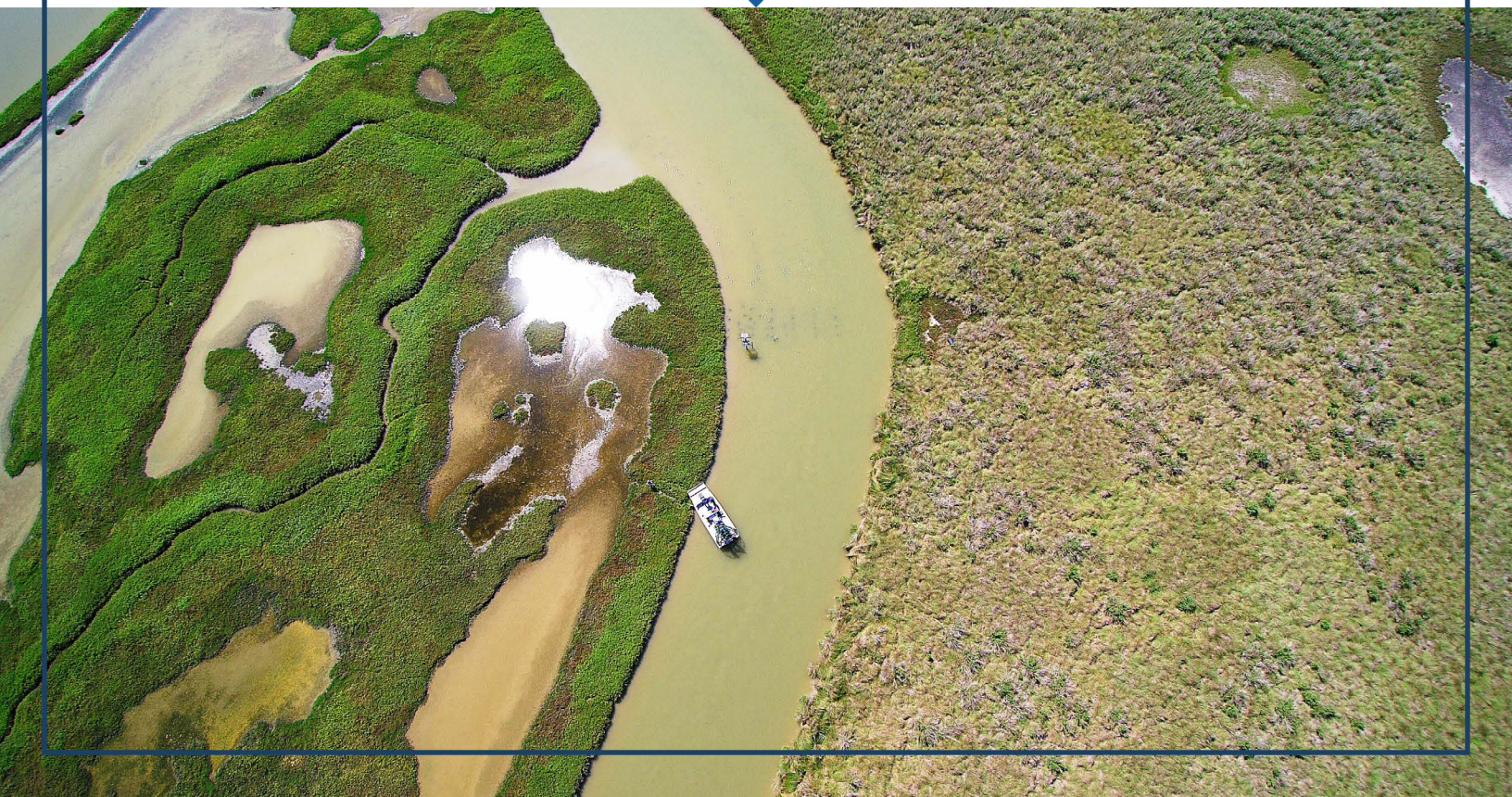
Water quality is important to estuarine productivity, wildlife habitats, and the economic vitality of the Coastal Bend. Maintaining water quality is challenging as populations increase and development continues, but it is possible through proper planning, pollution prevention programs, and other best 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.

Baffin Bay Stakeholder Group: CBBEP continues to work alongside the Harte Research Institute for Gulf of Mexico Studies to co-facilitate the Baffin Bay Stakeholder Group. The Group was formed to bring together scientist, natural resource managers, guides, and other bay users to support interests in resolving Baffin Bay water quality and biological productivity concerns. As part of its efforts in Baffin Bay, several CBBEP staff were also actively involved in the development of the Petronila Creek and San Fernando Creek Watershed Protection Plan. The Watershed Protection Plan was approved by EPA in December 2022.

Outreach to Wastewater Treatment Plants: CBBEP recently partnered with the Nueces River Authority (NRA) to conduct outreach and offer assistance to the 13 domestic wastewater treatment plants that discharge into the tributaries of Baffin Bay to help identify and address possible equipment, personnel, and capacity needs. Many of these plants receive very limited funding, are located in rural communities and districts, and were constructed in the late 1970's and early 1980's. As a result of this effort, areas were identified where further assistance in operations, new or additional equipment are needed to produce better effluent, and in many cases achieve compliance with discharge permits. After having met with most of the active wastewater treatment plant operators and identified needs at each facility, it was clear that further assistance was needed to address facility and operational deficiencies. In 2022, NRA and CBBEP collaborated on a second phase of the Wastewater Treatment Plant Assistance Program to work with a subset of the facilities listed above to address the grant and funding needs that would help address ongoing issues at the sites.

Nueces Delta Environmental Monitoring: Since 2009, CBBEP has contracted annually with the Conrad Blucher Institute at TAMUCC to (1) monitor the freshwater inflows coming into the Nueces Delta via a diversion pipeline by recording salinities within the water column at a strategic location along the Rincon Bayou and (2) maintain a real-time weather station and a water level and meteorological station in Nueces Bay. Data from these stations is used primarily to monitor releases of freshwater from reservoirs into the Nueces Delta system. In 2022, CBBEP entered into a memorandum of agreement with the National Oceanic Atmospheric Administration (NOAA) for quality control and dissemination of data from the Nueces Water Level Station as part NOAA's Physical Oceanographic Real-Time System (PORTS®). PORTS is a decision support tool that improves the safety and efficiency of maritime commerce and coastal resource management through the integration of real-time environmental observations, forecasts and other geospatial information. PORTS measures and disseminates observations and predictions of water levels, currents, salinity, and meteorological.

SALINITY MONITORING IN THE NUECES DELTA has been ongoing for over 14 years and the data gathered through this effort is critical for monitoring freshwater releases to the Delta.



Nutrient Monitoring in Petronila Creek: In FY 2020-23, CBBEP has worked in partnership with the Nueces River Authority to conduct monthly monitoring of nutrients in Petronila Creek and its tributaries. Sampling occurs at 13 stations located throughout the southeastern portion of the watershed - four stations are located on the main stem of the creek and nine stations are located on the tributaries of the creek. Nutrient parameters analyzed for the study include ammonia, nitrate nitrogen, nitrite nitrogen, total phosphorus, total kjeldahl nitrogen, dissolved kjeldahl nitrogen, chlorophyll-a, and pheophytin. Results are helping to identify sources of excess nutrient concentrations in Baffin Bay and are guiding watershed planning and restoration efforts.

Emerging Contaminants: CBBEP is currently collaborating with Texas A&M University - Corpus Christi to conduct a study that will provide the public with an understanding of current levels of per- and polyfluoroalkyl substances (PFAS) in Nueces, Corpus Christi, and Oso Bays and affiliated groundwater. PFAS were historically and are currently used in a number of commercial and household products leading to a ubiquitous accumulation of these compounds in nature. Due to their known links to reproductive, developmental, and immunological effects in humans, these compounds have received increased national attention. Despite this, little data is available about the current status of PFAS concentrations in the estuaries and groundwater of the Texas Coastal Bend. Monthly sampling of surface water and groundwater from Nueces Bay, Corpus Christi Bay, and Oso Bay is being conducted and liquid chromatography mass spec/mass spec is used to measure short and long chain PFAS. This project was funded by CBBEP in FY22, and the final results and report are pending.

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.

Rookery Island Monitoring & Management: Every year, the Coastal Bird Program manages hundreds of bird nesting islands from San Antonio Bay down to the Lower Laguna Madre to ensure that colonial waterbirds have a safe place to nest - islands are also monitored annually to determine nesting success.

CONSISTENT, ANNUAL EFFORTS ARE VITAL in properly managing rookery islands - it takes numerous seasons of intense management to improve island habitat. Below is an example of efforts to improve the type of vegetation available as nesting substrate.

Midcontinent Shorebird Conservation Initiative: The Coastal Bird Program has played a key role in supporting the "Mid-continent Shorebird Conservation Initiative" that is bringing together biologists, land managers, researchers, and other decision-makers to share information and develop collaborative approaches to monitoring, researching, and conserving shorebirds. Stakeholders from throughout the flyway, from the Arctic to the tip of South America, have been involved the effort. This multi-year planning effort has resulted in a "Midcontinent Shorebird Conservation Initiative Framework" that is currently being finalized into a formal plan.

Black Skimmer Research: In 2022, CBBEP began a three-year grant-funded project to use a combination of coastwide nest-site monitoring, precise tracking devices, archived Texas Parks and Wildlife Department fisheries and water-level data, and a rigorous human dimensions approach, this project will provide data and recommendations for the State to help conserve this unique species. Objectives for the project include: (1) determine threats and causes of nest failure during the nesting season at various colony sites across the Texas coast, using a combination of regular surveys, precise tracking devices, game cameras, field measurements, and current and archived data on water level and other environmental variables; (2) use data on prey selection and feeding areas obtained by tracking and monitoring components of the project to analyze trends in abundance and distribution, and temporal availability of prey items from Texas Parks and Wildlife Department Coastal Fisheries bag seine data and other sources to determine whether spatiotemporal mismatches in prey availability and abundance may be affecting reproductive success of Black Skimmers; (3) using specifically designed human dimensions survey methodologies, identify the relevant knowledge, beliefs, attitudes, behaviors, motivations and policy preferences among the range of coastal user groups; identify typologies of user groups to inform content framing, communication delivery methods, and optimal behavior change outreach strategies to match preferences of each typology.

CBBEP'S RESEARCH ON BLACK SKIMMERS is helping resource managers understand the causes behind the sharp declines in population numbers of these iconic birds.

Rookery Island Cleanups: CBBEP's Coastal Bird Program created the annual "Rookery Island Cleanup" as an opportunity to engage with volunteers from the public on waterbird conservation and to clean important waterbird rookery shorelines. The event has grown considerably and now focuses additional effort on also cleaning shorelines where the birds feed. The 2022 cleanup was held on October 22, with 50 volunteers removing trash along with other miscellaneous items from rookery islands and shorelines in the Lower and Upper Laguna Madre.

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 2022, the Delta Discovery Program continued to see regrowth in our programming as conditions related to the COVID-19 pandemic improved. We welcomed roughly 3,600 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.

STUDENTS ENJOY A FIELD TRIP at the Nueces Delta Preserve.

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. In FY 2022, Delta Discovery hosted 127 educators. CBBEP Staff conducted conference presentations, onsite trainings for preservice teachers, workshops, and school district professional development.

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. In FY 2022, CBBEP hosted 24 community outreach events at the Nueces Delta Preserve and had 270 participants. Delta Discovery staff and expert volunteers also focus on providing programs that bring the learning to the community. Through school science nights, after school clubs, parks and recreation events, and other public programs, staff reached around 2,600 individual in FY 2022.

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 debris trapping to improve stormwater quality entering Corpus Christi Bay, Coastal Bend economic forecast, "Sink Your Shucks" oyster recycling program,

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.

Access Control at the Port Aransas Nature Preserve: As the number of residents and visitors accessing our coastal resources for recreation continues to increase in the future, there will be even more pressure placed on our resources. As a result, ensuring the safety of natural resources will often require implementation of actions that mitigate the impacts of human intrusion and control public access in critical habitat areas. In 2022, CBBEP partnered with the City of Port Aransas to install two automated gates that will help the staff control and monitor access to the Nature Preserve at Charlie's Pasture. One gate has been installed (South entrance) and the second gate (North Entrance - Port Street) will be installed when ongoing bulkhead repairs are complete.

AUTOMATIC GATES are being installed at the Port Aransas Nature Preserve to help control access.

Violet Andrews Park Shoreline Enhancements: CBBEP is partnering with the City of Portland to engage in planning and engineering of improved recreational access to the waters at Violet Andrews Park in Portland. Violet Andrews Park is often cited as one of the top ten locations in the nation, and one of the top in the world, for kite-boarding. This is due in large part to the shallow, sandy, bottom which allows easy access to kite boarders to walk out into the water. Currently, to access the water the public must walk across several feet of dangerous rip-rap. The City

has contracted with an engineering firm to oversee the planning and engineering for improvements to the entry-point and surrounding shoreline. These efforts will also including several public meetings to gather input from the community about what they would like to see at the site. The project is underway and should be complete in 2023.

Up2U PLUS: In 2022, CBBEP and partners kicked off the Up2U PLUS program! This program is designed to address illegal dump sites that pose health hazards and have significant economic impacts on local communities. Up2U PLUS strives to remove barriers like cost and accessibility that prevent correct disposal of illegally dumped items. Dumpsters that highlight the Up2U anti-litter message are provided for communities to use at no cost (typically for a 10-day period), while clean up of existing dump sites is also part of the project. To date, the dumpsters have been placed in Bishop (twice), Premont, Riviera, St. Paul, Tradewinds, Mathis, Banquete, Bayside, and Austwell. Over 165 total tons of bulk waste/metal have been collected and over 1,966 tires. Dumpsters are typically emptied between 3-7 times during a 10-day period, which shows the need and popularity of this program. The project will continue for another year and a half and is funded by a grant from the EPA Gulf of Mexico, Trash Free Waters Program.

THE CORNERSTONE OF THE UP2U LITTER CAMPAIGN is a yellow mesh litter bag emblazoned with the empowering Up2U message.

INTRODUCTION

This FY 2024 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 2024 Comprehensive Annual Work Plan.

The FY 2024 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 2024 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 2024.

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, 2023, and to end October 31, 2028.

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FY 2022/2023 BIL ACCOMPLISHMENTS

The FY2022/2023 BIL Annual Work Plan submitted on October 24, 2022, represents the first round of BIL funds being administered by CBBEP. Funds for the Work Plan were awarded to CBBEP in February 2023, and since that time, CBBEP has been working to implement the identified projects. In the FY2022/2023 BIL Annual Work Plan, CBBEP listed nine (9) projects funded by the BIL award. Six (6) of the projects are managed by the CBBEP, while three (3) utilize subawardees that will lead implementation. The following brief discussions are an overview of these nine (9) projects and their current status:

2313 Tern Island Restoration and Completion

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 11/30/2024
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

here 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 February 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	05/30/2023
Progress Reports	semi-annually
Draft Final Report	07/31/2024
Final Report	08/31/2024

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: The project is underway and progressing well.

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

FY 2024 IMPLEMENTATION OF PROJECTS

Project activities for the FY 2024 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 parks, monitoring success of a large-scale dredge placement project, invasive species control, green stormwater infrastructure development, implementation of an OSSF assistance program, disposal fees for household waste, and monitoring of ocean acidification. CBBEP will not be using FY 2024 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 2024 BIL funding:

#2404 Monitoring Success of Dredge Material Placement at the Nueces Delta
#2412 Hans and Pat Suter Wildlife Refuge Enhancements
#2417 Held-Moran Sanctuary Accessibility Improvement and Trail Development, Phase II
#2422 Flour Bluff Wetlands Invasive Species Control
#2428 OSSF Assistance Program, Phase II
#2435 Ocean Acidification Monitoring in Aransas Ship Channel
#2438 Green Stormwater Infrastructure Demonstration Project at Keach Family Library, Robstown, TX
#2441 Up2U PLUS Disposal Fees

Task 2.0 Project Management

The FY 2024 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 $90,230 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 2024 BIL funds, and each of these projects is described in detail on the following pages.

Project #2404 Monitoring Success of Dredge Material Placement at the Nueces Delta

Performing Organization: Coastal Bend Bays & Estuaries Program

Project Partners: Anchor QEA, Army Corps of Engineers, Port of Corpus Christi

Total Project Funding: $142,769

BIL Funding: $20,002

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

Project Status: New

Estimated Completion Date: 02/28/2025

Objectives:

The objectives for this project are (1) to conduct pre/post elevation and vegetation surveys related to an upcoming dredge placement project at the Nueces Delta Preserve and (2) to develop an adaptive management plan that will assist CBBEP in their long-term management efforts associated with the dredge placement project.

Need:

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. The project would include the proposed construction by the USACE of 2,000 additional feet of breakwater to extend the CBBEP project and provide additional protection with beneficially used sacrificial material.

CBBEP has been coordinating with the USACE and other agencies to ensure that the project will meet the goals of (1) restoring marsh habitat that has been lost due to ongoing wind and wave erosion along the bay shoreline and (2) restoring marsh that has been lost within the Nueces Delta marsh complex due to subsidence, reductions in sediment supply, and breaching of the shoreline. USACE is hopeful to begin the dredge placement project during the winter of 2023/2024. Funds will be utilized by CBBEP to work with a contractor on the pre- and post-monitoring of the dredge placement project, as well as the development of an adaptive management plan that would assist CBBEP in their long-term management efforts associated with the project (e.g.,placement of maintenance material, vegetation planting, invasive species control). It is anticipated that monitoring will involve both (1) elevation monitoring (i.e., pre-construction elevation survey; geotech; settlement plates; site monitoring during material placement; post-construction elevation survey) and (2) vegetation monitoring (i.e., post-construction species composition and percent cover in 1-m plots, as well as height of dominant species).

Project Deliverable Description:

Deliverables for this project will include pre/post construction elevation surveys, installation and monitoring of settlement plates, site monitoring during material placement, post-construction species composition and percent cover, as well as height of dominant species. Deliverables also include a QAPP, semi-annual progress reports, adaptive management plan, draft final report, and final report.

Project Outcomes:

The expected outcome of this project is increased coordination with the USACE during the dredge placement project, improved understanding of dredge placement project outcomes related to elevation targets and vegetation composition, and development of strategies that will assist CBBEP in their long-term management of the dredge placement area.

Support of BIL NEP Priorities:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: The need to support activities that maximize beneficial use of dredged material is included as a priority goal (D 1.1) in the *Coastal Bend Bays Plan, 2nd Ed*. The Plan specifically calls for efforts to assess the results of beneficial uses of dredged material and monitoring the success of beneficial use projects. The proposed project will directly support these objectives by monitoring and assessing the outcomes of a large-scale beneficial use project at the Nueces Delta. The project also supports CBBEP's goals related to restoring and enhancing degraded habitats and creating new habitats where feasible (HLR 1.2).

Ensure that benefits reach disadvantaged communities: This project will include monitoring and assessing the outcomes of a large-scale dredge placement project at the Nueces River Delta. The project location and upstream communities are located within designated 'disadvantaged communities' as identified by the CBBEP's approved Equity Strategy. Specific burdens for these communities include climate change, health, and transportation. Tract numbers for disadvantaged community: 48409010900, 48355006300, 48409011200.

Build the adaptive capacity of ecosystems and communities: The Nueces River Delta is one of the most expansive marsh systems on the Texas coast and is the only significant marsh habitat located near the City of Corpus Christi. Recognizing the value of this area, CBBEP began acquiring land in the Nueces River Delta and currently owns over 10,500 acres of important coastal habitats in this region. However, the Nueces Delta shoreline is eroding at a rate of 8.2 ft/yr and significant amounts of marsh habitat are being lost. Studies have shown that loss of marsh habitat in the Nueces Delta area will decrease its ability to attenuate storm surge/waves and provide benefits to surrounding communities. Shoreline protection measures must be implemented to preserve this valuable marsh habitat that plays a key role in both the local ecology and the resiliency of nearby communities. CBBEP is currently working on a project to install a rock breakwater that will protect the eroding shoreline from wind and wave action, and concurrently, CBBEP is working with the USACE on a project to beneficially place dredge material near the breakwater and restore marsh habitat that has been lost.

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 $122,767 in 320 funds from the EPA.

Project Deliverables/Schedule:

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

Project Budget:

BIL Funds	$ 20,002
EPA 320 Funds	$122,767
TOTAL	$142,769

Project #2412 Hans and Pat Suter Wildlife Refuge Enhancements

Performing Organization: City of Corpus Christi

Project Partners: Coastal Bend Bays & Estuaries Program

Total Project Funding: $346,991

BIL Funding: $249,000

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

Project Status: New

Estimated Completion Date: 02/28/2026

Objectives:

The primary project goal is to implement the first phase of enhancements at the Hans and Pat Suter Wildlife Refuge. Specific objectives include: (1) conversion of trails from asphalt to ADA-compliant concrete trails; (2) protection and restoration of eroding shoreline; and (3) engineering and design work related to boardwalk and viewing structure replacements (future phase will be needed to cover construction costs for this objective).

Need:

This project will greatly improve access to Hans & Pat Suter Wildlife Refuge, a popular park and wildlife viewing location within the City of Corpus Christi Parks & 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. If the issues are not addressed, use will continue and damage to the resource will occur because of foot traffic in undesignated areas that may not be safe. The proposed project will allow the City of Corpus Christi Parks and Recreation Department to make improvements or replacements to the trails, boardwalks, and several other amenities. The City is also seeking to repair a shoreline erosion issue on the south side of the site. The City is currently investing approximately $50,000 per year in materials and labor to provide needed upgrades on a small scale, but this project will allow for larger scale work to make the space more accessible and use materials that are more resilient for the future.

The full project scope includes the following components: (1) conversion of trails from asphalt to ADA compliant concrete trails, (2) protection and restoration of eroding shoreline, (3) addition of ADA picnic tables and benches, (4) replacement of boardwalk materials, and (5) rebuilding of viewing structures. This is a large-scale project that will require multiple phases for full implementation.

Project Deliverable Description:

Deliverables for this project will include installation of concrete trails, implementation of shoreline protection strategy, and engineering/design for future phases. Deliverables also include semi-annual progress reports, draft final report, and final report.

Project Outcomes:

The expected outcome of this project is enhanced accessibility to users of the Hans and Pat Suter Wildlife Refuge while also enhancing user safety and limiting damage to environmentally sensitive areas. By addressing an area of shoreline erosion, the project will also prevent habitat loss and protect Refuge infrastructure.

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 implement public access improvements and erosion protection at Hans and Pat Suter Wildlife Refuge located along Oso Bay in Corpus Christi. Within a 5-mile radius of this public access site, there are many designated 'disadvantaged communities' as identified by CBBEP's approved Equity Strategy. Specific burdens for these communities include climate change, health, housing, transportation, and workforce development. Tract Numbers for disadvantaged communities include: 48355002301, 48355002200, 48355002400, 48355002603, 48355003303, 48355003306, 48355003305, 48355002703, 48355003203, 48355003002, 48355003001.

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 $97,991 in state funds from the TCEQ.

Project Deliverables/Schedule:

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

Project Budget:

BIL Funds	$249,000
TCEQ Funds	$ 97,991
TOTAL	$346,991

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

Performing Organization: Coastal Bend Bays & Estuaries Program

Project Partners: Audubon Outdoor Club

Total Project Funding: $50,000

BIL Funding: $50,000

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

Project Status: Phase II

Estimated Completion Date: 08/31/2025

Objectives:

The primary project objective is to continue improving the accessibility to Held-Moran Sanctuary by installing an ADA-compliant trail, interpretive signage, and establishing a fire break on the southwest boundary.

Need:

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, such as deer and javelinas. The Sanctuary is managed by the AOC, with careful attention to the removal of litter, cultivation of native plants, restoration efforts to enhance natural water features, and establishment of habitat ideally suited to migratory birds.

Ensuring public access is critically important to maintaining the ecotourism economies of the coastal communities in the region. However, the need to provide public access must be balanced with the need to conserve and protect this unique live oak coastal habitat from user impacts such as litter/debris, wildlife disturbance, and habitat alteration as explained above. As the Coastal Bend continues to grow and tourism increases, the pressure to provide public access is becoming an increasing issue. The project goal is to have well-planned and well-managed access to the sanctuary to curtail resource damage, while providing for the growing numbers of visitors.

This project will build upon a previous project from CBBEP FY22/23 BIL Workplan (Held-Moran Sanctuary Accessibility Improvement and Trail Development, Phase I), that provided public access improvements including an ADA compliant parking area and bollard and cable repair. This project will expand on those improvements and install an ADA complaint trail, interpretive signs, and limit damage to the environmentally sensitive live oak forest from misuse and ensure the safety of surrounding residential buildings by providing a fire break on the southwest boundary.

Project Deliverable Description:

Project deliverables include trail construction, sign installation, and firebreak installation. Additional deliverables include semi-annual progress reports, draft final report, and final report.

Project Outcomes:

Outcomes of the project include increased accessibility to users of the Held-Moran Sanctuary while enhancing user safety, limiting damage to the environmentally sensitive live oak forest from off-trail use, and improved safety of surrounding residential buildings by providing a fire break on the southwest boundary.

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 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). The Plan specifically calls for projects that help mitigate the impacts of human intrusion on important critical habitats through implementation of things like trail systems and educational signs.

Ensure that benefits reach disadvantaged communities: The Held-Moran Sanctuary is located in the Flour Bluff community of Corpus Christi, Texas. Although the site itself is not designated a 'disadvantage community', within a 5-mile radius there are designated 'disadvantaged communities' as identified by the CBBEP's approved Equity Strategy that will benefit from this project by increasing individuals' ability to access, enjoy, and benefit from coastal habitats and engage them better in volunteer opportunities, capacity-building, and educational activities. Specific burdens for these communities include Climate Change. Tract Numbers for disadvantaged communities: 48355003002, 48355003001.

Project Deliverables/Schedule:

Bid Solicitation	01/31/2024
Trail Construction	12/31/2024
Firebreak	12/31/2024
Progress Reports	semi-annually
Draft Final Report	07/31/2025
Final Report	08/31/2025

Project Budget:

BIL Funds	$50,000
Other Funding	$ --
TOTAL	$50,000

Project #2422 Flour Bluff Wetlands Invasive Species Control

Performing Organization: Coastal Bend Bays & Estuaries Program

Project Partners: Flour Bluff Independent School District, Texas Master Naturalists, Friends of Redhead Pond, Flour Bluff Citizens Council, and Department of the Navy

Total Project Funding: $80,000

BIL Funding: $60,000

Bays Plan, 2nd Edition Actions: HLR 1.2, HLR 2.6

Project Status: New

Estimated Completion Date: 02/28/2025

Objectives:

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.

Need:

The restoration site at FBISD includes a saltwater pond (approximately 10 acres), a freshwater pond (approximately 1.5 acres), and uplands (approximately 40 acres). Currently, the extremely aggressive, non-native Brazilian peppertrees have overtaken approximately 30 acres of native plant communities at the site. Guinea grass is also present but to a lesser extent. FBISD has identified the need to restore and enhance their highly used educational wetland. The project would not only benefit students' outdoor education but also contribute to the overall improvement of wildlife habitat along the Laguna Madre. FBISD's wetland is adjacent to Duncan Pond (owned by the City of Corpus Christi) and Redhead Pond Wildlife Management Area (managed by Texas Parks and Wildlife Department), both of which are conservation areas. The restoration will be conducted in coordination with community partners that include Texas Master Naturalists, Friends of Redhead Pond & Environmental Stewardship Association, Flour Bluff Citizens Council, and the Department of the Navy.

The goals of the project are to remove and control invasive Brazilian peppertrees and guinea grass that are present on the site in various densities and allow regrowth of native plants. Friends of Redhead Pond are currently managing Brazilian pepper trees and guinea grass growth at the Pond, and similar methods will be employed at the FBISD wetlands. 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. Although students will not be participating in removal and herbicide treatments that will be necessary to control the invasive plants, they will be able to monitor progress, learn to identify native plants as they re-establish, and observe changes in wildlife usage as the habitat is restored.

Project Deliverable Description:

Project deliverables include executed contract, acres of invasive species, and firebreak installation. Additional deliverables 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 and removal of invasive vegetation. The project will ultimately result in enhanced plant and wildlife diversity at a currently impacted site. Finally, the project will provide a tool that can be used to educate young students about conservation methods and monitoring techniques.

Support of BIL NEP Priorities:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: The need to support efforts to minimize introductions and 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 Brazilian peppertrees and guinea grass at the FBISD wetland site. The project will also support CBBEP's larger goal of restoring and enhancing degraded habitats where feasible (HLR 1.2). Although students at FBISD will not participate directly in the treatment and removal efforts, they will be able to monitor progress, learn to identify native plants as they re-establish, and observe changes in wildlife usage as the habitat is restored. Therefore, the proposed project will also support CBBEP's efforts to promote public participation in stewardship activities (PEO 1.3) and provide authentic discovery-based experiences for K-12 students.

Ensure that benefits reach disadvantaged communities: This project will remove invasive plant species to improve the diversity of native plants and wildlife populations at the FBISD wetlands. The proposed project will not only contribute to the overall improvement of wildlife habitat along the Laguna Madre, but it will also benefit students' outdoor education. Flour Bluff Primary, Elementary, and Intermediate schools are designated Title I by the Texas Education Agency and the project site is located within a designated 'disadvantaged community' as identified by CBBEP's approved Equity Strategy. Specific burdens for these communities include climate change (expected building loss rate, low income), and the tract numbers for disadvantaged communities include: 48355003002, 48355003001.

Project Deliverables/Schedule:

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	01/31/2025
Final Report	02/28/2025

Project Budget:

BIL Funds	$60,000
USFWS Coastal Program	$20,000
TOTAL	$80,000

Project #2428 OSSF Assistance Program, Phase II

Performing Organization: Nueces River Authority

Project Partners: Coastal Bend Bays & Estuaries Program

Total Project Funding: $242,054

BIL Funding: $242,054

Bays Plan, 2nd Edition Actions: NPS 1.3

Project Status: Phase II

Estimated Completion Date: 01/31/2026

Objectives:

The project objective is to address nutrient and bacteria issues in targeted watersheds by inspecting, repairing, and/or replacing eleven (11) OSSFs that are failing or non-existent, focusing on underserved communities with limited resources.

Need:

On-site Sewage Facilities (OSSFs) are used to treat wastewater where centralized Wastewater Treatment Facilities (WWTFs) are not available. Conventional systems use a septic tank and gravity-fed drain field that separates solids from wastewater prior to its distribution into the soil where treatment occurs. However, in many coastal watersheds, the soils are considered very limited, which means conventional septic tank systems are not suitable for the proper treatment of household wastewater. In these areas, advanced treatment systems, most commonly aerobic treatment units, are suitable alternative options for treatment. While advanced treatment systems are highly effective, operation and maintenance needs for these systems are rigorous compared to conventional septic systems. Limited awareness and lack of maintenance can lead to system failures.

Unlike pollution from industrial and sewage treatment plants, nonpoint source (NPS) pollution comes from many diffuse sources. Rain events create runoff which picks up human-made and/or natural pollutants and transports them into water bodies. Failing or non-existent OSSFs can produce significant bacteria and nutrient loading into the watershed in the form of NPS pollution.

Factors contributing to OSSF failure include improper system design or selection, improper operation and maintenance, and lack of financial resources for proper maintenance. There are numerous areas within the Coastal Bend where poorly functioning OSSFs are believed to be contributing bacteria and nutrients to receiving waterbodies. Many of these OSSFs were installed before regulations existed and may not have been designed for full-time dwelling occupancy. A program that offers pump-out and inspection followed by repair or replacement where needed, at no cost to the owner, is a proven way to address this problem. This strategy is especially important when working in underserved communities with limited resources.

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. The proposed project would continue and expand on the impacts of the FY22/FY23 OSSF Assistance Program.

Project Deliverable Description:

Deliverables for this project will include approximately (1) 12 OSSF inspections and pumpouts and (2) 11 OSSF systems that are repaired or replaced. 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 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 improve management of all loadings to the bay system is identified as a priority goal in the *Coastal Bend Bays Plan, 2nd Ed*. The Plan specifically calls for efforts to assess and improve nonpoint source management throughout the region, and outlines actions to assist local governments and organizations to implement OSSF programs and projects (NPS 1.3). Examples of OSSF programs and projects identified in the Plan include inspection of existing OSSFs, financial assistance for repair or replacement, and education on proper maintenance.

Ensure that benefits reach disadvantaged communities: This is a continuation of OSSF Assistance Program, Phase I, which focused on implementing OSSF assistance in colonias communities located in Jim Wells, Nueces, and San Patricio counties. Colonias are substandard housing developments found along the Texas-Mexico border where residents lack basic services such as drinking water, sewage treatment, and paved roads. The colonia communities that will benefit are in designated 'disadvantaged communities' as identified by the CBBEP's approved Equity Strategy. Specific burdens for these communities include climate change, housing, legacy pollution, and transportation.

Build the adaptive capacity of ecosystems and communities: Climate change poses a number of difficult challenges to coastal infrastructure - the most commonly discussed impacts include flooding of roads, bridges, and culverts, or water damage to buildings and electric utilities. A less discussed, but equally alarming challenge to infrastructure, is how climate change is affecting OSSFs. Rising sea levels, increased precipitation, and warmer temperatures due to climate change are all adversely impacting these systems leading to increased system failures, which ultimately leads to smelly, unhealthy wastewater backing up into homes and flowing into drinking water supplies or recreational waters, creating a public health problem. Low-income and disadvantaged people who settled in areas with poor soils are disproportionately affected by the impacts of climate change on OSSFs. By focusing on the installation of advanced treatment systems (i.e., aerobic treatment units) that provide a more suitable treatment option for addressing climate change impacts, the proposed project will increase the adaptive capacity and resilience of both human communities and the bays and estuaries of the Coastal Bend.

Project Deliverables/Schedule:

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

Project Budget:

BIL Funds	$242,054
Other Funding	$ --
TOTAL	$242,054

Project #2435 Ocean Acidification Monitoring in Aransas Ship Channel

Performing Organization: Texas A&M University - Corpus Christi

Project Partners: Coastal Bend Bays & Estuaries Program

Total Project Funding: $63,656

BIL Funding: $63,656

Bays Plan, 2nd Edition Actions: NPS 1.3

Project Status: Reinstatement of previous monitoring effort

Estimated Completion Date: 05/31/2025

Objectives:

The primary objective of this project is to conduct high frequency monitoring of pH and pCO2 in the Aransas Ship Channel using two (2) in situ sensors. Additional water samples will be analyzed for total alkalinity and dissolved inorganic carbon (DIC).

Need:

Ocean acidification is reflected by the decrease in pH caused by the uptake of atmospheric carbon dioxide (CO2). Atmospheric CO2 levels have been increasing steadily since the industrial revolution. As of now, approximately 30% of anthropogenically produced CO2 since the industrial revolution has been absorbed by the world's oceans. As CO2 dissolves into the ocean, carbonic acid is formed and leads to an increase of hydrogen ion concentration (or a decline in pH). Changing the chemistry of the ocean has many adverse effects on marine organisms. Examples of some of the organisms that could or have been negatively impacted are oysters, shrimp, corals, sea urchins, some plankton species, and even fish species. For many organisms, an environment with decreasing pH hinders them from producing and maintaining their carbonate shells/skeletons (Spalding et al., 2017) or causes developmental delays. 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.

Prior research revealed an overall decline in both pH and alkalinity (i.e., acidification) in almost all estuaries (including estuaries and coastal bays) in the State of Texas (northwestern Gulf of Mexico). This study is based on a long-term dataset that has been collected by the TCEQ. Among these estuaries, those in southern Texas, subject to semi-arid conditions, experience the highest decline in alkalinity and pH, including the Mission-Aransas Estuary (comprised of Copano, Aransas, and Mesquite Bays).

To further study the acidification phenomenon in estuarine settings, this project will resume monitoring high-temporal resolution pH and partial pressure of carbon dioxide (pCO2) using two in situ sensors. These high-resolution data will allow researchers to examine both the short-term (daily to monthly) variations and longterm (interannual) changes in water carbonate systems in the Aransas Ship Channel, which connects estuarine water with the northwestern Gulf of Mexico.

Project Deliverable Description:

Deliverables for this project include high-frequency sampling of pH and CO2 and water samples collected for analysis of total alkalinity and DIC. Additional deliverables include QAPP, semi-annual progress reports, draft final report, and final report.

Project Outcomes:

The expected outcome of this project is an improved understanding of climate change impacts on key, local abiotic parameters, specifically pH, CO2, alkalinity, and DIC. Ultimately, this improved understanding will assist local resource managers in their efforts to adapt to potential impacts of ocean acidification on estuarine and marine organisms.

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 CO2. The proposed project will directly support these needs by collecting data on pH, pCO2, and alkalinity.

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	12/01/2023
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

Project Budget:

BIL Funds	$63,656
Other Funding	$ --
TOTAL	$63,656

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

Performing Organization:	Texas State University
Project Partners:	Coastal Bend Bays & Estuaries Program, Clean Coast Texas, Nueces County
Total Project Funding:	$214,858
BIL Funding:	$54,858
Bays Plan, 2nd Edition Actions:	NPS 1.1, NPS 1.4, NPS 1.5, WSQ 1.1
Project Status:	New
Estimated Completion Date:	08/31/2025

Objectives:

The primary project objective is to construct a demonstration-scale rain garden and bioretention area at the Nueces County's Keach Family Library in Robstown, Texas.

Need:

The Clean Coast Texas Collaborative is a program of the Texas General Land Office, which is administered by The Meadows Center for Water and the Environment at Texas State University. The Clean Coast Texas Collaborative 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 currently has Memoranda of Agreement (MOA) with the City of Rockport, the City of Fulton, Aransas County, and the Aransas County Navigation District that include the construction of several types of demonstration scale green stormwater infrastructure (e.g., rain gardens, rainwater harvesting, permeable pavers) at multiple locations in the Coastal Bend. With support from Coastal Bend Bays & Estuaries Program, 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.

Project Deliverable Description:

Deliverables for this project will include construction of a green stormwater infrastructure demonstration project in Nueces County. Additional deliverables include executed contract, engineering designs, bid solicitation, 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 through load reductions of both bacteria and nutrients. The project will also serve as a valuable educational resource for area residents, demonstrating the benefits of green stormwater infrastructure projects.

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, such as rain gardens, that are designed to filter out pollutants and/or prevent pollution by controlling it at is source.

Ensure that benefits reach disadvantaged communities: This project will construct a demonstration scale rain garden bioretention area at the Nueces County's Keach Family Library in Robstown, Texas to reduce pollutant loading and stormwater impacts and serve as a valuable educational resource for area teachers and environmental educators. The community of Robstown and the project location are located within designated 'disadvantaged communities' as identified by the CBBEP's approved Equity Strategy. Specific burdens for these communities include climate change, energy, health, and housing. Tract Numbers for disadvantaged communities include: 48355005602, 48355005601.

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 storms increase in intensity and frequency, all residents, especially those most vulnerable to storm impacts through lack of resources and infrastructure, must be prepared for future storms and flooding events. CBBEP is working with partners to implement projects that demonstrate how green infrastructure can benefit local climate resiliency. Green infrastructure uses vegetation, soils, and natural processes to manage water and create healthier urban environments. In conjunction with gray infrastructure, interconnected networks of green infrastructure can enhance community resiliency by increasing water supplies, reducing flooding, combatting urban heat island effect, and improving water quality. The proposed project will build resiliency in Nueces County by implementing a green infrastructure project that addresses stormwater runoff and reduces flooding.

Project Deliverables/Schedule:

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

Project Budget:

BIL Funds	$ 54,858
Other Funding	$160,000 (secured by Texas State University)
TOTAL	$214,858

Project #2441 Up2U PLUS Disposal Fees

Performing Organization:	Coastal Bend Council of Governments
Project Partners:	Coastal Bend Bays & Estuaries Program, Nueces River Authority, EPA
Total Project Funding:	$264,962
BIL Funding:	$80,000
Bays Plan, 2nd Edition Actions:	BD 1.1, PEO 1.1, PEO 1.3
Project Status:	Ongoing
Estimated Completion Date:	02/28/2025

Objectives:

The project objective is to provide disposal fees associated with dumpster events for the Up2U Plus Program.

Need:

Illegal dumping is not just an unsightly and costly problem in the Texas Coastal Bend region, it can pollute our coastal waters and cause serious health hazards. To combat illegal dumping and protect water quality, the Coastal Bend Bays & Estuaries Program (CBBEP) has partnered with the Nueces River Authority (NRA) and Coastal Bend Council of Governments (CBCOG) to develop a three-year public awareness campaign called Up2U PLUS, where the plus sign stands for the plus-sized trash items dumped in public places. At the core of the Up2U PLUS campaign are numerous Community Clean Ups and Free Bulk Waste Collection events throughout the Coastal Bend region through 2024.

The goal of Up2U PLUS is to keep bulk trash from reaching our waterways. Dumped materials not only cover plants and feeding areas that wildlife depends on, but many items can also release chemicals into the air, ground, and water as they sit exposed to the elements. Removing these harmful materials from our watershed and taking steps to prevent dumping in the future will benefit our Coastal Bend with cleaner water, healthier habitats, and a more aware and engaged public.

This three-year program began in 2022 with funding from the EPA through their Trash Free Waters Program and 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, we are having to empty the dumpsters more often than we anticipated as the communities fill them up. This project will provide for additional disposal fees associated with dumpster events.

Project Deliverable Description:

Deliverables for this project will include disposal of household waste from Up2U PLUS events. Additional deliverables include executed contract, semi-annual progress reports, draft final report, and final report.

Project Outcomes:

The expected outcomes of this project include (1) communities made more resilient through a reduction in illegal dumping activity, (2) prevention of trash from reaching Coastal Bend waterways, and (3) trash removed from the environment.

Support of BIL NEP Priorities:

Accelerate and more extensively implement the Coastal Bend Bays Plan, 2nd Ed: The proposed project directly supports the *Coastal Bend Bays Plan, 2nd Edition*. Specifically, the project will address the following objectives in the Plan: BD1 - Reduce the amount of debris in the bays and estuaries throughout the Coastal Bend; PH1 - Minimize the threat of waterborne illness and disease; WSQ1 - Improve the quality of ambient water and sediment in impaired or stressed segments to attain standards and criteria; and PEO1 - Implement an innovative public education and outreach strategy to improve understanding and stewardship of bay resources.

Ensure that benefits reach disadvantaged communities: This project will provide disposal fees for CBBEP's Up2U PLUS Program, which removes barriers to illegal dumping by providing bulk waste removal, recycling, and tire disposal in rural communities. The program has been implemented in Bishop (48355006100), Premont (48249950700), Riviera (48273020100), St. Paul (48409010900), Mathis (48409011300), Banquete (48355005900), Austwell / Tivoli (48391950400), Three Rivers (48297950100), San Diego (48131950100, 48249950200), and Sarita (48261950100). All of these communities are designated 'disadvantaged communities' as identified by the CBBEP's approved Equity Strategy. Specific burdens for these communities include climate change, energy, health, legacy pollution, energy, housing, transportation, and workforce development. Tract numbers for disadvantaged communities indicated in parenthesis above.

Project Deliverables/Schedule:

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

Project Budget:

BIL Funds	$ 80,000
EPA Gulf of Mexico, Trash Free Water	$184,962
TOTAL	$264,962

TASK 2 - PROJECT MANAGEMENT

To support the administration and management of BIL-funded projects, CBBEP will utilize $90,230 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 2022/2023 BIL Funds: $90,230

Completion date: 08/31/2028

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 water quality monitoring and other environmental measurements, and through the approved Quality Management Plan that provides descriptions of the quality policies, including all requirements described in EPA QA/R-2.

SUMMARY

The CBBEP has been working on implementing the *Coastal Bend Bays Plan* for over 24 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 2024 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 2024 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, 2028. Of the total funds identified in the Work Plan budget, $909,800 is new FY 2024 BIL funding, and $585,720 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 83 percent of FY 2024 BIL funds will benefit disadvantaged communities.

TABLE 1: FY 2024 BIL Annual Work Plan Milestone Summary and Schedule

PERIOD OF PERFORMANCE: November 1, 2023 – August 31, 2028

TASK 1 - PROJECT IMPLEMENTATION	
Project #2404 Monitoring Success of Dredge Material Placement at the Nueces Delta	
Execute Contract	12/1/2023
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
Project #2412 Hans and Pat Suter Wildlife Refuge Enhancements	
Execute Contract	12/1/2023
Bid Solicitation	12/31/2024
Erosion Protection	12/31/2025
Trail Construction	12/31/2025
Progress Reports	semi-annually
Draft Final Report	1/31/2026
Final Report	2/28/2026
Project #2417 Held-Moran Sanctuary Accessibility Improvement and Trail Development, Phase II	
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
Project #2422 Flour Bluff Wetlands Invasive Species Control	
Execute MOU	12/1/2023
Bid Solicitation	4/30/2024
Invasive Species Treatment and Removal	11/30/2024
Progress Reports	semi-annually
Draft Final Report	1/31/2025
Final Report	2/28/2025
Project #2428 OSSF Assistance Program, Phase II	
Execute Contract	12/1/2023
OSSFs inspected, repaired, and/or replaced	9/30/2025
Progress Reports	semi-annually
Draft Final Report	12/31/2025
Final Report	1/31/2026

Project #2435 Ocean Acidification Monitoring in Aransas Ship Channel	
Execute Contract	12/1/2023
QAPP Submitted	12/31/2024
Monitoring	4/1/2024 - 3/31/2025
Progress Reports	semi-annually
Draft Final Report	4/30/2025
Final Report	5/31/2025
Project #2438 Green Stormwater Infrastructure Demonstration Project at Keach Family Library, Robstown, TX	
Execute Contract	12/1/2023
100% Engineering Design	1/31/2024
Bid Solicitation	3/31/2024
Construction Services Contract	6/30/2024
Construction	6/30/2025
Progress Reports	semi-annually
Draft Final Report	7/31/2025
Final Report	8/31/2025
Project #2441 Up2U PLUS Disposal Fees	
Execute Contract	12/1/2023
Up2U PLUS Waste Disposal	12/31/2024
Progress Reports	semi-annually
Draft Final Report	1/31/2025
Final Report	2/28/2025
TASK 2 - Project Management	
Project Management	8/31/2025

TABLE 2: FY 2024 BIL Annual Work Plan Project Funding Summary

TASK	BIL 2024
Task 1 - Project Implementation	
2304 - Monitoring Success of Dredge Material Placement at the Nueces Delta	$20,002
2412 - Hans and Pat Suter Widllife Refuge Enhancements	$249,000
2417 - Held-Moran Sanctuary Accessibility Improvement and Trail Development, Phase II	$50,000
2422 - Flour Bluff Wetlands Invasive Species Control	$60,000
2428 - OSSF Assistance Program, Phase II	$242,054
2435 - Ocean Acidification Monitoring in Aransas Ship Channel	$63,656
2438 - Green Stormwater Infrastructure Demonstration Project at Keach Family Library, Robstown, TX	$54,858
2441 - Up2U PLUS Disposal Fees	$80,000
Task 2 - Project Management	$90,230
TOTAL	**$909,800**

TABLE 3: Estimated Travel Allocations for BIL FY 204

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
TOTAL							**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**