



Equity Strategy for the Coastal Bend Bays & Estuaries Program

Approved by the Environmental Protection Agency on June 20, 2023

Delivering a better world

Prepared for:

Coastal Bend Bays & Estuaries Program

1305 N. Shoreline Blvd., Suite 205

Corpus Christi, TX 78401

cbbep.org

Prepared by:

AECOM

19219 Katy Freeway, Suite 100

Houston, TX 77094

aecom.com

This document was prepared by the Coastal Bend Bays & Estuaries Program, with planning and facilitation support from AECOM. This support was funded under a cooperative agreement between the United States Environmental Protection Agency and the Coastal Bend Bays & Estuaries Program. The contents of this document do not necessarily represent the views of the EPA.

Copyright © 2023 by AECOM



Table of Contents

1.	Governance Overview	. 1
1.1.	Program Overview	1
1.2.	Coastal Bend Bays Plan	1
1.3.	Administrative Framework	2
1.3.1.	Board of Directors	2
1.3.2.	Staff	3
1.4.	Stakeholder Teams and Committees	3
1.4.1.	Implementation Teams	3
1.4.2.	Coordination Team	3
1.4.3.	Bays Council	4
1.5.	Annual Work Plan Development Process	4
1.6.	CBBEP Programs	4
1.6.1.	Land Conservation and Stewardship	4
1.6.2.	Delta Discovery	4
1.6.3.	Coastal Bird Program	4
1.7.	Environmental Justice and Equity	5
1.7.1.	Environmental Education	5
1.7.2.	Public Access	
1.7.3.	Water Quality and Habitats	
2.	Definition of Disadvantaged Communities	. 8
2.1.	DAC Alternative Definition	9
2.2.	Criteria Used for Determining DACs	9
2.2.1.	Additional Considerations: Education & Outreach	.12
2.3.	Tools	.14
3.	Baseline Analysis	14
3.1.	EPA National Baseline Assessment	.14
3.2.	EPA Baseline Assessment of CBBEP	.15
4.	Numeric Targets	17
5.	Key Activities	18
5.1.	Habitat and Living Resources	
5.2.	uman Uses	
5.3.	Water and Sediment Quality	
5.4.	Education and Outreach	
5.5.	Coastal Resilience	.21
5.6.	Maritime Commerce and Dredging	.21
6.	Tracking Benefits	22
7.	Stakeholder Engagement Plan	
7.1.	Key Issues	
7.1.1.	Habitat and Living Resources	
7.1.2.	Human Uses	
7.1.3.	Water and Sediment Quality	
7.1.4.	Education and Outreach	

7.1.5.	Coastal Resilience	24
7.1.6.	Maritime Commerce and Dredging	24
7.2.	Stakeholders	25
8.	Other	38
	EJScreen Supplemental Indexes	
8.2.	Outreach Meetings	
8.2.1.	Academic Experts	
8.2.2.	Community Outreach	

Figures

Figure 1-1. The CBBEP Administrative Framework	2
Figure 2-1. CEJST and SDI Combined	11
Figure 2-2 CEJST and SDI Combined in Corpus Christi	12
Figure 2-3. Title 1 Funding per Student by School District (2018)	13
Figure 2-4. Schools Participating in CBBEP Education & Outreach Programs by Location Tagged by DAC Categorization Using CEJST and EJScreen SDI	14
Figure 3-1. Past NEPORT Projects (2017-2021) Overlaid with EJScreen SDI	17

Tables

Table 1-1. Community Profile of the CBBEP Program Area	5
Table 2-1. Tool Comparison	9
Table 2-2. Number and Population of Colonias Identified as EJ Community or DAC by Tool	10
Table 3-1. EPA HQ Baseline National Summary (2017-2021) Results	15
Table 3-2. EPA's Baseline Analysis of CBBEP Habitat Projects between FY2017 and FY2021	16
Table 7-1. Unique Partners/Stakeholders and Timing of Engagement	25
Table 8-1. EJScreen Supplemental Indexes	

1. Governance Overview

The National Estuary Program (NEP) is a non-regulatory program authorized by Congress in 1987 under Section 320 of the Clean Water Act. Overseen by the U.S. Environmental Protection Agency (EPA), the NEP establishes placebased programs that are designed to protect and restore the water quality and associated habitats of the 28 nationally significant estuaries throughout the U.S. Each of these estuary programs is individually managed either by state and local agencies, universities, or individual nonprofits. The EPA provides funding, national guidance, and technical assistance to the estuary programs, which are in charge of developing and implementing a long-term Comprehensive Conservation and Management Plan (CCMP). Through the CCMP, a focused study area is defined for each estuary, and actions to address water quality and living resource challenges and to identify priorities are implemented under Section 320 of the Clean Water Act. The challenges and priorities detailed in the CCMP are reflective of the focused study area and are defined by local, city, state, federal, private, and nonprofit stakeholders. Further stakeholder collaboration is achieved through a Management Conference (or similarly named group), coordinated by each estuary program. This includes input from diverse stakeholders and other community members to ensure that the CCMP is uniquely tailored to local environmental conditions and highlights key local priorities.¹

1.1. Program Overview

The Coastal Bend Bays & Estuaries Program (CBBEP) is a local non-profit 501(c)(3) organization dedicated to researching, restoring, and protecting the bays and estuaries of the Texas Coastal Bend. Local stakeholders have been guiding the organization for over 20 years, recognizing our interdependence on the bay system and placing a high value on protecting and restoring our bays and estuaries. As part of the NEP, the CBBEP is a nonregulatory, voluntary partnership among industry, environmental groups, bay users, governments, and resource managers charged with improving the bay system's health. Public participation by individuals and organizations is encouraged. A mix of local governments, private industry, and state/federal 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. Together, the bays, estuaries, and bayous in the Copano, Aransas, Corpus Christi, Nueces, Baffin, and Upper Laguna Madre bay systems total 514 square miles and represent three of the seven major Texas estuaries.

CBBEP's mission is to implement the Coastal Bend Bays Plan, which calls for the protection and restoration of the health and productivity of the bays and estuaries, while supporting continued economic growth and public use of the bays.

1.2. Coastal Bend Bays Plan

Efforts to improve the health and productivity of the Coastal Bend bays and estuaries began in the 1990s and resulted in the region being designated as an "estuary of national significance." This led to the establishment of the Corpus Christi Bay National Estuary Program, which initiated a multi-year, community-based planning effort to identify the problems facing the bay system and 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 (Bays Plan), identified specific actions that would benefit the bay system and bay users, and was approved in 1998. Local stakeholders used a consensus-building process to collectively design and create a plan that represented their diverse perspectives and interests. The Bays Plan included a detailed, yet flexible, regional framework for action that could be used by partners in industry, local government, academia, and resource management to align their resources and programs to voluntarily participate in the Coastal Bend Bays Plan implementation.

¹ <u>https://www.epa.gov/nep/overview-national-estuary-program</u>

In 2016, the CBBEP initiated a new collaborative effort to revise the Bays Plan to incorporate developments that have occurred since the previous Bays Plan was published and to ensure that new priorities are being addressed. The goal of The Coastal Bend Bays Plan, 2nd ed., was to meet the current and future needs of stakeholders. The revised Bays Plan contains a total of 15 action plans organized into the following categories: (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.

1.3. Administrative Framework

As a 501(c)3 organization, the CBBEP operates under the direction of a Board of Directors. The administration and operation of the CBBEP is outlined in the Bays Plan, the Interlocal Agreement, and the CBBEP By-laws. The administrative framework of the CBBEP, including the relationship of the Board of Directors, Bays Council, Bays Council Coordination Team, Implementation Teams, and CBBEP staff, is shown in **Figure 1-1** below.

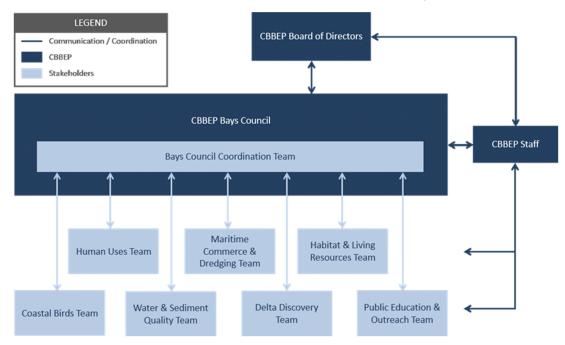


Figure 1-1. The CBBEP Administrative Framework

1.3.1. Board of Directors

The property, business, and fiscal affairs of the CBBEP are managed by its Board of Directors, which may exercise all such powers of the CBBEP and do all such lawful acts and things as are authorized by statute, the Interlocal Agreement, the Bays Plan, and CBBEP By-laws. The Board of Directors may establish any committees, task forces, or advisory groups as it deems necessary. The designated members of the Board of Directors of the CBBEP shall consist of seven members, as follows:

- 1. The Mayor of the City of Corpus Christi, or a person designated by the Mayor;
- 2. The County Judge of San Patricio County, or a person designated by the County Judge;
- 3. The County Judge of Nueces County, or a person designated by the County Judge;
- 4. The Chair of the Port of Corpus Christi Authority, or a person designated by the Chair;
- 5. A representative of the Coastal Bend Industry Association designated by their Board;

2

- 6. A representative of the Coastal Bend Bays Foundation designated by their Board; and
- 7. The Chair of the Bays Council.

In addition, there may be up to four members at-large appointed to the Board of Directors. These members shall be people elected by the members of the Board of Directors listed above.

1.3.2. Staff

Implementation of the Bays Plan is dependent upon adequate staffing levels for the CBBEP. Although staffing levels may change over time and with availability of resources, a minimum number of administrative and project management staff are needed to manage and coordinate CBBEP activities and projects. The primary role of the CBBEP administrative staff is to provide organizational and logistical support for the Board of Directors and subcommittee meetings, to coordinate and communicate as necessary with appropriate groups, including stakeholder groups, state and federal agencies, local governments, and professional groups relevant to the implementation of the Bays Plan, and to generate funding for projects and programs.

The role of the CBBEP Project Management staff is to develop and implement partnership projects with local governments, state and federal agencies, and private organizations. This involves ongoing coordination and communication with stakeholder implementation teams. Project Management staff also monitor, track, and report on implementation performance by implementing partners, and work to maintain implementation commitments. They also play a key role in developing a prioritized annual work plan and budget for Board of Directors review and approval. Finally, Project Management staff provide for overall program coordination, including quality control/quality assurance procedures with EPA Region 6 and Texas Commission on Environmental Quality (TCEQ).

1.4. Stakeholder Teams and Committees

Stakeholder involvement has been key to both the development and implementation of the Coastal Bend Bays Plan. Broad stakeholder involvement has been sustained through representation on Implementation Teams, the Coordination Team, and the Bays Council, the roles of which are described below. The involvement of these stakeholder groups will continue in the future and will be important for the successful implementation of the Bays Plan.

1.4.1. Implementation Teams

CBBEP formed several Implementation Teams to focus on maintaining stakeholder involvement in our ongoing efforts to implement the action items identified in the Bays Plan. The Implementation Teams are also designed to provide periodic reviews of the Bays Plan and to recommend potential updates. Current Implementation Teams include: (1) Human Uses, (2) Maritime Commerce & Dredging, (3) Habitat and Living Resources, (4) Water and Sediment Quality, and (6) Environmental Education. The formation of additional teams related to Coastal Birds, Land Conservation, and Public Education and Outreach has been discussed, but none of these additional teams are currently active at this time.

Each year, the Implementation Teams are tasked with identifying needs within specific priority issue areas (e.g., water and sediment, habitat and wildlife, public access and nature tourism, environmental education) and recommending specific project ideas to address these issues. Following multiple meetings to discuss project ideas between team members and CBBEP staff, teams prioritize proposed project ideas for potential inclusion in the CBBEP Annual Work Plan. Each team has a Chair (or Co-chairs) and a CBBEP staff liaison that coordinates the team's efforts and facilitates meetings. Meetings are open to stakeholders with diverse interests and expertise in the issues addressed by a particular implementation team.

1.4.2. Coordination Team

The Coordination Team consists of the Implementation Teams Chairs (described above) and other persons as appointed by the Chair of the Bays Council (see below) or the Executive Director. The role of the Coordination Team

is to help CBBEP staff resolve differences over substantive, procedural, and budgetary issues resulting from deliberation of the Implementation Teams and to develop a list of projects for inclusion in the proposed Annual Work Plan. The Coordination Team typically meets once per year after the implementation team meetings.

1.4.3. Bays Council

The Bays Council, an advisory council to the Board of Directors, provides programmatic guidance and recommendations regarding the programs and projects of the CBBEP. Members include a representative of each partner and implementer of the Bays Plan as designated by the Board of Directors or Executive Director. The Bays Council is specifically tasked with developing a proposed Annual Work Plan to be presented to the Board of Directors for final approval. The Bays Council is overseen by a Chair and Vice-Chair, which may serve a term not to exceed two years. The Bays Council Chair or the Chair's designee serves on the Board of Directors. The Chair or Executive Director calls a meeting of the Bays Council annually for approval of the Annual Work Plan and presentation to the Board of Directors.

1.5. Annual Work Plan Development Process

CBBEP operations are guided by the Annual Work Plan, approved by the Board of Directors prior to the start of each new fiscal year. The Work Plan is developed with input from CBBEP staff, and the stakeholder teams described above. The Work Plan includes a comprehensive list of the programs and projects that CBBEP will undertake within a designated fiscal year, with the overarching goal of the document being the continued successful implementation of the Coastal Bend Bays Plan. CBBEP staff and Implementation Teams identify, develop, and select project ideas for inclusion in the Work Plan; the Coordination Team (consisting of all the chairs of the Implementation Teams and key members of the Bays Council) develops an initial list of projects for inclusion in the Work Plan; and the Bays Council uses recommendations from the Coordination Team to propose the Annual Work Plan to the Board of Directors. The Board of Directors has ultimate approval of the Work Plan. Each step of the process requires extensive involvement from CBBEP staff. It is important to note that the number and type of programs and projects included in the Work Plan are based on the amount of funds available from various sources, including federal and state grants/contracts, foundations, local governments, and private corporations.

1.6. CBBEP Programs

The CBBEP maintains three "in-house" programs led and implemented by CBBEP staff. These programs are included each year in the Annual Work Plan, described above. The programs are described below:

1.6.1. Land Conservation and Stewardship

CBBEP's Land Conservation Program is working with partners to conserve valuable habitats within the Coastal Bend. To date, CBBEP has conserved over 14,000 acres, and we manage these lands responsibly and sustainably for the long-term benefit of both wildlife and people.

1.6.2. Delta Discovery

CBBEP created the Delta Discovery Program to provide opportunities for classrooms and families to connect with nature, and to plant the seeds of stewardship in individuals whose decisions affect our estuaries. We provide field trips for thousands of students each year, train teachers on how to connect classrooms to outdoor experiences and give families opportunities to discover the estuary in their own backyard.

1.6.3. Coastal Bird Program

CBBEP's Coastal Bird Program works 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 brings innovative management, diversified partnerships, and science-based decision-making to bird conservation in the Coastal Bend.

1.7. Environmental Justice and Equity

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 from Matagorda Island to the Laguna Madre. We have also developed an education program that provides outdoor, hands-on learning experiences for students, teachers, and families every year. We have successfully led projects that provide better 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. In addition, our land acquisition projects have protected close to 14,000 acres of valuable coastal habitats.

Table 1-1 (below) provides a general profile of the 12-County Coastal Bay Bends. As a whole, about 40% of the area's population is made up of children and seniors. About 17% of the population 25 years and older has less than a high school degree, compared to 11% for the US. The area's median household income (\$55,690) is also significantly lower than the US average (\$69,021), and the area's poverty rate (19%) is higher than the US (13%).

	Region	Texas
Population:	583,951	28,862,581
under 18 years	25%	26%
over 64 years	15%	13%
Less than a High school degree (for population 25 years+)	17%	15%
Median household income	\$55,690	\$67,321
Households with Public Assistance Income	2%	2%
Renter-Occupied Housing Units Paying 30% or more of Income on Rent	44%	45%
Civilian labor force that is Unemployed	6%	5%
Poverty Rate	19%	14%



Source: 2021 5-Year American Community Survey

The sections below highlight some of the successes of the CBBEP where environmental justice and equity are already integrated into the program's work.

1.7.1. Environmental Education

Research suggests that children who play and learn in nature are healthier, happier, and perform better in school. Because of lack of access, children are becoming increasingly disconnected from nature. This disconnect can lead to physical and emotional health problems and a sense of isolation. CBBEP created its environmental education program, called Delta Discovery, to help address this "nature-deficit" and connect classrooms and families to nature. Delta Discovery has an outstanding track record for environmental education in the Coastal Bend. Every year we provide field trips to thousands of students, train teachers on how to connect classrooms to outdoor experiences and

5

Table 1-1. Community Profile of the CBBEP Program Area

provide opportunities for families to experience nature. The Program serves numerous Title I schools, and to ensure that cost and accessibility are not obstacles, all programming is provided free of charge. Delta Discovery operates at the Nueces Delta Preserve, an 11,500-acre property that is comprised of diverse habitats, including wetlands and prairies, and is located near Odem, Texas. Funds to cover transportation costs are also available to remove barriers associated with travel to and from the site. In addition, when resource limitations affect a school's ability to come to the Nueces Delta Preserve, staff have the ability to bring the programming into the classroom or provide virtual presentations from the Preserve.

Additionally, there are not enough safe outdoor spaces close to home for most Texas children, especially those from disadvantaged communities (DACs). To further serve communities where accessibility is an obstacle, CBBEP has an Outdoor Classrooms/Schoolyard Habitats Program that funds the installation of green space on school properties and other types of learning centers, including in urban locations, for the purpose of an outside learning environment. Students learn about habitats as well as experience opportunities for alternative approaches to learning in other content areas. The green spaces also increase access to fresh air and serve as a space for resetting self-regulation as part of social emotional learning.

1.7.2. Public Access

To ensure people continue to benefit from a safe, clean bay system, it is important to promote stewardship of our bay's resources and plan for the increasing number of people who live in and 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 residents of our community and our millions of visitors on ways to enjoy the resources without degrading them. Often, access to natural areas, including bays and estuaries, for people from DACs is limited to parks and trails near their residence or to publicly accessible locations along shorelines. The CBBEP implements many projects at nature parks/trails and at public shoreline access locations that promote or enhance recreational user experience for visitors in the Coastal Bend, and several recent projects are listed below.

Public Access Enhancements at Packery Flats – Packery Flats provides free public access to the bay side of Mustang Island. Recently CBBEP added road base material to the existing road system to ensure that all vehicles could access the site. Missing or damaged bollards that delineate the road and parking area were also replaced – the bollards are important for controlling access and keeping vehicles out of sensitive habitat areas. Educational signs have also been installed to provide visitors with a better understanding of the Packery Flats ecosystem and to highlight the wildlife that may be seen.

Educational Signage for the Leonabelle Turnbull Birding Center – This birding center includes trails and overlooks and is open to the public, free of charge. This project included the design, purchase, and installation of interpretive signs detailing insects, reptiles, amphibians, and resident birds.

Port Aransas Nature Preserve, Charlie's Pasture Habitat Enhancement – CBBEP has funded several habitat enhancement projects in the Charlie's Pasture at the Port Aransas Nature Preserve. These projects have focused on invasive plant removal and planting of native grasses or seeds to enhance the habitat within Charlie's Pasture. The Nature Preserve trails and overlooks are open to the public and free of charge. Habitat enhancement projects at public nature parks provide an opportunity to educate the public about the importance of coastal ecosystems and the services they provide to the public.

Up2U Litter Prevention – This project is creating a sustainable behavior-changing litter prevention program by providing free litter bags at river, bay, and beach public access sites for visitors to use. The cornerstone of the program is a yellow mesh bag emblazoned with the empowering Up2U message and serves as a tool for trash removal, trash prevention, and outreach. The program is in its third year and has distributed over 60,000 litter bags to visitors to use while recreating at public access sites.

1.7.3. Water Quality and Habitats

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.

Water quality issues can result if wastewater treatment systems are not adequately removing pollutants, such as nitrogen and phosphorus, before it is released into a local water body. For example, research has shown that excess nutrients are the primary cause of the decline in Baffin Bay's health and have contributed to a decline in water quality, persistent algal blooms, fish kills, and decline in marine habitats. To address this, CBBEP recently partnered with the Nueces River Authority (NRA) to conduct outreach and offer assistance to 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 to work with a subset of the facilities to address the grant and funding needs that would help address ongoing issue at the sites.

Failing On-Site Sewage Facilities (OSSFs) within Coastal Bend watersheds also represent a significant threat to water quality in certain areas of the Coastal Bend. OSSFs are used to treat wastewater where centralized Wastewater Treatment Facilities 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, soil is limited in many coastal watersheds, 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.

Failing or non-existent OSSFs can produce significant bacteria and nutrient loading into the watershed in the form of nonpoint source (NPS) pollution. Unlike pollution from industrial and sewage treatment plants, 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. The CBBEP has partnered with NRA to conduct OSSF outreach and implement an OSSF Assistance Program that focusses on DACs, primarily colonias, and will work with licensed septic service providers to complete inspections, pumpouts, repairs, and replacements of OSSFs. Colonias are substandard housing developments in unincorporated areas along the Texas-Mexico border where many residents lack basic services such as drinking water, sewage treatment, and paved roads. Colonia residents tend to be young, predominately Hispanic, and speak Spanish as their primary language. They are low to very low income and employed in low paying sectors. Many of these colonias that lack access to wastewater are located in rural areas and rely on either failing septic systems, cesspools, or outhouses that may pose a risk to private wells. Adequate wastewater disposal systems are critical to preventing contaminated water from harming colonia residents, their surrounding communities, and the ecosystems of the Coastal Bend.

Another issue that can cause problems with water quality as well as critical habitats is illegal dumping. Illegal dump sites are not only unsightly, but they pose public health hazards that can have significant economic impacts on local communities. If not removed, illegal dump sites can result in health and safety concerns for local citizens, including exposure to hazardous waste, metals, and other dangerous chemicals and materials. Dump sites also have significant negative impacts on the environment, potentially leading to water pollution and habitat destruction.

In 2022, CBBEP and partners kicked off the Up2U PLUS program, designed to address illegal dump sites that pose health hazards and have economic impacts on local communities. The project focuses on rural and DACs and aims

to remove barriers such as cost and access by providing disposal dumpsters, cleaning up dump sites to discourage other dumpers that are attracted to these existing sites, and improving community awareness of problems associated with illegal dumping and legal options for bulk trash disposal through education and outreach.

2. Definition of Disadvantaged Communities

Investing in our communities, and in particular, focusing our program and project implementation efforts on the DACs in our 12-county program area, is a priority for CBBEP. From the programming mentioned above to our stakeholder engagement processes, we are committed to developing methods and strategies that prioritize DACs. To do so, it is important to understand who and where DACs are in our area.

The EPA recommends use of their Environmental Justice Screening Tool (EJScreen) to identify DACs. This tool provides a nationally consistent dataset looking at demographic and environmental factors. The EJScreen Supplemental Demographic Index (SDI) layer is the default DAC definition in the NEP Bipartisan Infrastructure Law (BIL) Implementation Memo and is described below:

"The update to EPA's EJScreen tool includes a new five-factor Supplemental Demographic Index that combines these factors:

- Percent low-income;
- Percent linguistically isolated;
- Percent less than high school education;
- Percent unemployed; and
- Low life expectancy.

These demographic indicators can be used to highlight areas where vulnerable populations may be disproportionately impacted. Maps generated in EJScreen highlight census block groups above the 80th, 90th, and 95th percentiles when compared to the nation, calculated as the average of these demographic indicators. If the Supplemental Demographic Index percentile in a census block group exceeds 80%, it will be identified as a disadvantaged community for the purposes of establishing baselines in each NEP's equity strategy, and for tracking Justice40 investments and benefits."

It is important to note that many communities face different challenges. The purpose for identifying DACs here is to align with requirements from the Justice40 initiative. Of note, there are several terms that are often used to describe these communities, which are addressed in the implementation memo: "There are several related terms used to describe communities facing hardship or who have historically benefitted unevenly from federal funds, including disadvantaged, overburdened, underserved. Under Justice40 EPA is using the term "disadvantaged" for consistency with E.O. 14008 and other programmatic terminologies. EPA notes that this terminology is distinct from "environmental justice" community, which is defined as a community facing disproportionate environmental, public health, and other burdens that reduce quality of life. These terms should not be used interchangeably. Most environmental justice communities are also likely disadvantaged (depending on the criteria set for the latter's definition), but not all disadvantaged communities are environmental justice communities."

The EPA allows NEPs to propose alternative definitions to better define and capture DACs in their region. Several tools were used to explore and identify DACs in the CBBEP Program Area. Findings are discussed below along with a proposed alternative definition for future programming and projects.

8

DAC Alternative Definition 2.1.

CBBEP was interested in undertaking further analysis to understand whether the EPA's five-factor Supplemental Demographic Index (hereafter referred to as EJScreen SDI) may be undercounting communities they know to be disadvantaged. The team reviewed: Census data, SNAP benefits, Title I funding to school districts, EJScreen supplemental indexes (80% percentile for any of the 12 environmental variables)², and the Climate and Economic Justice Screening Tool (CEJST). Ultimately, it was determined that combining CEJST with the five-factor EJScreen SDI would be better suited for identifying DACs in this area for use in understanding investments and benefits to DACs moving forward. For more information on the EJScreen supplemental index review, see Section 8. For educational and outreach programming, an additional analysis looking at Title I funding will likely be helpful to better understand DAC reach.

CBBEP's proposed alternative DAC definition for future programs and projects combines the CEJST and the five-factor EJScreen SDI tool.

Additionally, for education and outreach programming, an understanding of Title I fund distribution was developed to help capture CBBEP's beneficial impact on disadvantaged students.

Criteria Used for Determining DACs 2.2.

CEJST and EJScreen SDI use different methods for determining DACs. The CEJST tool was developed in response to Executive Order 140008, which directed the Council on Environmental Quality to develop a tool to identify DACs. White House memorandum M-23-09 released in January 2023 notes: "Federal agencies should now start using the CEJST to identify geographically defined disadvantaged communities for any covered programs under the Justice40 Initiative and for programs where a statute directs resources to disadvantaged communities, to the maximum extent possible and permitted by law. Agencies shall use best efforts to transition to using the CEJST as expeditiously as possible. By the start of fiscal year 2024 (i.e., October 2023), agencies are expected to use the CEJST for any new covered investments that fall under the Justice40 Interim Guidance."3 Planning for future projects in alignment with the CEJST criteria will allow CBBEP to meet the Justice40 initiative using recommended methodologies and will also help capture more of the social and environmental metrics that are important to consider for our region.

Table 2-1 below compares the two tools, including their unit of analysis, application, thresholds, and criteria. Under CEJST, factors that played a larger role in identifying DACs in the Coastal Bend area included building loss rate and diabetes. Other leading factors included projected flood and wildfire risk, energy cost, heart disease, and lack of indoor plumbing.

Table 2-1. Tool Comparison

	EJScreen SDI	CEJST
Unit of analysis	Block groups	Census tracts

² EPA identifies the **80th percentile** as an *initial* starting point. In other words, an area with any of the 12 EJ Indexes at or above the 80th percentile nationally should be considered a potential candidate for further review (per EPA EJScreen Technical Documentation). https://www.epa.gov/sites/default/files/2021-04/documents/ejscreen_technical_document.pdf

³ https://www.whitehouse.gov/wp-content/uploads/2023/01/M-23-09 Signed CEQ CPO.pdf

	EJScreen SDI	CEJST
Overview	Five-factor Supplemental Demographic Index on community- level vulnerability.	 Communities are considered disadvantaged: If they are in census tracts that meet the thresholds for at least one of the tool's categories of burden, or If they are on land within the boundaries of Federally Recognized Tribes Are completely surrounded by DACs and is at or above the 50th percentile for low income
Thresholds	80th percentile	90th percentile for factors outlined below, AND 65th percentile for low-income for all indicators but workforce development, which is more than 10% of people ages 25 or older have a high school education
Criteria	 Percent low-income Percent limited English speaking Percent less than high school education Percent unemployed Low life expectancy. 	 Climate change: agricultural loss, building loss, population loss, flood risk, wildfire risk Energy: energy cost, PM 2.5 in the air Health: asthma, diabetes, heart disease, low life expectancy Housing: housing cost, lack of green space, lack of indoor plumbing, lead paint, historically redlined Legacy pollution: proximity to hazardous waste facilities, proximity to Superfund sites, proximity to Risk Management Plan (RMP) facilities, or have at least one abandoned mine land, or a formerly used defense site Transportation: diesel PM exposure, transportation barriers, traffic proximity and volume Water and wastewater: underground storage tanks and releases, wastewater discharge Workforce development: linguistic isolation, low median income, poverty, unemployment

In addition to capturing more social and environmental considerations, our analysis found that EJScreen SDI captures less than half of the identified colonia population in the study area. As noted in **Section 1**, colonias are substandard housing developments found along unincorporated areas of the Texas-Mexico border where many residents lack basic services such as drinking water, sewage treatment, and paved roads. While EJScreen SDI captures around 40% of the count and population, CEJST and CEJST combined with EJScreen SDI capture 90% or more of the count and population. **Table 2-2** below shows the total number of colonias in the 12-county region, and the number and population captured using the EJScreen and CEJST.⁴

ΤοοΙ	Total Colonias	Total Colonias in an EJ Community or DAC	Percentage of Colonias in EJ Community or DAC	Percentage of Identified Colonia Residents in EJ Community or DAC
EJScreen SDI	256	101	39%	42%
CEJST	256	230	90%	92%
CEJST & SDI	256	234	91%	93%

⁴ Data on colonias obtained from the Colonia Database (Texas Office of the Attorney General) and show all identified colonias (including those with population listed as 0) from the 2019 dataset.

Figure 2-1 maps the CEJST DACs, the EJScreen SDI, and the identified colonias for the 12-county CBBEP region, while **Figure 2-2** shows this information zoomed in to Corpus Christi.

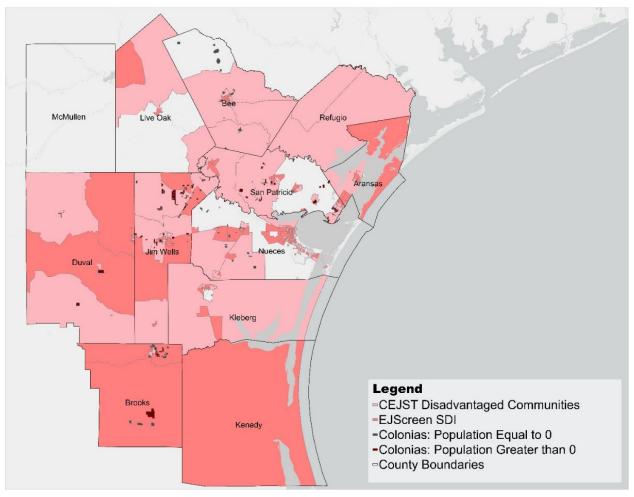


Figure 2-1. CEJST and SDI Combined

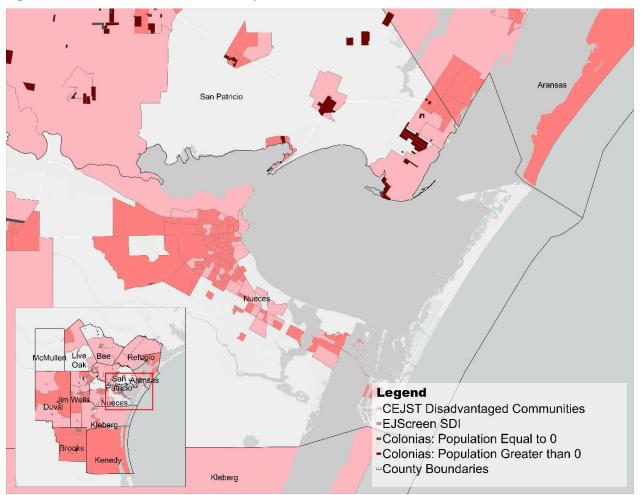


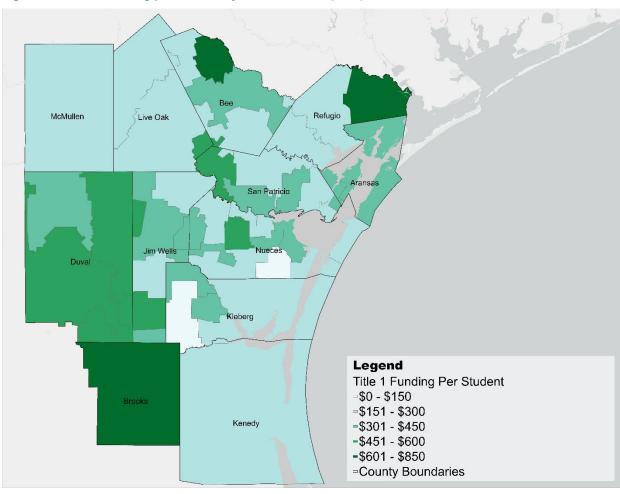
Figure 2-2 CEJST and SDI Combined in Corpus Christi

2.2.1. Additional Considerations: Education & Outreach

Due to CBBEP's strong focus on education and outreach programs as part of our core mission to protect the bays and estuaries of the Coastal Bend, an additional methodology was developed to understand the program's reach to disadvantaged students and to tailor future efforts, including capacity building. The U.S. Department of Education provides financial assistance to local educational agencies and primary and secondary schools to help disadvantaged students meet state academic and performance standards. To be qualified as a Title 1 school, at least 40% of the student body must qualify for a free or reduced lunch. To better understand our region's disadvantaged student population, the distribution of Title 1 funding in the region was reviewed based on Journalist's Resource analysis for fiscal year 2018 that combines data from the Census and the U.S. Department of Education. ⁵ Out of the 45 school districts in the region, schools in 44 of the districts receive some amount of Title I funding. **Figure 2-3** shows the amount of Title 1 funding per student by school district based on this analysis (2018).

Figure 2-4 shows the 23 schools that participated in education and outreach programming with CBBEP between 2017 and 2021. In this figure, we see that while only 10 of these schools are located in CEJST and EJ Screen SDI communities, all of them were in school districts receiving Title 1 funding. Understanding Title 1 funding thus helps to

⁵ Data sources used: The Journalist's Resource; US Census Bureau's SAIPE; Dept. of Education <u>https://journalistsresource.org/economics/2020-census-title-i-maps/</u>





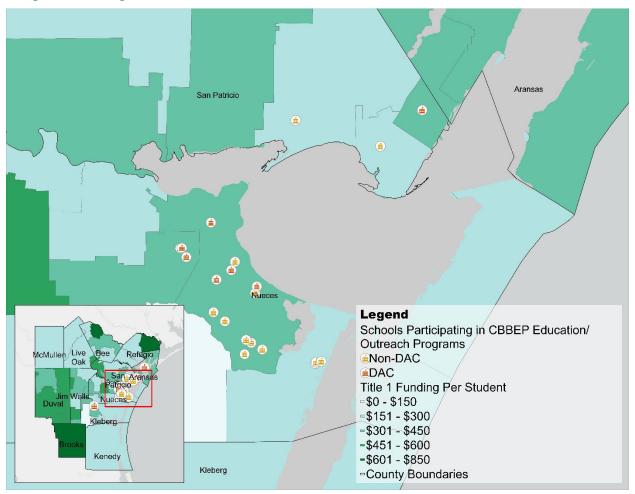


Figure 2-4. Schools Participating in CBBEP Education & Outreach Programs by Location Tagged by DAC Categorization Using CEJST and EJScreen SDI

2.3. Tools

Our approach uses the CEJST tool plus EJScreen SDI as the basis for identifying DACs in our Program Area for analysis for future programs and projects. In addition, Title I funding from the Department of Education is referenced specifically for education and outreach programming.

3. Baseline Analysis

3.1. EPA National Baseline Assessment

The EPA has calculated a baseline of investments in DACs⁶ for all NEPs using existing data from the National Estuary Program Online Reporting Tool (NEPORT) (**Table 3-1**). This calculation looks only at habitat projects

⁶ EPA understands that many communities and advocates prefer alternative terms like underserved and overburdened to refer to communities with EJ concerns. However, Executive Order 14008 uses the phrase "disadvantaged communities," and this term has been used in existing Federal and state programs to prioritize funding for environmental justice. Until subsequent guidance can address the question of the most appropriate terminology, this program and the BIL Implementation Memo relies on the language used in Executive Order 14008.

recorded in NEPORT over the last five years (2017-2021). NEPORT habitat projects are displayed through NEPmap which, for the purposes of this baseline calculation, is overlayed with the EJScreen SDI layer.

Combining NEPmap with the EJScreen SDI layer results in a visualization of the habitat projects located in DACs. EPA analyzed reported information from 2017-2021 on these selected projects to calculate the:

- Percent and number of NEP habitat projects located in DACs,
- Percent and amount of CWA Section 320 funds invested from habitat projects in DACs, and
- Percent and total project costs invested from habitat projects in DACs.

EPA is aware that calculating a baseline using only NEPORT habitat projects will result in an undercount of the investments NEPs have made in DACs. NEPORT was not developed with the intention of tracking or analyzing work done in DACs and NEPs have been making progress incorporating equity more thoroughly into their programs for several years – examples of several of CBBEP's efforts were provided previously in this report. However, this is the only consistent data collected from all 28 NEPs and the only location data that EPA has to overlay on a map with DACs to approximate a baseline.

The NEP BIL funds are covered under the Justice40 Initiative, and the national program, as a whole, has a target of ensuring that at least 40% of the investments and benefits from the BIL flow to DACs.⁷ The purpose of the baseline is to determine the number and percent of recent pre-BIL funds or projects that benefit DACs for comparison with the investments and benefits that flow to DACs with the influx of NEP BIL funds. Prior to BIL, the NEP was not a covered program under Justice40.⁸ Therefore, there is no expectation for NEPs to meet a certain number or percentage of pre-BIL investments in DACs for the baseline.

	In DACs	Total	% in DACs
Habitat Projects	183	2,800	6.54%
320 Funds	\$23,335	\$13,620,804	0.17%
Total Project Costs	\$489,752,460	\$4,466,470,236	10.97%

Table 3-1. EPA HQ Baseline National Summary (2017-2021) Results

3.2. EPA Baseline Assessment of CBBEP

The CBBEP Baseline Assessment performed by EPA is included below in **Table 3-2**, covering habitat projects from 2017-2021. Using the EPA definition, 5.41% of habitat projects were in DACs, and 1.32% of habitat project costs were invested in DACs. **Figure 3-1** shows the location of these projects overlaid with the EJScreen SDI. The backwards-looking baseline analysis focuses on CBBEP's habitat projects, which represent 37 of CBBEP's 154 projects in its work plans from the same time period. It is important to note that CBBEP has many other types of projects that benefit DACs (see **Section 1.7** for more information), which should be included in future analysis iterations. Furthermore, projects often benefit communities that may not be in direct proximity to the project location. For example, public access improvement projects, habitat enhancement projects, and water quality improvement projects, can all have lasting benefits to communities across the region.

⁷ See <u>National Estuary Program Bipartisan Infrastructure Law Funding Implementation Memorandum for Fiscal Years 2022-2026</u>, 2022 guidance.

⁸ See <u>Justice40 Initiative Covered Programs List for the Environmental Protection Agency</u>, 2022 memo.

Year	# of Habitat Projects in DACs	Total Habitat Projects	% of Habitat Projects in DACs	Section 320 Funds Invested in DACs through Habitat Projects (\$)	Total Section 320 Funds Used in Habitat Projects (\$)	% of Section 320 Funds Invested in DACs through Habitat Projects	Habitat Project Costs Invested in DACs (\$)	Total Habitat Project Costs (\$)	% of Habitat Project Costs Invested in DACs
2017	0	10	0.00%	-	-	-	0	1,368,700	0.00%
2018	0	7	0.00%	-	-	-	0	1,207,998	0.00%
2019	0	5	0.00%	-	-	-	0	79,349	0.00%
2020	1	8	12.50%	-	-	-	21,420	4,986,736	0.43%
2021	1	7	14.29%	-	-	-	100,000	1,568,996	6.37%
Total	2	37	5.41%	-	-	-	121,420	9,211,779	1.32%

Table 3-2. EPA's Baseline Analysis of CBBEP Habitat Projects between FY2017 and FY2021

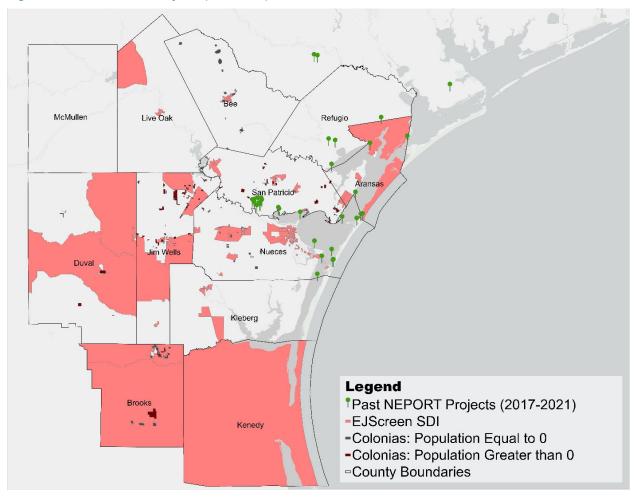


Figure 3-1. Past NEPORT Projects (2017-2021) Overlaid with EJScreen SDI

4. Numeric Targets

The BIL is a transformational opportunity to ensure that the benefits of federal investments are shared equitably by communities benefiting from CBBEP programs and projects. In identifying priority actions, CBBEP's Bays Council and other stakeholder committees should develop and prioritize projects with benefits that flow to historically DACs. Specifically, the BIL NEP funds are covered under the Justice40 Initiative, and the National Estuary Program, as a whole, has a target of ensuring that at least 40% of the benefits from the BIL NEP funding flow to DACs. CBBEP is setting a numeric target of <u>at least</u> 50% of BIL NEP funding dollars to be invested in future projects and activities that will benefit DACs as defined by the alternative definition described in **Section 2.1**.

One strength that will help the CBBEP meet its numeric target is our role as an environmental leader and trusted partner in the Coastal Bend. CBBEP is well-known, both regionally and throughout the State, for its efforts to protect and restore the bays and estuaries of the Texas Coast, and the organization has good relationships with agencies, foundations, academia, local industries, and the general public. The organization has proven to be a good steward of both federal/state and philanthropic dollars, and when we say we will do something, it almost always gets done on time and on budget. This has enabled CBBEP to attract support from a wide variety of partners to implement high-value projects and programs. These relationships, including opportunities to leverage BIL NEP funding with other investments, will be key for CBBEP moving forward with BIL projects. In addition, CBBEP has previous experience

working on priority issues in several of the disadvantaged areas of the Coastal Bend, and therefore has built a number of relationships that will help with successful implementation of high value projects in these areas.

Using CBBEP's Alternative Definition, approximately 75% of the CBBEP Program Area is considered a DAC. Proportionately, this presents a very large, underserved area that could benefit from these BIL investments. While this presents CBBEP with increased opportunities to reach its numeric target and could be considered a strength, it is also a challenge. It shows the high-level of need within the Coastal Bend and will require CBBEP and partners to prioritize investments and also look for opportunities to leverage BIL NEP funds with other sources of support.

Ensuring that benefits from BIL projects reach DACs will be a priority for CBBEP. However, another anticipated challenge associated with this is a lack of appropriately trained staff for project management and grant administration responsibilities, issues with cash flow, and a lack of community volunteers in underserved communities. This could limit both the identification and implementation of projects, despite BIL funding being available. These factors could also result in difficulty accessing and administering federal funds and grants. Therefore, in addition to providing funding, it is anticipated that CBBEP will likely have to manage and administer many of these projects and be the leader in the pursuit of leveraging opportunities, as capacity for these types of projects is built within communities. This emphasizes the need for proper staffing levels within CBBEP to ensure project management and administrative support are available.

5. Key Activities

The path to achieve the numeric target of at least 50% of BIL funding benefitting DACs begins with CBBEP Implementation Teams' annual series of meetings. The stakeholder engagement process begins in the fall and includes two to three meetings in which members help to identify needs within specific priority issue areas and to recommend projects to be considered for inclusion in the CBBEP Annual Work Plan. The meetings are open to a diversity of stakeholder groups with interests and expertise in the issues addressed by a particular implementation team. When BIL funding is available, stakeholders are encouraged to consider BIL priorities and identify projects and areas that could benefit from that funding. Special consideration will be given to proposals that both address BIL priorities and benefit DACs.

To increase the accessibility of all stakeholders to BIL project development and implementation processes, CBBEP has also developed a BIL website (<u>https://www.cbbep.org/bil/</u>) that can be used to identify priority issues and submit project ideas/activities. These project ideas can be submitted throughout the year, and following submission, will be referred to the appropriate implementation team for consideration during the process described above. All stakeholders that submit project ideas will be invited to review the projects in conjunction with the implementation teams to ensure that the issues and activities proposed are fully understood.

Examples of how BIL funds could be used to implement activities and projects are provided below and grouped by priority issue area. Specific Bays Plan action items that could be implemented within each priority area are also listed below

5.1. Habitat and Living Resources

Healthy bay and estuarine habitats provide the critical foundation for sustainable environments and thriving economies. DACs are often under resourced and underserved to protect fish, wildlife, and habitat. Therefore, CBBEP will support projects that preserve, restore, enhance, and create coastal habitats in collaboration with DACs to ensure the long-term sustainability of native living resources. Example projects include but are not limited to wetland restoration, barrier island habitat conservation, shoreline protection, and managing invasive species impacts.

Relevant Bays Plan goals for Habitat and Living Resources activities include:

Habitat and Living Resources:

HLR 1.1: Preserve functional, natural habitats of all major types.

18

HLR 1.2: Restore and enhance degraded habitats and create new habitats where feasible.

HLR 1.3: Support efforts to identify and minimize adverse impacts of activities and operations on coastal habitats.

HLR 2.1: Develop and implement adaptive management plans to ensure sustainability for species of concern.

HLR 2.2: Support rescue and rehabilitation programs of native animal species.

HLR 2.3: Support effective commercial and recreational fisheries management.

HLR 2.4: Support efforts to identify and minimize adverse impacts of activities and operations on coastal living resources.

HLR 2.5: Improve understanding of harmful algal blooms and their impact on living resources.

HLR 2.6: Develop and support adaptive management plans to minimize introductions and impacts from invasive species.

Shoreline Management:

SM 1.1: Advise and assist local partners with shoreline management issues.

SM 1.2: Support efforts to promote enhanced management of riverine shorelines and riparian habitat.

Coastal Birds:

CB 1.1: Implement successful waterbird management actions to reverse declines in colonial nesting waterbirds in the Coastal Bend.

CB 2.1: Conduct conservation-oriented monitoring and management actions to benefit shorebird species that utilize the Central Flyway and visit the Coastal Bend.

Land Conservation and Stewardship:

LCS 1.1: Promote the stewardship of coastal resources through the implementation of responsible and sustainable adaptive management techniques on both CBBEP properties and those of willing landowners.

LCS 1.2: Collaborate with partners to identify and protect properties with high conservation value through donation, acquisition, or conservation easements.

5.2. Human Uses

The bays and estuaries of the Coastal Bend contain a wealth of resources for people to enjoy and appreciate, and they also support an enormous segment of the local economy. Often, for people from DACs, access to our bays and estuaries and other nature-based recreation opportunities, such as trails and parks, is limited to facilities in close proximity to their homes and water access is often limited to locations along shorelines. Therefore, CBBEP will support projects that promote or enhance opportunities for individuals from DACs to participate in nature-based recreational opportunities. Projects will most likely focus on implementing improvements at existing sites and developing an appropriate number of new, well-managed sites to protect the coastal resources and ensure their longevity for future bay users.

Relevant Bays Plan goals for Human Uses activities include:

Tourism and Recreation:

TR 1.1: Collaborate with tourism organizations to adopt a theme of resource protection and stewardship in their promotion of tourism.

TR 2.1: Provide for the appropriate number of improved, well-managed public access sites.

TR 3.1: Support the development and implementation of management strategies that reduce or avoid impacts from recreational uses.

Bay Debris:

BD 1.1: Support activities to reduce the amount of debris reaching the bays.

BD 1.2: Support activities to remove existing debris in the bay.

Public Health:

PH 1.1: Support efforts to protect recreational water quality through studies on waterborne health issues, including pathogens, chemicals, and Harmful Algal Blooms.

PH 2.1: Support health risk assessments associated with consumption and handling of seafood.

5.3. Water and Sediment Quality

Water and sediment quality and freshwater inflows are important to coastal habitats, wildlife, and the economic vitality of the Coastal Bend. DACs are often disproportionately burdened by pollution. Therefore, CBBEP will support projects, programs, and planning efforts that respond to water quality and sediment problems that may pose a risk to people or the environment. Example projects include but are not limited to Total Maximum Daily Load planning and implementation, monitoring and addressing toxics and pathogen loads and contamination, developing and implementing nutrient reduction strategies, implementing stormwater management practices that reduce non-point source pollution impacts, focusing particularly on promoting the adoption of green and nature-based infrastructure approaches (e.g., rain gardens, pervious pavement, riparian restoration).

Relevant Bays Plan goals for Water and Sediment Quality activities include:

Water and Sediment Quality:

WSQ 1.1: Support the implementation of plans and projects to improve water and sediment quality in identified segments.

WSQ 1.2: Continue to support permitting rules for mariculture and aquaculture.

WSQ 2.1: Support efforts to quantify total constituent loadings and identify possible transport pathways, sources, and fates.

WSQ 2.2: Support analyses of the biological and ecological effects of constituents.

WSQ 3.1: Ensure that water and sediment quality standards and criteria are adequate and appropriate.

Nonpoint Source Management:

NPS 1.1: Assist local governments, small businesses, industries, and organizations in their efforts to reduce loadings. NPS 1.2: Provide assistance to small businesses and industries in the region that are subject to the TPDES permit program or have point or nonpoint source control needs.

NPS 1.3: Assist local governments and organizations to implement On-Site Sewage Facility (OSSF) programs and projects.

NPS 1.4: Support agricultural water quality management plans, programs, and projects.

NPS 1.5: Support efforts to improve the quality of urban stormwater runoff.

Freshwater Resources:

FW 1.1: Improve scientific understanding of the freshwater, nutrient, and sediment supply needs of the estuaries. FW 1.2: Assist the Coastal Bend Regional Water Planning Group and regional water managers to incorporate environmental needs in comprehensive planning.

FW 1.3: Support efforts that optimize environmental flows to the bays and estuaries of the Coastal Bend.

FW 1.4: Effectively communicate the purpose and results of environmental flow efforts.

5.4. Education and Outreach

CBBEP also focuses on both formal and informal education and outreach to foster awareness and build informed and engaged communities. CBBEP will continue to seek opportunities to promote environment literacy, awareness, and stewardship, and work to expand the reach of educational opportunities to new target audiences, including underrepresented and underserved communities. Efforts will also focus on providing DACs with opportunities to practice stewardship and participate in activities like ecosystem restoration. Other projects may focus on capacity-building and training related to priority issues such as wastewater and green infrastructure.

Relevant Bays Plan goals for Education and Outreach activities include:

Delta Discovery:

DD 1.1: Provide authentic discovery-based experiences for PK-12 students and beyond that are aligned to crosscurricular state/national standards.

DD 1.2: Provide professional development and resources for educators that allow them to connect classroom instruction with real-world application.

DD 1.3: Identify and promote partnership opportunities with like-minded organizations to develop and/or deliver programs that support the Delta Discovery mission of environmental education and coastal watershed protection. DD 2.1: Provide outdoor learning opportunities that facilitate hands-on investigations of and experiences in the natural environment.

Public Education and Outreach:

PEO 1.1: Develop and distribute information and outreach materials for targeted audiences.

PEO 1.2: Support events that focus attention on bay resources and uses.

PEO 1.3: Promote public participation in stewardship activities.

PEO 1.4: Support public meetings that improve understanding and stewardship of bay resources.

PEO 1.5: Promote recognition of individuals and programs that protect our bays and estuaries.

5.5. Coastal Resilience

Changing climatic and environmental conditions pose major threats to our nation's estuaries, and as part of a network of coastal, place-based programs, the CBBEP and the communities it serves are significantly affected by these changes. Reports show that the harms from climate change fall disproportionately upon underserved communities who are least able to prepare for, and recover from, heat waves, poor air quality, flooding, and other climate-related impacts. To help DACs address the ongoing threats of climate change, CBBEP will look for opportunities to utilize BIL funds to conduct climate vulnerability assessments, develop and implement climate change adaptation strategies, and use adaptation tools to promote coastal resilience.

Relevant Bays Plan goals for Coastal Resilience activities include:

Coastal Resilience:

CR 1.1: Facilitate and support studies to better project and understand the local biological, chemical, physical, and ecological effects of changing climatic conditions.

CR 1.2: Assist in developing and implementing adaptive management plans that conserve and protect coastal resources and their ecosystem services by incorporating changing climatic conditions.

CR 2.1: Develop or use formal and informal education materials that are locally relevant to enhance climate literacy.

5.6. Maritime Commerce and Dredging

Much economic activity in the Coastal Bend region is linked to waterborne commerce via the use of shipping or pipelines. Given the increase in vessel size/number and the widespread use of marine pipelines, there is a potential for accidents that could impact the marine environment, threaten human health and safety, and cause economic loss. Dredging is also a routine activity necessity to maintain waterways in the Coastal Bend due to sedimentation. Impacts from maritime accidents, pipeline incidents, and dredge placement may disproportionately affect DACs. CBBEP will continue to work with partners on projects to ensure maritime traffic safety while reducing the rate of maritime incidents from shipping, terminal operations, and marine pipelines. CBBEP will also work to ensure that dredging activities are planned and conducted in ways that minimize ecological impacts and maximize the beneficial uses of dredge material. Examples of projects include but are not limited to habitat restoration through beneficial use of dredge material and increasing oil/chemical response capacity in disadvantaged areas.

Relevant Bays Plan goals for Maritime Commerce and Dredging activities include:

Maritime Commerce:

MC 1.2: Modify the height, size, position, and light intensity of existing navigation ranges and add new ranges where necessary.

MC 1.3: Support efforts to maintain and improve the Vessel Traffic Information System and any additional navigational aids, such as the Physical Oceanographic Real-Time System (PORTS).

MC 1.4: Continue to support vessel operator training regarding safe operating procedures, rules of the road, and local navigation hazards.

MC 2.1: Continue to maintain and improve regional oil spill response capability.

MC 2.2: Continue to maintain and improve hazardous spill response planning and resources to ensure public protection.

MC 4.1: Continue to support the prevention of the introduction of non-native species through improved ballast water management.

Dredging:

D 1.1: Support the activities of the Beneficial Uses Group (BUG) to maximize beneficial uses of dredged material as required.

D 1.3: Develop a long-term (50 year) dredged material management plan and strategy for the Gulf Intracoastal Waterway, other navigation channels, channel subdivisions, private marine terminals, and private and public marinas. D 1.4: Develop a long-term (50 year) Regional Habitat Management Plan that utilizes dredged material from private and public sources.

6. Tracking Benefits

EPA is currently developing NEP BIL Benefits Methodology that outlines what national BIL measures the EPA NEP plans to track, describes what data sources will be needed to track the measure, and details what calculations need to be performed using the data. It will include baseline measures, general BIL measures, and Justice40 specific measures. Once finalized, CBBEP will follow the guidance provided by the EPA and use NEPORT to track all benefits from BIL investments.

Based on the draft NEP BIL Benefits Methodology, data collected and entered into NEPORT for each project will include Primary Beneficiary, Project Implementation Location, Project Beneficiary Location, Primary Benefit, Total Project Cost, Funds Invested in DACs, and Funds Leveraged.

7. Stakeholder Engagement Plan

The scope of the projects and programs implemented by the CBBEP have historically resulted in beneficial impacts at varying degrees to a wide array of stakeholders. Stakeholder relationships remain a top priority for CBBEP, as they play an integral role in working toward the mission of protecting bays and estuaries, while also facilitating a healthy and growing relationship between the public and environmental resources. The project efforts of CBBEP focus on water quality and freshwater inflow management, public access and recreational opportunities, and habitat and wildlife. CBBEP also implements three "in-house" programs designed to address declining coastal bird populations, land conservation, and environmental education. Stakeholders from different ranges of socio-economic and age demographics can engage with many of these projects and programs, at varying degrees, throughout the course of project development and implementation. Aligned with the Justice40 initiative's goal to maximize environmental benefits to DACs, CBBEP will more explicitly tailor engagement efforts to better understand whether program benefits are reaching these communities.

Stakeholder involvement has been integral to CBBEP's efforts to address priority issues and restore and protect Coastal Bend bays and estuaries. CBBEP maintains several Implementation Teams to focus on stakeholder involvement in our ongoing efforts to implement the action items identified in the Bays Plan. The Implementation Teams are also designed to provide periodic reviews of the Bays Plan and to recommend potential updates. Current Implementation Teams include: (1) Human Uses, (2) Maritime Commerce & Dredging, (3) Habitat and Living Resources, (4) Water and Sediment Quality, and (6) Environmental Education. Each year, the Implementation Teams are tasked with identifying needs within specific priority issue areas (e.g., water and sediment, habitat and wildlife, public access and nature tourism, environmental education) and recommending specific project ideas to address these issues. Following multiple meetings (minimum of two, maximum of three) to discuss project ideas between team members and CBBEP staff, teams prioritize proposed project ideas for implementation and inclusion in CBBEP's Annual Work Plan. Each team has a Chair (or Co-chairs) and a CBBEP staff liaison that coordinate the team's efforts and facilitate meetings. The stakeholder engagement process culminates with CBBEP's Bays Council, an advisory council to CBBEP's Board of Directors, recommending an Annual Work Plan for approval by CBBEP's Board of Directors.

CBBEP works to maintain a high level of communication and transparency with stakeholders, both internal and external, regarding project selection, project progress, and project implementation. All CBBEP Board of Directors and Implementation Team Meetings are open to the public and publicized on our website. Projects are publicly proposed and discussed through CBBEP's implementation team process described above. As mentioned above, stakeholders also have the opportunity to help CBBEP prioritize proposed projects through a ranking process that involves team members. Funding partners are openly disclosed in relation to the project that they are supporting and project reports are generated to keep funding partners and contractors in sync on project developments. Project reports are made available to the public through the CBBEP website, uploaded as they are completed.

Outside of stakeholder meetings, projects may provide stakeholders an opportunity to engage with the program or project in a more hands-on manner, depending on the nature of the project. These instances may take the shape of volunteer opportunities, community outreach efforts, clean up initiatives, and spreading useful information through word-of-mouth amongst their respective communities. For these engagement opportunities to become available, stakeholders must first be engaged at the informational level.

To increase the accessibility of all stakeholders to the project development and implementation process, CBBEP has developed a website (<u>https://www.cbbep.org/bil/</u>) that can be used to identify priority issues and submit project ideas/activities. These project ideas can be submitted throughout the year at any time of day, and following submission, will be referred to the appropriate implementation team for consideration during the process described above. All stakeholders that submit project ideas will be invited to review the projects in conjunction with the implementation teams to ensure that the issues and activities proposed are fully understood by CBBEP staff and partners.

Moving forward, CBBEP will continue to involve the many trusted partners across the region. Additional we seek to further engage disadvantaged populations identified in this strategy to ensure that benefits derived from projects are reaching these communities and aligned with their needs. We understand that every community, including the diverse populations within DACs, each have different priorities and needs, as well as interpretations of project benefits. CBBEP will solicit feedback from DAC communities to understand priorities, to increase awareness of programs particularly when they are tied to human health outcomes, and to provide technical assistance to implementation partners working in DAC areas. CBBEP also understands that many disadvantaged populations face barriers that could prevent them from providing input that informs project development and implementation. CBBEP will work to increase access and remove barriers to participation so that projects can better serve all of Coastal Bend's communities.

7.1. Key Issues

The priority issues that CBBEP seeks to address, whether it be water quality, erosion, flooding, habitat loss, or public access, affect a wide variety of stakeholders, both internal and external. When examining DACs specifically, CBBEP projects and programs have the opportunity to provide support for communities that would otherwise experience difficulty addressing these issues in an effective manner for lack of experience, knowledge, or resource availability. CBBEP anticipates engaging with stakeholders around the following issues:

7.1.1. Habitat and Living Resources

Healthy bay and estuarine habitats provide the critical foundation for sustainable environments and thriving economies. DACs are often under resourced and underserved to protect fish, wildlife, and habitat. Therefore, CBBEP will support projects that preserve, restore, enhance, and create coastal habitats in DACs to ensure the long-term sustainability of native living resources.

7.1.2. Human Uses

The bays and estuaries of the Coastal Bend contain a wealth of resources for people to enjoy and appreciate, and they also support an enormous segment of the local economy. Often, for people from DACs, access to our bays and estuaries and other nature-based recreation opportunities, such as trails and parks, is limited to facilities in close proximity to their homes and water access is often limited to locations along shorelines. Therefore, CBBEP will support projects that promote or enhance opportunities for individuals from DACs to participate in nature-based recreational opportunities.

7.1.3. Water and Sediment Quality

Water and sediment quality and freshwater inflows are important to coastal habitats, wildlife, and the economic vitality of the Coastal Bend. DACs are often disproportionately burdened by pollution. Therefore, CBBEP will support projects, programs, and planning efforts that respond to water quality and sediment problems that may pose a risk to people or the environment.

7.1.4. Education and Outreach

CBBEP focuses on both formal and informal education and outreach to foster awareness and build informed and engaged communities. CBBEP will continue to seek opportunities to promote environment literacy, awareness, and stewardship, and work to expand the reach of educational opportunities to new target audiences, including underrepresented and underserved communities. Efforts will also focus on providing DACs with opportunities to practice stewardship and participate in activities like ecosystem restoration. Other projects may focus on capacity-building and training related to priority issues such as wastewater and green infrastructure.

7.1.5. Coastal Resilience

Changing climatic and environmental conditions pose major threats to our nation's estuaries, and as part of a network of coastal, place-based programs, the CBBEP and the communities it serves are significantly affected by these changes. Reports show that the harms from climate change fall disproportionately upon underserved communities who are least able to prepare for, and recover from, heat waves, poor air quality, flooding, and other climate-related impacts. To help DACs address the ongoing threats of climate change, CBBEP will look for opportunities to utilize BIL funds to conduct climate vulnerability assessments, develop and implement climate change adaptation strategies, and use adaptation tools to promote coastal resilience.

7.1.6. Maritime Commerce and Dredging

Much economic activity in the Coastal Bend region is linked to waterborne commerce via the use of shipping or pipelines. Given the increase in vessel size/number and the widespread use of marine pipelines, there is a potential for accidents that could impact the marine environment, threaten human health and safety, and cause economic loss. Dredging is also a routine necessity to maintain waterways in the Coastal Bend due to sedimentation. Impacts from maritime accidents, pipeline incidents, and dredge placement may disproportionately affect DACs. CBBEP will continue to work with partners on projects to ensure maritime traffic safety while reducing the rate of maritime incidents from shipping, terminal operations, and marine pipelines. CBBEP will also work to ensure that dredging activities are planned and conducted in ways that minimize ecological impacts and maximize the beneficial uses of dredged material.

7.2. Stakeholders

The CBBEP provides a structured platform for stakeholder engagement with project planning and implementation from the beginning of the process. CBBEP stakeholders range from public agencies, private industry leaders, non-profit organizations, and communities throughout the Coastal Bend. As already stated, CBBEP will look to broaden stakeholders engaged in the process to better understand project benefits, particularly for DACs. A list of stakeholders to be engaged is included in **Table 7-1** below. However, this does not represent an exhaustive list of potential stakeholders that may become involved in the stakeholder process as part of this Equity Strategy, which will continue to be developed as situations and engagement focuses evolve over time.

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
American Bird Conservancy (ABC)	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Education and Outreach	4x/year
Aransas County	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Aransas County Navigation District	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Aransas ISD	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year
Austwell-Tivoli	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
Banquete ISD	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year

Table 7-1. Unique Partners/Stakeholders and Timing of Engagement

25

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
Bee County	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Brooks County	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Buckeye Partners, L.P	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water and Sediment Quality	4x/year
Calallen ISD	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year
Celanese	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water and Sediment Quality	4x/year
Cheniere	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water and Sediment Quality	4x/year
Citgo	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water and Sediment Quality	4x/year
City by the Sea	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
City of Alice	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Aransas Pass	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Beeville	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Bishop	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Corpus Christi	Local	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
City of Falfurrias	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Freer	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and	4x/year

AECOM

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
			Outreach, Coastal Resilience	
City of George West	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Ingleside	Local	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
City of Mathis	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Odem	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Port Aransas	Local	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
City of Portland	Local	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and	4x/year

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
			Dredging, Coastal Resilience	
City of Premont	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Robstown	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Rockport	Local	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
City of San Diego	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Sinton	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
City of Taft	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
Coastal Bend Bays Foundation	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year
Coastal Bend Community Foundation	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	4x/year
Coastal Bend Council of Governments (CBCOG)	Local	Public Meetings, Information Distribution, Project Design and Implementation	Coastal Resilience	4x/year
Coastal Conservation Association (CCA)	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources	4x/year
Voices of the Colonias	Local	Public Meetings, Information Distribution, Project Design and Implementation	Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
Conoco Philips	National	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water and Sediment Quality	4x/year
Corpus Christi ISD	Local	Public Meetings, Information Distribution	Education and Outreach	6x/year
Corpus Christi Water Department (CCW)	Local	Public Meetings, Information Distribution, Project Design	Water and Sediment Quality	4x/year
Duval County	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
Ed Rachal Foundation	Local	Public Meetings, Information Distribution, Project Design	Habitat and Living Resources, Education and Outreach	4x/year
Flint Hills	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water	4x/year

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
			and Sediment Quality	
Flour Bluff ISD	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year
Gregory Portland ISD	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year
Gulf Coast Growth Ventures (GCGV)	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water and Sediment Quality	4x/year
Hamman Foundation	Local	Public Meetings, Information Distribution, Project Design	Habitat and Living Resources, Education and Outreach	4x/year
Harte Research Institute (HRI)	Regional	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	6x/year
Indigenous People of the Coastal Bend	Local	Public Meetings, Information Distribution, Project Design and Implementation	Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
Ingleside by the Bay	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
Ingleside ISD	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year
Jacob and Terese Hershey Foundation	State	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Education and Outreach	4x/year

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
Jim Wells County	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
Kenedy County	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Kleberg County	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Knobloch Family Foundation	State	Public Meetings, Information Distribution, Project Design	Habitat and Living Resources, Education and Outreach	4x/year
Live Oak County	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
LyondellBassel	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water and Sediment Quality	4x/year
McMullen County	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and	

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
			Dredging, Coastal Resilience	
Mathis ISD	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year
National Fish & Wildlife Foundation	National	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
National Oceanic and Atmospheric Administration (NOAA)	National	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Nueces County	Local	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Nueces County Drainage District 2	Local	Public Meetings, Information Distribution, Project Design	Water and Sediment Quality	4x/year
Nueces River Authority (NRA)	Local	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	6x/year
Padre Island National Seashore (PINS)	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and	4x/year

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
			Outreach, Maritime Commerce and Dredging, Coastal Resilience	
Phillips 66	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water and Sediment Quality	4x/year
Port of Corpus Christi Authority (POCC)	Local	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Refugio County	Local	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Robert J. Kleberg, Jr.and Helen C Kleberg Foundation	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources	4x/year
Rotary Club of Corpus Christi	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
San Patricio County	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year

AECOM

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
School of Science and Technology	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year
Talen Energy	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water and Sediment Quality	2x/year
Texas A&M University – Corpus Christi (TAMUCC)	State	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
TCEQ	State	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	6x/year
Texas General Land Office (GLO)	State	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Texas Parks & Wildlife Department	State	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	4x/year
Texas State Soil and Water Conservation Board	State	Public Meetings, Information Distribution, Project Design and Implementation	Water and Sediment Quality	4x/year

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
Texas Water Resources Institute	State	Public Meetings, Information Distribution, Project Design and Implementation	Water and Sediment Quality	4x/year
Town of Bayside	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
Town of Fulton	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
Town of Refugio	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
Town of Riviera	Local	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Coastal Resilience	4x/year
Tuloso-Midway ISD	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year
Trull Foundation	Local	Public Meetings, Information Distribution, Project Design	Habitat and Living Resources, Education and Outreach	4x/year
Union Pacific	National*	Public Meetings, Information Distribution, Project Design	Education and Outreach	4x/year
U.S Army Corps of Engineers (USACE)	National	Public Meetings, Information Distribution,	Habitat and living resources, Human Uses, Water and	4x/year

Group / Partner / Community Name	Geographical Locale [Local, State, Tribal, Nat'l]	Type of Engagement Anticipated [Info Distribution, public meetings, consultations, project design or implementation]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of Engagement
		Project Design and Implementation	Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	
U.S Environmental Protection Agency (EPA) Region 6	Regional	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Human Uses, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	6x/year
U.S Fish & Wildlife Department	National	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources	4x/year
University of Texas - Marine Science Institute (UTMSI)	Regional	Public Meetings, Information Distribution, Project Design and Implementation	Habitat and living resources, Water and Sediment Quality, Education and Outreach, Maritime Commerce and Dredging, Coastal Resilience	6x/year
Valero	National*	Public Meetings, Information Distribution, Project Design	Habitat and living resources, Water and Sediment Quality	4x/year
Wells Fargo	National*	Public Meetings, Information Distribution, Project Design	Education and Outreach	4x/year
West Oso ISD	Local	Public Meetings, Information Distribution, Project Design	Education and Outreach	6x/year

*CBBEP interacts on a local scale

8. Other

8.1. EJScreen Supplemental Indexes

As noted in **Section 2**, EJScreen Supplemental Indexes were also reviewed as part of the process of exploring alternative definitions (**Table 8-1**). In the past, EJScreen Supplemental Indexes have been used by EPA as a starting point for identifying areas for further review, intended as a screening tool, for identifying EJ communities. When reviewing the EJScreen Supplemental Indexes overlaid with the colonias dataset, only 147 of the 256 colonias (or 57%) were captured. Ultimately, CEJST was selected for use in addition to the EJScreen SDI for future evaluation of programs and projects for a variety of reasons, including that it covers a more comprehensive set of social and economic variables in addition to environmental considerations, which is the focus of these indexes.

Table 8-1. EJScreen Supplemental Indexes	Table 8-1.	EJScreen	Supplemental	Indexes
--	------------	-----------------	---------------------	---------

	EJScreen Supplemental Indexes		
Unit of analysis	Block groups		
Overview	An area with any of the 12 EJ Supplemental Indexes at or above the 80th percentile nationally should be considered a potential candidate for further review.		
Thresholds	80th percentile; these indexes are calculated by multiplying the supplemental demographic index (SDI) by the normalized Environmental Indicator (below)		
Criteria	 Environmental: level of PM 2.5, ozone exposure, diesel PM, air toxics cancer risk, air toxics respiratory hazard index, traffic proximity, lead paint indicator, Superfund proximity, RMP facility proximity, hazardous waste proximity, underground storage tanks, wastewater discharge Health: life expectancy, heart disease, asthma Wildfire and flood risk: wildfire risk, flood risk 		

8.2. Outreach Meetings

During the development of the Equity Strategy, it was important to CBBEP to incorporate stakeholder input on the alternative DAC definition to be used to evaluate future programs and projects, and on the overall identification and inclusion of DACs in the program area. As such, two outreach meetings were held to help refine the selection of tools and as an opportunity for the community to provide input on CBBEP's activities, targets, and the engagement plan.

8.2.1. Academic Experts

CBBEP engaged with academic experts at Texas A&M University – Corpus Christi's Harte Research Institute early in the development of the alternative DAC definition. This meeting aimed to better understand how their investments benefit surrounding communities and included a discussion on the methodologies that were explored to define DACs in a way that is representative of their impact. During the meeting, attendants were asked to identify any other obvious variables to consider that may flag a community in the program area as disadvantaged, what factors should be considered when developing a continual stakeholder engagement process that will keep stakeholders engaged, and their input on the proposed alternative DAC definition. In general, positive feedback was received on CBBEP's proposed approach.

8.2.2. Community Outreach

CBBEP held an outreach meeting prior to submission of the Equity Strategy to provide an overview of the components of the strategy, describe the alternative DAC definition, and engage with stakeholders and interested members of the community. Topics discussed included an overview of CBBEP and its programs and activities, the BIL and its relation to NEP funds, the criteria and tools used to define DACs in the program area, additional considerations within the program area (i.e., Colonias and the distribution of Title I funds), an analysis of the previous

work done to benefit DACs in the program area, the activities that will be targeted in the future to benefit DACs, and the stakeholder engagement plan. Participants were generally in agreement with the CBBEP's approach to the Equity Strategy, identifying DACs in the program area, and the stakeholder engagement plan. Approximately 15-20 individuals were in attendance and CBBEP provided an opportunity to provide feedback after the meeting via a survey, either online or paper-form in person.

