

CHAPTER

15

Monitoring Strategy



CONTENTS

Environmental Monitoring
Programmatic Monitoring

Evaluating the success of *The Bays Plan, 2nd Ed.*, requires the CBBEP to track both the extent to which the actions laid out in the Plan are being implemented and the environmental response to those implemented actions. The combination of these monitoring approaches support evaluations of whether management actions are being implemented as planned and have resulted in progress toward environmental goals. Monitoring also establishes baselines from which to evaluate the environmental response to potential future perturbations, such as hurricanes, oil spills, and climate change.

The CBBEP developed a regional monitoring plan for the Coastal Bend in support of *The Bays Plan*. *The Bays Plan, 2nd Ed.* proposes to continue using a similar monitoring approach, with the primary goals of the monitoring program being: (1) to measure the effectiveness of the management actions and programs implemented under the Bays Plan, and (2) to provide essential information that can be used to redirect and refocus *The Bays Plan, 2nd Ed.* during implementation (Hunt et al., 2001).

Environmental Monitoring

The goal of the environmental monitoring program is to provide environmental data that can be compared to the goals, objectives, and actions outlined in the Bays Plan and used to evaluate progress towards achieving environmental goals. Two complementary approaches are used by the CBBEP to conduct environmental monitoring. The first approach involves an assessment of the overall health of the bays. This allows for the systematic measurement of the net effectiveness of all actions implemented. This approach incorporates environmental monitoring of the major areas of concern, including habitat, sediment quality, water quality, freshwater resources, commercial and recreational fisheries, species of concern, and shoreline management. The second approach provides for more tailored monitoring programs and plans that may be required for individual projects or programs that have specific environmental evaluation criteria (Hunt et al., 2001).

There are numerous ongoing environmental data collection and monitoring activities in progress within the CBBEP program area, most of which are carried out by federal, state and local agencies, academic institutions, and volunteers and community organizations (Table 4).

 **CBBEP STAFF WORK WITH PARTNERS** to install water quality monitoring equipment in Egery Flats. (Photo by the CBBEP)

Data are collected at thousands of stations throughout the Coastal Bend, some of which have been in operation for decades, and the frequency of data collection ranges from continuous to annual sampling (Hunt et al., 2001). The CBBEP's role in these different monitoring programs and activities has focused primarily on financial support, coordination, synthesis, and communication to varying degrees.

CBBEP utilizes the monitoring data from its partners to track environmental indicators and determine status and trends of important indicators on a periodic basis (e.g., CBBEP Environmental Indicators Report, State of the Bay). These types of reports bring together data collected by researchers from the academic and agency communities as it applies to understanding the environmental dynamics of the Coastal Bend bays and estuaries. Several of the major environmental monitoring programs and activities within the Coastal Bend are described in Table 6. These data sources are considered useful for measuring the effectiveness of management actions/programs and for tracking progress towards environmental goals. However, this is not a comprehensive listing and other programs and activities may be used as needed to determine the health of the bay and estuary system.

The CBBEP's strategy for achieving the goals of the Bays Plan is through the implementation of individual projects as part of the Annual Work Plan. While it may be difficult to attribute short-term estuary-wide results from individual projects, it is important that the localized environmental improvements of each project be assessed. As part of the process of developing the CBBEP Annual Work Plan, those projects to be evaluated for localized environmental benefits will be identified. For those projects, the CBBEP will conduct an environmental evaluation as appropriate (Hunt et al., 2001). Results of environmental evaluations from individual projects will be summarized in project reports and research publications and will be included in CBBEP summary reports when relevant.

It is important to note that the environmental monitoring program is not static, and data collection techniques must evolve and adapt with changes in technology, management needs, ecosystem responses, and funding. The Action Plans of *The Bays Plan, 2nd Ed.* include a number of recommendations for ongoing enhancements to monitoring. The CBBEP will make efforts to ensure that the Annual Work Plans and Quality Assurance Plans of individual monitoring components will be regularly updated as these changes are incorporated.

TABLE 4. DESCRIPTIONS OF THE MAJOR ENVIRONMENTAL MONITORING PROGRAMS AND ACTIVITIES WITHIN THE CBBEP PROGRAM AREA. THESE PROGRAMS AND ACTIVITIES REPRESENT POTENTIAL DATA SOURCES FOR EVALUATION OF BAY AND ESTUARY HEALTH.

Program/Activity Name (Lead Agency)	Program/Activity Description	Location	Relevant Action Plans
Surface Water Quality Monitoring Program (TCEQ)	Surface water quality monitoring involves collection of physical, chemical, and biological samples (i.e., dissolved oxygen, pH, temperature, conductivity, salinity, fecal coliform, nutrients, chlorophyll, dissolved and suspended solids, metals in water, metals in sediment, organics in water, and fish tissue) from numerous surface water sites throughout the Coastal Bend. Data may be used to determine compliance with the Texas Surface Water Quality Standards through the Texas Integrated Report.	Gulf of Mexico, bays, lakes, rivers, and creeks throughout the CBBEP area	WSQ, NPS, PH, SM, FR, CC
Clean Rivers Program (NRA, SARA)	The Clean Rivers Program monitors bacteria (<i>E.coli</i> , <i>Enterococcus</i>) and water quality parameters (dissolved oxygen, temperature, pH, ammonia, chlorophyll, nutrients, chloride, sulfate, and total dissolved solids) in bay/tidal and river/lake sites within the Coastal Bend on a quarterly basis.	Rivers and bays within the CBBEP area	WSQ, NPS, PH, SM, FR, CC
Texas Coastal Ocean Observation Network	TCOON is tasked with the collection of accurate water level data along the Texas Coast. Many TCOON stations also measure wind data, atmospheric pressure, and air and water temperature.	Bays throughout the CBBEP area	WSQ, FR, CC
System-Wide Monitoring Program (MANERR)	The System Wide Monitoring Program measures water quality parameters (i.e., pH, salinity, temperature, dissolved oxygen, turbidity, and water level), weather conditions (i.e., air temperature, wind direction, wind speed, barometric pressure, and relative humidity), and nutrient concentrations (i.e., nitrate/nitrite, ammonium, phosphate, and silicate). Water quality parameters are sampled in 15-min intervals at six sampling platforms, while weather conditions are sampled in 15-min intervals at one station.	Mesquite, Aransas, and Copano Bays and Aransas Ship Channel	WSQ, NPS, FR, CC
Texas Beach Watch (TGLO)	Texas Beach Watch monitors water for <i>Enterococcus</i> bacteria as a surrogate of harder to detect, disease-causing microorganisms where sewage or storm runoff is present. Water quality advisories are recommended when <i>Enterococcus</i> levels exceed limits established by EPA. During the peak beach season (May-Sept), water samples are collected weekly. During the rest of the year samples are collected every two weeks.	Gulf of Mexico and bay beaches throughout the CBBEP area	PH, WSQ, NPS, CC
Texas Streamflow Program (USGS)	Rivers and creeks are monitored for daily stream flow volume.	Rivers and creeks throughout the CBBEP area	FR, CC
Water Level Stations (NOAA)	In addition to measuring tidal heights, NOAA Water Level stations also record 11 different oceanographic and meteorological parameters. These include wind speed and direction, water current speed and direction, air and water temperature, and barometric pressure. Measurements are collected every six minutes.	Aransas National Wildlife Refuge, Rockport, Corpus Christi, Packery Channel, Bob Hall Pier, South Bird Island, Baffin Bay, Rincon del San Jose	WSQ, CC
Nueces Bay Salinity Monitoring (CBI)	Multiple sites in the Nueces River, Delta, and Bay are monitored for routine field parameters, salinity, water temperature, dissolved oxygen, and pH at 30-minute intervals.	Nueces River, Nueces Delta, and Nueces Bay	WSQ, FR, CC

TABLE 4 (CONT'D). DESCRIPTIONS OF THE MAJOR ENVIRONMENTAL MONITORING PROGRAMS AND ACTIVITIES WITHIN THE CBBEP PROGRAM AREA.

Program/Activity Name (Lead Agency)	Program/Activity Description	Location	Relevant Action Plans
Seafood and Aquatic Life Group Survey (TDSHS)	The TDSHS tests fish and aquatic life tissues from public waters of Texas to determine contaminant levels and to assess human health risks from consumption of fish or aquatic life. The DSHS informs the public of unsafe contaminant levels in fish and aquatic life by issuing consumption advisories and possession bans (closures).	Rivers, creeks, and bays throughout the CBBEP area	PH, HLR
Baffin Bay Water Quality Monitoring (TAMUCC)	A suite of water quality parameters are sampled by volunteers on a monthly basis and following rain events throughout Baffin Bay. Nutrient addition bioassays are also conducted to determine whether nitrogen or phosphorus is primarily responsible for the excessive algal growth.	Baffin Bay	WSQ, NPS, FR
Estuary Monitoring Program (TWDB, TPWD)	Hydrolab datasondes are deployed at multiple sites throughout Coastal Bend bays to provide high-frequency data (most measurements every 15-60 min) on salinity patterns resulting from changing river flows or meteorological events. Data supports calibration and validation of estuarine hydrodynamic and salinity transport models and is used for development of freshwater inflow-salinity relationships to aid in water resources planning.	Bays throughout CBBEP area	WSQ, FR, CC
Plankton Monitoring Program (TAMU, UTMSI, MANERR)	A FlowCAM is used to analyze water samples collected at MANERR water quality monitoring stations on a monthly basis for the composition of microplankton. Continuous monitoring is performed in the Aransas Ship Channel using the Imaging FloCytobot (IFCB). Both systems are imaging flow cytometers designed to characterize particles in the microplankton size range. The FlowCAM and IFCB conduct routine monitoring of microplankton samples for presence of <i>Karenia brevis</i> and other harmful algal species.	Mesquite, Aransas, and Copano Bays and Aransas Ship Channel	HLR, PH, CC
National Phytoplankton Monitoring Network (NOAA – NCCOS)	The National Phytoplankton Monitoring Network is a community-based network of volunteers monitoring marine phytoplankton and harmful algal blooms. Volunteers collect water samples and use digital microscopy to identify species of phytoplankton. Data is reported to the Marine Biotoxins Program using an on-line database. Samples are collected weekly or biweekly.		HLR, PH, WSQ
Resource Monitoring Program (TPWD)	Fisheries-independent monitoring of finfish and shellfish communities is conducted within the Coastal Bend bays using bag seines, bay trawls, gill nets, and oyster dredges. Data include the number of each species captured, the average total length of each species in every sample, and hydrological data, such as water temperature and salinity while sampling.	Gulf of Mexico and bays throughout CBBEP area	HLR, WSQ, FR, CC
Sport-Harvest Monitoring Program (TPWD)	Fisheries surveys and trailer counts are performed at boat ramps in the Coastal Bend. Trailer counts are used to determine the amount of boating pressure at each site, and fisheries surveys are then used to collect data on amount of angler effort, the quantity, size, and species of fish landed that day, and the general area where anglers captured their fish.	Bays throughout CBBEP area	HLR, TR

TABLE 4 (CONT'D). DESCRIPTIONS OF THE MAJOR ENVIRONMENTAL MONITORING PROGRAMS AND ACTIVITIES WITHIN THE CBBEP PROGRAM AREA.

Program/Activity Name (Lead Agency)	Program/Activity Description	Location	Relevant Action Plans
Commercial Harvest Monitoring Program (TPWD)	Commercial fishery landings are monitored annually through a mandatory self-reporting system for licensed seafood and bait dealers. Regularly scheduled intercept surveys of shrimp and finfish dealers are also conducted to augment commercial landing information.	Bays throughout CBBEP area	HLR, PH, CC
Coastal-Change Analysis Program (NOAA)	The NOAA Coastal-Change Analysis Program produces a nationally standardized inventory of U.S. coastal intertidal areas, wetlands, and adjacent uplands on a rotating five-year collection cycle. Maps of the Coastal Bend region are available for 5-year increments starting in 1996.	Watershed and bays of the CBBEP area	HLR, CC
National Wetlands Inventory (USFWS)	The National Wetlands Inventory was developed by the USFWS to provide geospatially referenced information on the status, extent, characteristics, and functions of wetland, riparian, deepwater, and other related aquatic habitats through a series of topical maps. The most recent NWI maps for most of the Coastal Bend are based on sub-meter, true color digital imagery collected in 2006 and National Agriculture Imagery Program county mosaics from 2004 CIR imagery. Habitats were delineated in a heads-up, on-screen environment at a relative scale of 1:10,000. Wetland and riparian areas were delineated based on vegetation, visible hydrology, and geography in accordance with adopted USFWS classification procedures.	Watershed and bays of CBBEP area	HLR, CC
Texas Seagrass Monitoring Program (UTMSI)	The Texas Seagrass Monitoring Program uses a hierarchical strategy to establish the quantitative relationships between physical and biotic parameters that ultimately control seagrass condition, distribution, and persistence. Tier 1 includes a remote sensing component (typically at 1:24,000 resolution) for status and trends mapping that is regularly updated at about five-year intervals. Tier 2 is a regional rapid assessment program using fixed stations sampled annually from a shallow-draft vessel, along with high resolution photoimagery analysis for deep edge delineation. Tier 3 includes an integrated landscape approach that includes permanent stations and transects that are aligned with high resolution photoimagery to examine the presumptive factors associated with changes in seagrass maximum depth limits and patchiness.	Bays throughout CBBEP area	HLR, WSQ, NPS, TR, CC
Surface Elevation Tables (MANERR, USFWS, CBBEP)	Surface Elevation Table (SET) measurements allow researchers to evaluate elevation change around an in situ benchmark, and if dense temporal measurements are made, the vertical trajectory of the surface can be calculated. SET measurements are taken at fixed locations, typically on an annual basis.	Aransas and Nueces Bay	HLR, CC
Texas Colonial Waterbird Society Surveys (TPWD, USFWS, CBBEP, Audubon Texas, TGLO, TAMU, TNC)	Texas Colonial Waterbird Surveys are performed annually during the last week of May and the first week of June. Data collected includes: number of adults, number of nests, and estimated number of breeding pairs. Surveys began in 1973, but sampling duration varies by monitoring site due to staffing and budget constraints.	Rookeries throughout CBBEP area	HLR, TR, CC

TABLE 4 (CONT'D). DESCRIPTIONS OF THE MAJOR ENVIRONMENTAL MONITORING PROGRAMS AND ACTIVITIES WITHIN THE CBBEP PROGRAM AREA.

Program/Activity Name (Lead Agency)	Program/Activity Description	Location	Relevant Action Plans
Christmas Bird Count (National Audubon Society)	Every year from Dec 14 – Jan 5, volunteers participate in the Christmas Bird Count. Data collected during the Christmas Bird Count includes number of individuals observed by species. There are multiple active Christmas Bird Count sites within the Coastal Bend, but sampling duration at sites varies based on volunteer participation.	Aransas National Wildlife Refuge, Rockport, Welder Wildlife Refuge, Port Aransas, Corpus Christi, Flour Bluff, Kingsville, Kenedy County	HLR, CC
Whooping Crane Census (USFWS)	Distance sampling is used to survey the areas where Whooping Crane territories are known to occur. To ensure each area is surveyed in a uniform and consistent pattern, transects that are 1 km apart are established for each sampling area. Each survey is conducted by a pilot and two observers looking out different sides of the plane. Upon detecting a crane, the observers record the bird's location on a high-resolution satellite image using a touch screen laptop equipped with a wireless GPS. Surveys are conducted at approximately 60 meters altitude and 160 km/hr. Surveys are performed the last two weeks of Nov and the first two weeks of Dec.	Aransas National Wildlife Refuge and surrounding area	HLR
Sea Turtle Patrol (NPS, UTMSI)	Systematic surveys are conducted daily during nesting season (Mar-Jul) on Gulf beaches of North Padre and Mustang Islands. Data collected include date and location of observation, number of eggs, length and width of nesting turtles, and tag numbers of nesting turtles.	Gulf beaches of North Padre and Mustang Islands	HLR
Mussel Watch (NOAA)	Nationwide project that has monitored chemical contaminants in sediments and bivalve mollusks since 1986. Bivalves are collected every other year and sediments every fifth year. Samples are analyzed for PAHs, PCBs, DDT, DDD, DDE, chlorinated pesticides, major elements, and trace elements.	Mesquite, Aransas, Copano, Corpus Christi, and Nueces Bay	HLR, WSQ, CC

Programmatic Monitoring

Ultimately, the success of the Bays Plan will be judged by indications of improved health and abundance of living resources and increased uses and value of the Coastal Bend's natural resources. The environmental monitoring described above is necessary to detect and chronicle these responses. However, because of the natural variability of estuarine systems and the time it may take for expected improvements to be observed, the implementation of management actions must also be tracked to provide early indications of program success. Programmatic monitoring also establishes accountability for organizations assigned to lead particular actions, and it provides managers with information about the status of various programs and the degree to which programs are or are not achieving their intended outcomes. With this type of information, managers can modify the Bays Plan or specific actions as needed to ensure that desired outcomes are being reached (Hunt et al., 2001).

Programmatic monitoring is proposed for each of the 15 action plans identified in *The Bays Plan, 2nd Ed.* The effectiveness of implementation will be determined using the performance metrics outlined for each action (see individual action plans for a list of performance metrics). Quantifiable targets were used whenever possible to increase the CBBEP's ability to track programmatic success. The CBBEP annually documents and assesses progress in implementing projects outlined in its Annual Work Plan, all of which identify the goals, objectives, and actions they strive to achieve. This information is used in combination with environmental condition data to determine programmatic success, and *The Bays Plan, 2nd Ed.* recommends that these program assessments be continued.

CHAPTER

16

Finance Strategy



CONTENTS

Ongoing Support
Enhanced Funding Strategy

The Bays Plan, 2nd Ed. provides a framework for investing in the health of the Coastal Bend bays and estuaries and their watersheds. These investments can produce real value through improved environmental quality and enhancements in the region’s economy and quality of life. Wise investment in the Coastal bend bays and estuaries and its watersheds will ultimately provide more resilient and sustainable returns in property values, water quality, storm protection, recreation and tourism, and other goods and services. Therefore, the CBBEP and the *The Bays Plan, 2nd Ed.* should be considered an asset with real value that is worth investing in.

Ongoing Support

There are two types of costs associated with implementation of the *The Bays Plan, 2nd Ed.* The first cost is associated with maintaining the CBBEP staff as described in Chapter 4. The second type of cost is the expense to implement the action items identified in *The Bays Plan, 2nd Ed.*. Anticipated costs have been allocated to each action item included in the Plan. These estimated costs are meant to be “ballpark” estimates and are not intended to represent final budgetary allocations. Such final adjustments of cost will necessarily be done during the implementation of an action, when more detailed information about existing level of efforts, available funds,

and other design criteria can be more accurately assessed. The accuracy of the anticipated cost estimates contained in the implementation strategies are limited by the quality of current information, and in many cases, the cost is based solely on “best professional judgment.” Regardless, the estimates provide some idea of the level of effort implied in the Action Plan.

The investments needed to support the CBBEP’s estuarine research, protection, and restoration efforts do not come from a single program or government agency (Table 5). Funding is needed across jurisdictions, including federal, state, and local governments in partnership with the private sector, including individuals, corporations, and foundations. Historically, the CBBEP has attracted funding and support through strategic partnerships with numerous organizations, and CBBEP has repeatedly shown its ability to leverage the support provided by partners to implement high-value projects and programs. Maintaining and expanding these strategic partnerships will be critical to the ability of CBBEP to provide sustained support for the current budget and for additional growth over the next 5-10 years.

Federal, state, and local government grants have historically constituted the majority of funding for the CBBEP. As part of the National Estuary Program, the CBBEP

TABLE 5. LIST OF THE CBBEP’S MAJOR FUNDING SOURCES.

FUNDING SOURCES	
GOVERNMENT	
EPA (Clean Water Act 320)	\$602,000 (yearly funding can vary slightly)
TCEQ	\$742,000 (yearly funding can vary slightly)
Local Governments	\$282,500
Federal Grants	\$150,000 (can vary greatly from year to year based on project type and number of grants received)
State Grants	\$150,000 (can vary greatly from year to year based on project type and number of grants received)
FOUNDATIONS	
Large/National	\$2,500,000 (can vary greatly from year to year based on project type and number of grants received)
Regional	\$125,000 (can vary greatly from year to year based on project type and number of grants received)
Family/Community	\$15,000 (can vary greatly from year to year based on project type and number of grants received)
CORPORATIONS	
Corporate Grant	\$100,000 (Can vary greatly from year to year based on project type and grants received)
Donations/Sponsorships	\$110,000
OTHER	
Court Penalties	\$35,000
Easements/ROWs	\$35,000

 A GREAT BLUE HERON glides across the water at the Nueces Delta Preserve. (Photo by Charlie Spiekerman)

receives federal funds from the EPA under Section 320 of the Clean Water Act. While these funds account for only a portion of the government revenue used to support program operation and *Bays Plan* implementation, these federal funds play a very important role in leveraging additional dollars from other governmental organizations. Other government funds come from the TCEQ, local governments (City of Corpus Christi, City of Ingleside, City of Portland, City of Port Aransas, City of Rockport, Nueces County, and San Patricio County), and the Port of Corpus Christi Authority (POCCA).

Funding from EPA and TCEQ has been received annually since 1994 when work began on the development of *The Bays Plan*. Local government and POCCA contributions began in 1999 when *The Bays Plan* was complete, with nine entities currently contributing to the CBBEP each year. These sources have historically been a consistent source of funding. However, these contributions are subject to appropriations, which can change from year to year. The CBBEP has also received support from several corporate sponsors on an annual basis.

The CBBEP applies for a number of grants each year to support specific projects, such as marsh restoration, invasive species management, shorebird research, and education programs. Many of these grant opportunities are also associated with government funding sources, such as the Texas General Land Office – Coastal Management Program and the U.S. Fish and Wildlife Service – Coastal Program. In recent years, however, the CBBEP has increased the amount of grant funding it receives from private foundations.

Enhanced Funding Strategy

Historical support from federal, state, and local sources for the CBBEP has led to the implementation of actions and projects that have resulted in a Texas Coastal Bend with cleaner water and sediment, healthier habitats, greater public access, and a more aware and engaged public. However, many of the priority issues identified 20 years ago still remain and several new issues have arisen. Ongoing investment in the Coastal Bend bays and estuaries and their watersheds is essential to capitalize on yesterday's successes, sustain today's momentum, and lay the groundwork for a healthy future ecosystem. While some of the proposed actions in *The Bays Plan, 2nd Ed.* could be accomplished through ongoing support of existing funding sources, the implementation of a broader suite of actions will require the CBBEP to leverage both funding and partnerships.

The funding categories that provide the greatest potential for additional investment in the CBBEP include foundations, corporations, and major gifts from individuals. In recent years, the CBBEP has received contributions from several local, regional, and national foundations, but these funds still only represent a small percentage of the overall annual revenue. Major gifts from individual donors have not historically been a significant source of funds for the CBBEP and present an area for great potential growth. Corporate donations also present an opportunity for potential revenue growth - CBBEP has historically received support from several corporate sponsors on an annual basis, but the number of contributors and the amount contributed has remained relatively constant over the last several years.

As the CBBEP continues to evolve, it is critical for the organization to increase the diversity of its funding sources in order to support the current budget and account for additional growth over the next 5-10 years. The CBBEP must build its capacity to address the areas of greatest potential fundraising growth described above. The continued growth of CBBEP will depend on having the people with the necessary skills, connections, and demographics and implementing the proper cultivation strategies. This will require the active involvement and development of the CBBEP staff, members of the Board of Directors, existing partners, and volunteers. Below is a list of potential funding sources being considered as potential options for CBBEP's future fund development strategies.

Government Grants and Contracts

Government grants and contracts are currently a large source of funding for the CBBEP, and they will continue to be important moving forward. The CBBEP will continue to work with EPA and TCEQ to ensure that funding for base operations continues. Grant proposals for specific projects/programs will also continue to be an important strategy moving forward and proposals will be directed both at the programmatic activities that are core to the mission of the organization, as well as organizational development activities that ensure growth and capacity-building of the CBBEP (Table 6).

Foundations

Foundations provide the CBBEP an opportunity to seek support for specific projects/programs and, when possible, general operations support. In recent years, the CBBEP has received contributions from several local, regional, and national foundations, but these funds still only represent a small percentage of the overall annual funding.

Opportunities exist to identify additional foundations whose funding priorities align with the mission and vision of the CBBEP (Table 6).

Corporations

Corporate donations and grants also present an opportunity for future funding growth. The CBBEP has historically received support from several corporate sponsors annually, but the number of contributors and the amount contributed has remained relatively constant over the last several years. Increased economic growth in the Coastal Bend provides an opportunity to identify additional corporate partners that would be willing to invest in the CBBEP. It also presents an opportunity to visit with existing partners about increasing their current level of support.

Major Individual Donors

Major gifts from individual donors have not been a significant source of funds for the CBBEP and present an area for great potential growth. A personalized process of cultivation, solicitation, and recognition will need to be developed in order to build this revenue category.

As a part of the individual donor program, there needs to be a focus on identifying opportunities for CBBEP to acquire donor-advised funds, which represent the fastest

growing technique in personal philanthropy. The CBBEP must carefully cultivate relationships with donors who make their gifts via donor-advised funds. CBBEP should also explore the possibility of forming collaborative programs and alliances with other entities with a similar mission, so as to present a more appealing option for donor-advised funding.

The CBBEP must also work to put the proper systems and procedures in place to allow for planned gifts from individuals. A planned gift is any major gift, made in lifetime or at death as part of a donor’s overall financial and/or estate planning. Whether a donor uses cash, appreciated securities/stock, real estate, partnership interests, personal property, life insurance, a retirement plan, etc., the benefits of funding a planned gift can make this type of charitable giving very attractive to both donors and non-profits. Establishing a planned giving program will provide significant revenue opportunities to the CBBEP as it develops relationships with donors and supporters. Estate gifts will come to the CBBEP when donors have confidence that their estate contribution will provide long-term conservation benefits to the community. That confidence will come through years of relationship building that will be important components of the major donor programs.

TABLE 6. LIST OF POTENTIAL GRANT OPPORTUNITIES TO WHICH THE CBBEP AND ITS PARTNERS COULD APPLY TO IMPLEMENT BAYS PLAN ACTIONS.

FUNDING SOURCES
FEDERAL
EPA: Smart Growth Grants, Urban Water Small Grants, Environmental Education Local Grants Program, and other EPA grants
NFWF: Gulf Environmental Benefit Fund, Pulling Together Initiative, Conservation Partners Program, and other NFWF grants
RESTORE Act: Direct Component, Comprehensive Plan Component, Spill Component, NOAA RESOTRE Act Science Program
NOAA: Coastal and Marine Habitat Restoration Grants, Bay Watershed and Training (B-WET) Grants, NERRS Science Collaborative, and other NOAA grants
NRCS: Conservation Stewardship Program, Environmental Quality Incentives Program, Agricultural Conservation Easement Program
STATE
TCEQ: Section 604B Funds, Section 319 Funds
TGLO: Coastal Management Program, Coastal Erosion Planning & Response Act Program, Coastal Impact Assistance Program
TPWD: Landowner Incentive Program, Section 6 Grants, Recreation Grants, and other TPWD grants
FOUNDATIONS
Large/National: National Fish and Wildlife Foundation, Disney Conservation Fund, and other national/large foundations
Local/Regional: Ed Rachal Foundation, Trull Foundation, Robert J. Kleberg, Jr. and Helen C. Kleberg Foundation, Alice Kleberg Reynolds Foundation, Meadows Foundation, Earl C. Sams Foundation, Shield-Ayres Foundation, Dixon Water Foundation, Coastal Bend Community Foundation, Harvey Weil Grant, Cynthia and George Mitchell Foundation, and other local/regional foundations
Corporate: AEP Foundation, BBVA Compass Foundation, Enbridge Community Investment Program, Wells Fargo, Frost Bank