

REGIONAL MONITORING PLAN

The lower Galveston Bay Watershed is highly monitored with a network of more than 300 water quality stations actively maintained by partners in the Clean Rivers Program. Many additional environmental and socioeconomic indicators are monitored by GBEP federal and state partners. With so many data sources, it is important to use a unified approach to determine the efficacy of regional monitoring.

THE REGIONAL MONITORING PLAN RECOMMENDS BRINGING TOGETHER THE VARIOUS MONITORING DATA SOURCES TO HELP THE GBEP TRACK HOW EFFECTIVELY THE CCMP IMPLEMENTATION IS BEING MANAGED BY ANSWERING TWO QUESTIONS.

1

ARE THE GOALS AND OBJECTIVES SET FORTH IN THE GALVESTON BAY PLAN BEING MET?

2

IS THE HEALTH OF THE ECOSYSTEM IMPROVING?

FINANCE PLAN

The GBEP recognizes that successful implementation of the Actions identified in *GBP’18* are subject to potential changes in national funding levels, environmental and weather-related factors, the national economic climate, and other variables beyond its control.

The GBEP also recognizes that changes to the Objectives, Priority Issues, and Activities can be influenced by revisions to national U.S. Environmental Protection Agency guidance. Subsequently, the GBEP, in coordination with the Galveston Bay Council and its subcommittees, may

choose to re-evaluate and update Work Plans generated through *GBP’18* to adjust for such changing factors. This adaptive management approach enables the GBEP to make appropriate modifications.

The GBEP continues to seek funds to implement the Actions recommended by *GBP’18* from a variety of sources to avoid creating a disproportionate financial burden on any group and to aid partners pursuing additional funds for implementation of Actions wherever possible.

Go to **gbep.texas.gov** to download *GBP’18*.

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THE GALVESTON BAY PLAN, 2ND EDITION EXECUTIVE SUMMARY

A SUMMARY OF THE COMPREHENSIVE CONSERVATION AND MANAGEMENT PLAN FOR THE GALVESTON BAY ECOSYSTEM

DECEMBER 2, 2019

The Galveston Bay Estuary Program (GBEP) is one of 28 National Estuary Programs designated by the U.S. Environmental Protection Agency under Section 320 of the Clean Water Act to protect and restore the nation’s estuaries. Estuary Programs not only provide grant funding to beneficial projects, they also build diverse and vital partnerships among organizations concerned with the health of the bay.

Each of the 28 National Estuary Programs are charged with developing and implementing a comprehensive conservation and management plan (CCMP) that serves as a blueprint to guide future decisions and addresses a wide range of environmental protection issues. It is a long-term plan that contains actions to address water quality and living resource challenges and priorities. The CCMP for the Galveston Bay estuary defines stakeholder-identified priority issues facing the health of the bay and watershed, presenting Action Plans to effectively address those issues.

The CCMP was first published in 1995 and is known as *The Galveston Bay Plan (GBP’95)*. It was approved by

the Governor of Texas and the Administrator of the U.S. Environmental Protection Agency.

In 2009, the Galveston Bay Council – the 41-member advisory committee to the Texas Commission on Environmental Quality for the GBEP – published *Charting the Course to 2015: Galveston Bay Strategic Action Plan*. It consolidated the 17 Priority Issues identified in *GBP’95* and new or emerging issues into three priority Focus Areas in a shorter, easier-to-read format. The Actions identified in *GBP’95* and the *Strategic Action Plan* led the GBEP and its partners for over two decades of significant conservation, restoration, and education work to protect the Galveston Bay estuary.

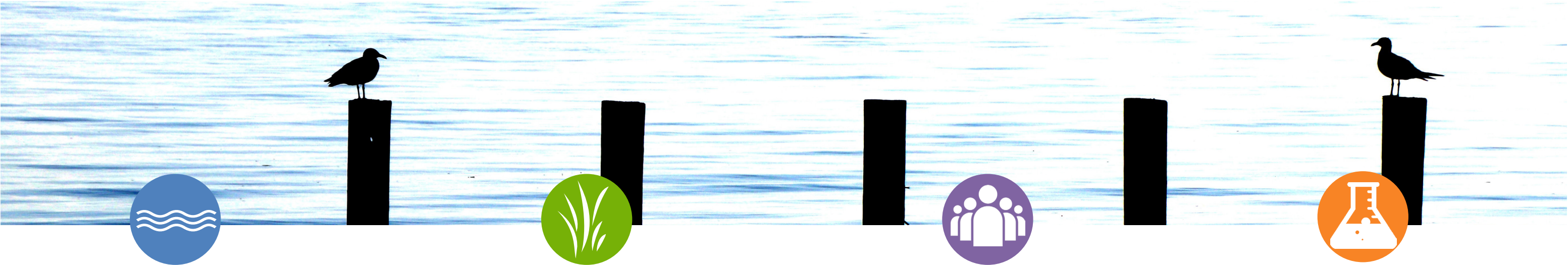
A revision to the CCMP, known as *GBP’18*, is now appropriate to continue protection and conservation of the estuary. Efforts focus on identifying new issues facing Galveston Bay that were not addressed by *GBP’95* or previous updates, and present them in an easily accessible format.

GBP'18 STRUCTURE

The technical heart of *GBP’18* is its Action Plans, nested within four technical components of the document, called Plan Priorities. The four Plan Priorities relate to the four subcommittees to the Galveston Bay Council.

Within each Action Plan are Actions. Actions are assigned a number that references the Action Plan under which it is housed. Each of the 38 Actions includes a short discussion, followed by a list of Activities, Timeframe and Outputs, Implementation Cost Estimates, Potential Implementers, Performance Measures, and References to previous plans. Due to the dynamic nature of Galveston Bay, some Actions in *GBP’18* are relevant to multiple Plan Priorities and Action Plans. Plan Priorities, Action Plans, and Actions are presented in *GBP’18* with numerical and alphabetical labels for organization and communication purposes but are not placed in any specific order based on their relative importance or priority.

A snapshot of the four Plan Priorities, ten Action Plans, and 38 Actions that comprise *GBP’18* can be found below (photo courtesy of Gene Fisseler).



ENSURE SAFE HUMAN AND AQUATIC LIFE USE

Galveston Bay is an economic driver for the Houston-Galveston region with frequent and varied use by residents, tourists, and commercial and trade interests. For people who live, work, and play in and around Galveston Bay it is beneficial to take an active role in protecting it. *GBP’18* outlines the steps to be taken to ensure Galveston Bay is kept safe for human and aquatic life use. To ensure safe human and aquatic life use of Galveston Bay, three Action Plans and 12 Actions are identified.

NONPOINT SOURCE POLLUTION ABATEMENT

- NPS-1 Support Watershed-based Plan Development and Implementation
- NPS-2 Support Nonpoint Source Education and Outreach Campaigns
- NPS-3 Implement Nonpoint Source Best Management Practices
- NPS-4 Host Nonpoint Source Workshops

POINT SOURCE POLLUTION ABATEMENT

- PS-1 Support Stormwater Education Programs
- PS-2 Achieve Sanitary Sewer System Capacity and Integrity
- PS-3 Increase Wastewater Treatment Facility Compliance

PUBLIC HEALTH AND AWARENESS

- PHA-1 Improve Seafood Advisory Awareness
- PHA-2 Improve Regional Contact Recreation Risk Awareness
- PHA-3 Improve Contact Recreation Safety Through Watershed-based Plans
- PHA-4 Improve Shellfish Consumption Safety Through Watershed-based Plans
- PHA-5 Improve Finfish Consumption Safety Through Watershed-based Plans

PROTECT AND SUSTAIN LIVING RESOURCES

The lower Galveston Bay watershed is composed of habitats that range from open water areas and estuarine wetlands to freshwater wetlands and upland coastal prairie. These habitats support plant, fish, and wildlife species that ensure the health and biological diversity of the estuarine system. *GBP’18* continues the ecosystem approach to living resource protection identified in *GBP’95* to ensure the existence of an optimal variety and distribution of coastal habitats. To protect and sustain the living resources of Galveston Bay, three Action Plans and eight Actions are identified.

HABITAT CONSERVATION

- HC-1 Land Acquisition
- HC-2 Habitat Restoration
- HC-3 Habitat Enhancement

SPECIES CONSERVATION

- SC-1 Native Species Management
- SC-2 Invasive Species Control

FRESHWATER INFLOWS

- FWI-1 Regional Planning for Freshwater Inflows
- FWI-2 Freshwater Inflows Research and Management
- FWI-3 Water Conservation and Education

ENGAGE COMMUNITIES

Nearly 5.4 million people call the five counties that surround Galveston Bay home, with millions more visiting the region each year (U.S. Census Bureau, Population Division, 2016). Residents and visitors affect the health of Galveston Bay through their daily actions, which makes engaging the people of Galveston Bay critical to its long-term successful management, and the sustainability of the bay and its resources. *GBP’18* continues and builds upon the comprehensive public participation and education work identified in *GBP’95*, with a renewed focus on connectivity, personal responsibility, and increasing environmental literacy. To fully engage the people who live, work, and play in Galveston Bay, two Action Plans and seven Actions are identified.

STAKEHOLDER AND PARTNER OUTREACH

- SPO-1 Stewardship Programs and Volunteer Opportunities
- SPO-2 Workshops and Events
- SPO-3 Support Regional Initiatives
- SPO-4 Local Government Outreach

PUBLIC EDUCATION AND AWARENESS

- PEA-1 Key Issue Engagement
- PEA-2 Adult Education
- PEA-3 Kindergarten to 12th Grade Education Efforts

INFORM SCIENCE-BASED DECISION MAKING

The health of the Galveston Bay estuary is dynamic, due to both human interactions and natural processes. These changes can affect the people, habitats, and species of Galveston Bay, making monitoring and research essential for the GBEP and its partners to manage, protect, and sustain Galveston Bay. *GBP’18* continues the approach identified in *GBP’95* with monitoring and research activities that focus on applied research and coordination to identify knowledge gaps and research needs and collection of data to address emerging issues, such as endocrine disrupters and personal care product contaminants. To ensure data used by the GBEP and its partners are accurate, defensible, and accessible, two Action Plans and 11 Actions are identified.

APPLIED RESEARCH AND MONITORING

- RES-1 Conduct Biological Stressor Monitoring and Research
- RES-2 Conduct Geochemical Stressor Monitoring and Research
- RES-3 Conduct Physical Stressor Monitoring and Research
- RES-4 Conduct Monitoring and Research to Address Limits to Contact Recreation
- RES-5 Conduct Monitoring and Research to Address Limits to Seafood Consumption
- RES-6 Evaluate Best Management Practice Projects
- RES-7 Conduct Research on Ecosystem Service and Economic Valuation of Bay Resources
- RES-8 Complete Coastal Resiliency and Acclimation Studies

ACCESS TO ECOSYSTEM INFORMATION

- ACS-1 Tracking Ecosystem Health Indicators
- ACS-2 Access to Monitoring and Research Data
- ACS-3 Track Galveston Bay Plan Implementation