

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Commissioners **Date:** January 12, 2010

Thru: LaDonna Castañuela
Chief Clerk

From:  L'Oreal W. Stepney, P.E., Deputy Director
Office of Water

Subject: Overview of Galveston Bay Estuary Program

At the January 22, 2010 Commissioners' Work Session, an overview of the Galveston Bay Estuary Program (GBEP) will be presented. The presentation will cover the following:

Discussion of the history of the program and its main activities;

Habitat Conservation and the GBEP's role in restoring and protecting habitat, including success stories for the North Deer Island Project and the West Bay Partnership;

Environmental Flows and the involvement of the GBEP Program;

The State of the Bay Symposia and State of the Bay report and their importance to the program; and

Building stewardship in the Galveston Bay area.

The presentation will incorporate the attached slides.

COMMISSIONERS' JANUARY 22, 2010 WORK SESSION
OFFICE OF WATER,
GALVESTON BAY ESTUARY PROGRAM

Overview

The Galveston Bay Estuary Program (GBEP) is a non-regulatory program in TCEQ's Water Quality Planning Division, Office of Water. The program coordinates the conservation and restoration of Galveston Bay, the largest and most productive estuary in the state, with some of the most productive fishing and shellfish-harvesting and diverse bird populations in the country.

The geographic area covered by the program includes the five counties surrounding the bay--Harris, Galveston, Brazoria, Liberty and Chambers counties (See Figure 1). However, implementation efforts extend as far north as Dallas when addressing freshwater inflow needs of the bay.

The GBEP program assists with the implementation of the Galveston Bay Plan by working with the Galveston Bay Council (The Council). The Council is composed of representatives of local governments, businesses, ports, commercial fisheries, recreational anglers, environmental organizations, citizens, and state and federal natural-resource.

The Estuary Program's current priorities are: protecting, creating, and restoring coastal habitat; building public stewardship; conducting watershed-based initiatives and outreach to improve and protect water-quality; monitoring and assessing the safety of consuming Galveston Bay seafood; and supporting state and regional efforts to develop management strategies for freshwater needs.

Freshwater Inflows

Freshwater inflows are an important element of the Bay's ecological system. The Texas Legislature--under Senate Bill 3--created the Environmental Flows Advisory Group which is reviewing the environmental flow needs for the major Texas rivers and bays.

Habitat Conservation

Coastal habitats provide a wealth of ecologically and economically important services. Since 2000, the estuary program partnership has restored, protected, and preserved 15,745 acres of critical habitats throughout the bay system. Many of these efforts were concentrated in West Bay, a sub bay of the Galveston Bay system. The award-winning North Deer Island Shoreline Protection project and the West Bay Partnership Conservation Initiative are two examples of these efforts.

North Deer Island

The Estuary Program collaborated with several private and public partners to complete a nine-year effort to protect 144 acres of wetlands and water bird nesting habitat at North Deer Island in West Galveston Bay. North Deer Island is the most productive bird rookery island on the upper Texas coast; it hosts up to 30,000 nesting pairs of colonial water birds including two threatened species and the once-endangered brown pelican.

West Bay Partnership Conservation Initiative

West Bay lost over 14,000 acres of tidal wetlands over the last half century, and nearly all of its seagrass, but partners have succeeded in protecting and restoring 5,800 acres of wetlands and important coastal habitats in the area, including an estimated 300 acres of seagrasses since 2000. Several of these partnerships efforts have been nationally recognized, including restoration at Galveston Island State Park, Jumbile Cove, and Delehide Cove.

State of the Bay

The Estuary Program creates the State of the Bay report every five to seven years using the data from stakeholders, including that shared at the State of the Bay Symposiums, and data management systems.

Building Stewardship

The Galveston Bay Plan identifies public participation and education as critical elements for the long-term, successful management of Galveston Bay. In 2005, Galveston Bay stakeholders, including Council members, industry professionals, resource managers, local government officials, and citizens identified the need for increased public awareness for Galveston Bay. As a result, the Estuary Program and its partners are seeking to create campaigns that unify bay communities and garner support for region-wide action that sustains all uses. The Estuary Program is currently developing the Galveston Bay campaign to increase awareness and foster stewardship of the bay.

National Awards

The Galveston Bay Estuary Program has received twelve national awards for its partnerships and progress in implementing The Plan and preserving the bay:

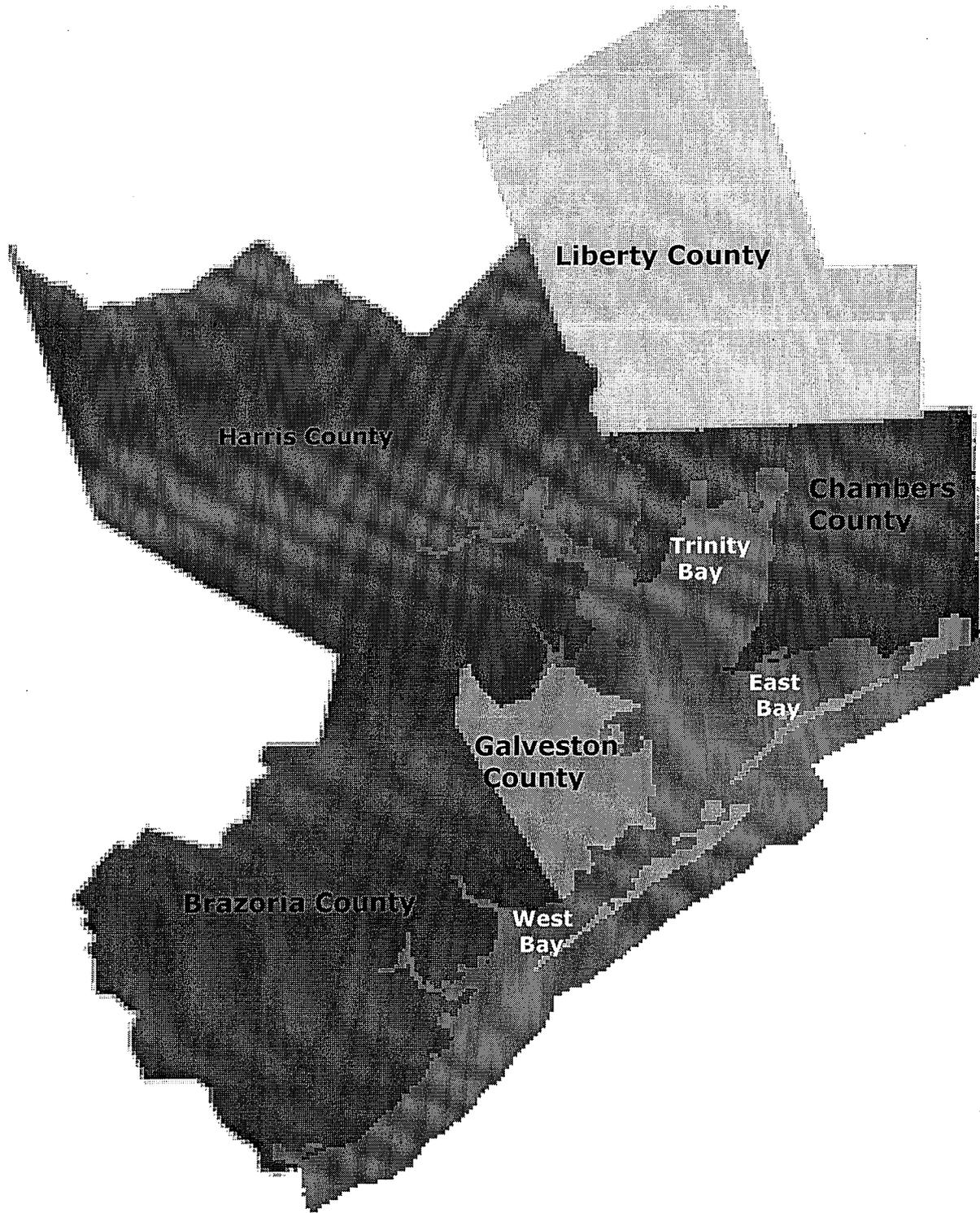
Pre-Fiscal Year 2009 AWARDS

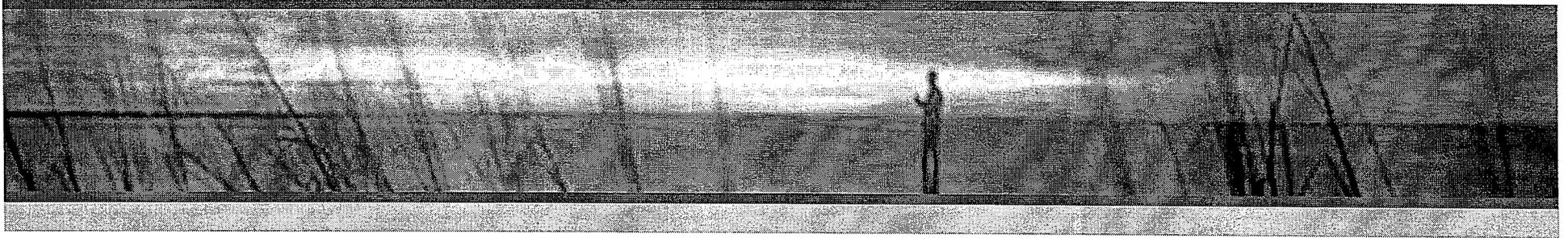
- Four Coastal America awards (Clear Creek Habitat Restoration, using beneficial uses of dredge material in 1999, Galveston Island State Park Habitat Restoration in 2002, Habitat Restoration at Jumbile Cove in 2003, and San Jacinto State Park Habitat Restoration in 2005)
- One from NASA in 2001 for bay preservation
- National Wetland Conservation Award for Delehide Cove Protection and Restoration from the U.S. Fish and Wildlife Service in 2006
- EPA Gulf of Mexico Program Gulf Guardian Partnership Award for the Brays Bayou Urban Wetlands Water Quality project in 2006
- The Fisheries and Habitat Conservation Partnership award for the cumulative habitat conservation work on the part of the NRU Subcommittee in 2006
- EPA Gulf of Mexico Program awarded First Place Gulf Guardian Award in the Partnership category for the East Bay Shoreline Protection Project in 2007
- The Department of Interior's Cooperative Collaborative Conservation award for the East Bay Shoreline Protection Project in 2008

FY 2009 AWARDS

- EPA's Gulf of Mexico Program Gulf Guardian Partnership Award for North Deer Island
- Coastal America Partnership Award for North Deer Island

FIGURE 1. MAP OF GALVESTON BAY ESTUARY PROGRAM GEOGRAPHIC AREA





Galveston Bay Estuary Program

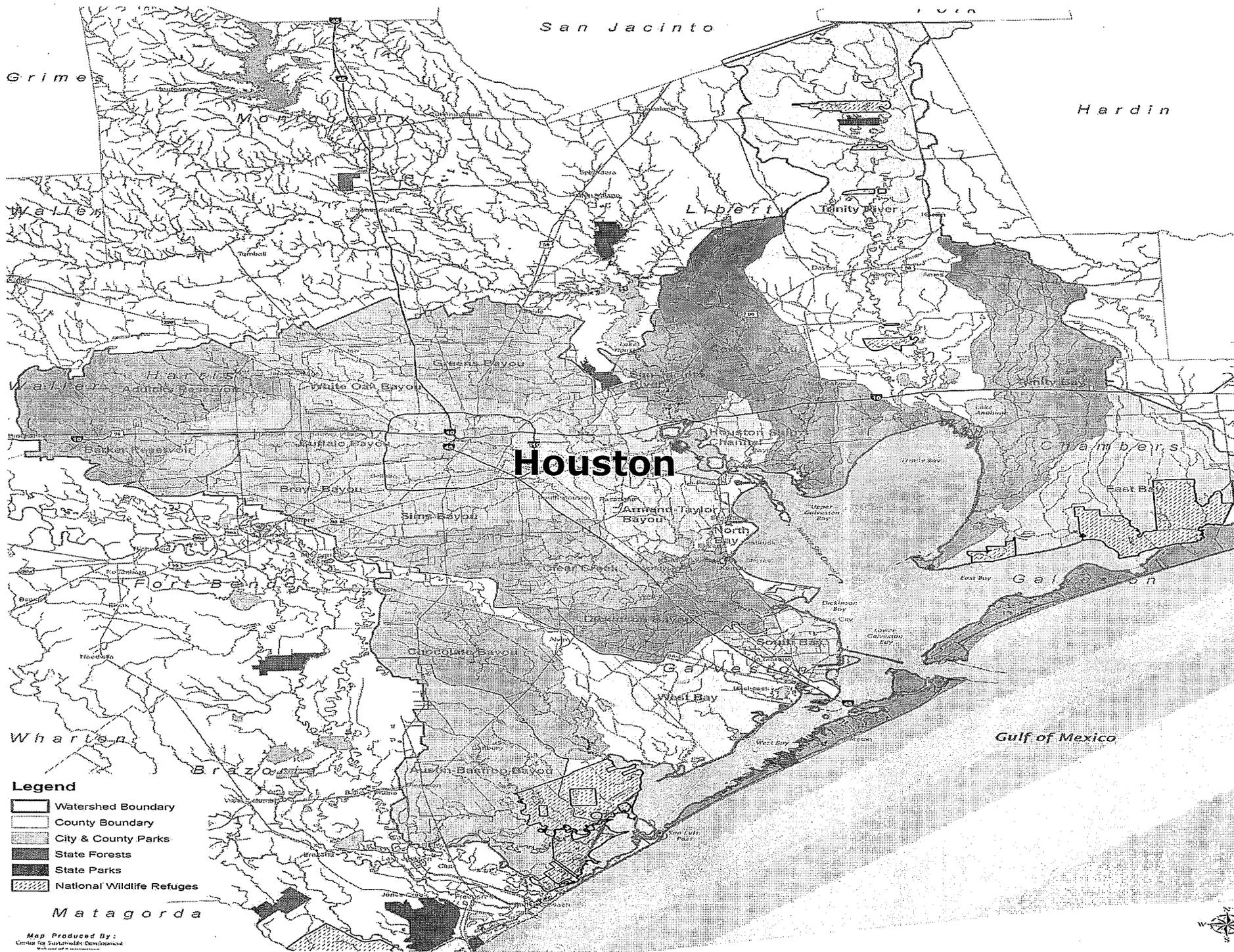
TCEQ Commissioners' Work Session

January 22, 2010

by

L'Oreal W. Stepney, P.E.,

Deputy Director, Office of Water

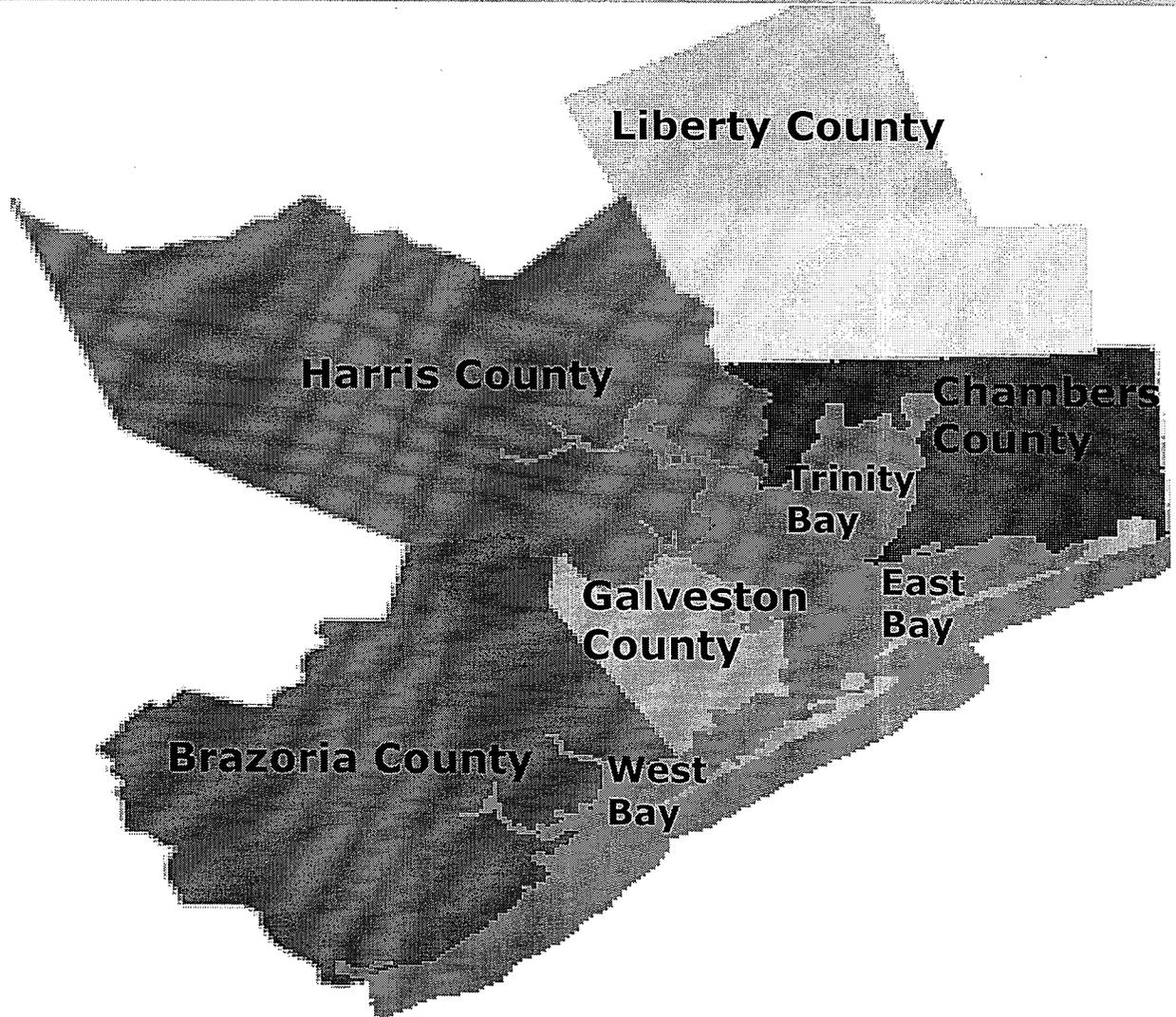
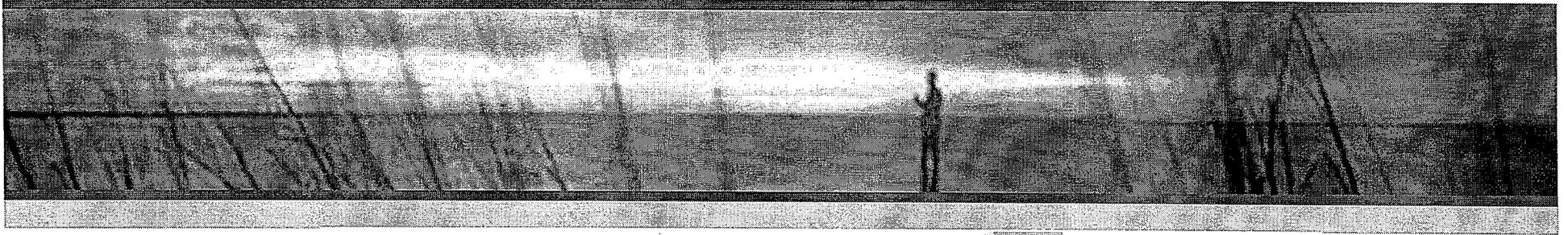


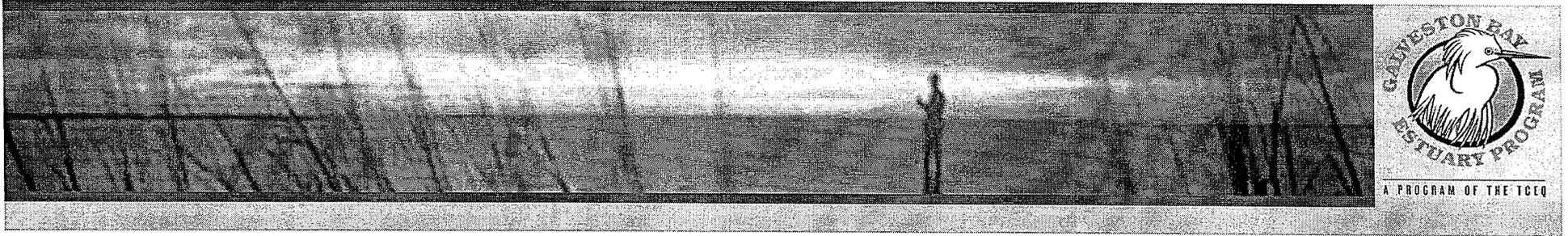
Houston

- Legend**
-  Watershed Boundary
 -  County Boundary
 -  City & County Parks
 -  State Forests
 -  State Parks
 -  National Wildlife Refuges

Map Produced By:
 Circle 60 Environmental Consultants
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 Houston, Texas 77042



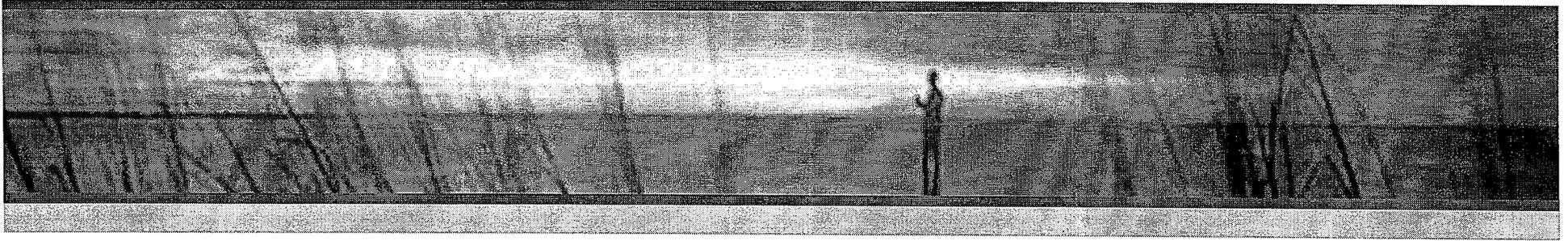




Presentation at a Glance

- Overview of the Estuary Program
- Habitat Conservation
- State of the Bay
- Building Stewardship

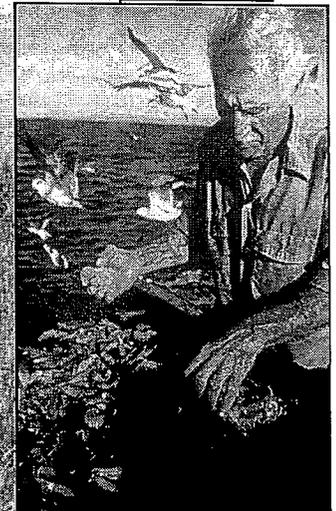


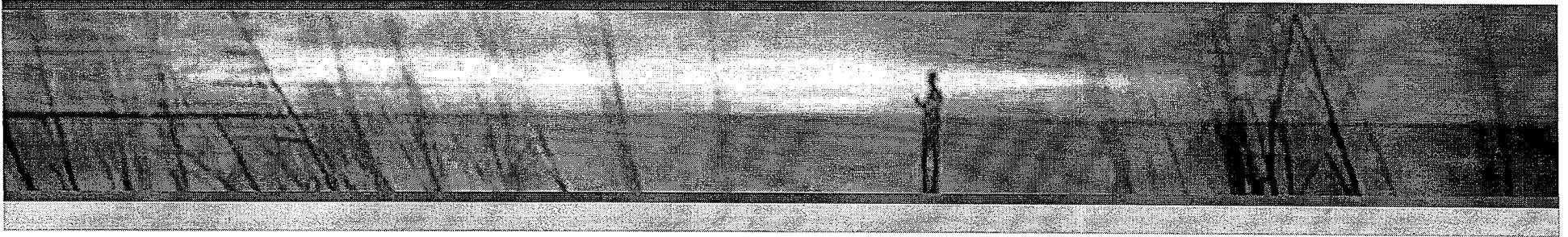


Galveston Bay Estuary

Overview

- Estuary of National Significance
- Conserve the estuary's health while balancing diverse human uses

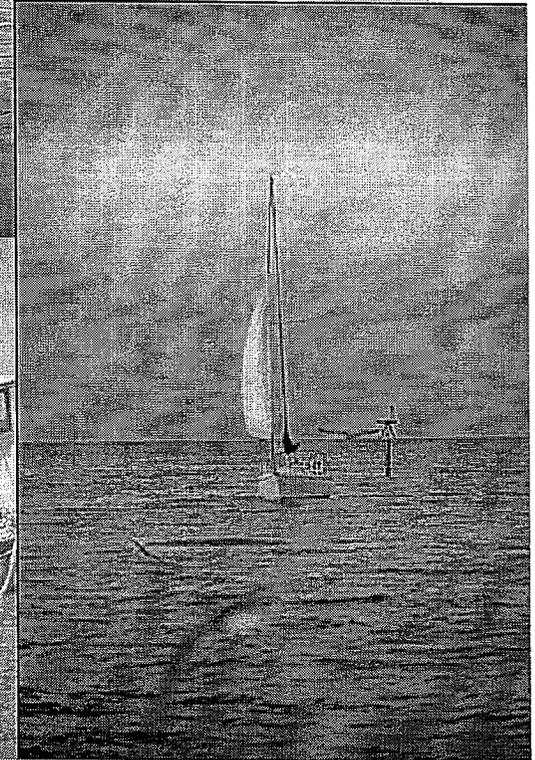
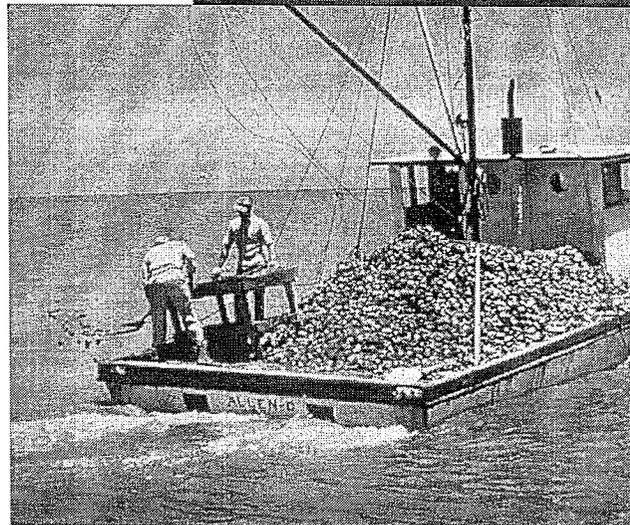
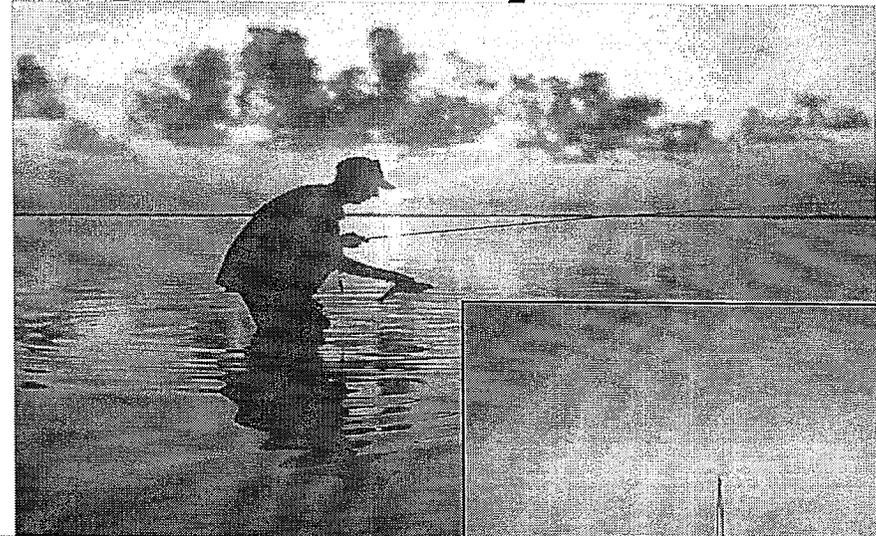


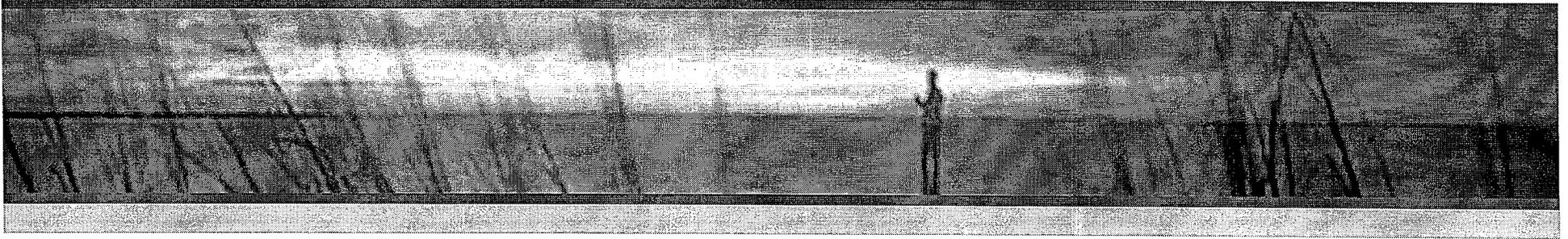


Galveston Bay Estuary

Overview

- Cornerstone for region's economy
- Recreational and commercial fishing valued at \$3 billion

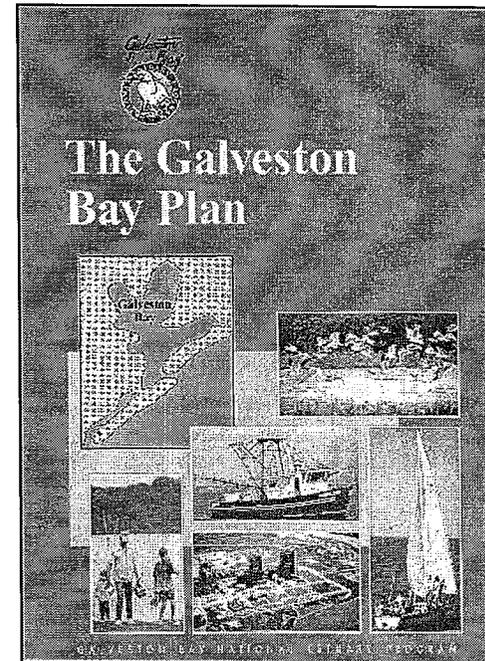


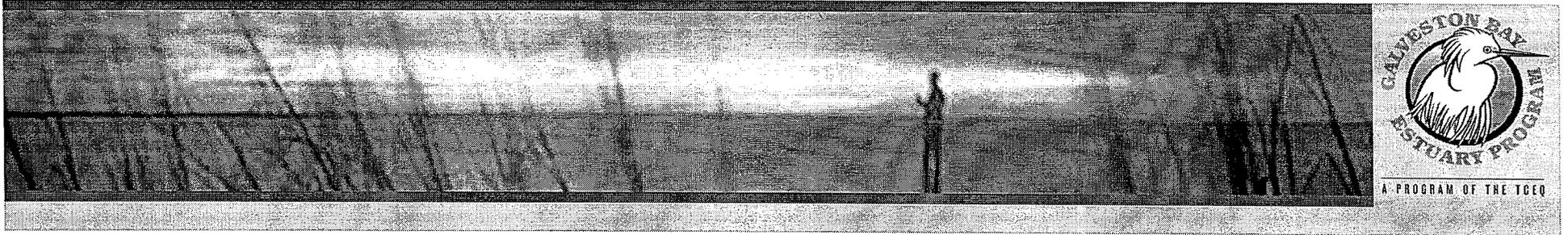


Galveston Bay Estuary Program

Overview

- Stakeholder-led, consensus-based
- The Galveston Bay Plan approved in 1995
- Program focus area- 5 counties surrounding the bay

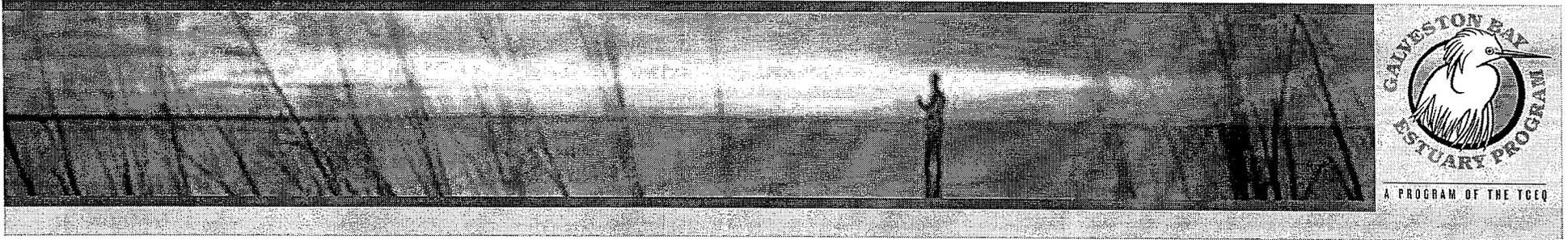




Galveston Bay Estuary Program

Overview

- Program staff coordinate implementation
- Galveston Bay Council, 41-member advisory committee, provide forum for coordination
- Four issue-specific subcommittees foster day-to-day execution of coordination



Galveston Bay Estuary Program

Overview

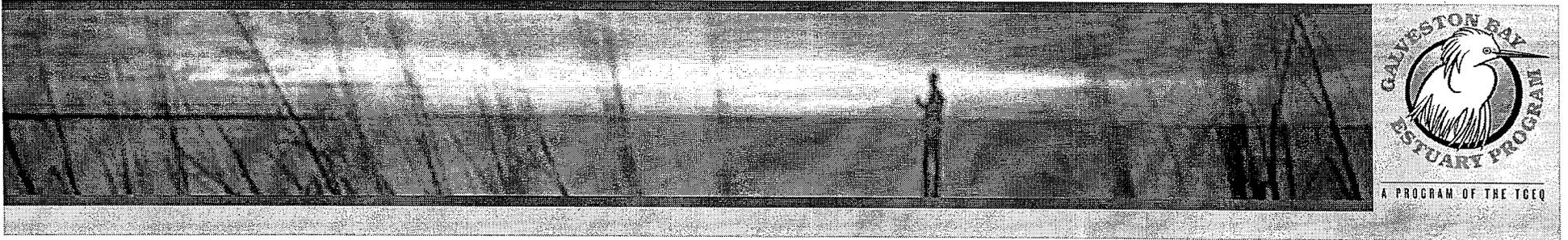
The Program's main activities address:

- Habitat Protection
- Water quality impairments or areas of concern
- Balancing bay ecosystem needs for freshwater



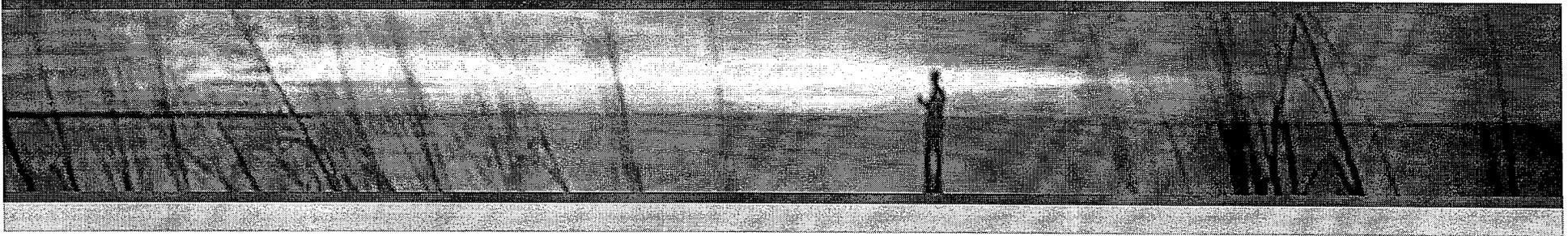
Senate Bill 3: Environmental Flows

- Expert Science Team provided recommendations in November
- 6-month comment period has begun
- Galveston Bay Estuary Program Involvement



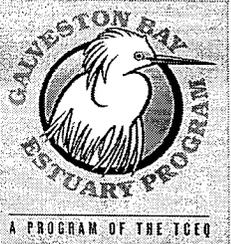
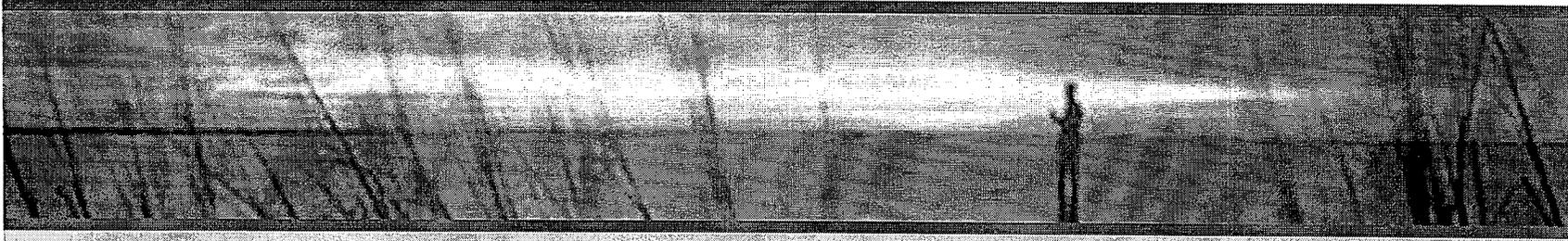
Galveston Bay Estuary Program

- Overview of the Estuary Program
- **Habitat Conservation**
 -  North Deer Island
 -  West Bay Partnership
- State of the Bay
- Building Stewardship



Habitat Conservation

- Protect water quality
- Reduce flood and storm damage
- Reduce shoreline erosion
- Provide habitat for a diversity of fish and wildlife
- Provide recreational opportunities
- Support quality of life in surrounding communities



Habitat Conservation

*The North Deer Island
Shoreline Restoration Project*

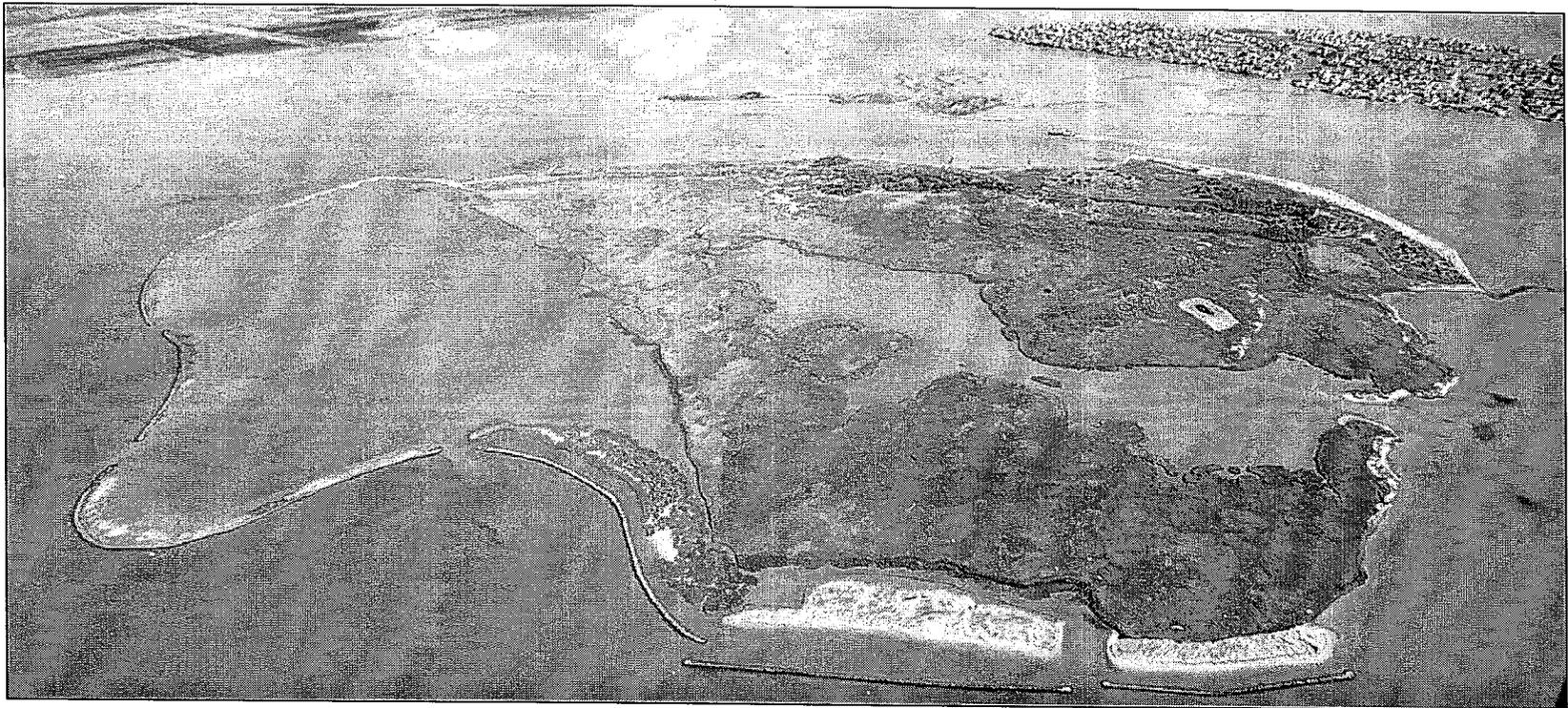
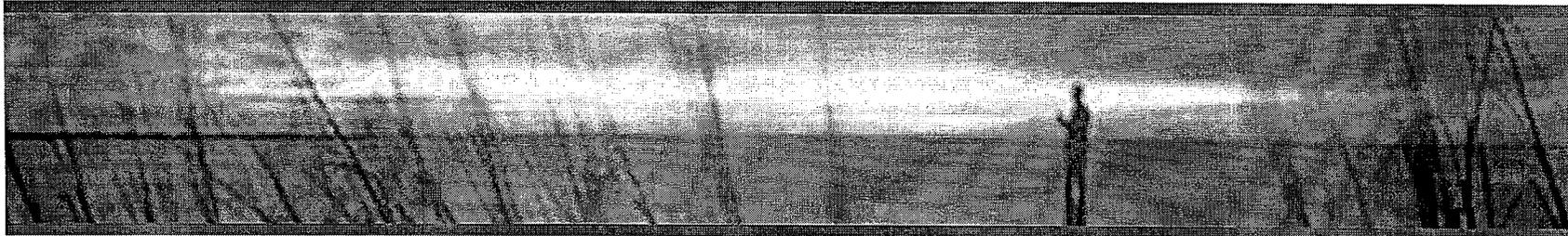
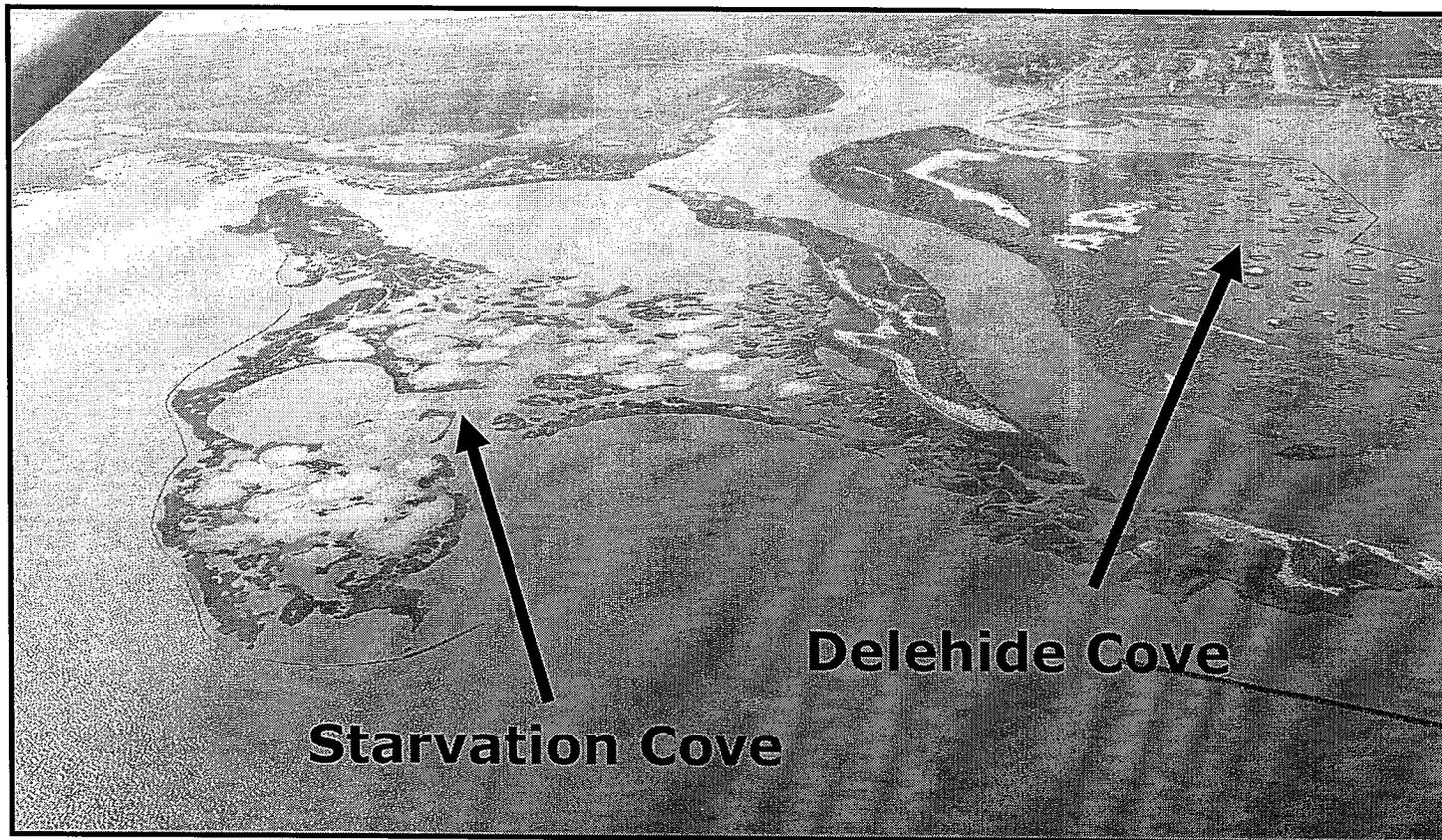


Photo Credit: Jarrett "Woody" Woodrow, USFWS

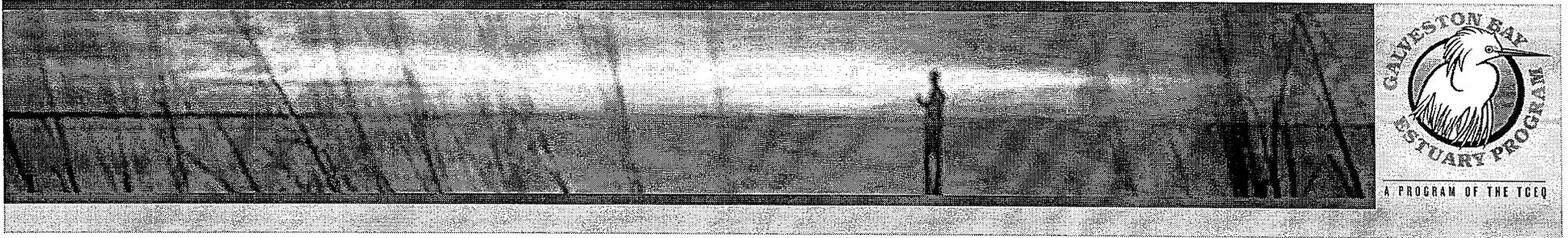


Habitat Conservation

West Bay Partnership



Starvation and Delehide Cove Restoration Projects



Galveston Bay Estuary Program

- Overview of the Estuary Program
- Habitat Conservation
- **State of the Bay**
 -  State of the Bay symposia
 -  State of the Bay report
- Building Stewardship

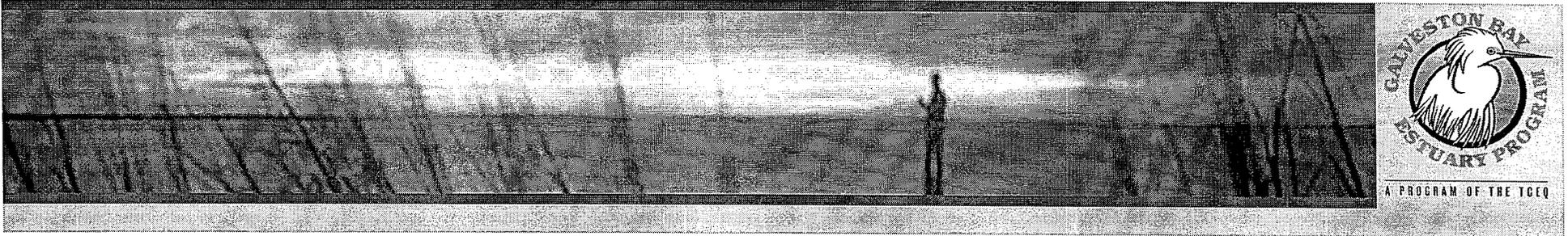


■ **State of the Bay Symposia**

- Provides opportunities to share successes, challenges and new research findings

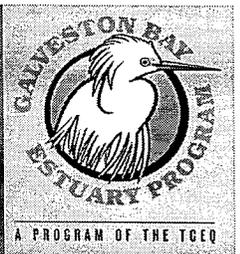
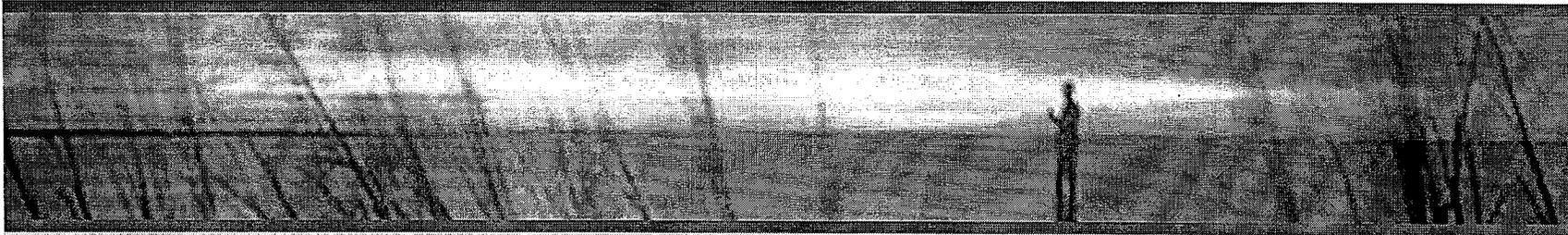
■ **State of the Bay Report**

- Characterization of the Galveston Bay ecosystem
- The draft State of the Bay, 3rd Edition, was recently completed and peer reviewed
- Prepared using the Program's quality assured environmental monitoring database
- Widely used by researchers, teachers, and resource management professionals



Galveston Bay Estuary Program

- Overview of the Estuary Program
- Habitat Conservation
- State of the Bay
- **Building Stewardship**



Building Stewardship

- Galveston Bay Campaign
- Building capacity of local communities

