

# Appendix J. Water Quality Outreach Efforts, by Jurisdiction/Organization

This is a list of many, but not all, of the water-related outreach provided by organizations serving the Armand Bayou area.

## TCEQ

- TCEQ water quality programs, efforts, and activities—  
Lead organization: TCEQ  
([http://www.tceq.state.tx.us/AC/nav/eq/eq\\_water.html](http://www.tceq.state.tx.us/AC/nav/eq/eq_water.html))

## GBEP

- Model Phase II Storm Water Management Program  
Manual containing a model storm water management program for use by entities subject to Phase II of the Storm Water regulations. (<http://www.gbep.state.tx.us>)
- “Estuary Live”  
25 September 2003—Students and educators from around the country log in for live interaction with experts on estuaries, watersheds, and water quality.  
(<http://www.estuarylive.org>)

## GBIC

- Records Collection  
With funding from both TCEQ and TGLO, maintains a collection of documents, maps, and electronic records of activities within Galveston Bay.
- Bibliography  
Most documents in this appendix are held by GBIC, and can be located by using the Galveston Bay Bibliography (<http://gbic.tamug.edu.icx.html>), Materials are available for review in-house and by request for inter-library lending.

## TPWD

- See <http://www.tpwd.state.tx.us/edu/>
- See <http://www.tpwd.state.tx.us/conserves/>
- See <http://www.tpwd.state.tx.us/grants/>
- **Hunter, Boater and Angler Education**  
Hunter education teaches hunting safety, skills and responsibility. The Texas Boater Education Program stresses boating safety and responsibility. Angling instructors provide several levels of angler training.
- **Outdoor Kids**  
Outdoor Kids is a self-paced program encouraging young people to experience firsthand the natural, cultural and recreational resources of Texas under the guidance of an adult leader—for instance, a Scout troop leader, a teacher, or a parent.

- **Project Wild**

Project WILD/Aquatic WILD is “Wildlife in Learning Design” - a Kindergarten - 12th grade environmental and conservation education program emphasizing awareness, appreciation and understanding of wildlife and natural resources.

- **Community Outdoor Outreach Program**

Builds relationships with non-traditional constituencies who have been underrepresented in Texas Parks & Wildlife activities and programs

- **Master Naturalists**

Intensive several-month training educates people about the ecology of the area and then creates a network of volunteers for various ecological restoration projects.  
<http://www.tpwd.state.tx.us/nature/volunteer/txmasnat/>.

- **Texas Nature Trackers**

Texas Nature Trackers, associated with the Texas Master Naturalist Program, is a citizen science monitoring effort designed to involve volunteers of all ages and interest levels in gathering scientific data on species of concern in Texas through experiential learning.

- **Teacher Tool Kit** (<http://www.tpwd.state.tx.us/edu/teacher.phtml>)

- **Wildlife Posters and Fact Sheets** (<http://www.tpwd.state.tx.us/edu/posters.phtml>)

- **Becoming an Outdoors Woman**

Provides an atmosphere where women feel comfortable learning new skills associated with hunting, fishing, and other outdoor activities, in a supportive and non-threatening environment.

- **Wildscapes**

Texas Wildscapes is a habitat restoration plan for rural and urban areas. Texas Wildscapes are small habitats that provide the essential ingredients for a variety of wildlife—food, water, shelter, and space. This is done by planting and maintaining native vegetation, installing birdbaths and ponds and creating structure. (<http://www.tpwd.state.tx.us/nature/wildscapes/>)

- **Private Lands and Habitat Enhancement**

The goal of the Private Lands and Habitat Program is to provide expertise to land managers in the preservation and development of wildlife habitat and the proper management of the various wildlife populations that utilize

that habitat. ([http://www.tpwd.state.tx.us/conserve/private\\_lands/](http://www.tpwd.state.tx.us/conserve/private_lands/))

- **Landowner Incentive Program**

Incentive programs to assist private landowners in protecting and managing rare species can have a direct and positive impact on their conservation. It is the goal of this program to provide financial incentives that encourage landowners to help conserve rare species. (<http://www.tpwd.state.tx.us/conserve/lip/>)

## HGAC

- **Armand Bayou watershed road signs**

The basic sign design approved, funds were made available and sites for sign placement were chosen.

- **Armand Bayou watershed brochure**

Tri-fold brochure highlighting the basin and its more prominent features and threats. (<http://www.h-gac.com/NR/rdonlyres/e572zaazuvi2mxyfaldfrzrqpq6evscrw5myyjd p5wdku5ry54dk5j6cui5lsxvkwvw2wkmb5blt3yclkzwmwic6ka/ArmBay WS08818.pdf>)

- **Texas Watch**

Volunteers trained to take water quality monitoring data and report it regularly; data compiled and available via online database.

## TCE / TSG

- **Master Naturalists**

Intensive several-month training educates people about the ecology of the area and then creates a network of volunteers for various ecological restoration projects. (<http://www.tpwd.state.tx.us/nature/volunteer/txmasnat/>)

- **Master Gardeners**

Intensive several-month training educates people about the proper planting and care of landscapes and yards. (<http://aggie-horticulture.tamu.edu/mastergd/mg.html>)

- **Galveston Bay Yards and Neighbors Program**

Community based education program educates homeowners on "Bay Friendly" home and lawn care practices which help reduce excess use of potential non-point source pollutants that may end up in Galveston Bay.

## TCWP

- **Armand Bayou Watershed Working Group**

Citizens, businesses, and governmental representatives are all invited to participate in the Working Group and its activities to improve and maintain the health of the Armand Bayou watershed. (<http://www.ArmandBayou.org>)

- **WaterSmart landscaping**

Teaching, demonstrating, and encouraging landscaping plants selected for their water and maintenance requirements. Brochures that explain the benefits—both

environmental and personal—of proper plant selection and maintenance.

(<http://www.urban-nature.org/publications/pdf/WS-organicLawnCare.pdf>)

(<http://www.urban-nature.org/publications/pdf/WS-WatersmartBrochure.pdf>)

## Harris County

- **"Clean Water Clear Choice"**

Houston and Harris County, both Phase I entities, joined forces to create this extensive outreach campaign, through television, radio, and print media logo, canvas bags, folders with pamphlets, magnets, etc. (<http://www.cleanwaterclearchoice.org/>)

- **Collaborative education workshop (pending)**

The groups are working to coordinate awareness and distribution of water quality and stormwater educational materials.

## Deer Park

- **Interactive web site**

Citizens can observe news worthy items and report anomalies for City investigation. (<http://www.ci.deer-park.tx.us/>)

- **Quarterly City newsletter**

Activity opportunities, mailed to each residential address listed in the City Limits for a water meter; also available through City Hall and the Community Center.

- **Phase II Stormwater Program (pending)**

In process of developing Stormwater Management program.

- **Recycling program**

Receptacles and/or regularly scheduled neighborhood collection are provided for residents for the disposal of waste oils, as well as recycling bins for plastic, glass, paper waste, etc.

- **Household hazardous waste collection**

Annual Household Hazardous Waste Day observance provides opportunities to properly dispose of / recycle these products.

- **Used motor oil collection**

City provides neighborhood collection of used motor oil and filters for recycling twice a week.

- **New construction regulation / education**

Building Inspectors require silt fencing at all job sites to help prevent dirt, sand and other debris from entering storm drains.

- **Landscape regulation / education**

Code enforcement officers stop landscapers and yard care people when they see them blowing grass clippings into the curb drains.

## Houston

- **“Clean Water Clear Choice”**  
Houston and Harris County, both Phase I entities, joined forces to create this extensive outreach campaign, through television, radio, and print media logo, canvas bags, folders with pamphlets, magnets, etc. (<http://www.cleanwaterclearchoice.org/>)
- **Collaborative education workshop (pending)**  
The groups are working to coordinate awareness and distribution of water quality and stormwater educational materials.
- **WaterWise landscaping**  
Booklet on water-conserving techniques for the homeowner.

## La Porte

- **Phase II Stormwater Program (pending)**  
In process of developing Storm Water Management program.
- **Recycling program**  
Receptacles are provided for residents for the disposal of waste oils as well as recycling bins for plastic, glass, paper waste, etc.
- **Pretreatment program- commercial vehicle equipment washing**  
City does not allow unauthorized discharges to ditches and/or storm from washing activities at commercial facilities. Wash water is directed to sanitary sewer system.
- **Interactive web site**  
Citizens can observe news worth items and report anomalies for City investigation. (<http://www.ci.la-porte.tx.us>)
- **New construction regulation / education**  
Building Inspectors require silt fencing at all job sites to help prevent dirt, sand and other debris from entering storm drains.
- **Landscaped regulation / education**  
Code Enforcement prevents landscapers and yard care crews from blowing grass clippings into the streets and drains if seen.
- **Community service**  
Community Service hours are used to clean streets, parks curbs, ditches, and the beach areas.
- **Ditch cleaning**  
City employees regularly mow and clean debris out of ditches to prevent solids and pollutants from entering waterways and to improve drainage.

## Pasadena

- **“Pasadena, Coastal City”**  
Series of 12 x 30 minute videos highlighting water quality

and Armand Bayou, airing monthly on local access cable tv; available to other cities for use as well.

- **Phase I Stormwater Program**  
Currently in its second iteration of the 5-year stormwater management plan.
- **No Dumping video**  
Ten-minute video, volunteers take to 3-5<sup>th</sup> grade classes.
- **Stormwater marker buttons**  
Students affix these markers to storm drains in neighborhood, alerting citizens that the water flows directly—untreated—to the bayous and bay.
- **Ditch cleaning and associated outreach**  
In conjunction with the “ditch” clearing effort, city employees place door hangers on each house adjacent to a cleaned ditch, informing folks that the water flows to Galveston Bay, that they are the stewards, and asking them to look out for pollutants.
- **Construction fact sheet (pending)**  
One-page fact sheet, for building permit applicants.
- **Landscape regulation / education**  
Code enforcement officers stop landscapers and yard care people when they see them blowing grass clippings into the curb drains.
- **Household hazardous waste (HHW) pick-up**  
City curb-side pick-up of HHW; residents call city to schedule pick-up. Keeps HHW out of landfills and waterways.
- **Clean Streets (community service)**  
Community service hours are used to clean streets, curbs, and roadside ditches of “floatables” and other trash.
- **City newsletter**  
Newsletter, providing activity opportunities, is distributed to residents. Copies are available through City Hall and the Community Center.
- **Recycling**  
Receptacles and scheduled pick-up provided by the city. By collecting and reusing used materials, the amount of waste materials that go into the landfills, streets, sewers, and waterways.

## GBF

- **Armand Bayou watershed road signs**  
Basic sign design approved, funds were available, sites for sign placement chosen.
- **Drive and Discover Trail**  
Self-guided driving trail in and around Galveston Bay.
- **Marsh Mania**  
Volunteers replant native marsh plants to reclaim lost marsh lands in the Galveston Bay region.

- **Trash Bash**  
Volunteer opportunity to get out and clean the rivers/ bayous/bay/lakes and floodways of trash and debris. (<http://www.trashbash.org/>)
- **Science of Galveston Bay**  
Interactive workshops show teachers and representatives of local parks and recreation departments how to integrate information about the Bay into their curricula and programs.
- **Bay Ambassadors**  
Volunteers speak to students at their schools to talk about water quality.
- **Armand Bayou monitors (pending)**  
Group wants to watch Armand Bayou specifically, monitor survival and growth of Marsh Mania replanting efforts.
- **Children's art calendar**  
Fifth graders artistically incorporate important Bay facts and dates in a popular calendar distributed to area residents, decision-makers, and supporters.
- **Galveston Bay Expeditions**  
Participants walk, paddle in canoes, or ride aboard Bay Ranger to explore one of several sites around the Bay, learning about habitat, uses and history.
- **Newsletter**  
Quarterly newsletter, providing activity opportunities, is mailed to members, supporters, and local decision-makers.

## ABNC

- **Water-related eco-classes**  
Classes for students from K-12 (depending on course):
  - Water Water Everywhere
  - Nature Discovery Classes
  - Night / dawn / sunset boat rides
  - Night hikes
  - Pond Pal classes
  - Bayou Studies
  - EcoCamp
  - Self-guided trail with activity packets
 May include dipnet, seine, microscope, talks from staff/ volunteers, etc.
- **Marsh Mania**  
Volunteers replant native marsh plants to reclaim lost marsh lands in the Galveston Bay region.
- **Trash Bash**  
Volunteer opportunity to get out and clean the rivers/ bayous/bay/lakes and floodways of trash and debris.

## EIH

- **Texas State Envirothon**  
The Envirothon is the largest high school environmental

competition, open to any high school student (grades 9 - 12). The Envirothon is an integrated educational experience that will enhance your students' knowledge and environmental literacy.

(<http://www.envirothon.org>)

- **Schoolyard habitats**  
Schools build backyard habitat sites and learn how the various animals use them. These experiences also provide many resources to teachers who want to use the outdoors as a context for learning.
- **Brown bag lunch lectures**  
Bring-your-own lunch lectures, by a variety of guest speakers, about local environmental issues.
- **San Jacinto marsh project**  
The San Jacinto Battleground State Historical Park preserve is the oldest and most visited state park in Texas and the site of the Marsh Restoration Project. It serves as a centerpiece of natural history training for teachers of K - 6 children.  
(<http://www.eih.uh.edu/education/workshops.htm>)

## Other

- **Community Advisory Panels (CAPs) / Citizens' Advisory Councils (CACs)**  
Created to encourage dialogue between chemical plant owners/operators and local neighborhood representatives, CAPs and CACs generally discuss local issues of concern, including environmental threats.

