

PROJECT BRAYS



Marsh Improving Bayou *Water Quality*

The partners who created the award-winning Brays Bayou Marsh at Mason have a new reason to celebrate. While results are preliminary, the first several months of water quality testing have been positive.

The 3.5-acre marsh is located at Mason Park, two miles north of the IH-610 and IH-45 interchange in southeast Houston. Partners of the project include:

- HCFCD
- Houston Parks and Recreation Department
- Texas Cooperative Extension / Texas Sea Grant
- Texas Parks and Wildlife Department
- Texas Master Naturalist Program
- Cesar E. Chavez High School
- Stephen F. Austin High School
- Natural Resource Conservation Service
- US Fish and Wildlife Service
- US Environmental Protection Agency
- Galveston Bay Estuary Program
- National Oceanic and Atmospheric Administration
- Texas General Land Office / Texas Coastal Management
- NRG Energy, Inc.

The completed project has become an educational area and outdoor classroom space for teachers and students.

Monthly water quality samples are taken by the Texas Cooperative Extension staff, trained volunteers and students to understand the underlying conditions of stormwater as it is filtered by the wetlands on its way to Brays Bayou. They test for dissolved oxygen, pH balance, water temperature, conductivity, turbidity and potential contaminants, said Marissa Sipocz, wetland restoration team leader for the Texas Cooperative Extension. The tests are performed on-site or in a lab. Samples are gathered at an inlet prior to entering the wetland, at the entrance of a shallow marsh, at the exit of the marsh and in the bayou itself.

Are You Ready for Storm Season?

Rain storms have taken a toll on the state of Texas this summer; images of flooding, heroic rescues and property damages have filled the evening news programs. Harris County has had its share of the torrential downpour. While damages in our area have not been nearly as severe as other regions of the state, the continuous rain serves as a staunch reminder that flooding can happen anywhere at any time.

The Harris County Flood Control District (HCFCD) helps alleviate the risk of flooding through projects like Project Brays. While these efforts may reduce the risk of flooding, this area will never be completely safe from rising waters. It is important for everyone to prepare in advance for flooding to help when a natural disaster strikes. Following are tips to assist with preparation.

Create a Family Preparedness Plan

- Discuss with your family the needs for preparation and dangers associated with a flood
- Prepare and maintain a portable family emergency kit with water and non-perishable food items for all family members, including pets
- Find an out-of-town family member or friend to be your "family check-in contact" in case you have trouble contacting each other during or after the flood. Make sure all family members have the phone number with them at all times
- Assemble important documents and family keepsakes in a single location
- Consider flood insurance and, if needed, keep it current
- Keep post-emergency phone numbers by the phone
- Get to know your neighbors and discuss how you can help each other
- Plan how to take care of your pets

When Flooding is Imminent

- Pay attention to all National Weather Service Flood Watches and Warnings
- Put your family preparedness plan into action
- Secure your family emergency kit
- Move valuables, legal papers, pets and vehicles to higher ground
- Turn off the electricity if you can do so safely

For a complete list of items to include in your Family Emergency Kit and tips to assist in organizing plans for flooding and other disasters, visit www.projectbrays.org.



Like many of the bayous in Harris County, Brays Bayou filled beyond capacity in 2001 during Tropical Storm Allison. The storm caused \$5 billion in damages and 22 deaths in Harris County.

Hurricane Tracking: No Need to Watch The Skies

Using HCFCD's 2007 Hurricane Tracker, you'll be able to automatically track this year's storms and be armed with vital information that will keep you prepared better than ever.

The Full Version Hurricane Tracker includes:

- An automatic tracker (including full-Atlantic view and track forecaster)
- A printable tracking chart
- Interactive, animated historical storms
- Hurricane and flood safety information
- Emergency contact information and more

To download the 2007 Hurricane Tracker, visit www.hcfcd.org.

Storm Season Resources

Harris County Office of Homeland Security & Emergency Management

www.hcoem.org

City of Houston Office of Emergency Management www.houstonoem.org

Harris County Flood Control District www.hcfcd.org/tropicalweather

American Red Cross: Greater Houston Area Chapter www.houstonredcross.org

FEMA: Federal Emergency Management Agency, Region VI

www.fema.gov/regions/vi/about

Houston Transtar (traffic conditions) 2fttraffic.houstontranstar.org

PROJECT BRAYS: HOW IT GETS DONE

With Project Brays construction well underway, one of the most important questions community members ask is, "Why does the construction schedule for specific projects in my area keep changing?" The process is complex, so HCFCD wants to help the community better understand the steps involved in building a capital project that, ultimately, affect the proposed schedule for Project Brays.

What is a Capital Project?

A capital project is part of an overall program planned and implemented by a government agency to improve infrastructure to meet community needs.

HCFCD has a 5-year Capital Improvement Program (CIP) that is presented annually to Harris County Commissioners Court. Projects included in HCFCD's CIP include channel modifications, new channel construction, excavation of stormwater detention basins and voluntary buyout of homes that have experienced repetitive flooding or are located deep in the floodplain.

Some CIP funds are allocated to flood damage reduction projects implemented solely by HCFCD. Other CIP funds are used in flood damage reduction projects that involve federal partnerships. Federal partnerships leverage local dollars and often produce projects that have faster completion schedules.

Project Brays encompasses more than 70 individual projects, some funded solely by HCFCD and some that are jointly funded with other partners, which explains why these many projects have staggered completion dates. For example, the Freshwater Marsh at Mason Park is a collaboration of HCFCD and many city, state and national organizations, both public and private. Additional dollars contributed to this project allowed it to progress more quickly.



What does it take to build a project?

As with Project Brays, once a flooding issue is identified, the project is included in the Capital Improvement Program. Upon allocation of available funds, a project team is selected to take the project from an engineering study through construction. While the steps for each project are very similar, each has an individual set of circumstances and varying timeline.

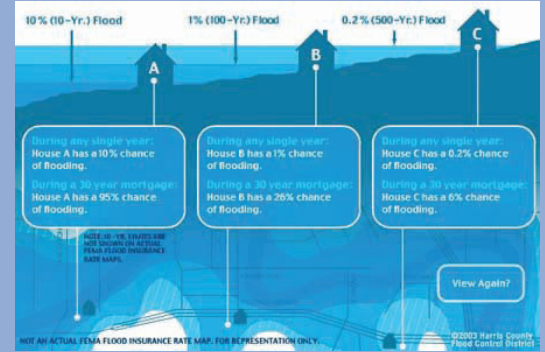
Some of the common steps include:

- Devise a flood damage reduction project
- Evaluate impacts and mitigation needs
- Consider community input (seek support, opinions; www.keep the community informed)
- Design the project
- Determine the land to build it upon (either on existing right-of-way, or through land acquisition)
- Secure permission to build (environmental, city/county development permits; interlocal agreements)
- Remove physical obstructions (utilities, bridges, etc.)
- Allocate funding
- Select a contractor (through a public bid and award process) and build

FLOODPLAINS

Explained

Houston is no stranger to rain and floods. Our climate makes us susceptible to both, including when we least expect it. Harris County is capable of experiencing 100-year and 500-year floods and beyond. In fact, in some areas of the county in 2001, Tropical Storm Allison measured far beyond the 500-year flood.



To view "Floodplains Explained" as a flash demo, visit www.projectbrays.org

One way to define such floods is by their likelihood of happening each year. For example, a person living on the edge of the 100-year floodplain has a 1 percent chance of flooding every year from a bayou or stream topping its banks. The risk for flooding increases as he or she moves closer to the bayou or stream and deeper into the 100-year floodplain. Over thousands of years, a 100-year flood occurs, on average, once every 100 years. A 500-year flood has a 0.2 percent chance of happening every year.

It is important to note that floodplains, as defined on Flood Insurance Rate Maps, show flooding from the 100-year and 500-year floods when bayous or streams top their banks. They also show the risk of flooding from some tidal surges. The maps do not take into account flooding from roadside ditches or storm sewers. This is why all Harris County residents should strongly consider flood insurance.

Contact Us

We welcome your feedback!

If you have questions, please e-mail us at info@projectbrays.org or call the Project Brays Hotline at **713-316-4820**.

For up-to-date information, you can also visit the

Project Brays website at

www.projectbrays.org.

