



# Dickinson Bayou Watershed Partnership

**Wednesday, August 21, 2013**

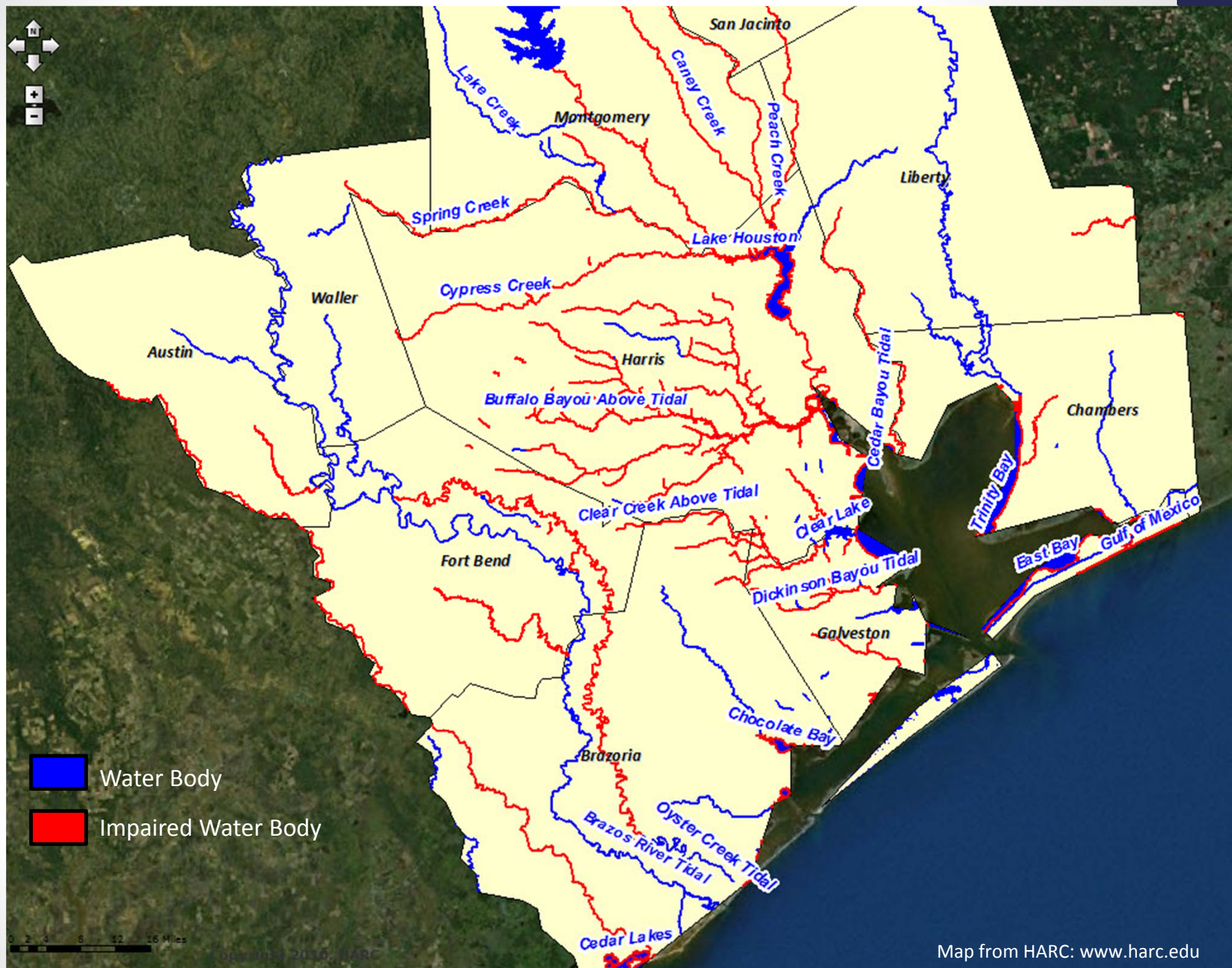
**[www.dickinsonbayou.org](http://www.dickinsonbayou.org)**

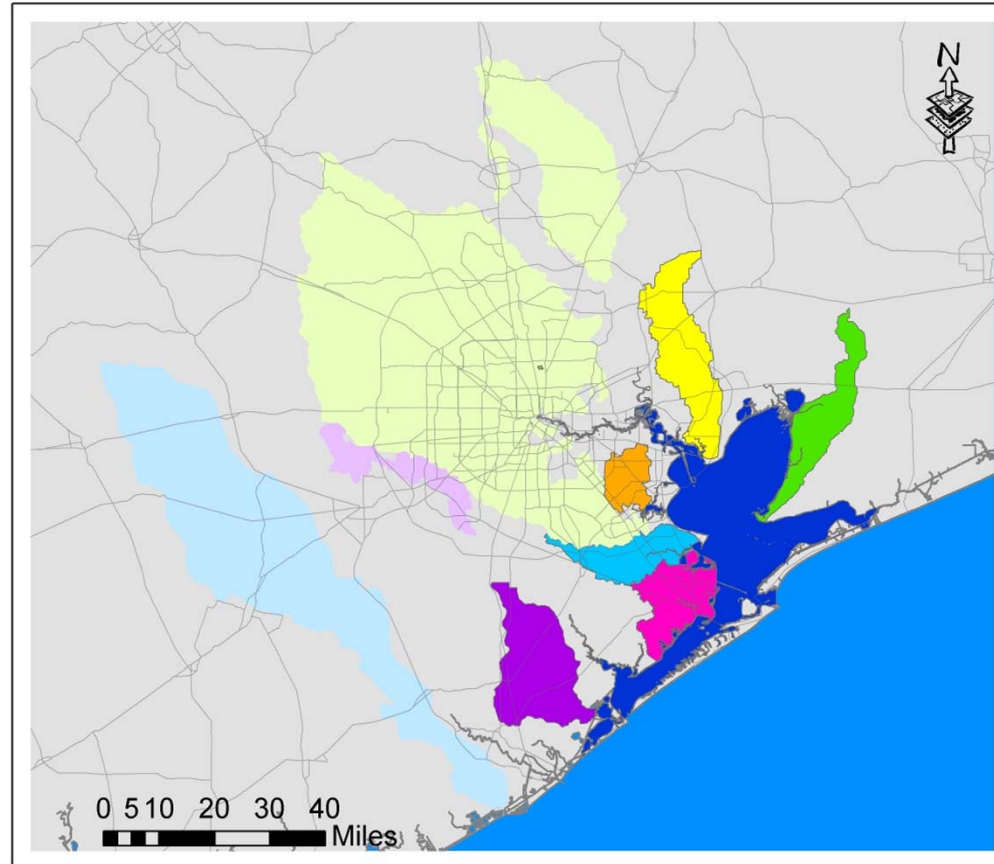
**[Facebook.com/dickinsonbayouwatershedpartnership](https://www.facebook.com/dickinsonbayouwatershedpartnership)**

# Regional Water Quality Concerns

- High bacteria
- Low dissolved oxygen







## Galveston Bay and Adjacent Watershed Protection Projects



[www.galvbay.org](http://www.galvbay.org)

*Our mission is to preserve, protect and enhance the natural resources of Galveston Bay for present users and for posterity through advocacy, conservation, education and research.*



TEXAS COASTAL WATERSHED PROGRAM



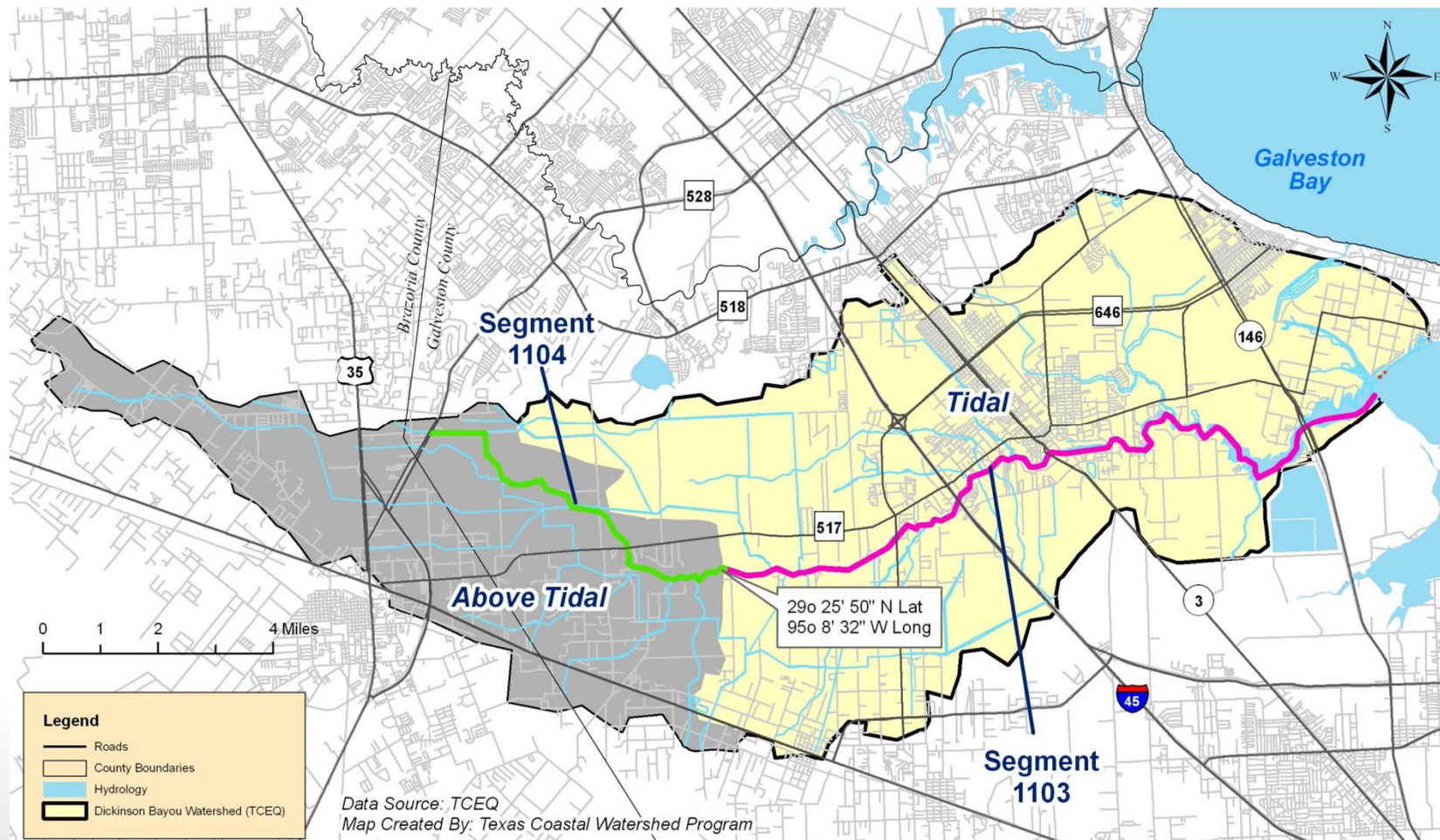
### Watershed Boundaries

Armand Bayou	I-Plan
Upper Gulf Coast Oyster Waters	I-Plan
Cedar Bayou Watershed	Watershed Plan
Double Bayou	Watershed Plan
Dickinson Bayou	I-Plan
Highland Bayou	Watershed Plan
Bastrop Bayou	Watershed Plan
Bacteria Implementation Group	I-Plan
San Bernard	Watershed Plan
Upper Oyster Creek	I-Plan
Westfield	Watershed Plan



# Water Quality Concerns in Dickinson Bayou

- High bacteria
- Low dissolved oxygen



# Bacteria Implementation Plan

- Describes the steps stakeholders and TCEQ will take to restore and protect water quality in Dickinson Bayou
- Identifies how these activities will be implemented
- Outlines the schedule for implementation
- Describes how stakeholders and TCEQ will track implementation and monitor improvements in water quality.

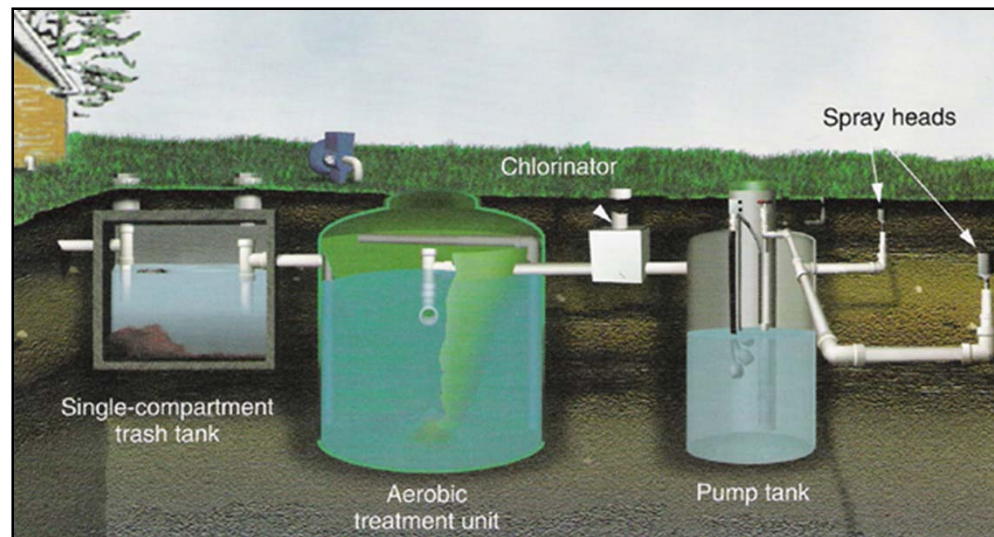
# Bacteria Implementation Plan (cont.)

- Ultimate goal: reduction of bacteria in Dickinson Bayou to levels that meet the state water quality standards to support contact recreation
- Stakeholders and TCEQ developed seven management measures and four control actions that will reduce bacteria contributions in the Bayou



# OSSF (Septic System) Management Measures

1. Improve management of on-site sewage facilities.
  - 1.1. Identify and rank target areas by pollutant reduction priority and expand home owner OSSF education.
  - 1.2. Hookup, upgrade, and/or fix identified failing OSSFs.
  - 1.3. Improve enforcement to mitigate failing OSSFs.
  - 1.4. Address maintenance of OSSFs through education efforts.





# OSSF (Septic System) Management Measures

- 1.5. Incorporate OSSF criteria into standards of practice for home sale inspections.
- 1.6. Target areas for intensive water quality sampling based on OSSF pollution, upon completion of mapping conducted under Management Measure 1.1.



<http://activerain.com/blogview/2181102/massachusetts-title-v-and-your-home-purchase>

# WWTF Management Measures

## 2. Improve wastewater treatment facilities.

2.1. Upgrade plants.

2.2. Consider regionalization of discharge effluent (WWTFs), especially for new development.

2.3. Develop and implement an improved sanitary sewer overflow initiative plan/program for individual SSSs.

2.4. Address fats, roots, oils, and grease (FROG).

2.5. Encourage appropriate mechanisms to maintain function at lift stations.



# WWTF Control Actions

- 1) Implement stricter bacteria limits and stricter enforcement measures for WWTF effluents.
- 2) Increase compliance and enforcement by the TCEQ.
- 3) Revise penalties and violations for sanitary sewer system (SSSs) and WWTFs.
- 4) Improve reporting capabilities for sanitary sewer overflows (SSOs).



# Animal Management Measures

3. Promote participation in existing conservation and cost-share programs.

3.1. Promote the reduction of feral hog populations.

3.2. Expand pet owner education efforts.

3.3. Install pet waste stations in parks and public areas.



# Animal Management Measures

3.4. Improve home owners associations' bylaws and ordinances for pet waste control.

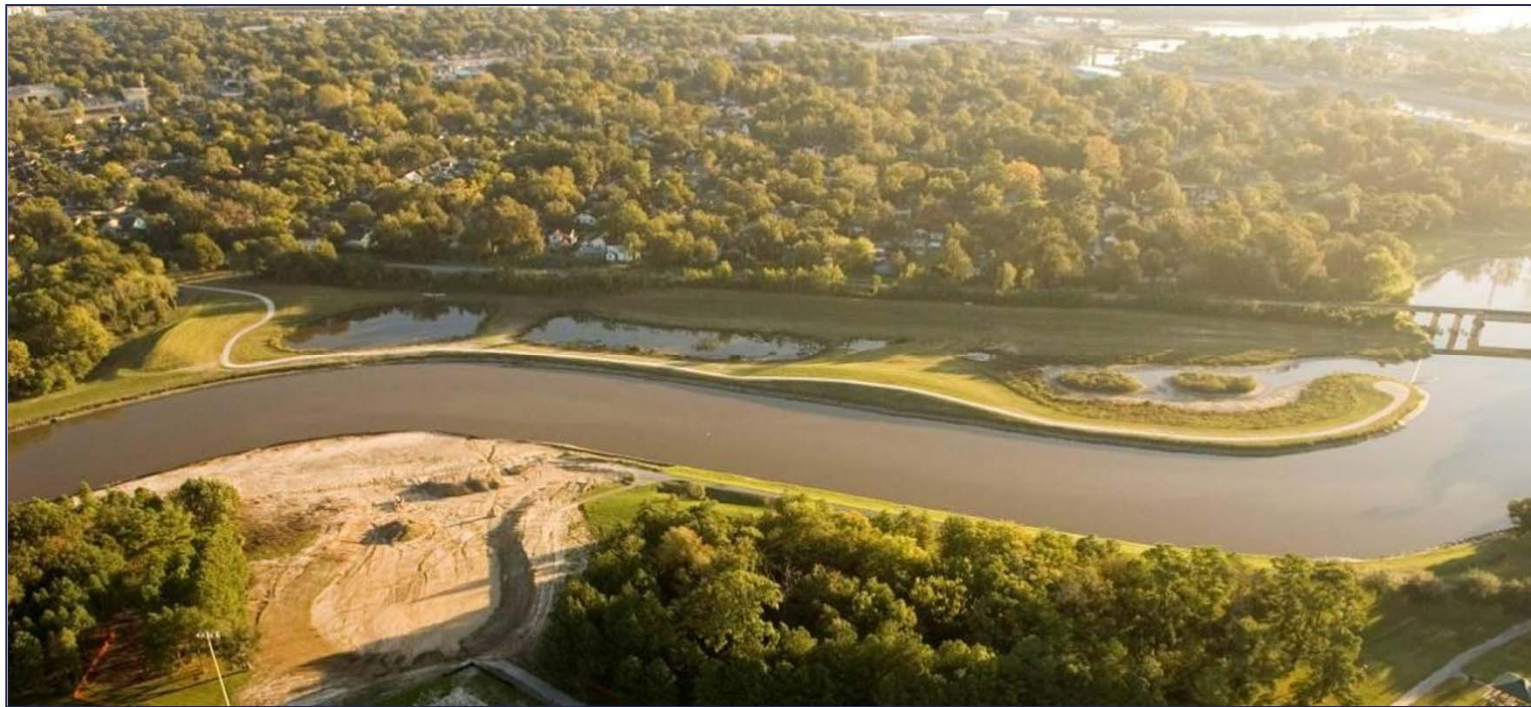
3.5. Increase awareness, development, and enforcement of pet waste control ordinances.

3.6. Promote BMPs for managing water quality for lands with large groups of animals not covered by other management measures such as a wildlife park, petting zoo or other animal feeding operations.



# Additional Management Measures

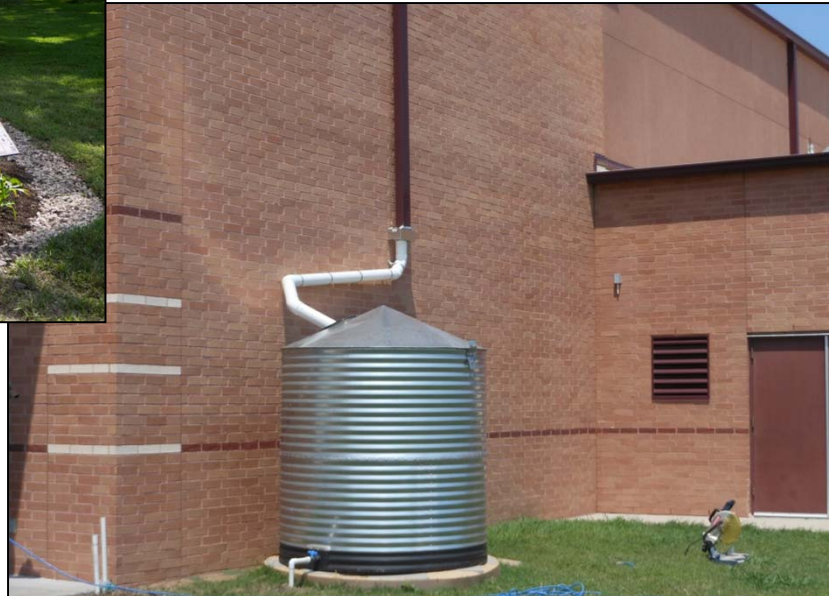
- 4. Restore and repair riparian zones.
- 5. Preserve and restore natural wetlands.
- 6. Construct treatment wetlands.





# Additional Management Measures

7. Provide demonstrations of and encourage installation of stormwater best management practices including rain gardens, bioswales, and rain water harvesting



# What's next?

- TCEQ Approval

# TCEQ Approval Process

- **August 21 (Today)** – TCEQ commissioners approve public comment period for the I-Plan
- **September 6** – I-Plan document will be released and the public comment period opens
- **September 12** – TCEQ Public Comment Meeting where anyone can submit verbal comments about the I-Plan
- **October 7** – Public comment period ends
- **Late 2013** – TCEQ staff address public comments
- **Early 2014** – I-Plan is submitted to TCEQ Commissioners for final approval



# What's next?

- TCEQ Approval
- More Implementation

# Feral Hog Workshop

Saturday, September 28, 2013

8:30am-4:00pm

Galveston County Extension Office

Registration forms available at [galveston.agrilife.org](http://galveston.agrilife.org)



