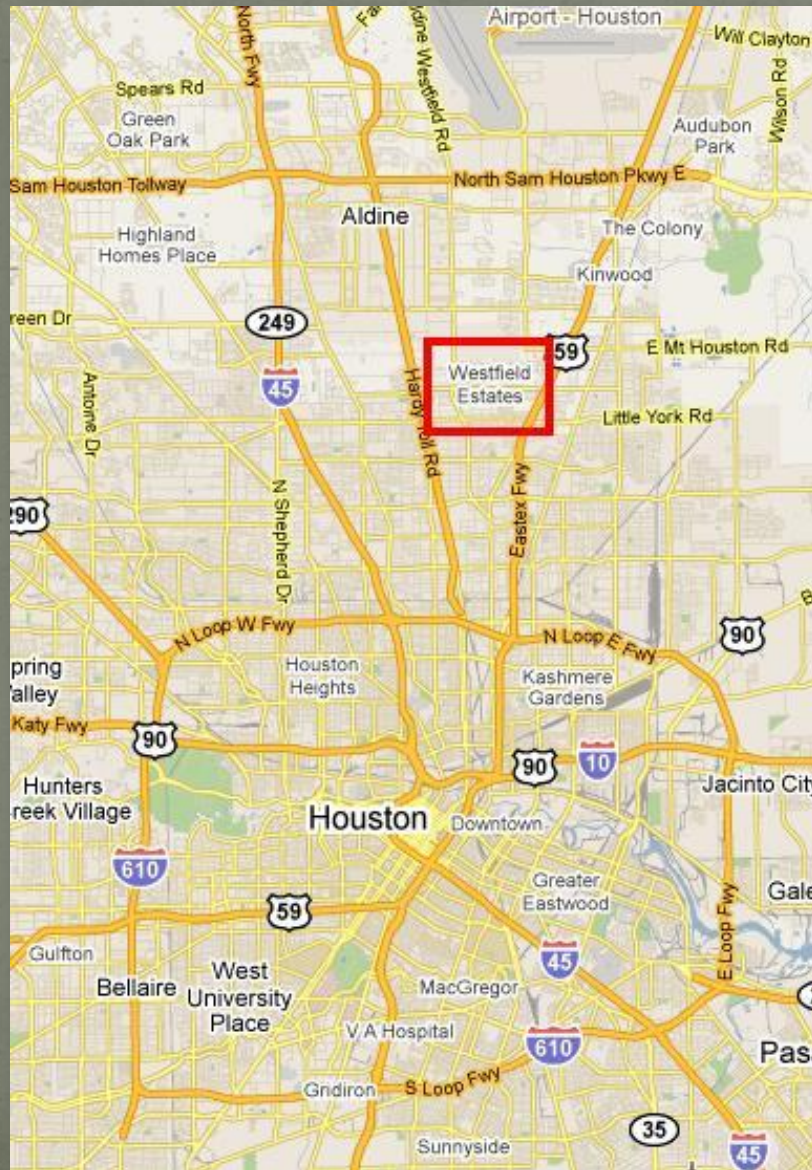


Westfield Estates Watershed Protection Plan



The Westfield Estates Watershed



- Aldine-Westfield Area, unincorporated Harris County
- Small, urbanized watershed
- Economically disadvantaged neighborhood



Westfield Estates Watershed Aerial

Source:  Houston-Galveston Area Council



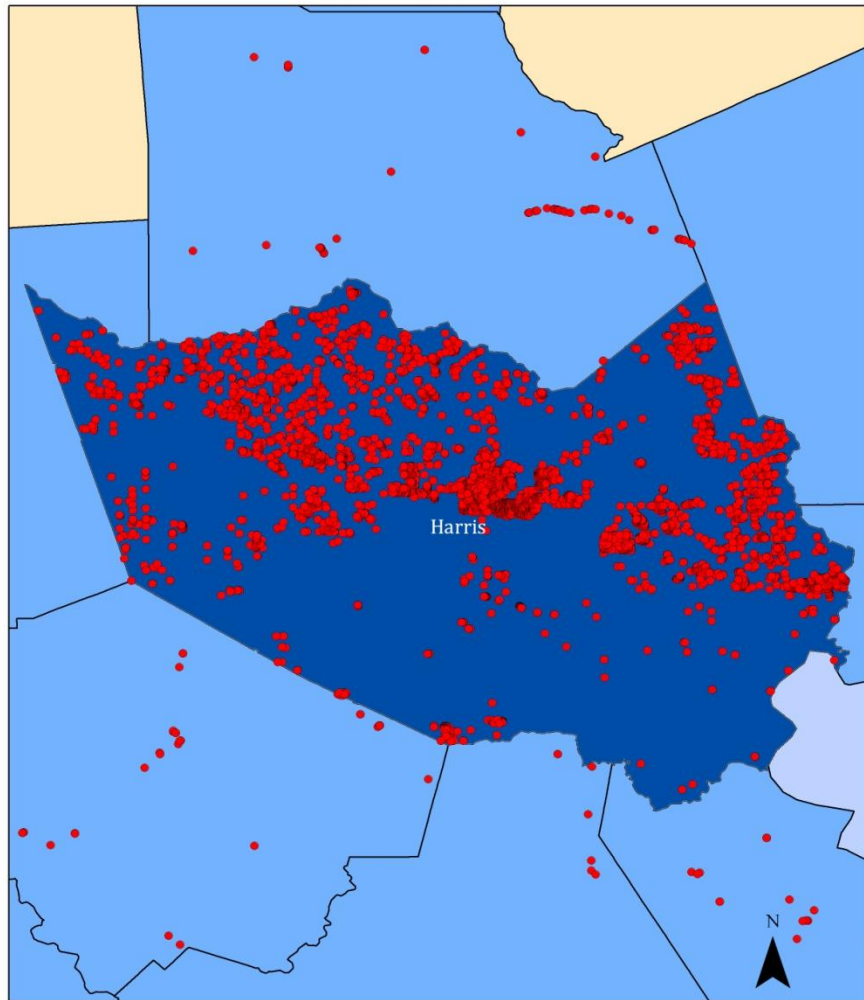
Legend

 Westfield Estates Watershed

0 0.045 0.09 0.18 Miles

A horizontal scale bar with four segments, corresponding to the distances 0, 0.045, 0.09, and 0.18 miles.

Project Impetus



**OSSF (Septic System) Violations
Harris County, TX**

HGAC Houston-Galveston Area Council

Legend

- Septic Violations
- Harris County

0 5 10 20 Miles

- Concern over high OSSF failure rate
- Failing Septic System Initiative (FSSI) – Westfield is area of concern
- At the time, no immediate plans for sanitary service

Challenges



- No sanitary sewer, all OSSFs (septic tanks)
- Drainage is open ditch, heavy siltation/pooling
- Discharges to Halls Bayou on east side

Water Quality Issues

Bacteria in Westfield ditches comes from:

- Failing OSSFs
- Domestic animals
- Pet waste
- Wildlife



Project Accomplishments

- ~250-300 low flow devices to prevent overflows
- Pumped out 263 residential OSSFs
- Replaced 4 failing OSSFs with SEP funds
- Multiple educational/outreach activities including:
 - Residential OSSF maintenance meeting
 - Pet waste bags device and information mailers
- Coordinated efforts with Halls Ahead

Partner Accomplishments

- Harris County/HCFCD improved drainage in ditches/outlets – less pooling
- East Aldine Mgmt. District and Sunbelt FWSD
 - expanded capacity in WWTP to accept future flows from Westfield
 - Are working on funding for collection system
 - Are working on funding for trash facility in area

Current Status/Next Steps

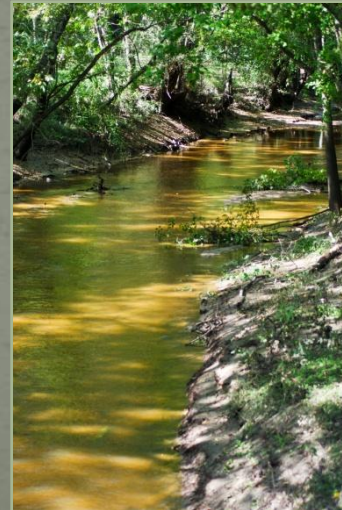
- 319 Project complete
- Pre-and post-implementation sampling still show high bacteria levels
- Partners continuing to:
 - Pursue sanitary service
 - Educate Community
 - Address trash
 - Improve drainage
 - Monitor water quality



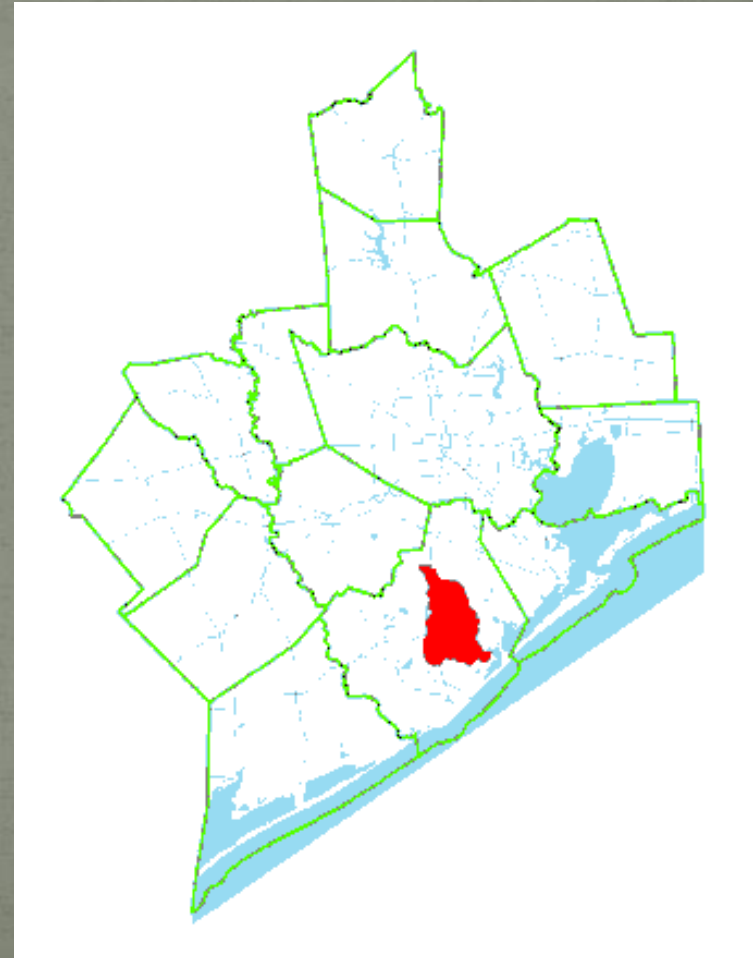
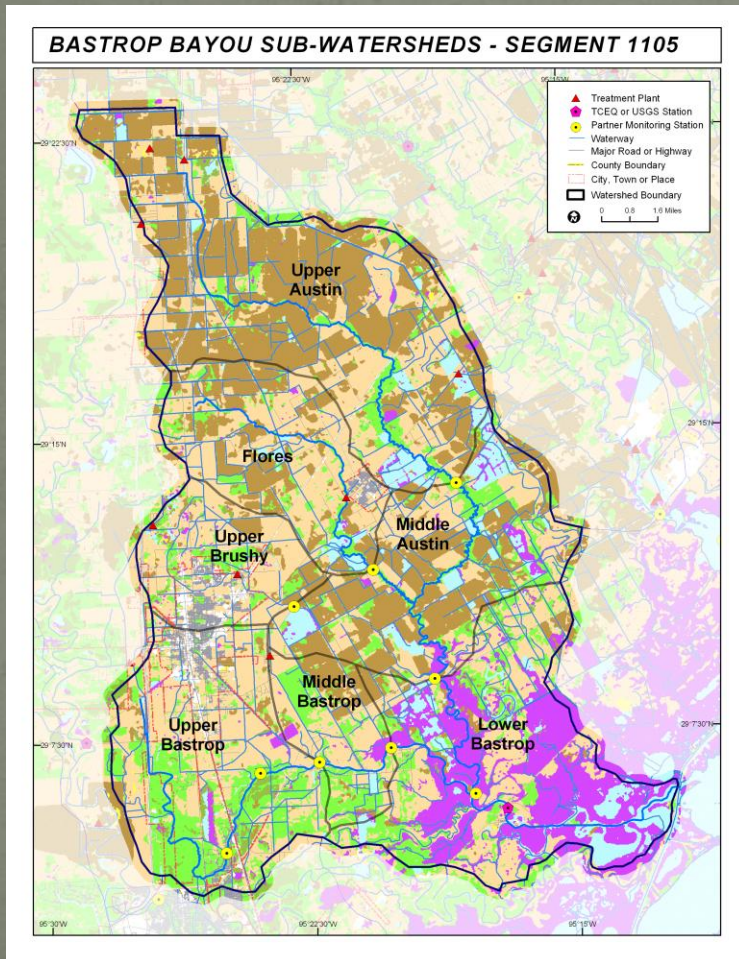
Any Questions?



Bastrop Bayou Watershed Protection Plan

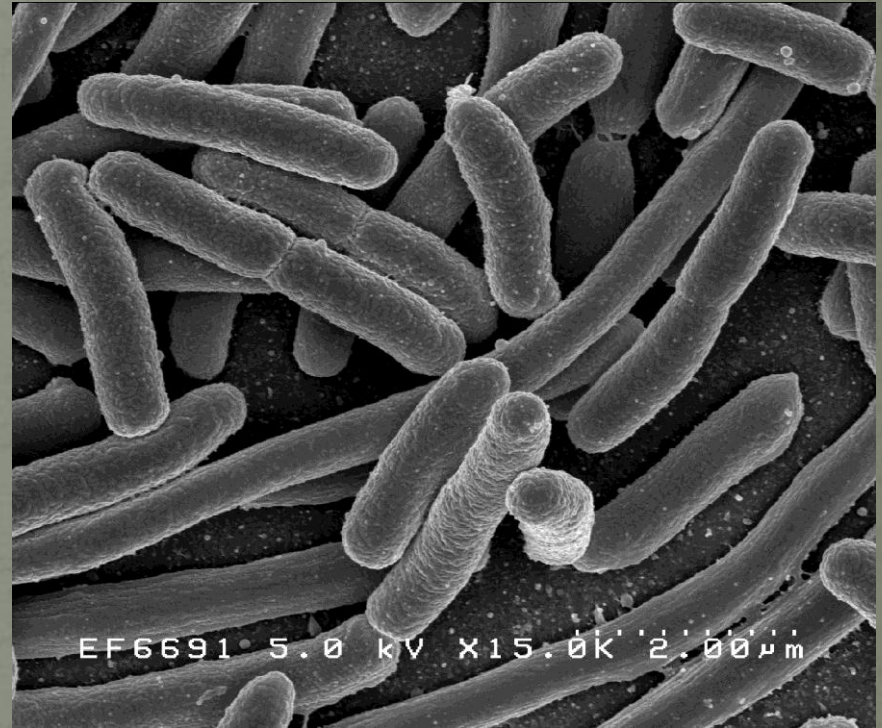


The Bastrop Bayou Watershed



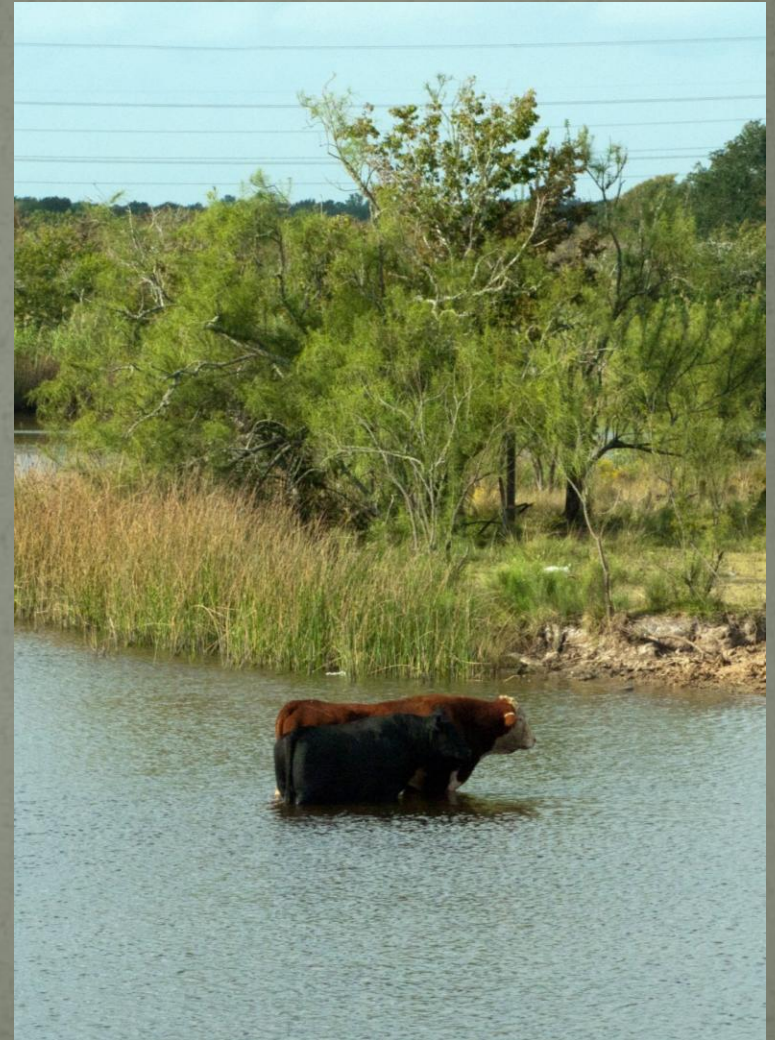
Bastrop Challenges

- Primary concerns are bacteria
 - Demi-John cholera case
- Area will receive appreciable growth, industry in coming years
- Local concerns over sediment, nutrients



Primary Bacteria Sources

- Agriculture
 - Cattle
 - Other cultivation
- Urban runoff/pets
- WWTFs/OSSFs
- Wildlife



Project Progress

- WPP remodeled, submitted
- H-GAC pursuing interim implementation with partners
 - Watershed Signage installed throughout watershed
 - 5 Watershed Kiosks installed
 - Dog Park installed in Angleton



Moving Onward – Next Steps

- WPP resubmitted in late 2012
- EPA comments received in April, 2013
- H-GAC/TCEQ working on FY14 grant proposal
 - Limited implementation
 - Stakeholder facilitation



Any Questions?

For more information, contact:

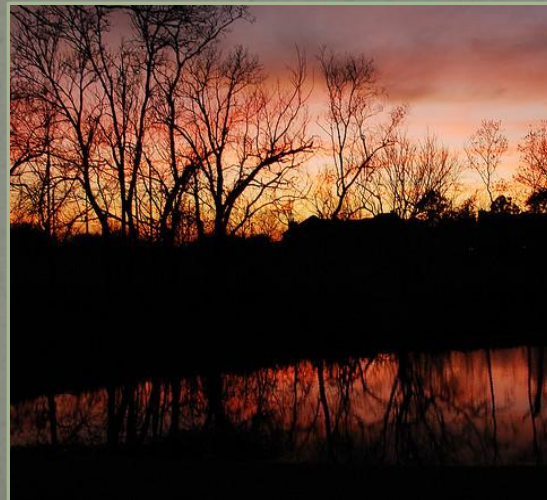
Justin Bower
Senior Environmental Planner

713-499-6653
Justin.bower@h-GAC.com

Houston-Galveston Area Council
3555 Timmons Lane, Suite 120
Houston, TX 77027



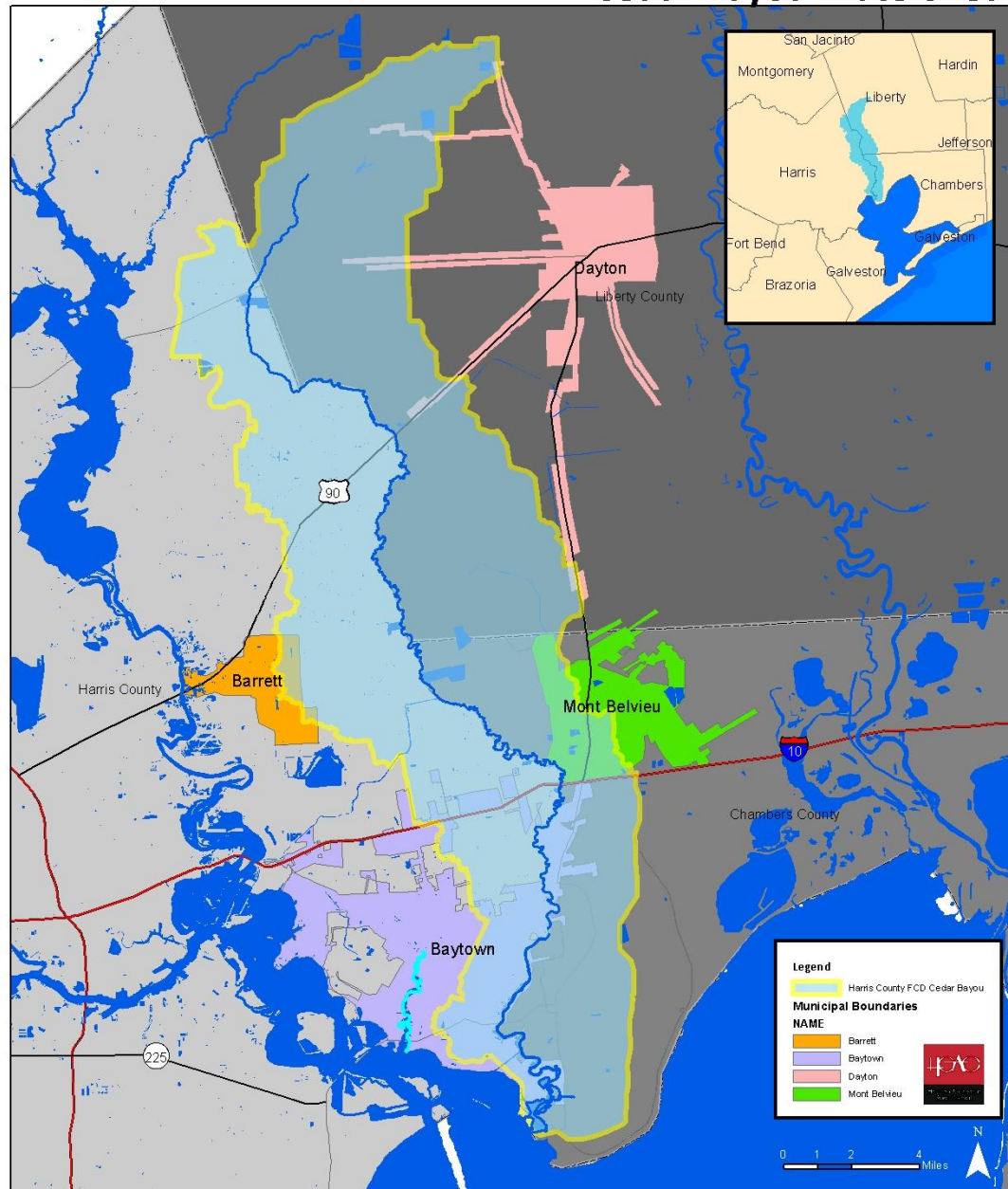
The Cedar Bayou Watershed Protection Plan



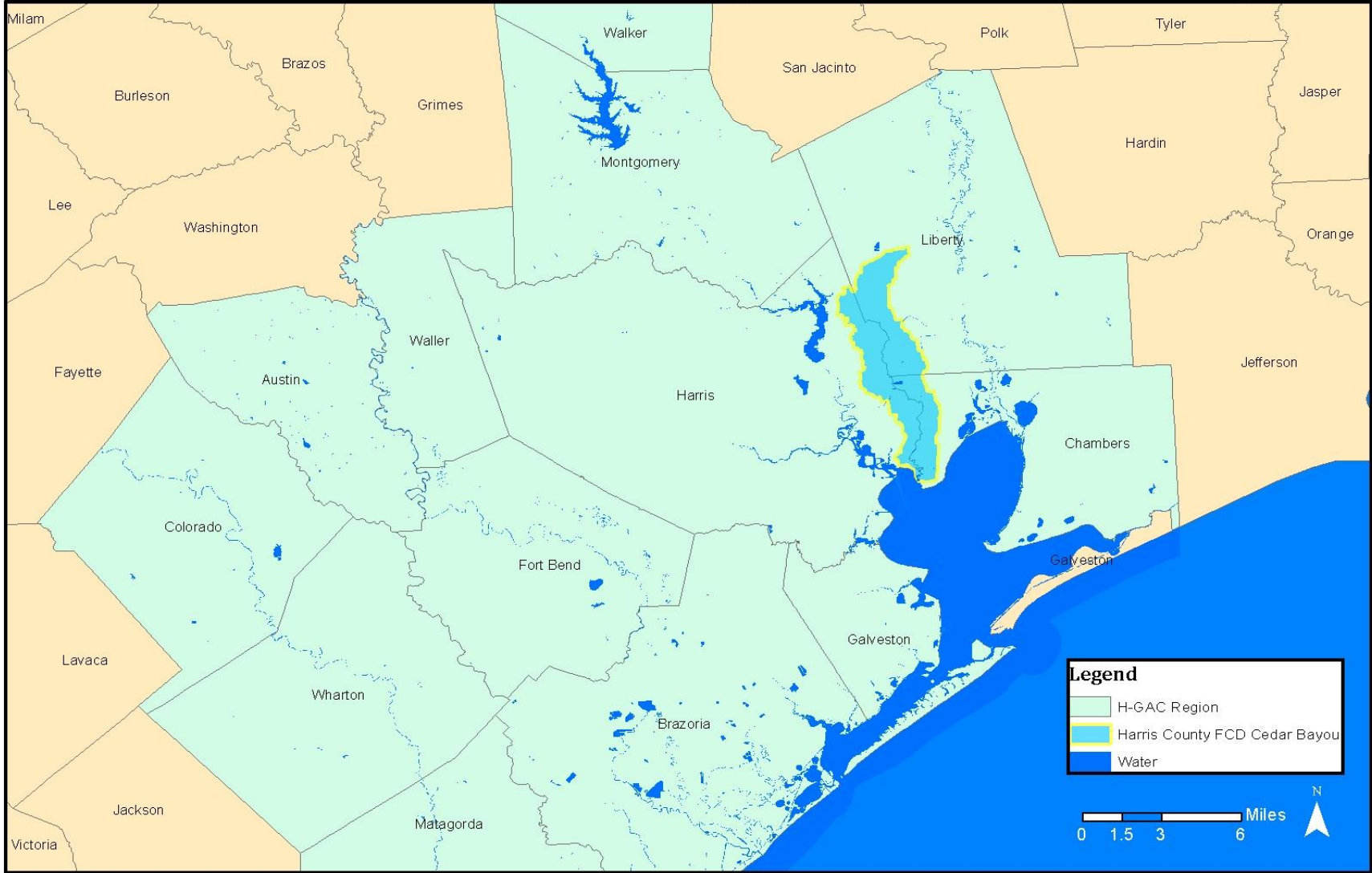
The Cedar Bayou Watershed

- ~200 square miles
- Bayou is boundary between Harris, Liberty, and Chambers Counties
- Drains to Galveston Bay system

Cedar Bayou Watershed



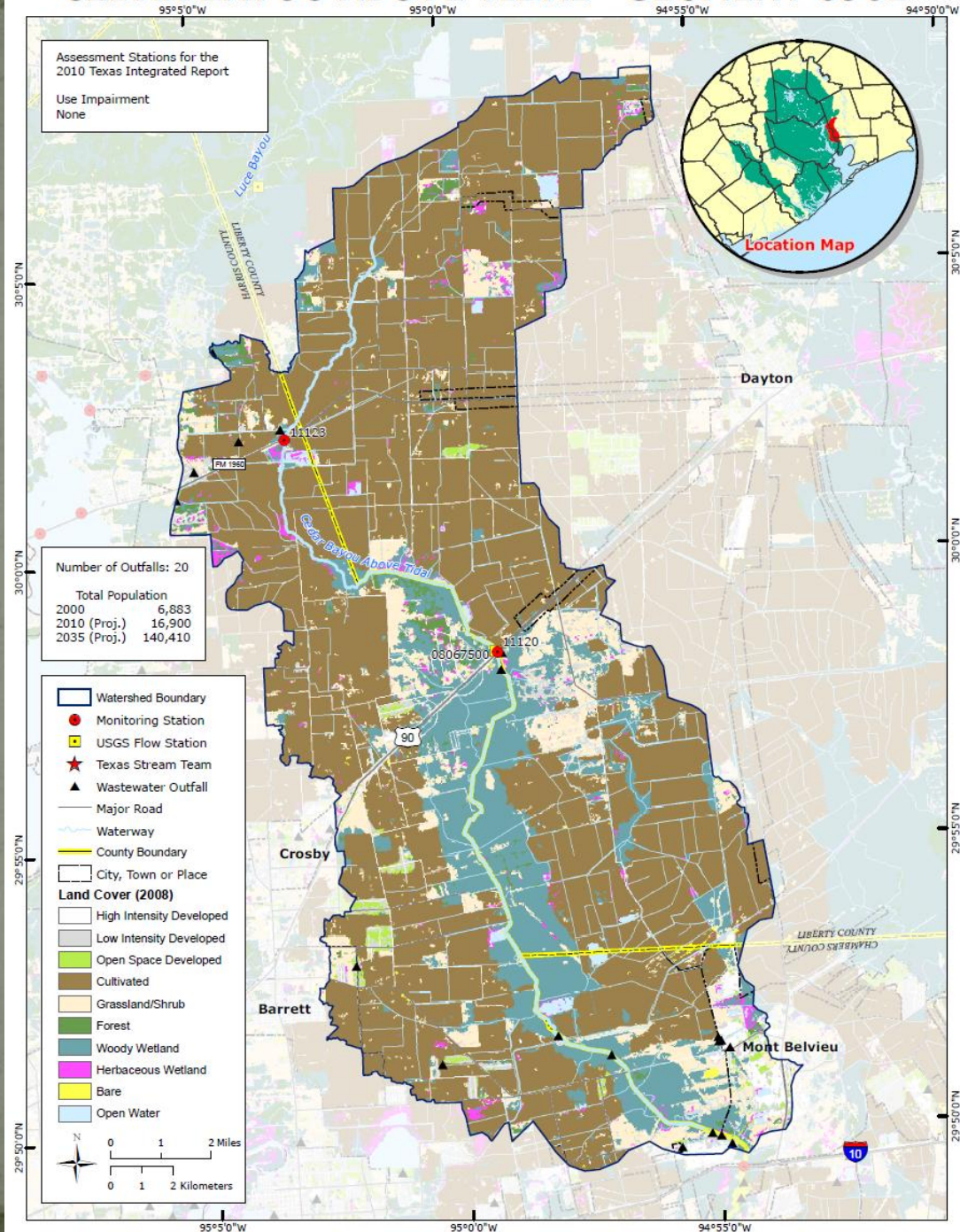
Cedar Bayou Watershed - Regional Perspective



Cedar Bayou Above Tidal

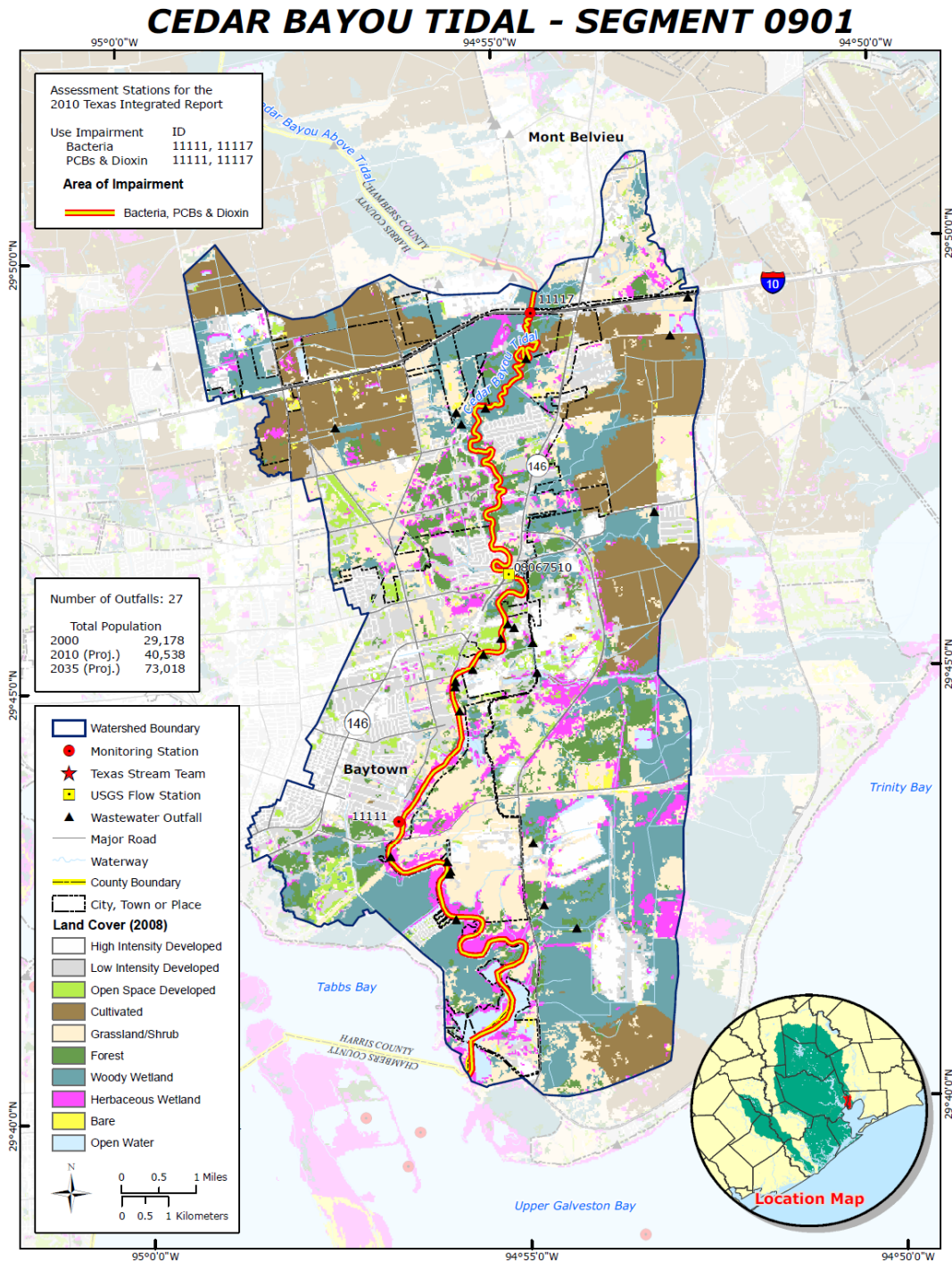
- Originates north of Hwy 90, Liberty Co.
- Parts of the Cities of Crosby, Barrett, Mont Belvieu
- Primary land uses:
 - Rural/agricultural
 - Wetlands
 - Some suburban/urban

CEDAR BAYOU ABOVE TIDAL - SEGMENT 0902



Cedar Bayou Tidal

- East of Ship Channel, west of Trinity River
- Parts of the Cities of Baytown, Mont Belvieu
- Primary land uses:
 - Urban
 - Industrial
 - Rural/agricultural
 - Wetlands



Water Quality Impairments

- Bacteria (Tidal, 2008/2010/Draft 2012)
- PCBs/Dioxins (edible tissue, Tidal 2008/2010/Draft 2012)
- Macrobenthic communities (Above Tidal, 2008)
 - Concern 2010, Nothing Draft 2012



Water Quality Concerns

- Chlorophyll-*a* (Tidal, 2010/Draft 2012)
- Macrobenthic communities (Above Tidal, 2010)
 - Nothing, Draft 2012
- Depressed dissolved oxygen (Above Tidal, 2010/Draft 2012)



Project Status – where are we?

- Make preliminary investigations
- Form stakeholder group
- Characterize watershed, sources
- Discuss potential solutions
- **Conduct scientific examination (monitor/model)**
- Review solutions against data
- Write, submit Watershed Protection Plan
- IMPLEMENT



Monitoring Water Quality

- Increased ambient monitoring
 - Begun
- Storm flow monitoring
 - To follow
- Effluent monitoring
 - Will be based on DMR
- DO monitoring
 - Begun
- Biological Assessment
 - Coming soon



Next Steps

- Modeling water quality
 - Load duration curves
 - SELECT
 - Tidal
 - Biological (CADDIS)
 - All awaiting QAPP
- Develop Watershed Protection Plan
 - Evaluate solutions
 - Compile WPP document



Interim Activities

- Boat Tour of Watershed
- Watershed Signage installed
- Baytown funded rehab of sanitary system overflows into Bayou
- Growing Green meeting held for Agricultural Community
- Abandoned boats/Barge identification



Focus on Social Media, Targeted Outreach

About Us | Contact Us | 713-499-6653

Cedar Bayou Watershed Partnership

Home | Project Background | Project Documents | News | How Can I Get Involved?



protect water quality

A Watershed Protection Plan for Cedar Bayou

A Watershed Protection Plan provides a better understanding of the sources of water pollution and what area governments, individuals, community groups, and business and industry can do to improve water quality. Cedar Bayou is a tributary to the Galveston Bay system, thus any sources of contamination potentially impact a wide range of economic and ecological interests even beyond their watershed of origin.

Calendar

Search

Calendar icon

Photo Galleries



Links

- Development of a Watershed Protection Plan for Cedar Bayou [Click Here](#)
- Cedar Bayou Watershed Overview [Click Here](#)
- Texas Stream Team volunteers help monitor water quality [Click Here](#)

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Cedar Bayou Watershed Partnership


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Community Organization
A locally-lead partnership to improve and protect water quality in the Cedar Bayou Watershed (www.cedarbayouwatershed.com)

32 Likes

Houston Channelview Deer Park Pasadena


Map Events



Growing Green:

Financial Incentives and Technical Resources For Agricultural Producers and Landowners

April 16, 2013, 6:00-8:00 PM
Crosby Community Center
409 Hare Road, Crosby, TX
Light Refreshments Provided



Any Questions?

For more information, contact:

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Senior Environmental Planner

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