

BRAZOS – COLORADO COASTAL BASIN: BASIN 13

Public Meeting 2
August 1, 2017

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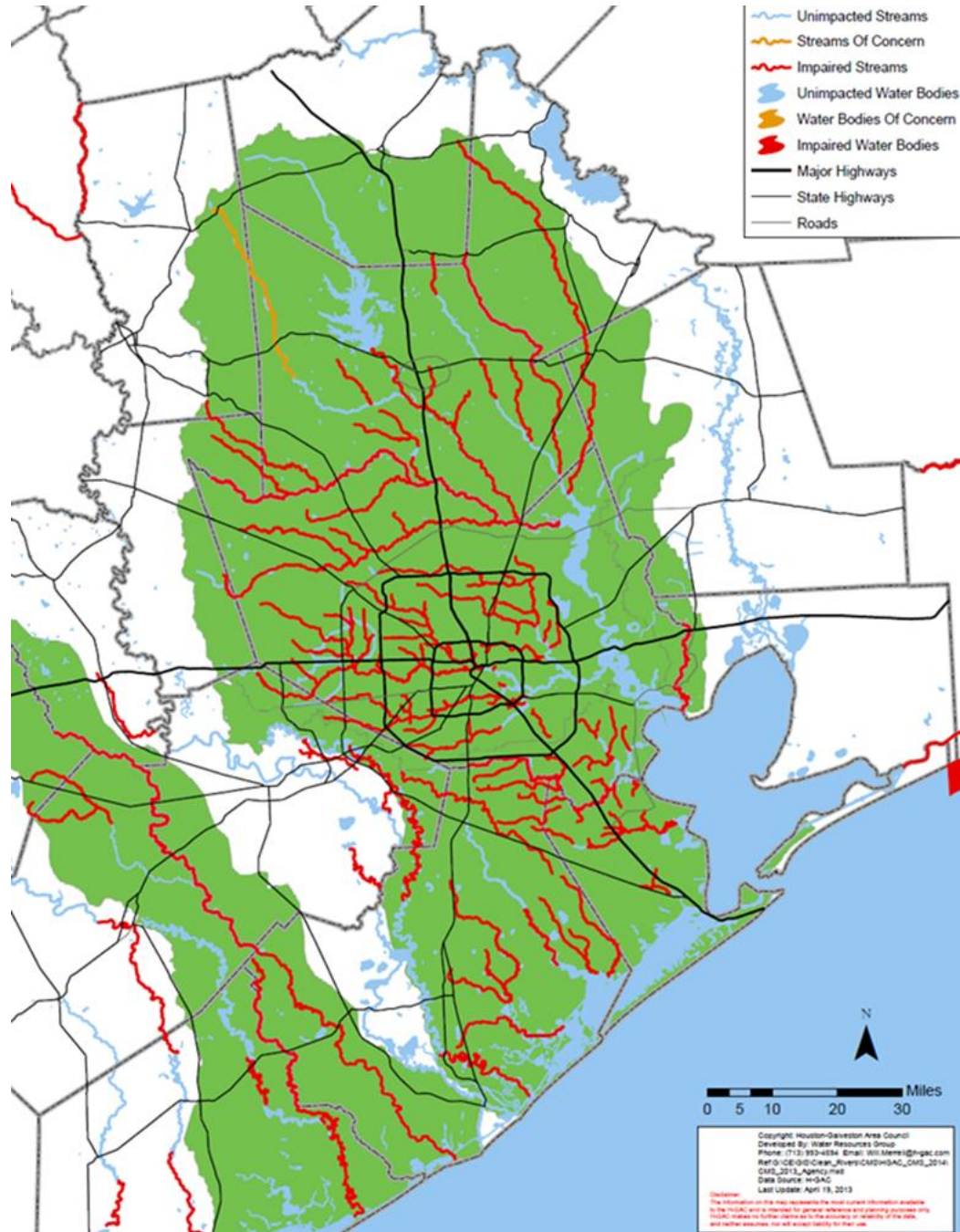
Meeting Agenda

- 3:00 – 3:05 Welcome - Open Meeting
- 3:05 – 3:25 Basin Water Quality Update
- 3:25 – 3:45 Caney Creek Special Study
- 3:45 – 4:00 Next Steps
- 4:00 – 5:00 Q&A / Meet and Greet

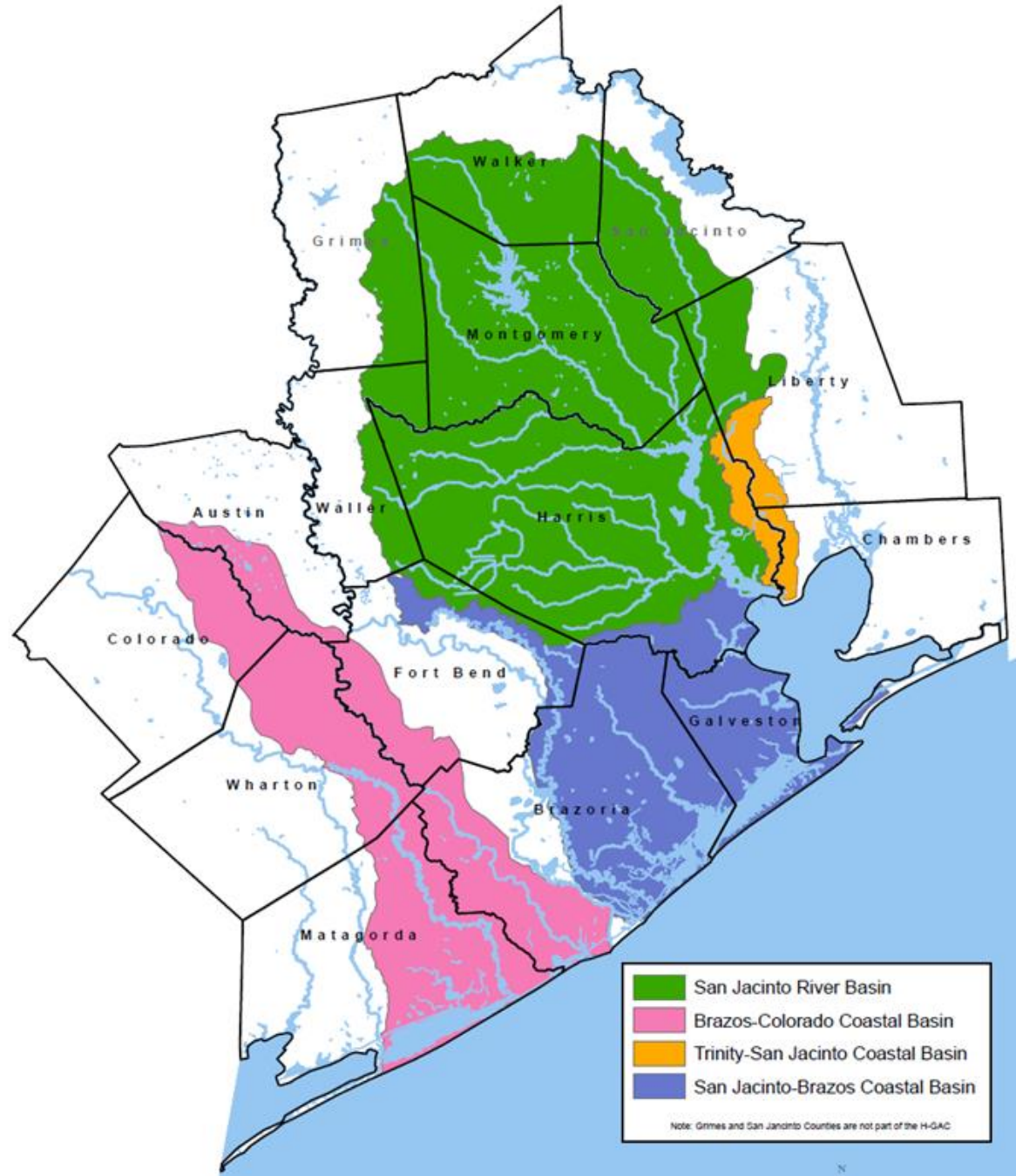
Meeting Goals / Takeaways

- ✓ Share Basin Water Quality – Bacteria
 - ❖ Review Water Quality Data
- ✓ What Are Potential Sources
- ✓ Watershed Planning Tools
- ✓ Local Stakeholder Involvement in Decisions
 - ❖ San Bernard Watershed Protection Plan Implementation
 - ❖ Caney Creek Watershed Planning

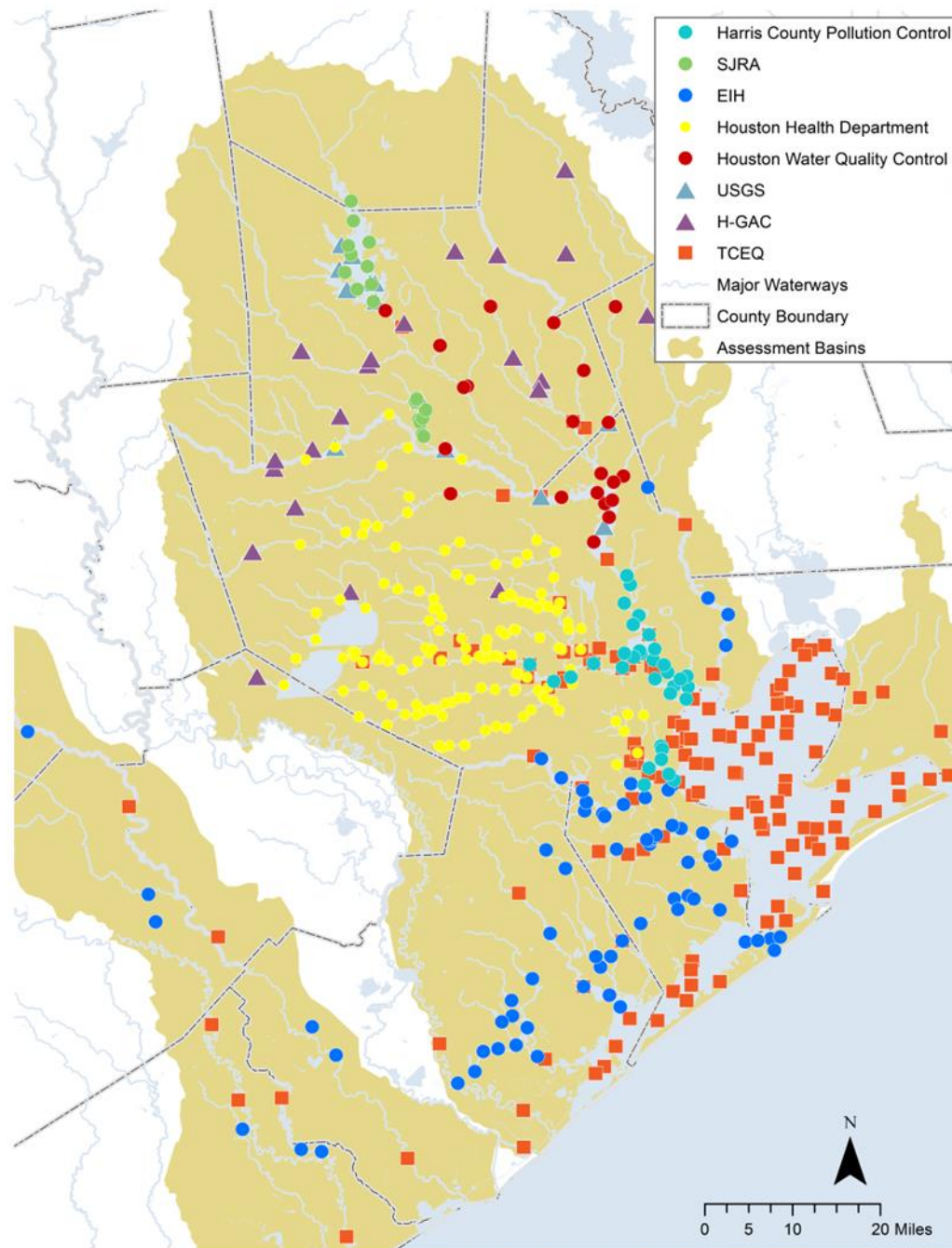
Why Are We Here?



Clean Rivers Program - Region



Regional Coordinated Monitoring



Basin 13

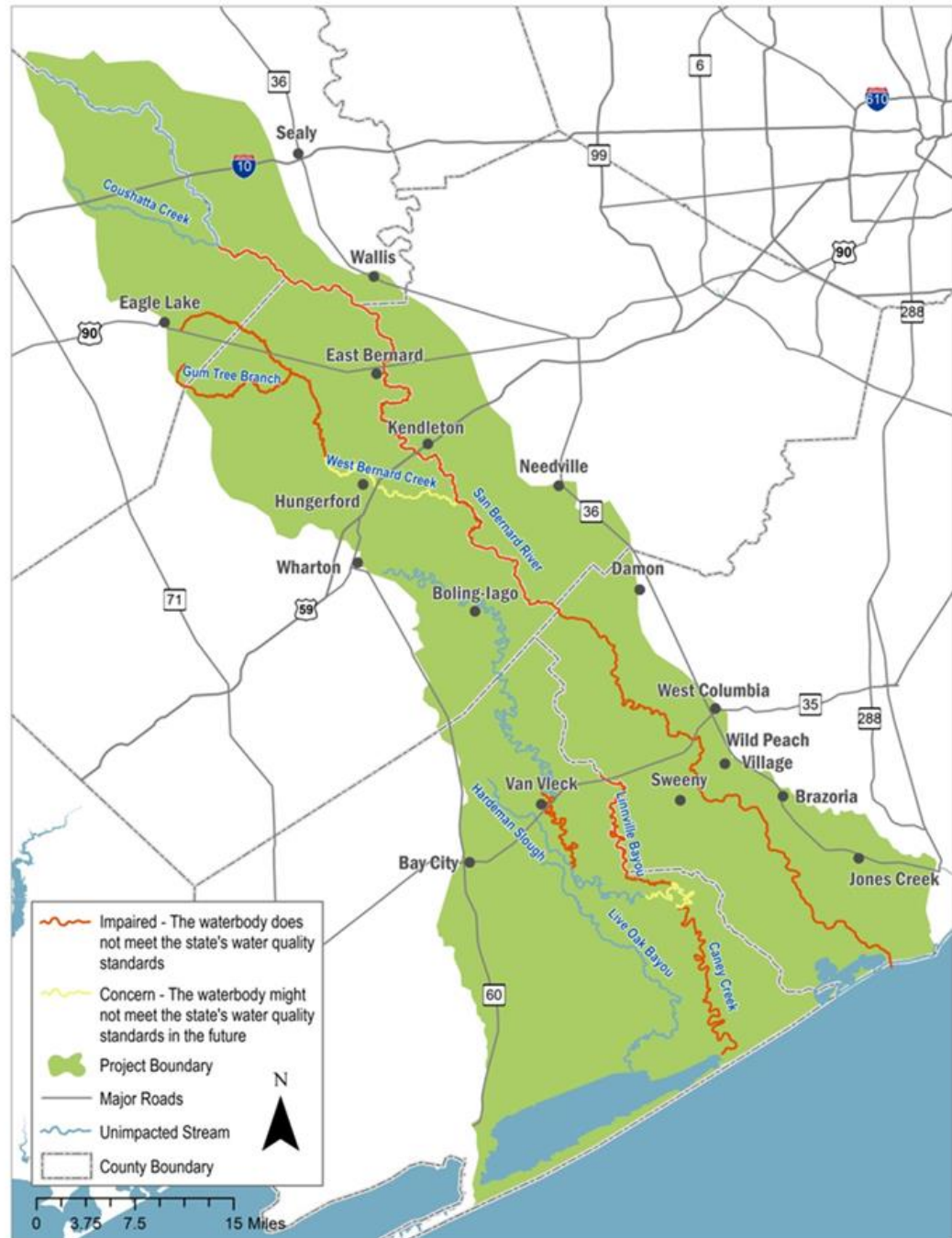
BASIN CHARACTERIZATION REPORT FOR THE BRAZOS – COLORADO COASTAL BASIN FOR INDICATOR BACTERIA

Segments: 1301, 1302, 1304, 1305

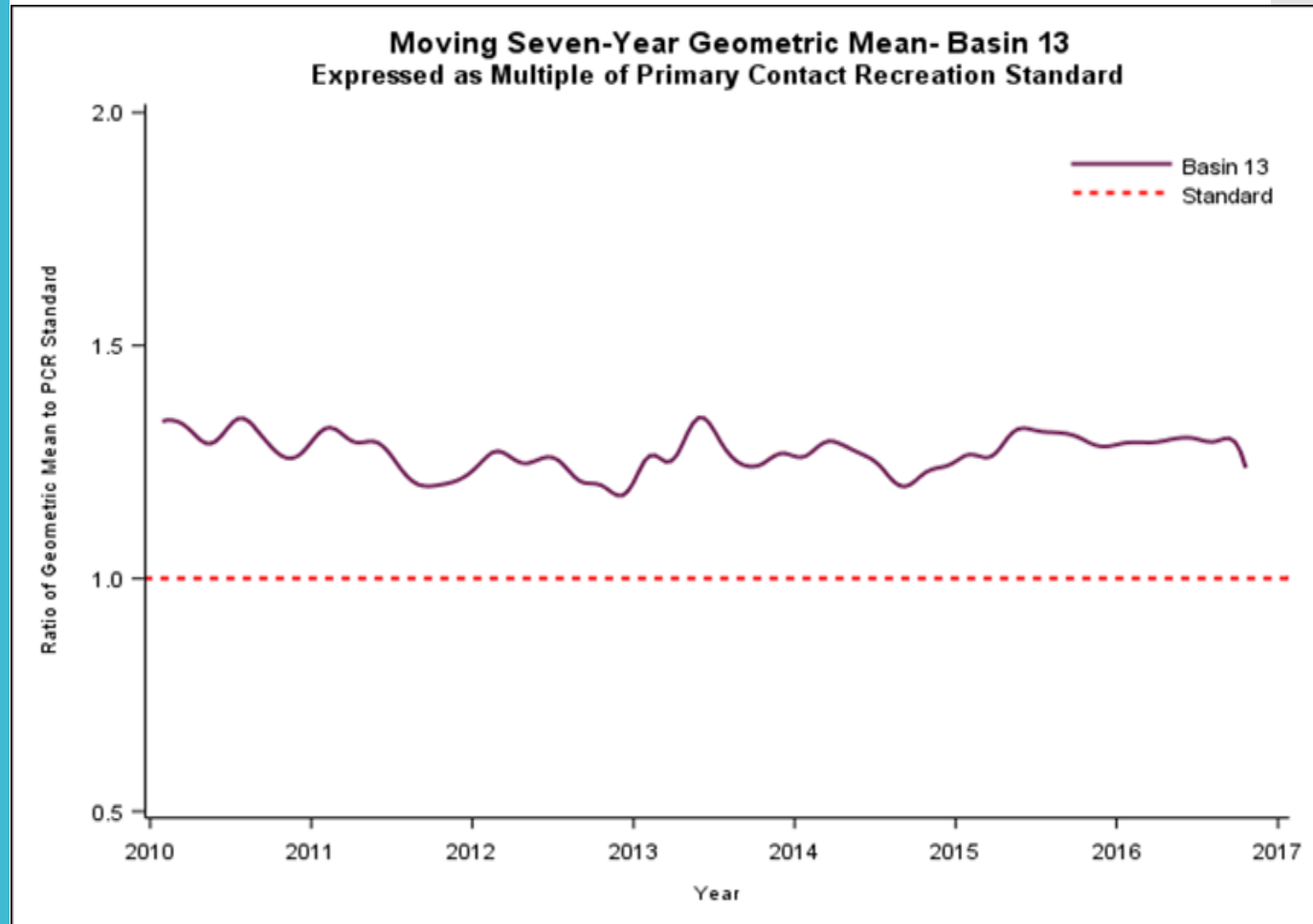


June 30, 2017

Bacteria



Bacteria Trends in Basin 13

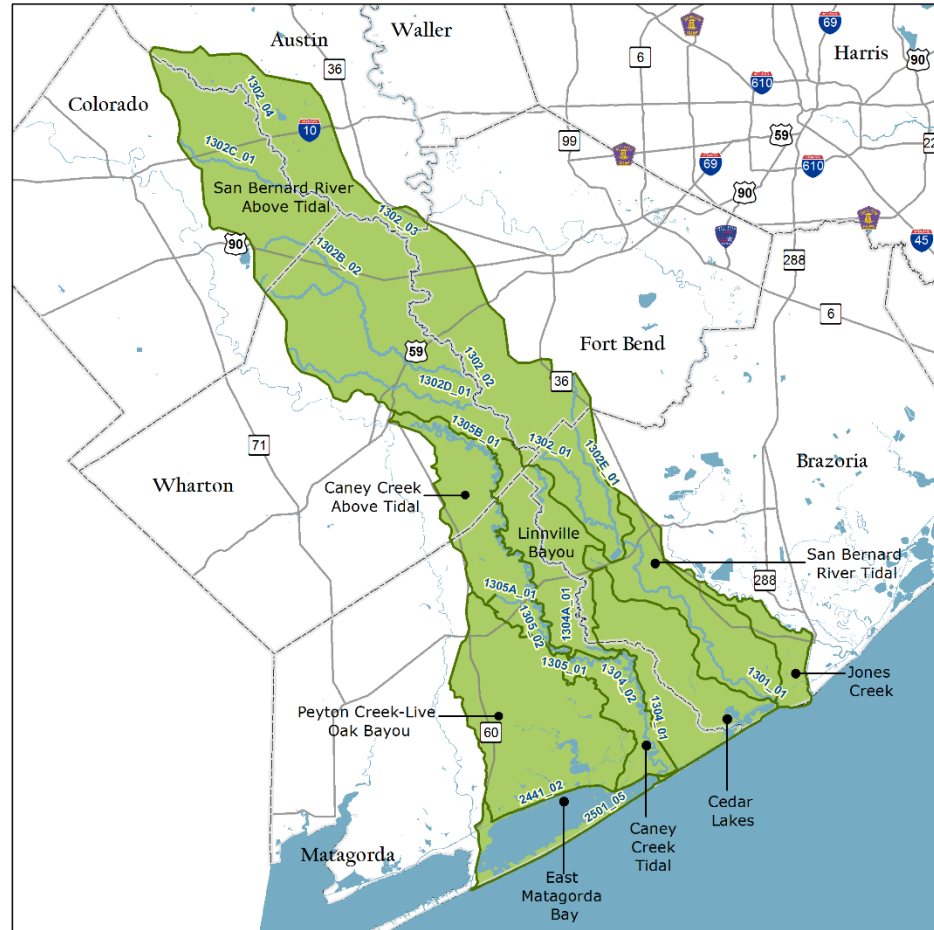


Basin Data



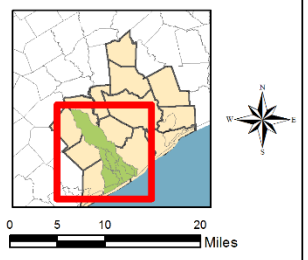
Watersheds

Basin 13 - Watershed



- County Boundary
- Major Rivers
- Major Roads
- Watershed Boundary

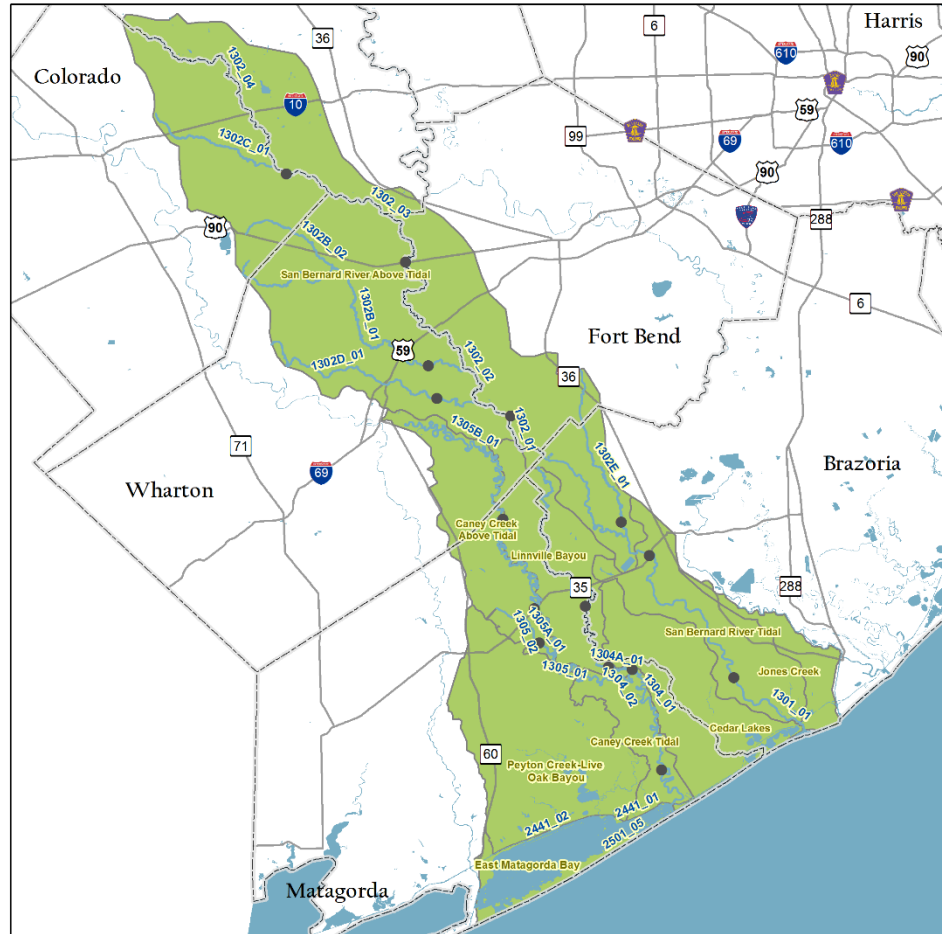
Watershed	% of Basin 13
Linnville Bayou	7.0
Caney Creek Above Tidal	7.0
Peyton Creek-Live Oak Bayou	13.5
Cedar Lakes	8.0
Jones Creek	2.0
San Bernard River Above Tidal	46.5
San Bernard River Tidal	7.0
Caney Creek Tidal	3.0
East Matagorda Bay	5.0



Source- Harris County Flood Control District (HCFCD), United States Geological Survey (USGS), 10-HUC watershed boundary dataset and the H-GAC Clean Rivers Program (CRP) watersheds

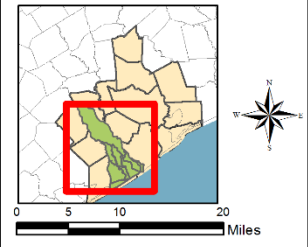
Monitoring Sites

Basin 13 - Monitoring Site Locations



- Monitoring Station
- ⊕ County Boundary
- Major_Rivers
- Major Roads
- 🌿 Watershed Boundary

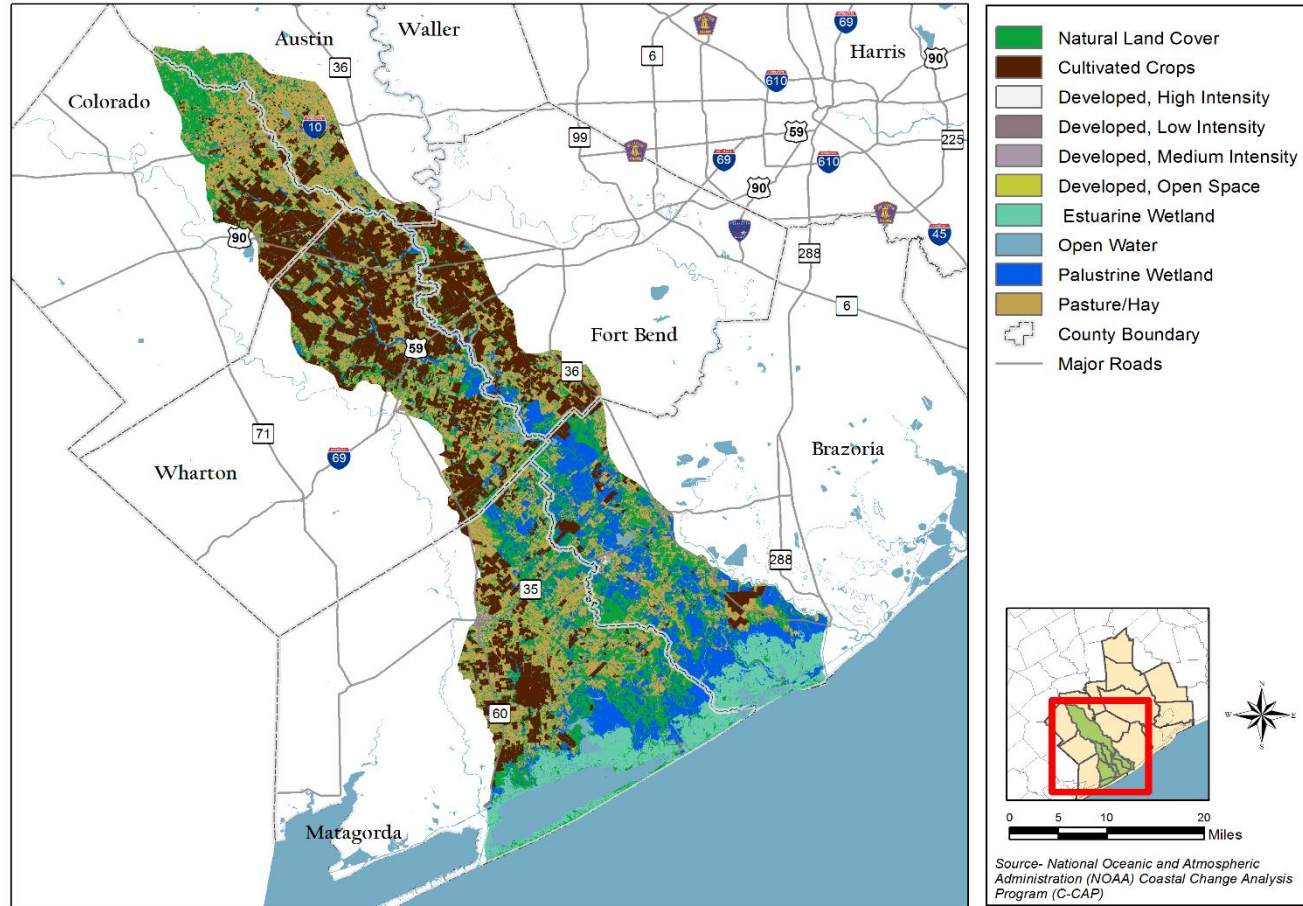
	No. Of Monitoring Sites
Basin 13- Total	15
Linnville Bayou	2
Caney Creek Above Tidal	3
San Bernard River Above Tidal	6
San Bernard River Tidal	2
Caney Creek Tidal	2



Source- Houston Galveston Area Council

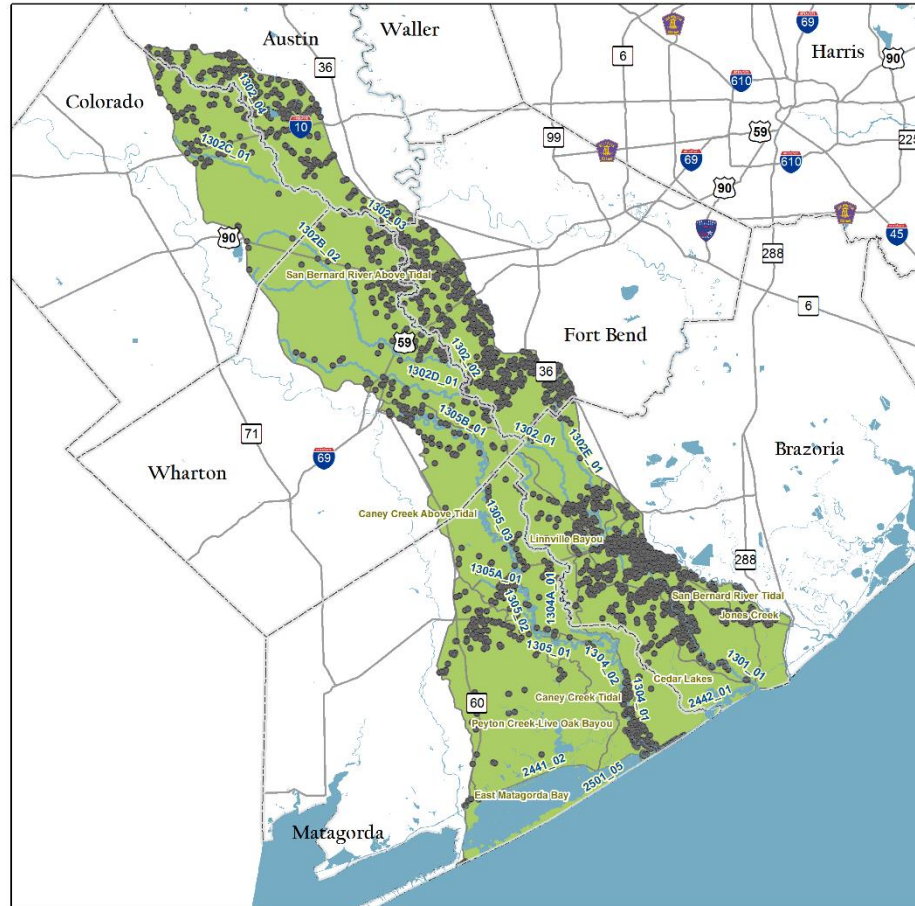
Potential Sources: Land Cover

Basin 13 - Land Cover



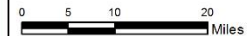
Potential Sources: OSSFs

Basin 13 - OSSF Permits



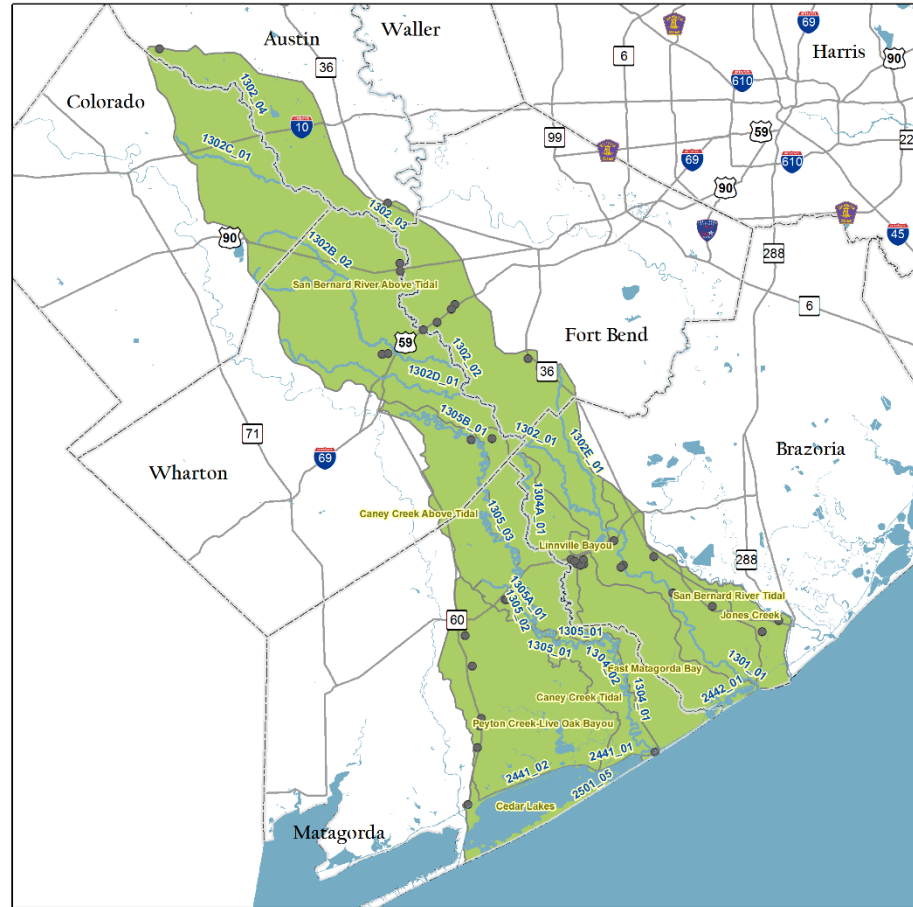
- County Boundary
- OSSF Permits
- Major Rivers
- Major Roads
- Watershed Boundary

	OSSF Permits
Basin 13-Total	4538
Linnville Bayou	103
Caney Creek Above Tidal	303
Peyton Creek-Live Oak Bayou	127
Cedar Lakes	267
Jones Creek	244
San Bernard River Above Tidal	2144
San Bernard River Tidal	1053
Caney Creek Tidal	279
East Matagorda Bay	18



Potential Sources: Wastewater Outfalls

Basin 13 - Waste Water Outfalls



- Waste Water Outfalls
- ⊕ County Boundary
- Major Rivers
- Major Roads
- Watershed Boundary

Waste Water Outfalls	
Basin 13- Total	38
Linnville Bayou	3
Caney Creek Above Tidal	3
Peyton Creek-Live Oak Bayou	5
Cedar Lakes	4
Jones Creek	2
San Bernard River Above Tidal	13
San Bernard River Tidal	6
Caney Creek Tidal	1
East Matagorda Bay	1

Addressing Impaired Waterways

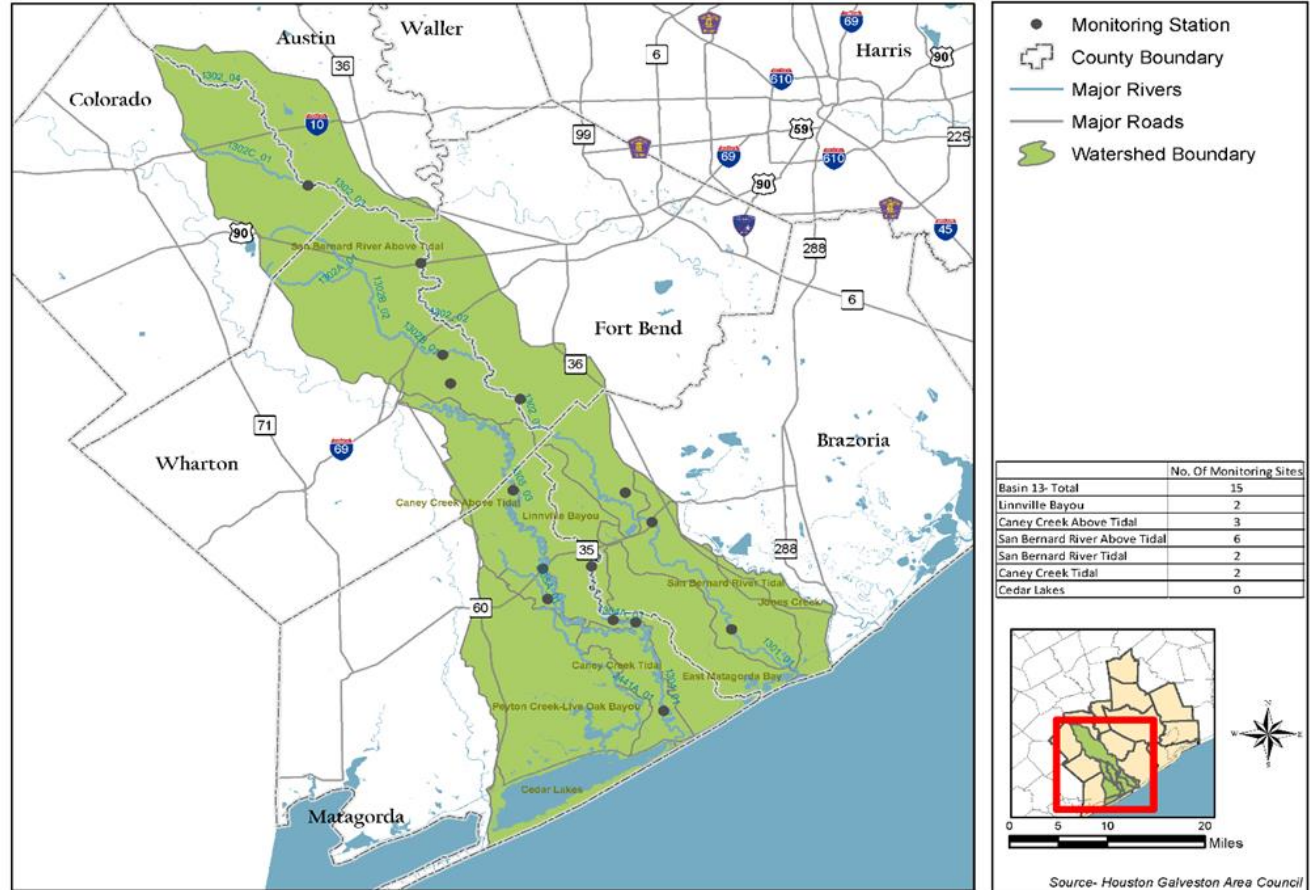
Watershed Planning Tools include:

- Increase or Expand Monitoring
- Recreational Use Attainability Analysis (RUAA)
- Total Maximum Daily Load (TMDL)
- Watershed Protection Plan (WPP)



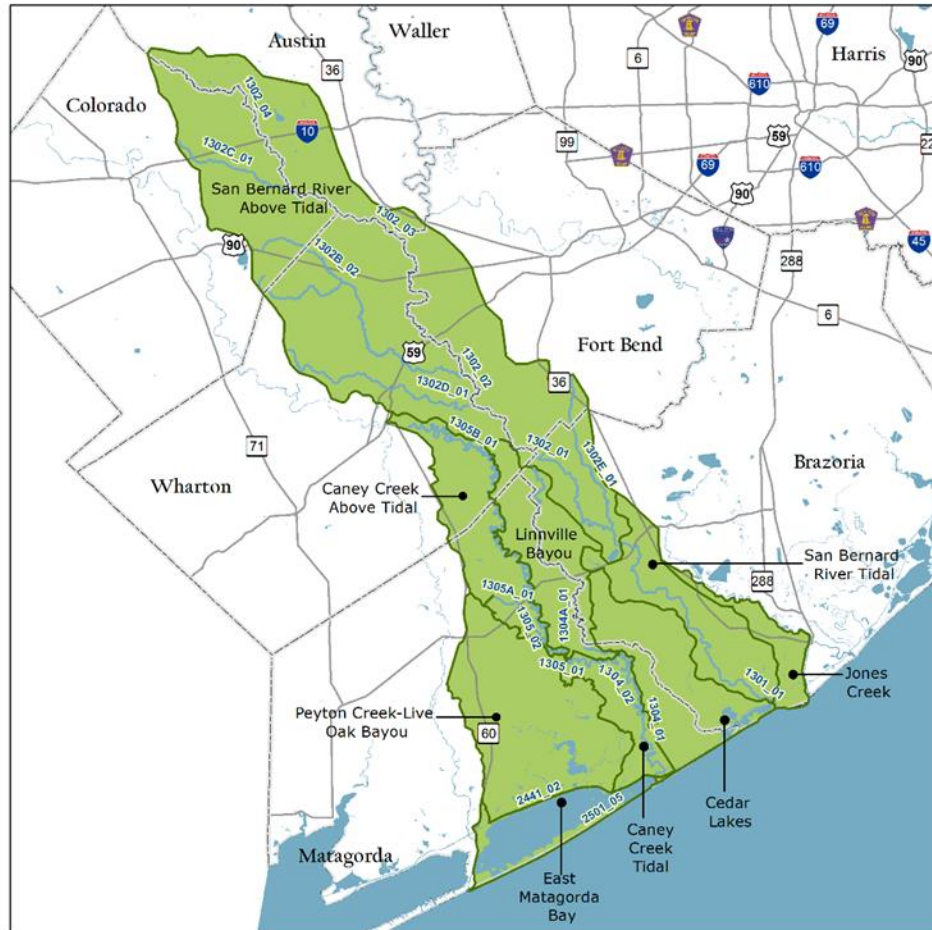
Increase or Expand Monitoring

Basin 13 - Monitoring Site Locations



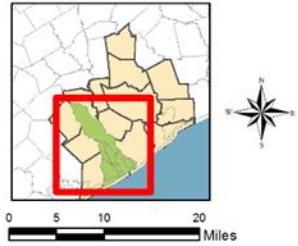
RUAAs

Basin 13 - Watershed



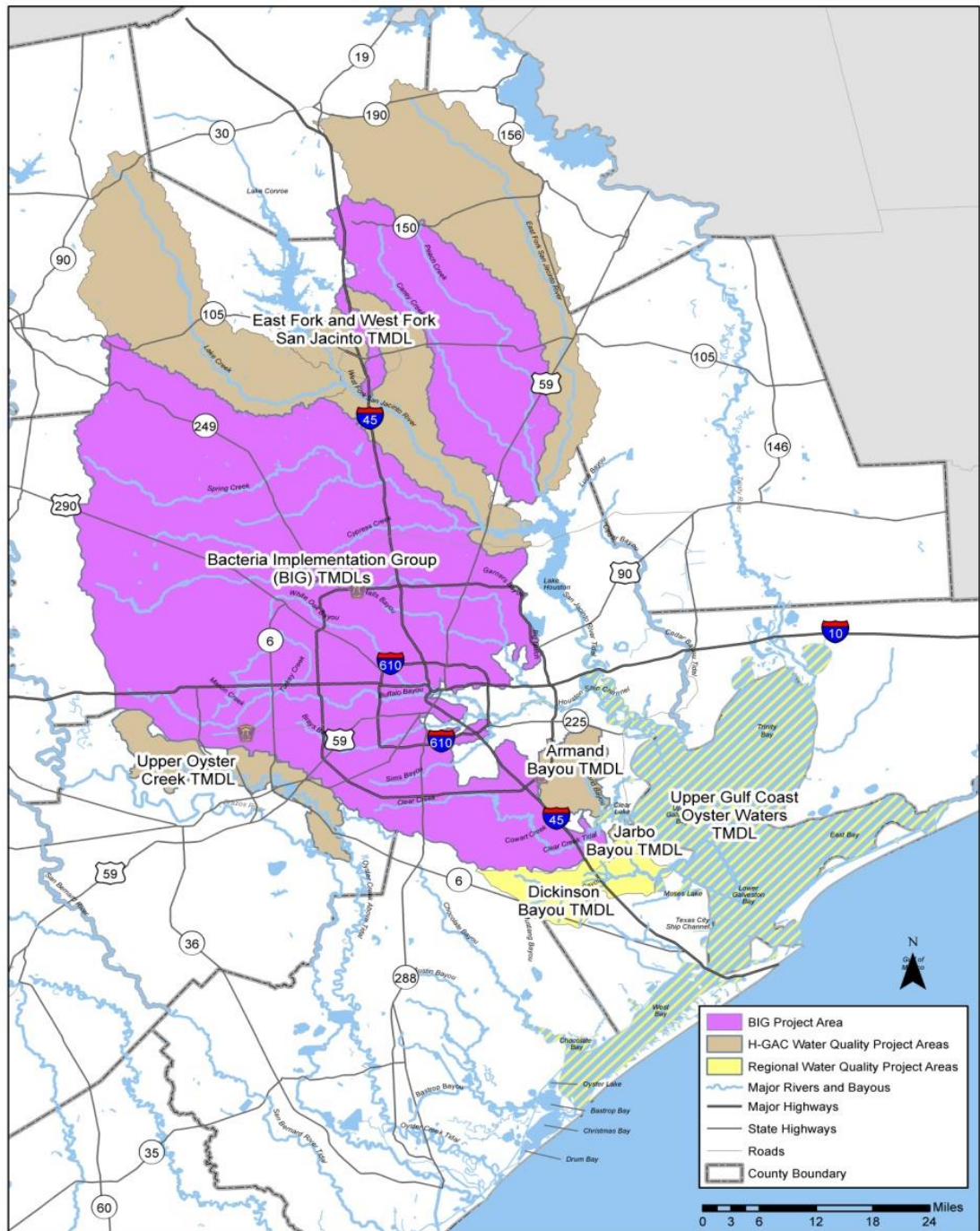
- County Boundary
- Major Rivers
- Major Roads
- Watershed Boundary

Watershed	% of Basin 13
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TMDL Projects



Addressing Impaired Waterways

What is a TMDL?

- “Budget” for pollutant
- Focus only on constituent of concern
- Can lead to mandatory and voluntary changes



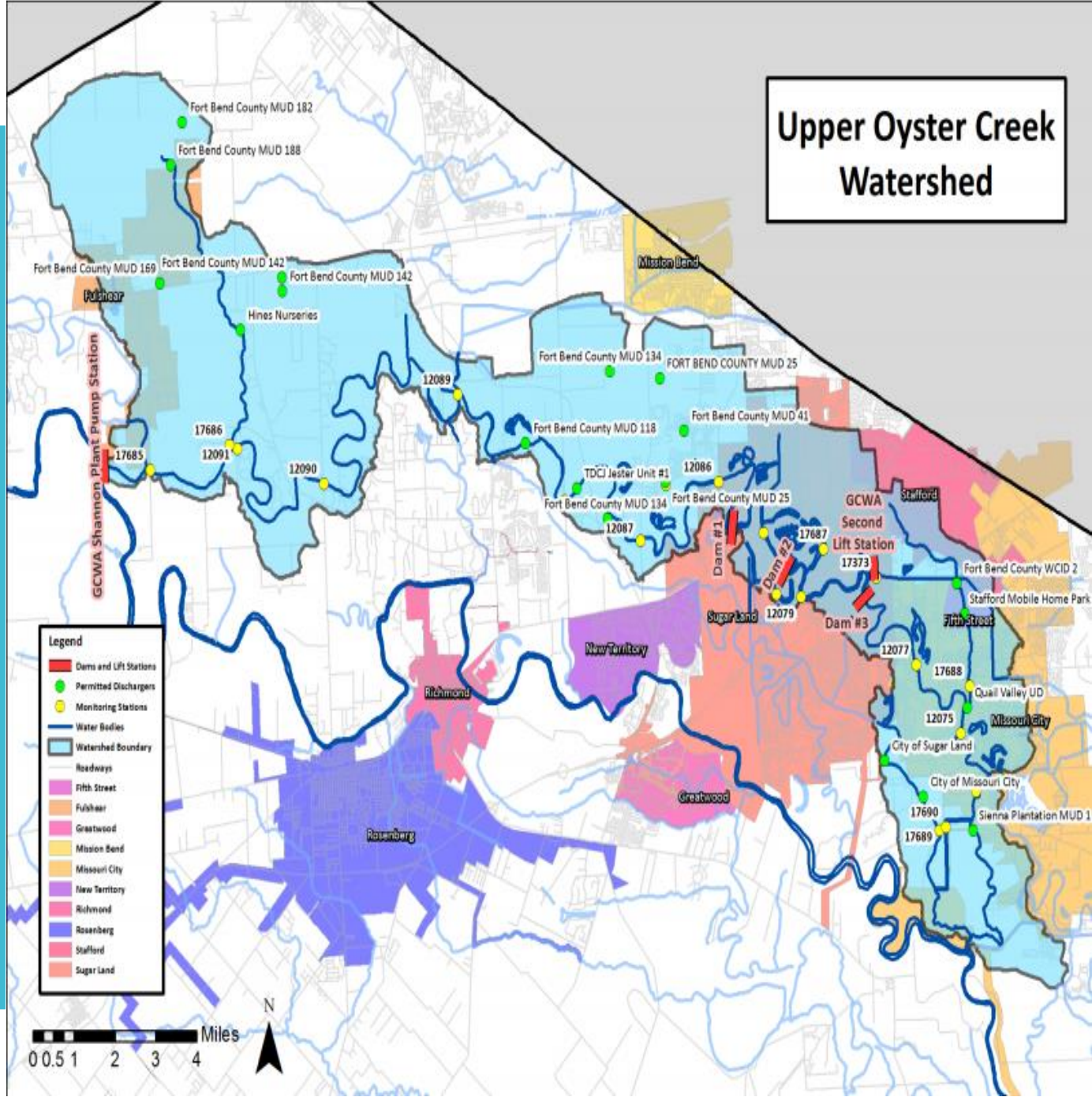
The I-Plan

What is an Implementation Plan?

- “Second Phase” of TMDL
- Determines HOW reductions will be made
- Based on stakeholder recommendations
- Identifies
 - Solutions
 - Implementing Partners
 - Timelines
 - Means of gauging improvement



Example TMDL/ I-Plan



Addressing Impaired Waterways

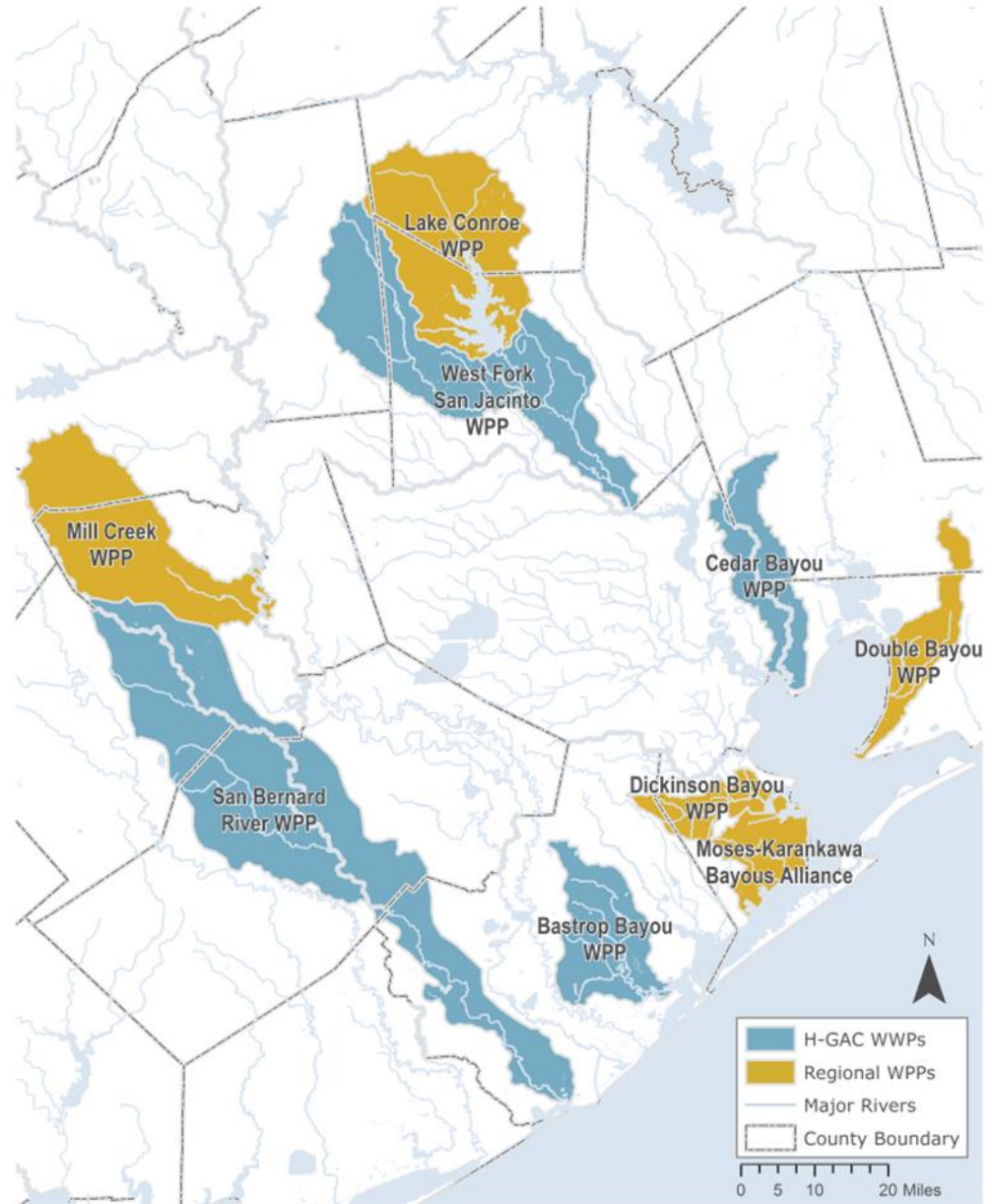
What is a WPP?

- Stakeholder-led process
- Holistic approach to water quality improvement
- Recommends voluntary changes



Regional WPP Projects

Watershed Protection Plans in the H-GAC Region



WPP Process

1. Identify and Characterized Watershed Impairments
2. Model Sources and Develop Loading Reductions
3. Stakeholders Identify Management Measures
4. Voluntary Approach

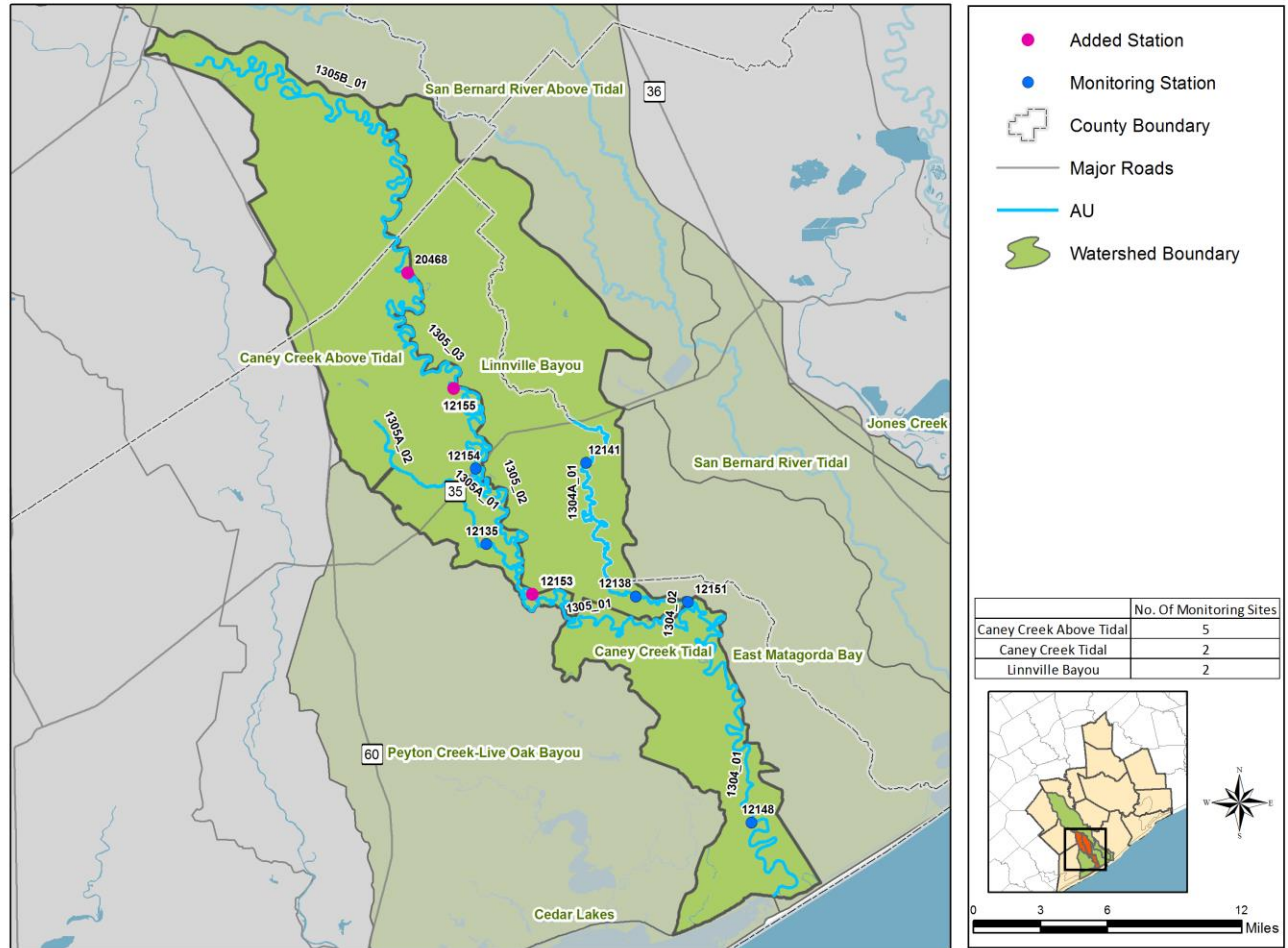
Example WPP: San Bernard River WPP

- Started in FY 10 through ARRA Grant
- Primary target is elevated indicator bacteria
- Focus of WPP is reducing bacteria from OSSFs and cattle
- WPP approved by TCEQ/EPA



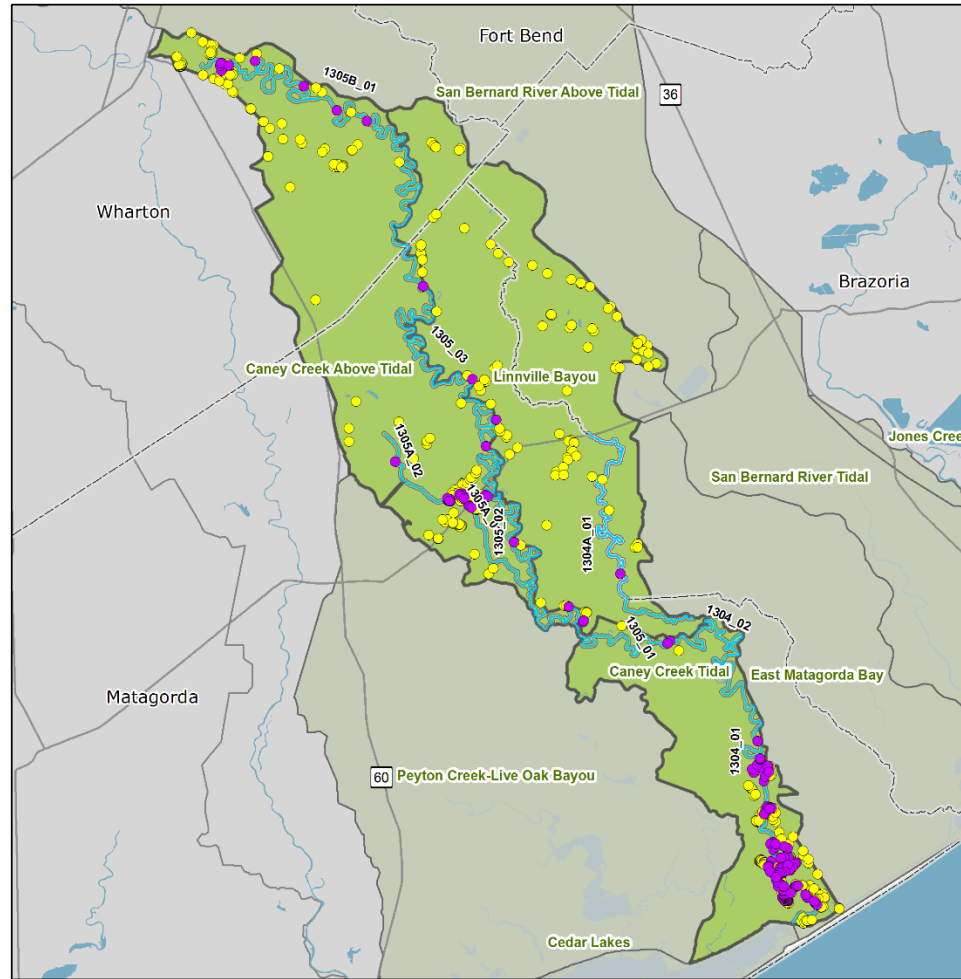
Caney Creek

Caney Creek - Monitoring Site Locations



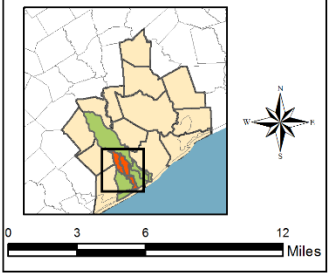
Caney Creek: OSSF

Caney Creek - OSSF Permits



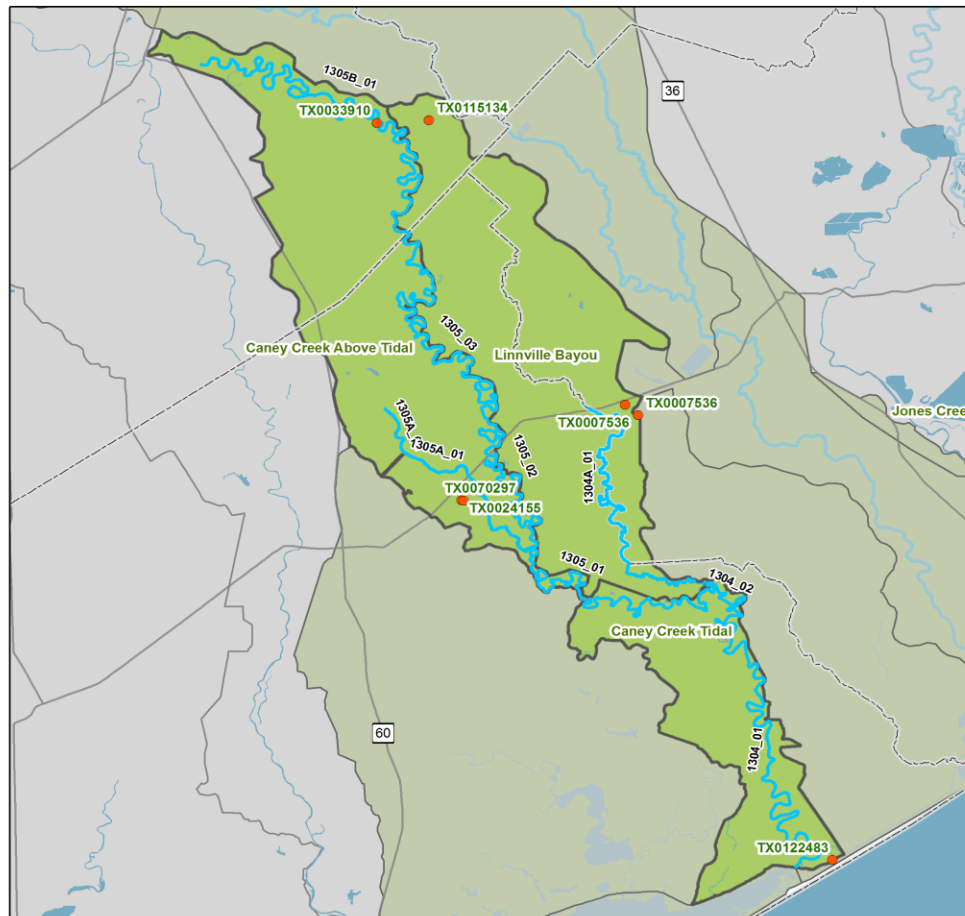
- OSSF Permits Within 500ft Buffer
- OSSF Permits
- AU
- Major Roads
- County Boundary
- Watershed Boundary
- 500ft Buffer

AU ID	OSSF within 500ft Buffer
1304_01	113
1304_02	2
1304A_01	1
1305_01	3
1305_02	3
1305_03	3
1305A_01	30
1305A_02	1
1305B_01	10



Caney Creek: WWTF Outfalls

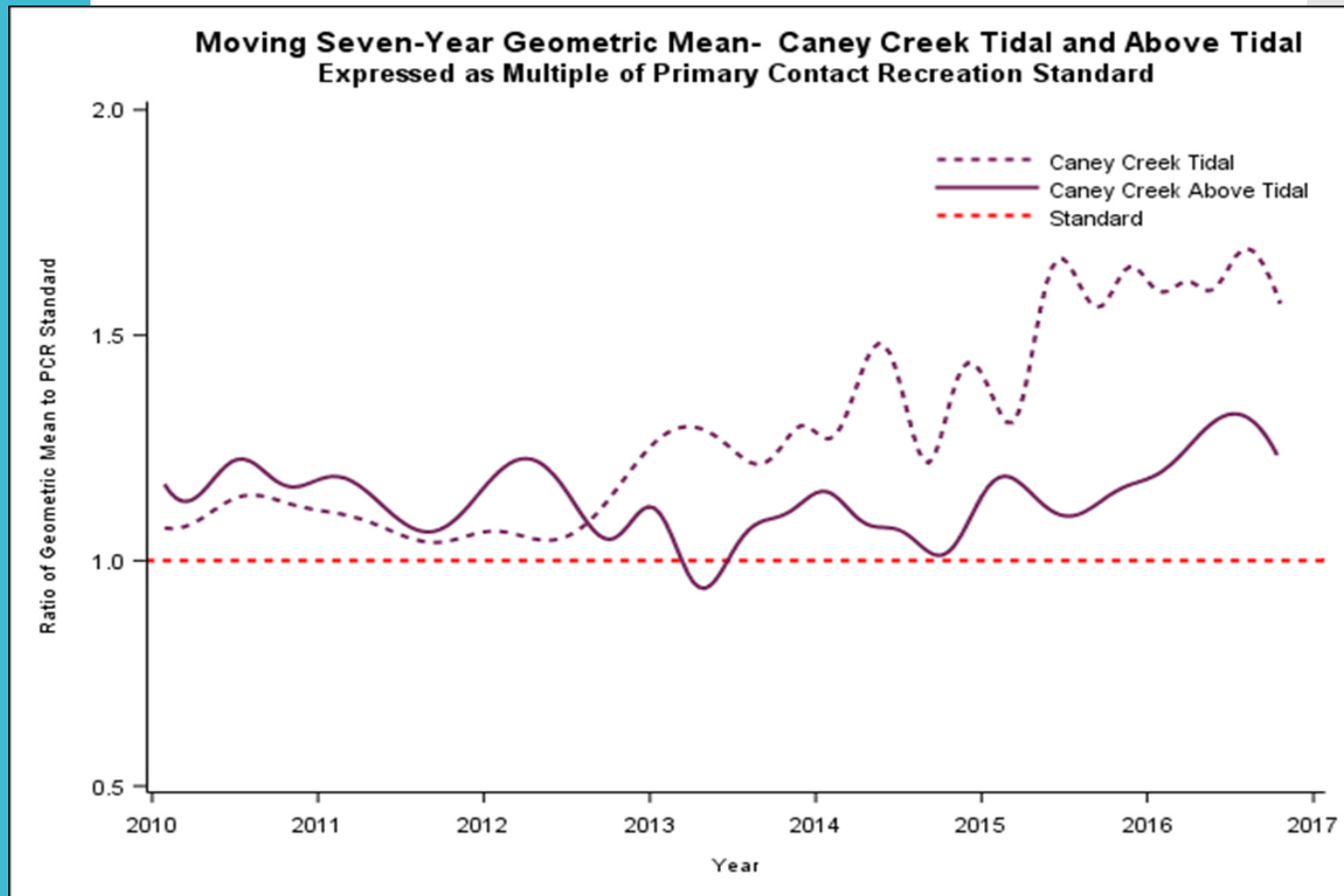
Caney Creek - WWTF



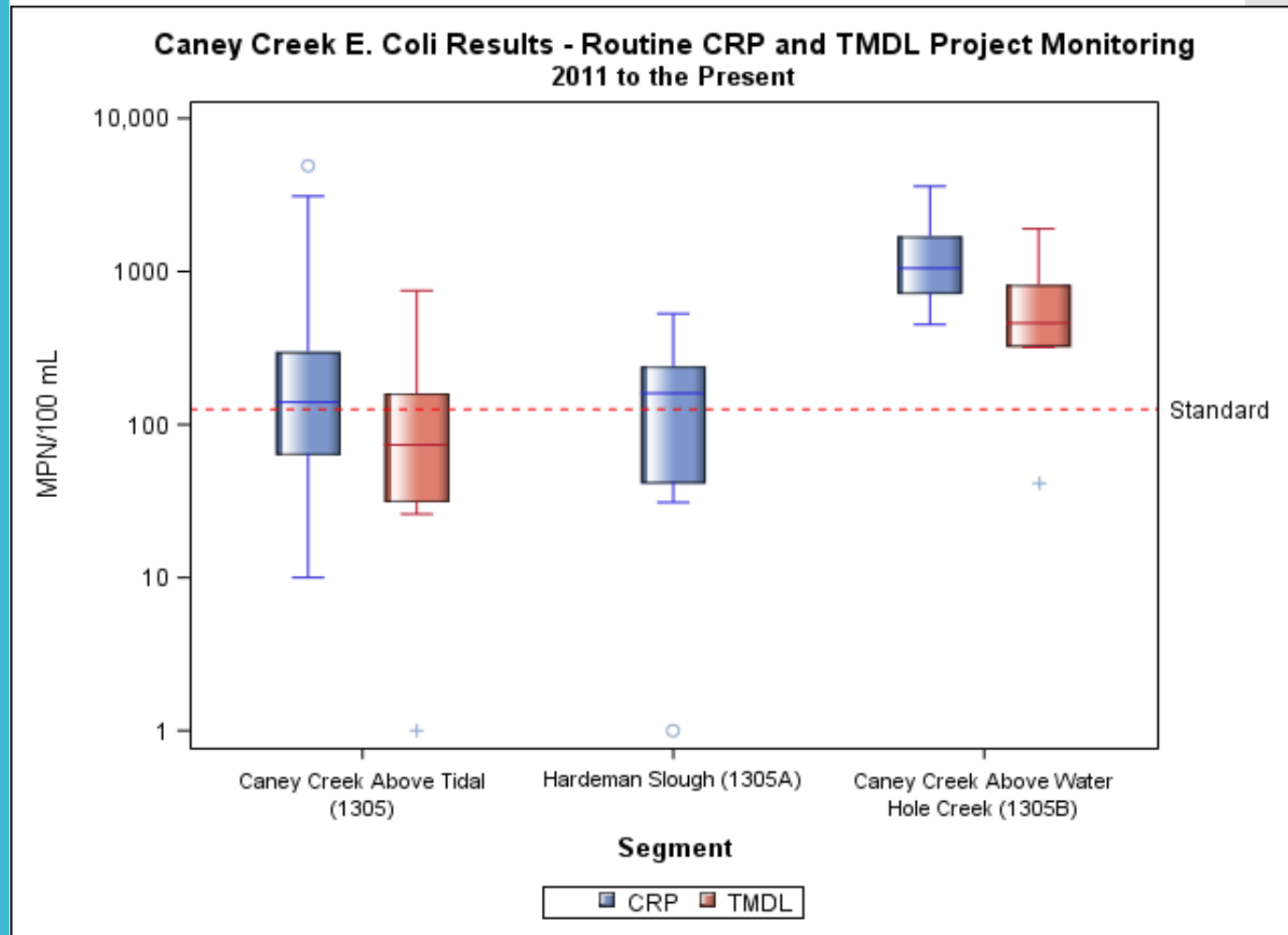
- WWTF Outfalls
- County Boundary
- Major Roads
- AU
- Watershed Boundary

Watershed	WWTF
Caney Creek Above Tidal	3
Caney Creek Tidal	1
Linnville Bayou	3

Bacteria Trends



New Data



State Programs - Implementation



Workshops and Training



Next Steps

- Working to find support for San Bernard WPP implementation.
- Start stakeholder meetings in Caney Creek
 - Selecting members of the Coordination Committee
 - Stakeholder input of watershed planning approach
- Draft Caney Creek Technical Support Document
 - Draft Due June 2018.

Questions?

