



Addressing Water Quality Impairments

Basin 13 Leadership Forum



March 21, 2019

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Agenda

Basin 13 Leadership Forum



- 10:00 – 10:05 Welcome – Opening Remarks
- 10:05 – 10:35 Review Basin 13 Project Area
- 10:35 – 11:25 Group Housekeeping
- 11:25 – 11:45 Implementation Activities
- 11:45 – 12:00 Wrap Up and Next Steps
- 12:00 Adjourn

Why are we here?

Portions of the San Bernard River, Caney Creek and Linnville Bayou do not meet the State's Water Quality Standards for Contact Recreation.



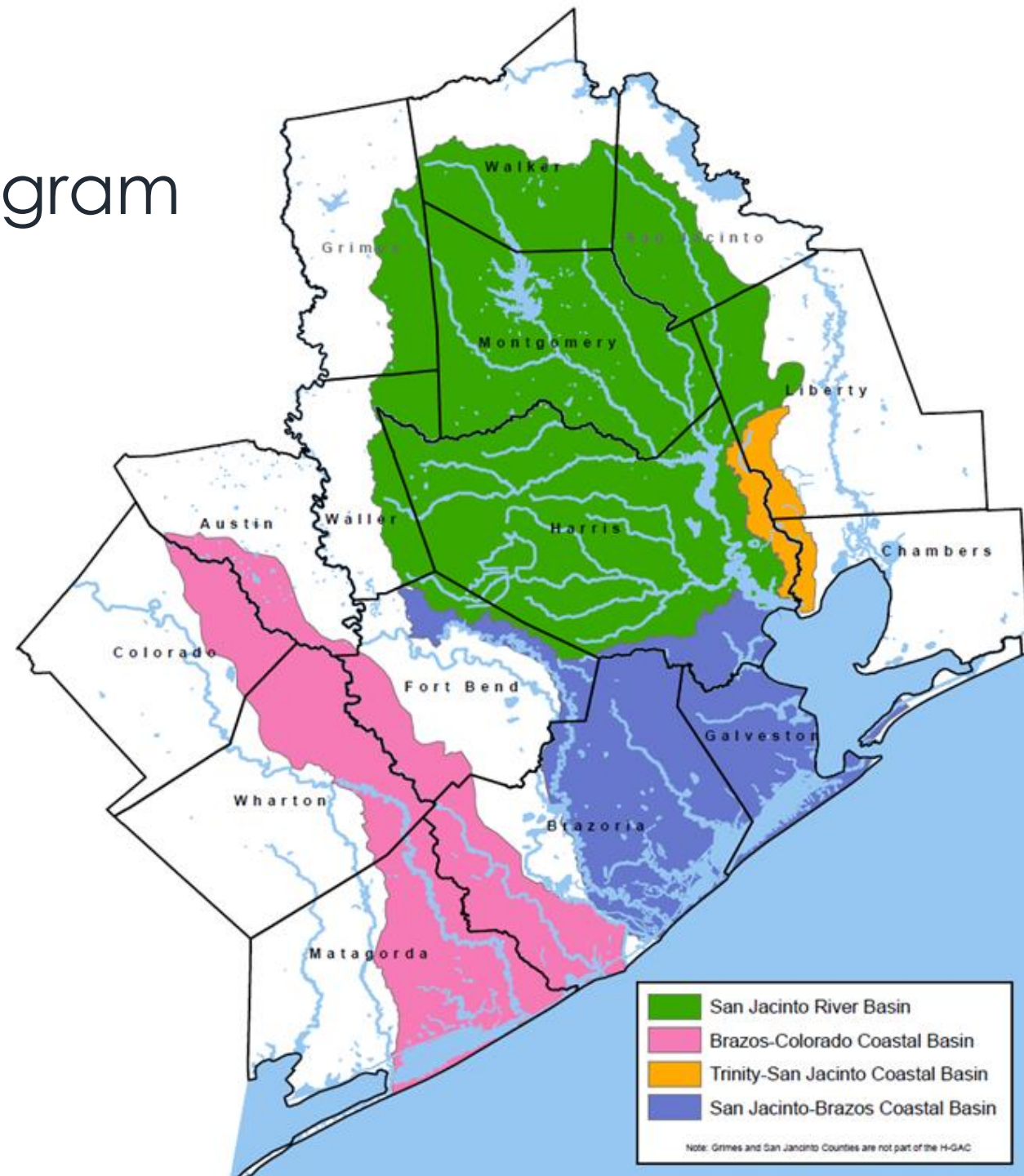
H-GAC's Clean Rivers Program

Clean Rivers Program Assessment Area

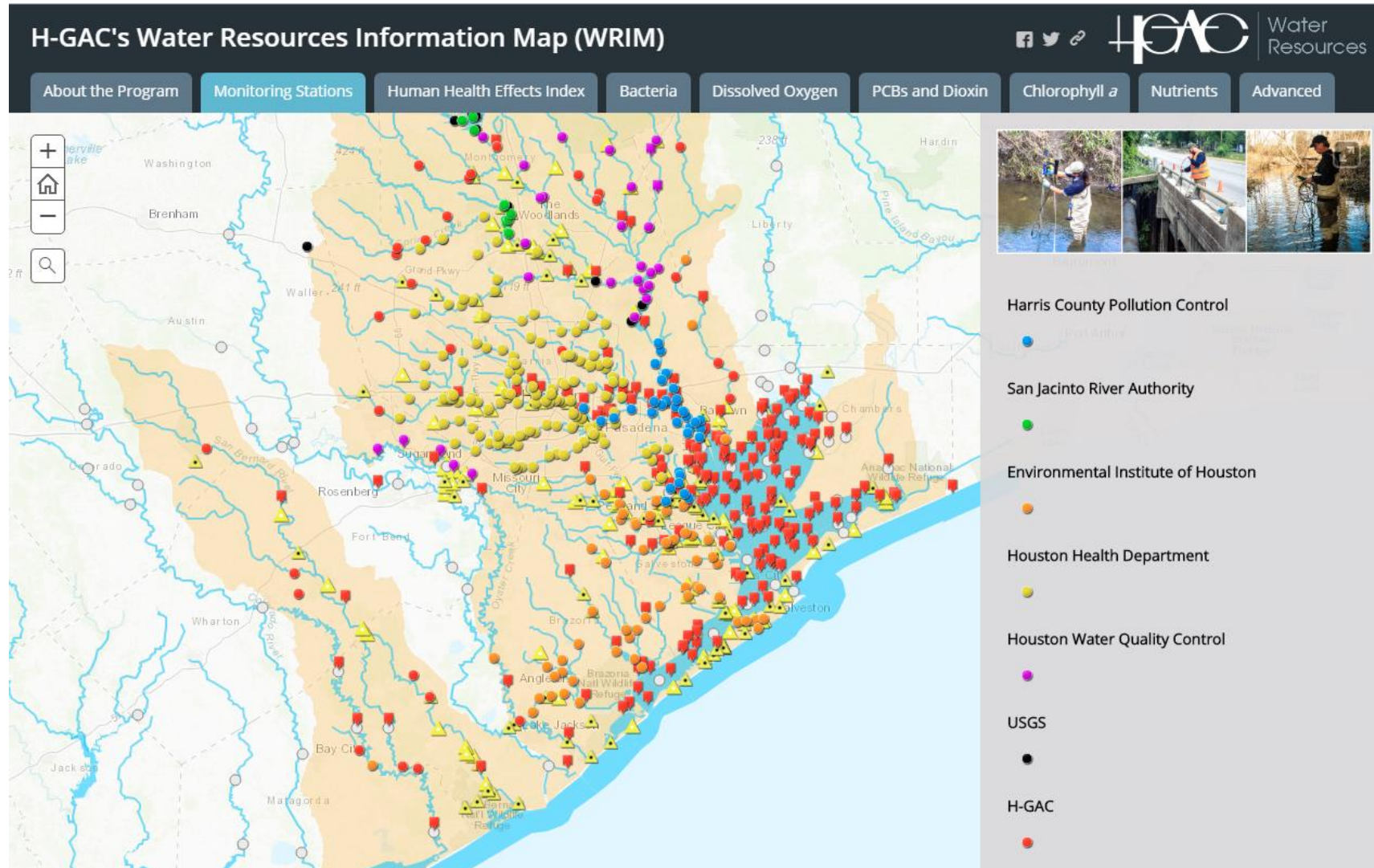
- 15 counties
- 16,000 miles of streams and shoreline
- Population 5+ million

Basin 13 Project Area

- Six counties
- 20-plus cities / communities

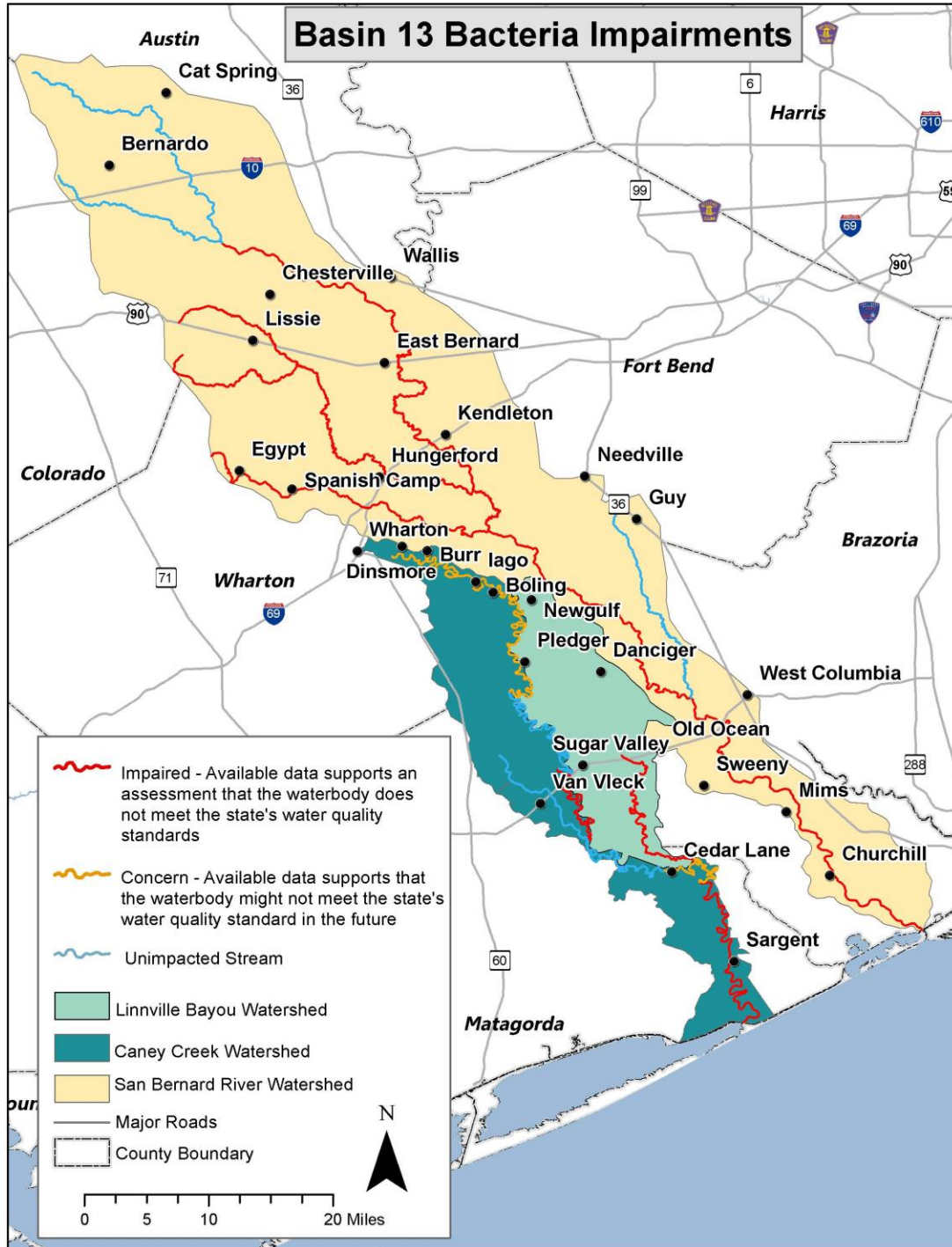


Coordinated Regional Monitoring

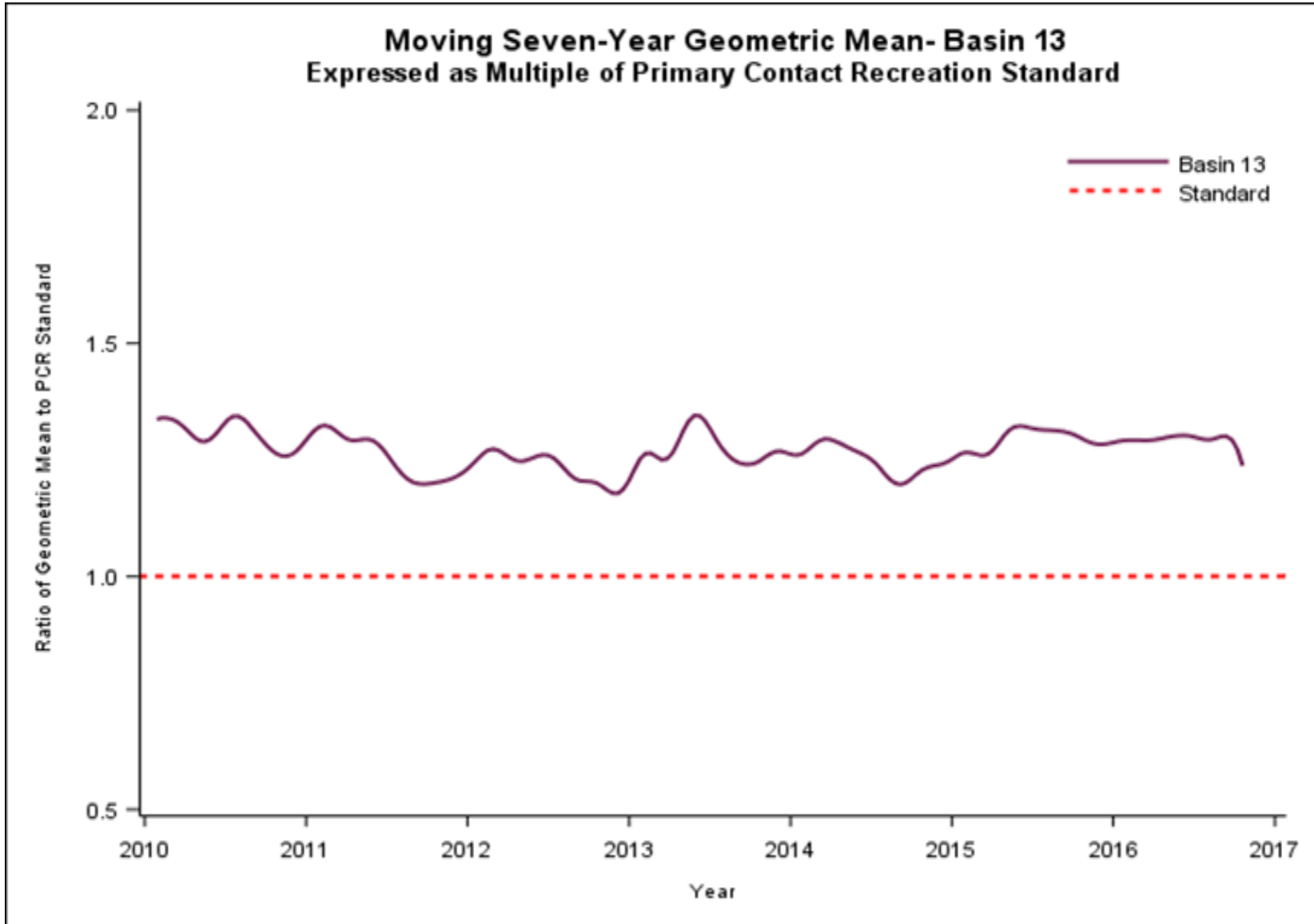


<http://www.h-gac.com/go/wrim>

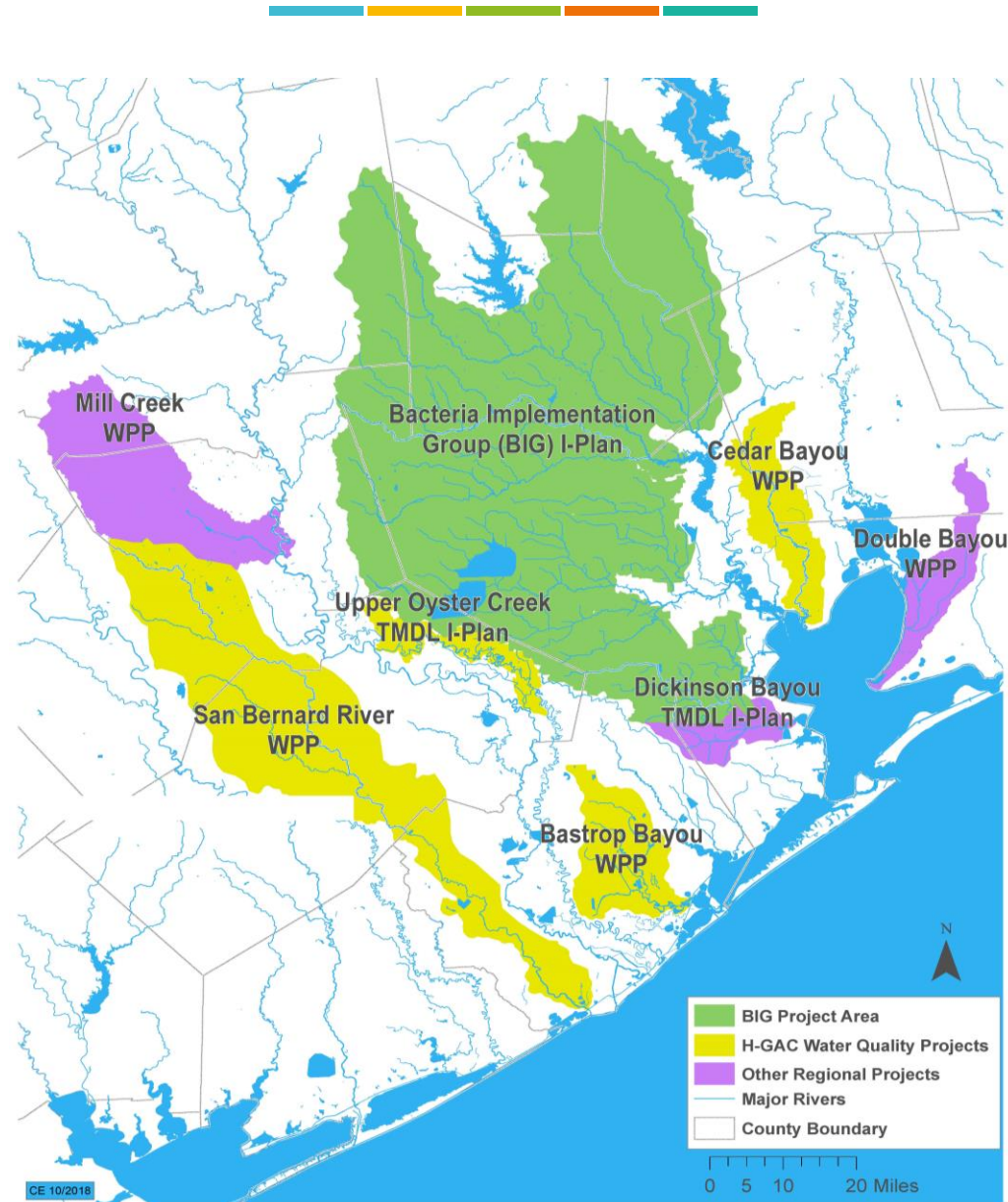
Basin 13 Bacteria Impairments



Bacteria Trends



Approved Watershed-based Plans



Types of Watershed-based Plans



TMDL / I-Plan

- ▶ Mostly Voluntary
- ▶ Single Pollutant
- ▶ Mostly Urban Watersheds
- ▶ Short Time-Frame
- ▶ Permittees can be ahead of the curve

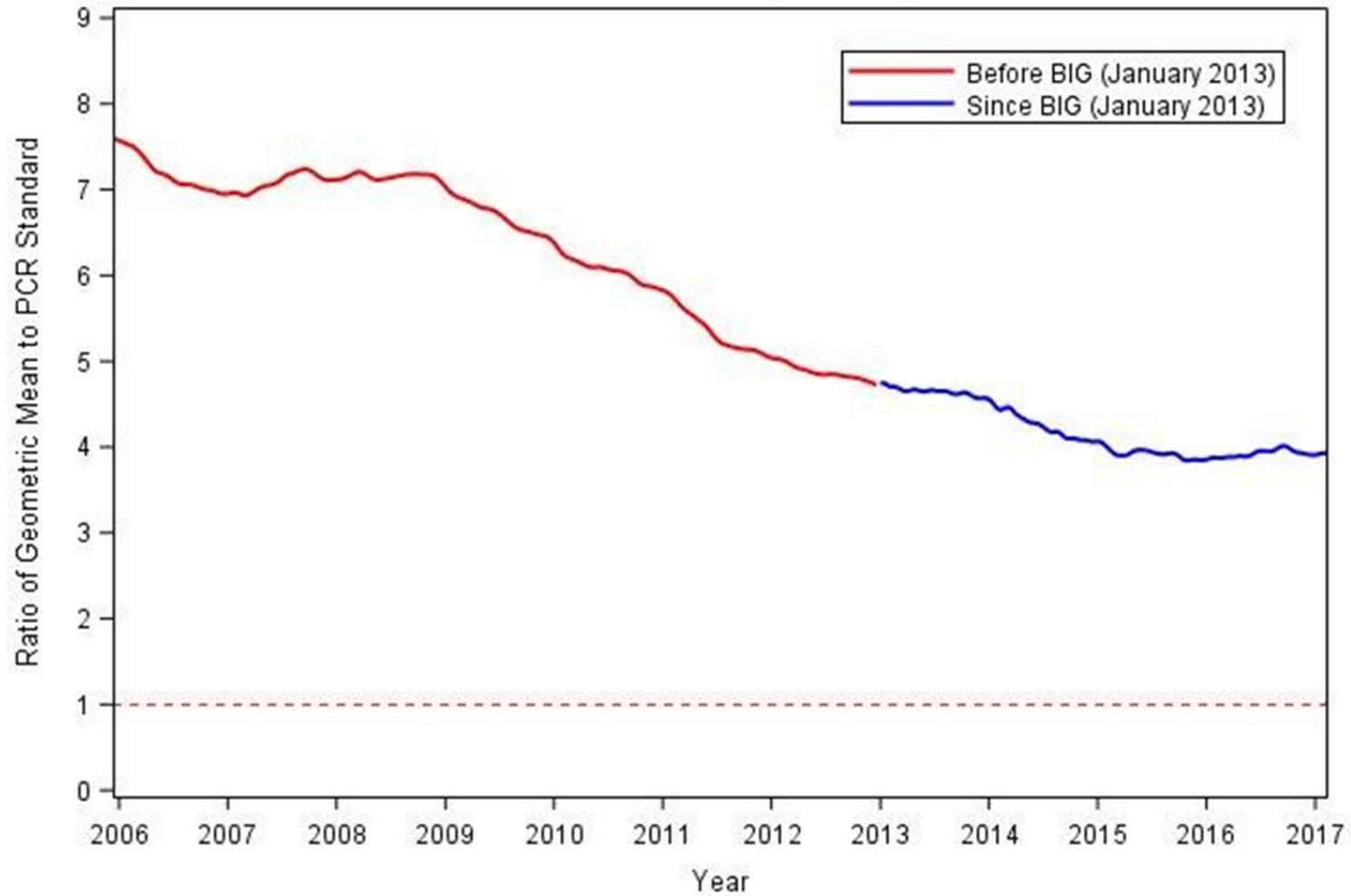
WPP

- ❖ Voluntary
- ❖ Typically Address multiple concerns
- ❖ Mostly Rural Watersheds
- ❖ Longer Time-Frame
- ❖ Not typically used by State Permit Process
- ❖ 319 Funding Source

Do Watershed-based Plans Work?



Bacteria Trend in BIG Project Area, 2006-2016



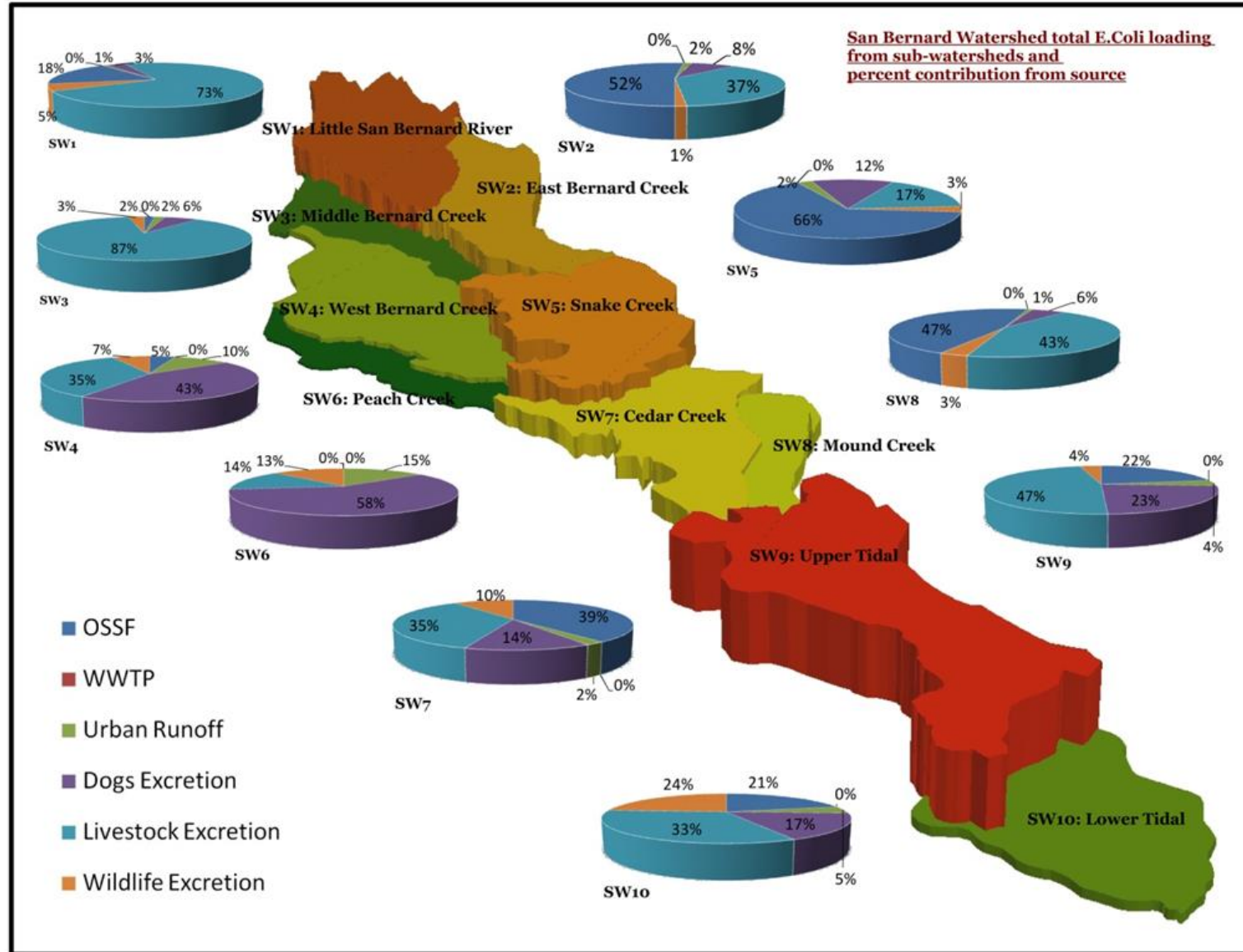
Dotted Red Line represents the Primary Contact Recreation Standard

Possible Bacteria Sources

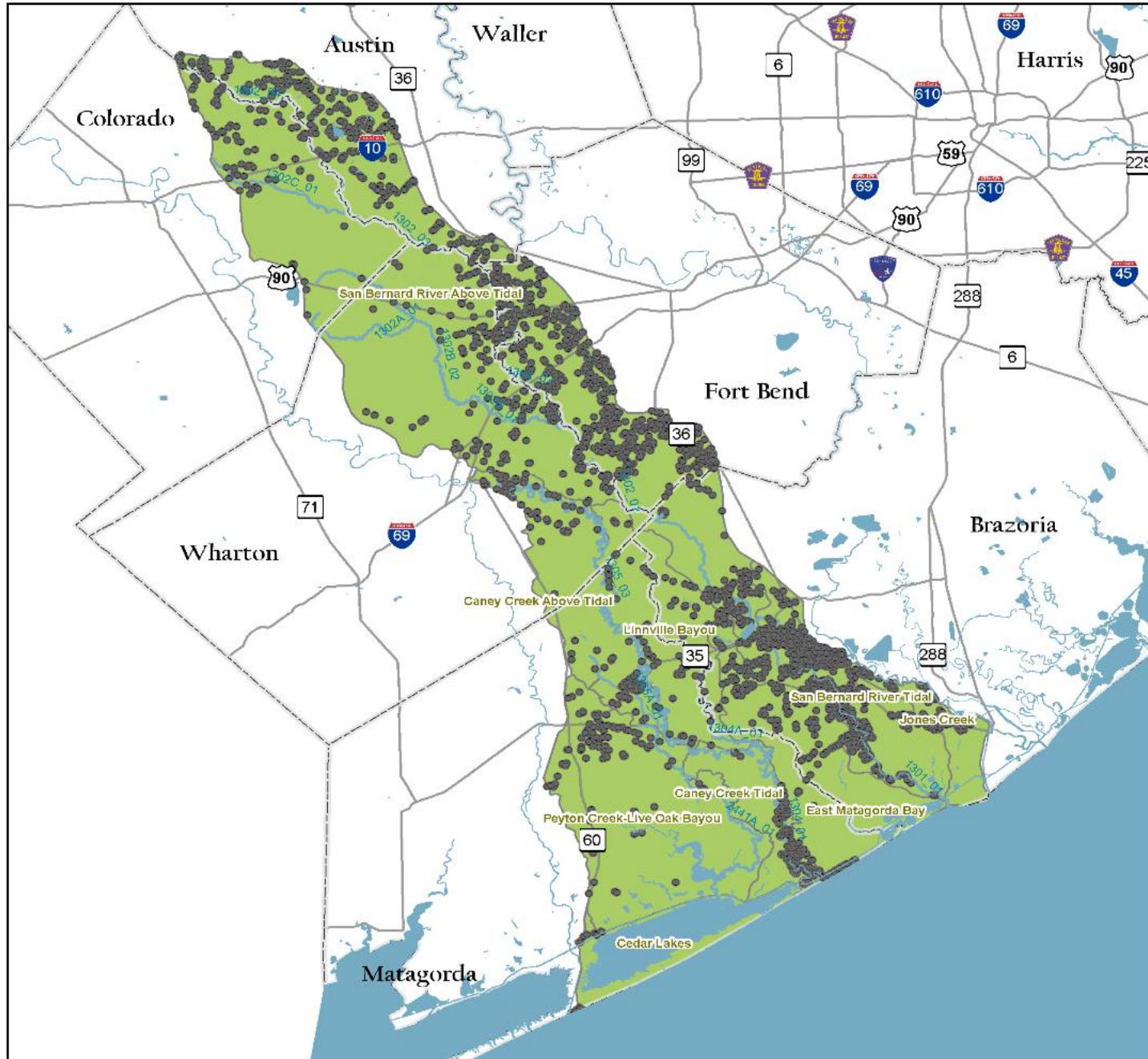
- Domestic pets (dogs, cats)
- Wastewater infrastructure
- Wildlife (deer, bird, raccoon, etc.)
- Concentrated Animal Feeding Operation
- Feral Hogs
- Onsite Sewage Treatment
- Urban lawns and landscaping
- Agriculture/Pasture



Source Contributions

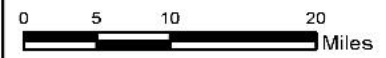


Basin 13 - OSSF Permits



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

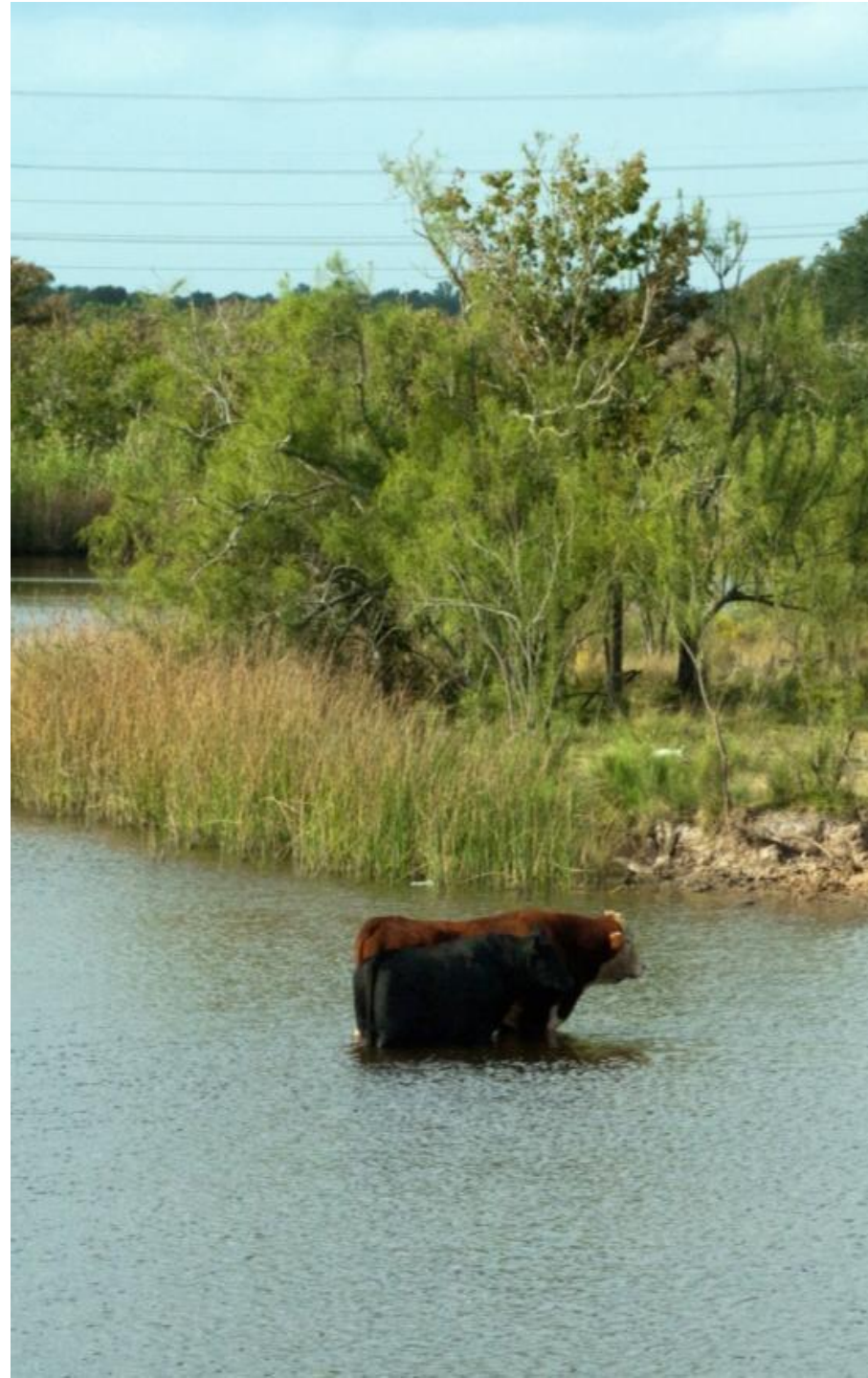
	OSSF Permits
Basin 13-Total	4538
Linnville Bayou	103
Caney Creek Above Tidal	303
Peyton Creek-Live Oak Bayou	127
East Matagorda Bay	267
Jones Creek	244
San Bernard River Above Tidal	2144
San Bernard River Tidal	1053
Caney Creek Tidal	279
Cedar Lakes	18



Potential Ag Source Measures



Watershed	Pasture/Grassland Area (Acres)	Cattle and Calves	Hogs and Pigs	Sheep and Lambs	Equine	Poultry
Brazoria	262112	78907	4218	1435	4572	6033
Matagorda	240492	53283	47	304	1141	1261
Wharton	256621	57168	131	395	1687	242
Caney Creek Tidal	9904.68	2194	2	13	47	52
Linnville Bayou	23429.63	5804	127	63	215	244
Caney Creek Above Tidal	40842.56	9069	13	56	224	144



Potential Pet / Feral Hog Source Measures

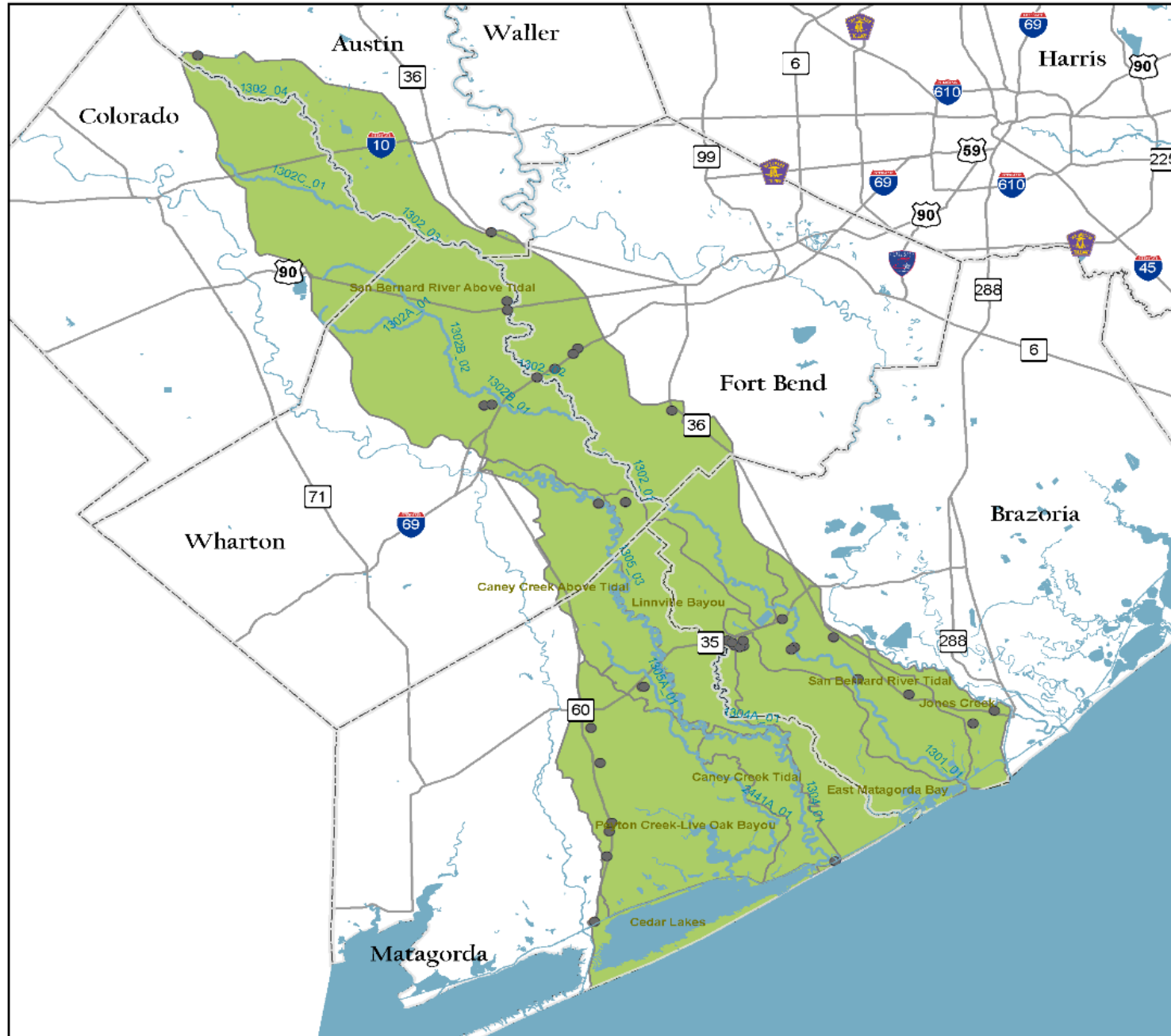
Segment	Estimated Households	Dogs	Cats
Caney Creek Tidal	185	108	118
Linnville Bayou	357	208	228
Caney Creek Above Tidal	3,003	1,754	1,916
Total	3,545	2,070	2,262



Watershed	Suitable Area (Acres)	Suitable Area (Sq. Mile)	Feral Hog Population
Caney Creek Tidal	28,182.51	44.04	342-570
Linnville Bayou	63,782.74	99.66	774-1291
Caney Creek Above Tidal	100,742.43	157.41	1223-2038

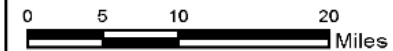
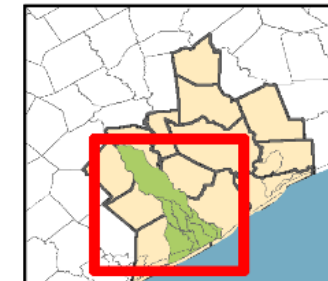


Basin 13 - Waste Water Outfalls



- 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
East Matagorda Bay	4
Jones Creek	2
San Bernard River Above Tidal	13
San Bernard River Tidal	6
Caney Creek Tidal	1
Cedar Lakes	1



Working Together to Protect Our Waterways

Basin 13 Leadership Forum



Purpose of the Leadership Forum:

- 01 Receive Updates & Provide Input
- 02 Collaboration on Implementation Activities

Composition of the Leadership Forum

Basin 13 Leadership Forum



COUNTY OFFICIALS

- Austin County
- Brazoria County
- Colorado County
- Fort Bend County
- Matagorda County
- Wharton County



CITY OFFICIALS

- City of Bay City
- City of Brazoria
- City of Eagle Lake
- City of East Bernard
- City of Freeport
- City of Kendleton
- City of Lake Jackson
- City of Needville
- City of Rosenberg
- City of Sealy
- City of Sweeny
- City of Wallis
- City of West Columbia
- City of Wharton
- Village of Jones Creek



PERMITTEES

Twenty-six permittees with discharge points in the Caney Creek and Linville Bayou or San Bernard watershed.

Defining Our Goals

Basin 13 Leadership Forum



*Tell me what you want to get out of the
Basin 13 Leadership Forum?*

Implementation Activities

Basin 13 Leadership Forum



What current or ongoing activities are happening in your communities?

Implementation Activities

Basin 13 Leadership Forum



*What current or ongoing activities would you
like to see in your communities?*

Available H-GAC Resources

Basin 13 Leadership Forum



- HGACBuy (Cooperative Purchasing)
- Engagement Toolbox (Coastal Communities)
- Interactive Mapping Tools
- Septic System Replacement Program
- Additional Partnership Opportunities
- Collaborative Grant Submissions

Caney Creek / Linville Bayou Plan Development Process





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