CHOCOLATE BAYOU TMDL
COORDINATION COMMITTEE

January 10, 2018

Steven Johnston & Kathy Janhsen

Meeting Agenda

- 10:00 – 10:05 Welcome - Open Meeting
- 10:05 – 10:35 Review Why We Are Here
- 10:35 – 11:05 Coordination Committee Discussion
  - Roles and Responsibilities
  - Finalize Roster (Who is Missing?)
  - Ground Rules
  - Identify Work Groups
- 11:05 – 11:35 Sources of Bacteria Discussion
- 11:35 – 11:45 Wrap Up and Next Steps
- 11:45 – 12:00 Final Q&A / Adjourn

Why Are We Here?

- Chocolate Bayou does not meet the State's Water Quality Standards for Contact Recreation.
- The Clean Water Act requires each state to address waters not meeting standards.
- TCEQ/H-GAC is working on a TMDL study.
- The TMDL process requires watershed stakeholders to develop an implementation plan (I-Plan).

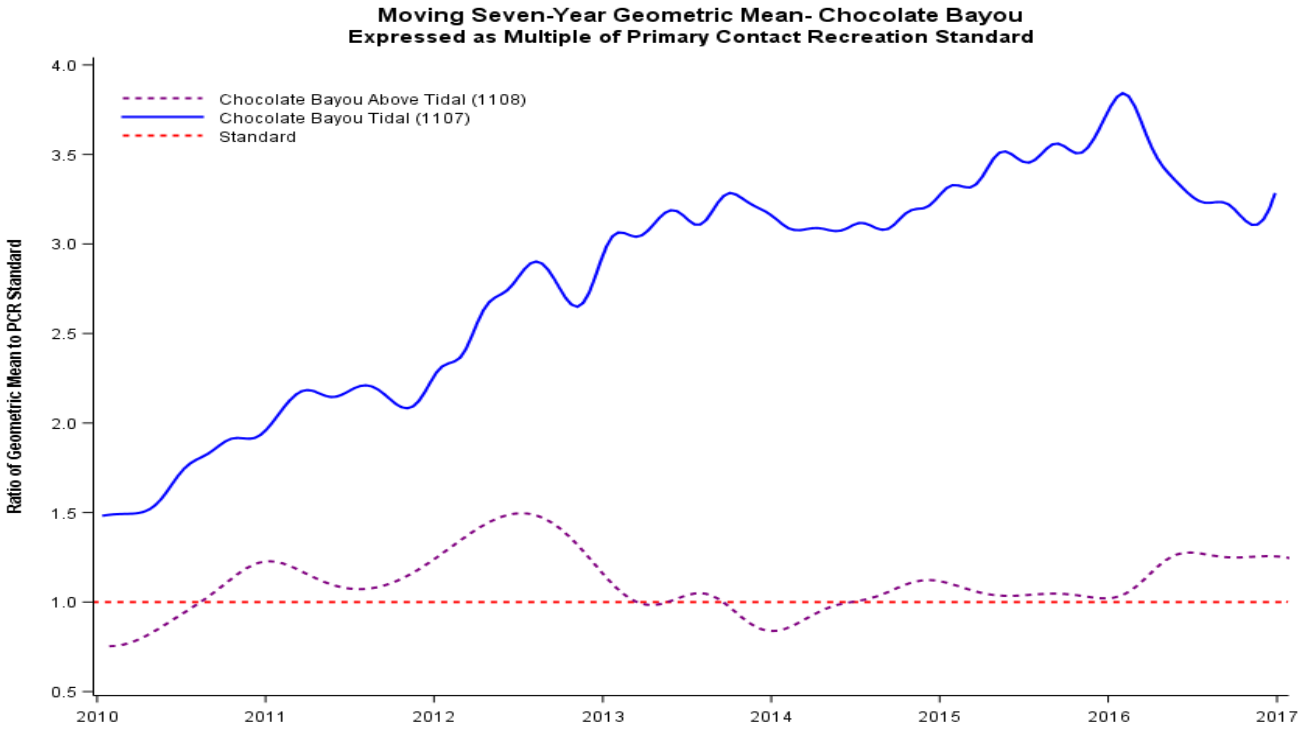
Chocolate Bayou TMDL

Technical Support Document for Total Maximum Daily Loads for Indicator Bacteria in the Chocolate Bayou Watershed

Segments: 1107 and 1108

July 2017

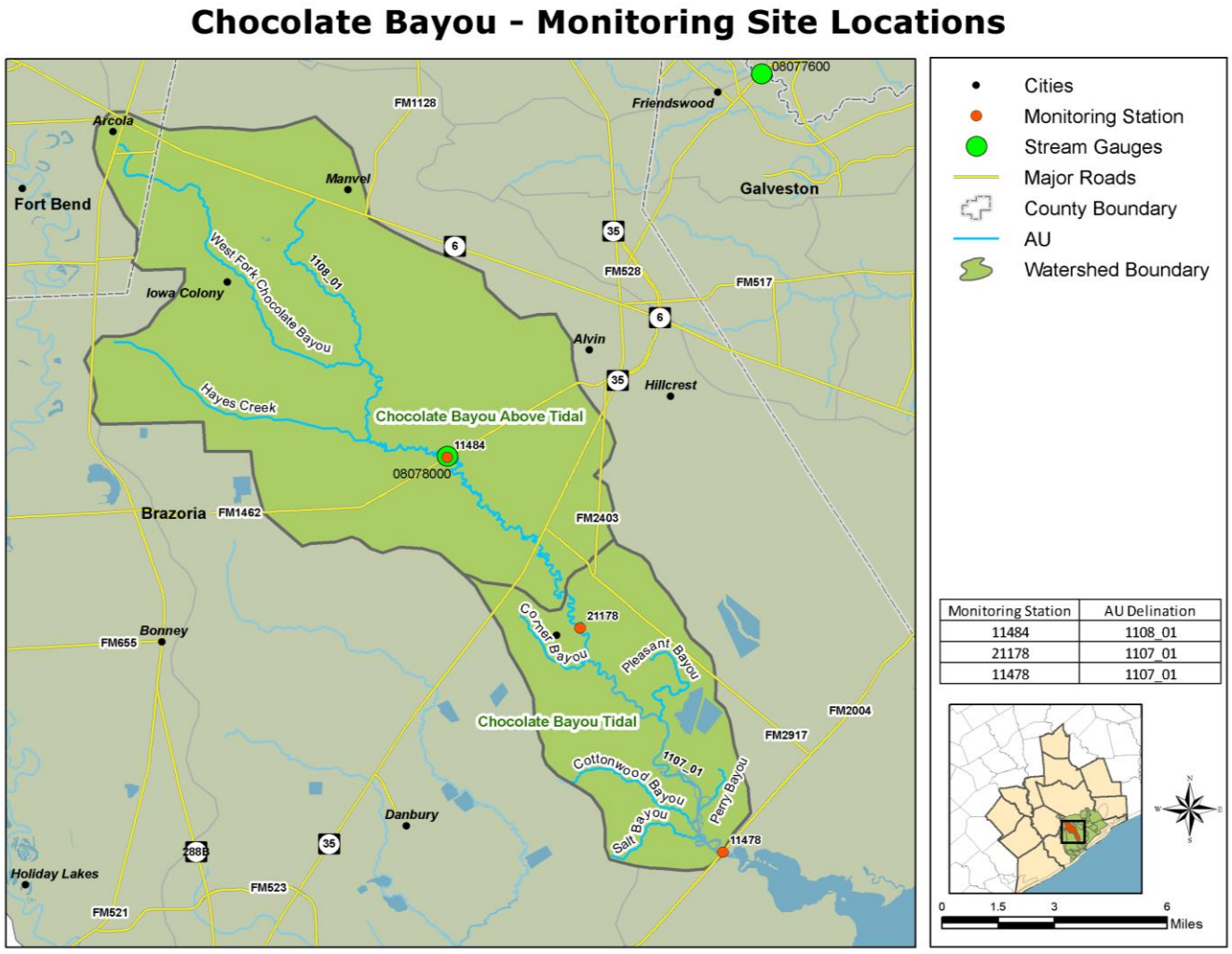
Chocolate Bayou: Bacteria Trends



Assessment Unit	Parameter	Station	No. of Samples	Data Date Range	Geometric Mean (MPN/100 mL)
1107_01	Enterococcus	21178/11478	79	2010-2016	115.0
1108_01	*E. coli*	11484	24	2010-2017	154.6

Basin Data

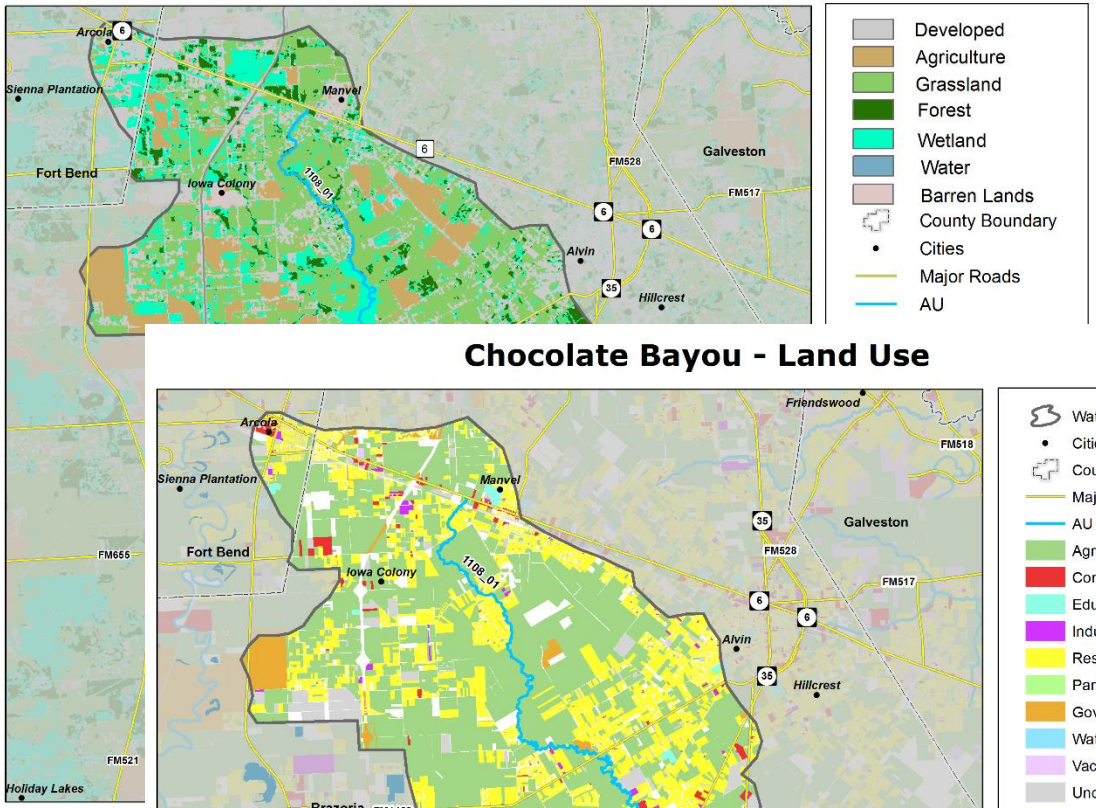
Chocolate Bayou Study 1107, 1108



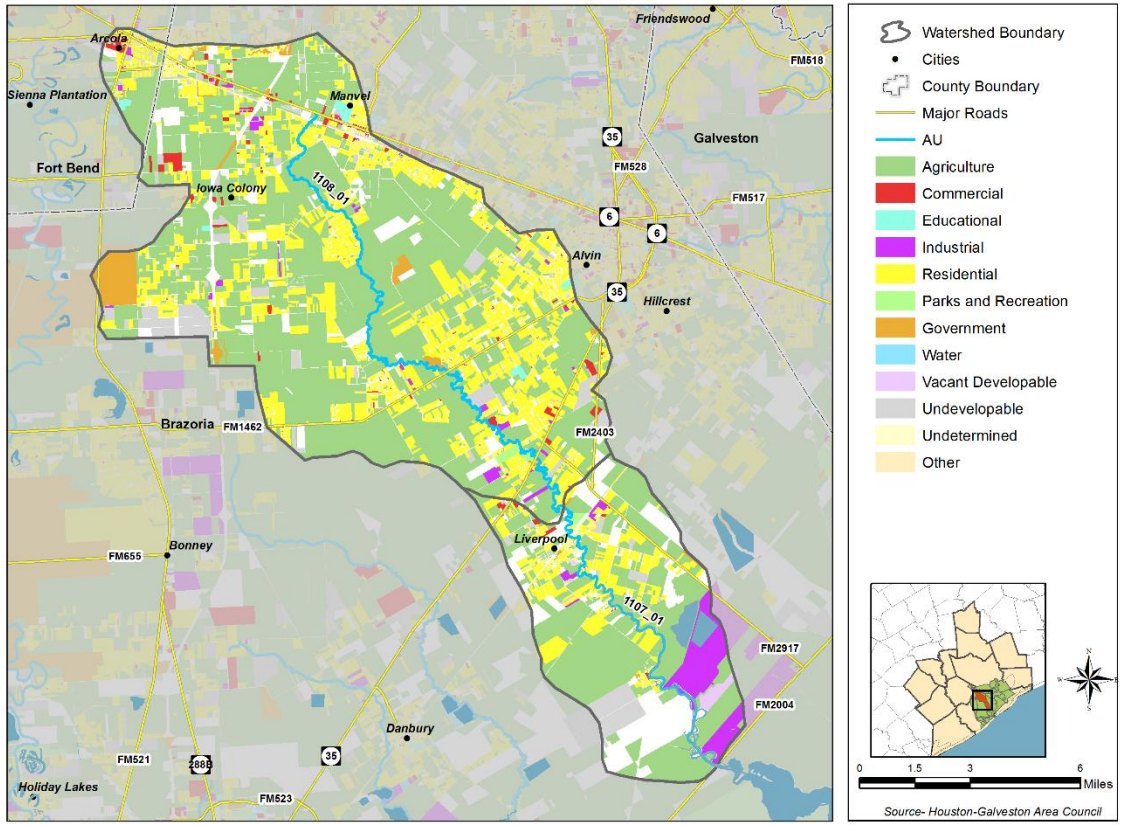
To access data, go to: www.h-gac.com/go/wrim

Chocolate Bayou: Land Cover / Land Use

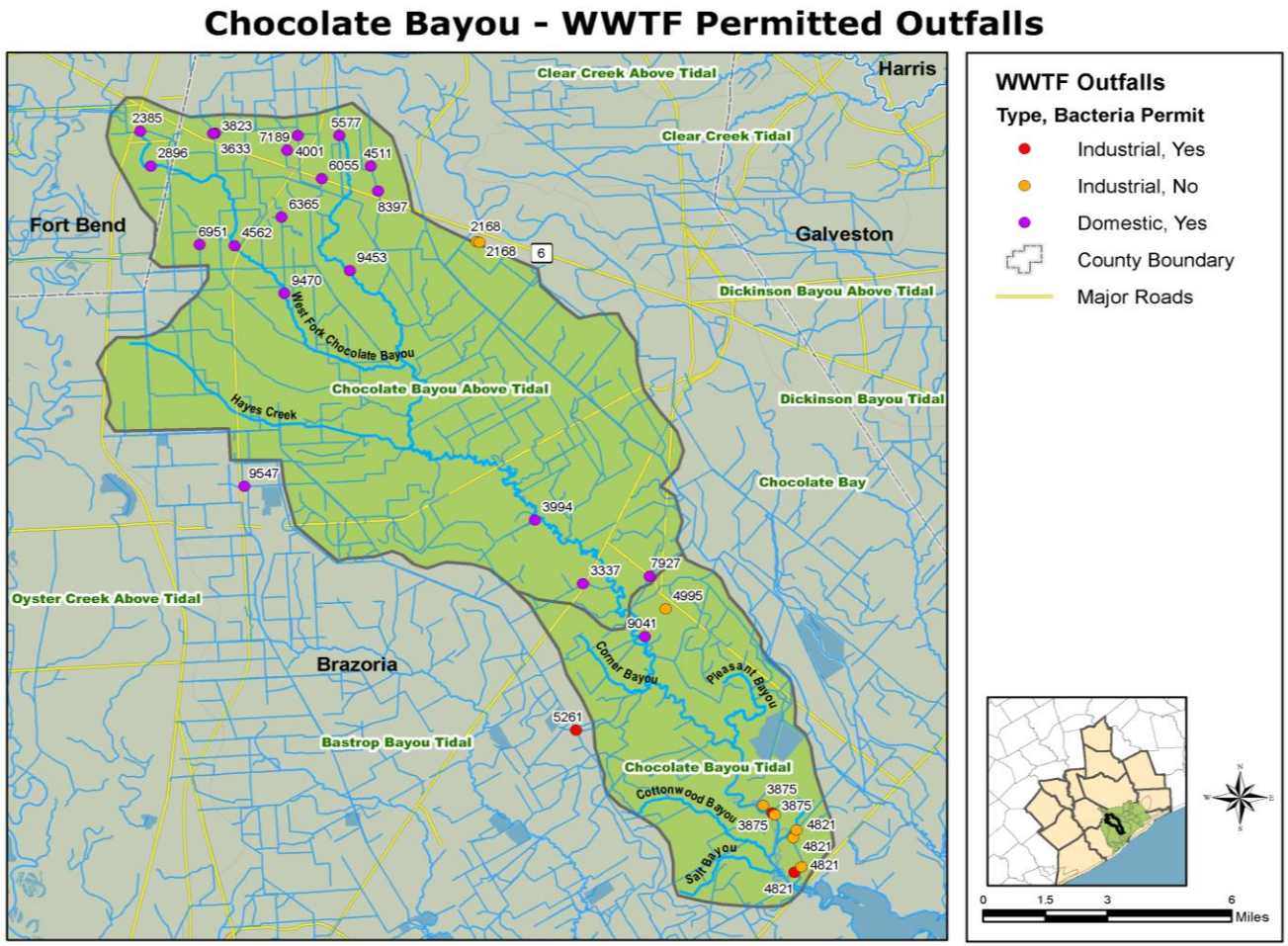
Chocolate Bayou - Land Cover



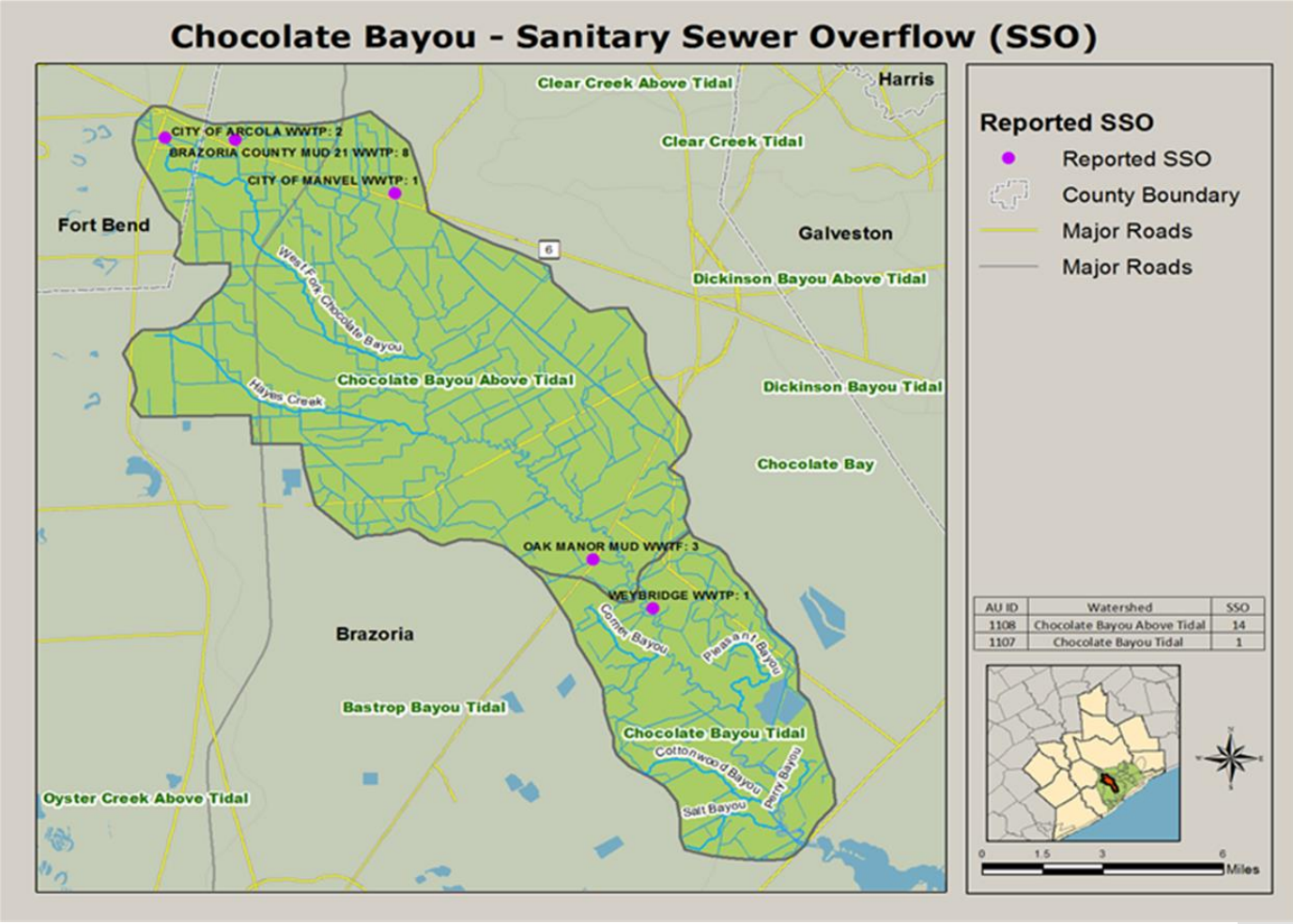
Chocolate Bayou - Land Use



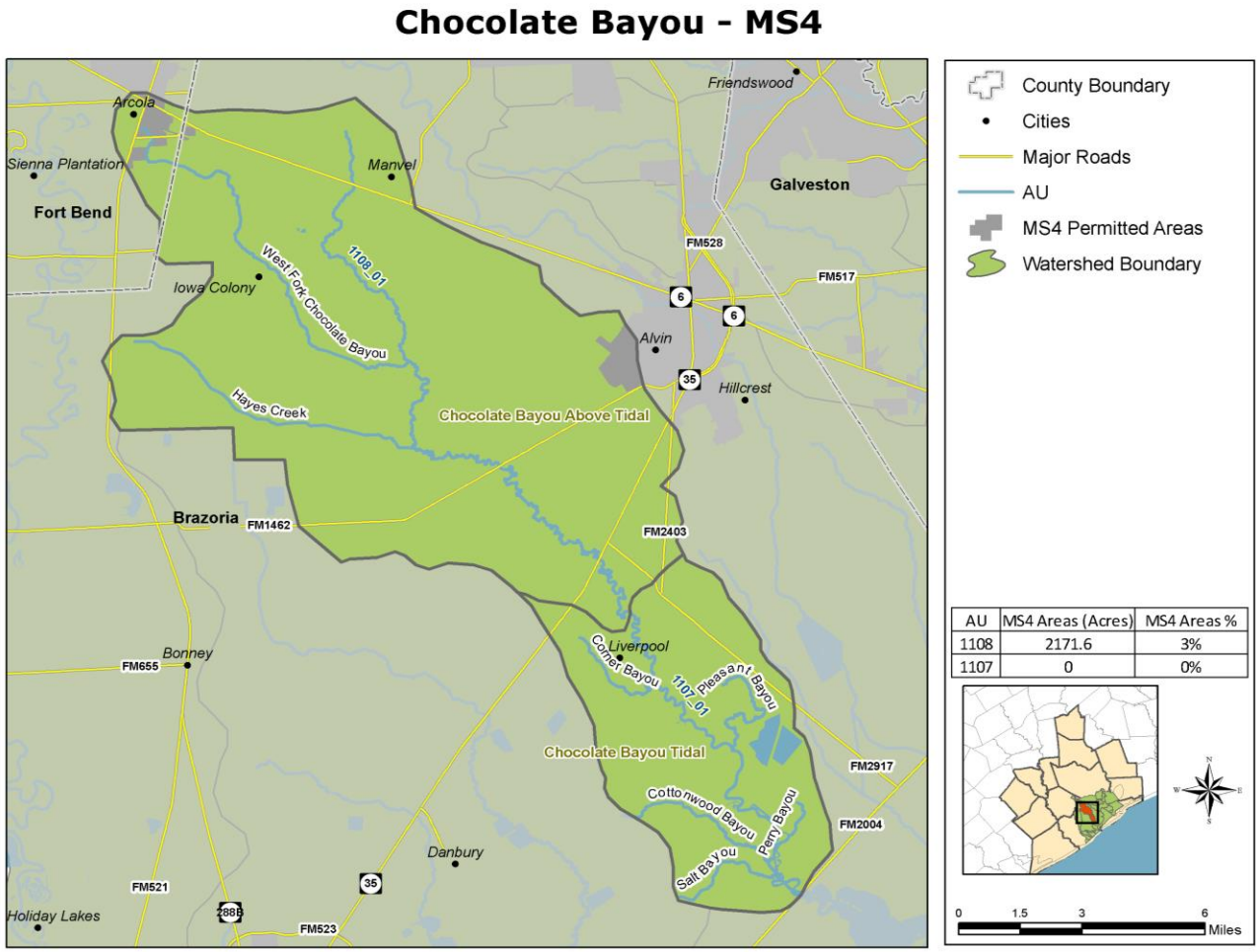
Chocolate Bayou: WWTF Outfalls



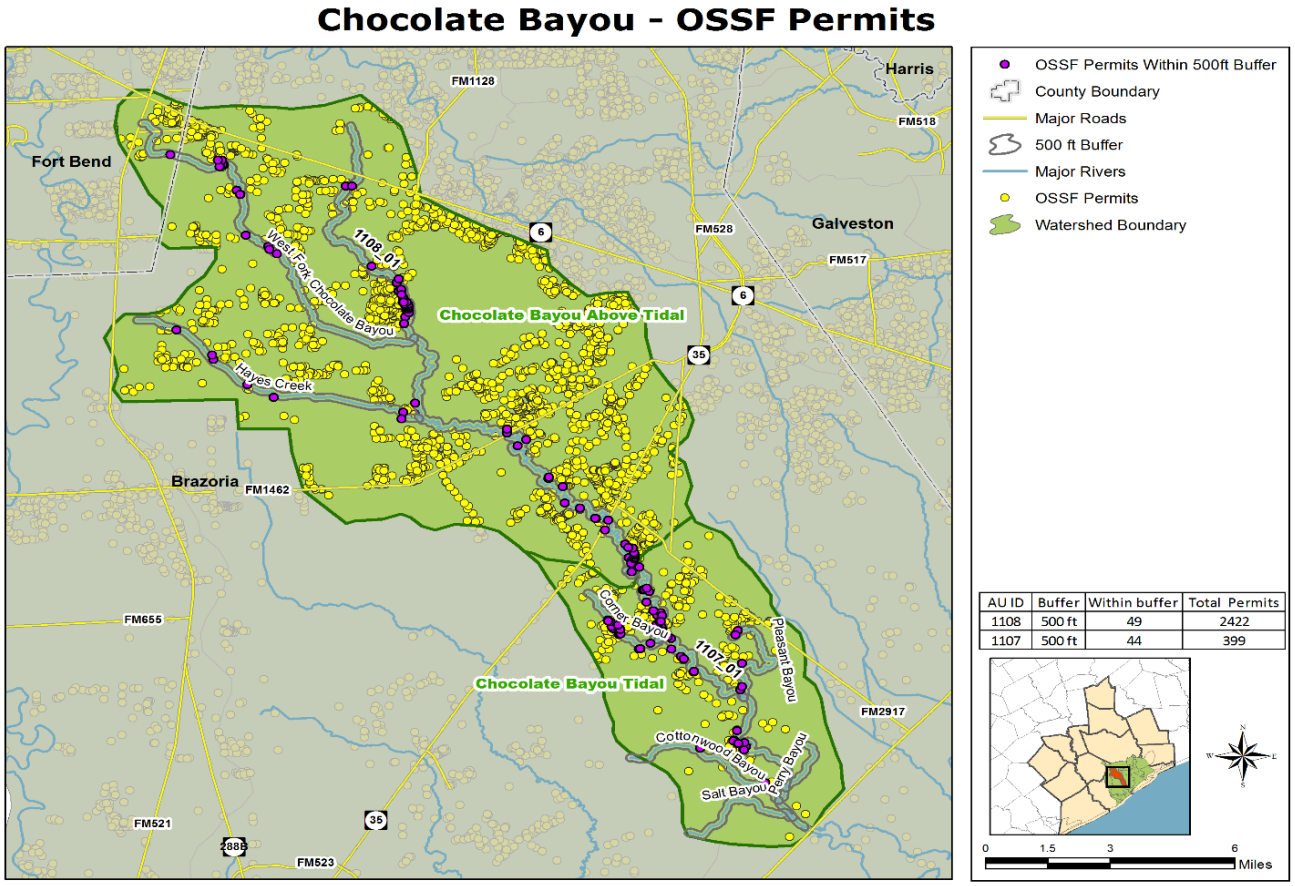
Sanitary Sewer Overflows



Chocolate Bayou: MS4



Chocolate Bayou: OSSFs



Other Sources

Brazoria County Livestock Figures, USDA 2012

Watershed	Area (Acres)	Cattle and Calves	Hogs and Pigs	Sheep and Lambs	Equine	Poultry
Brazoria County	869120	78907	4218	1435	4572	6033
1107	23464.17	2130	134	39	123	163
1108	70852.40	6433	344	117	373	492

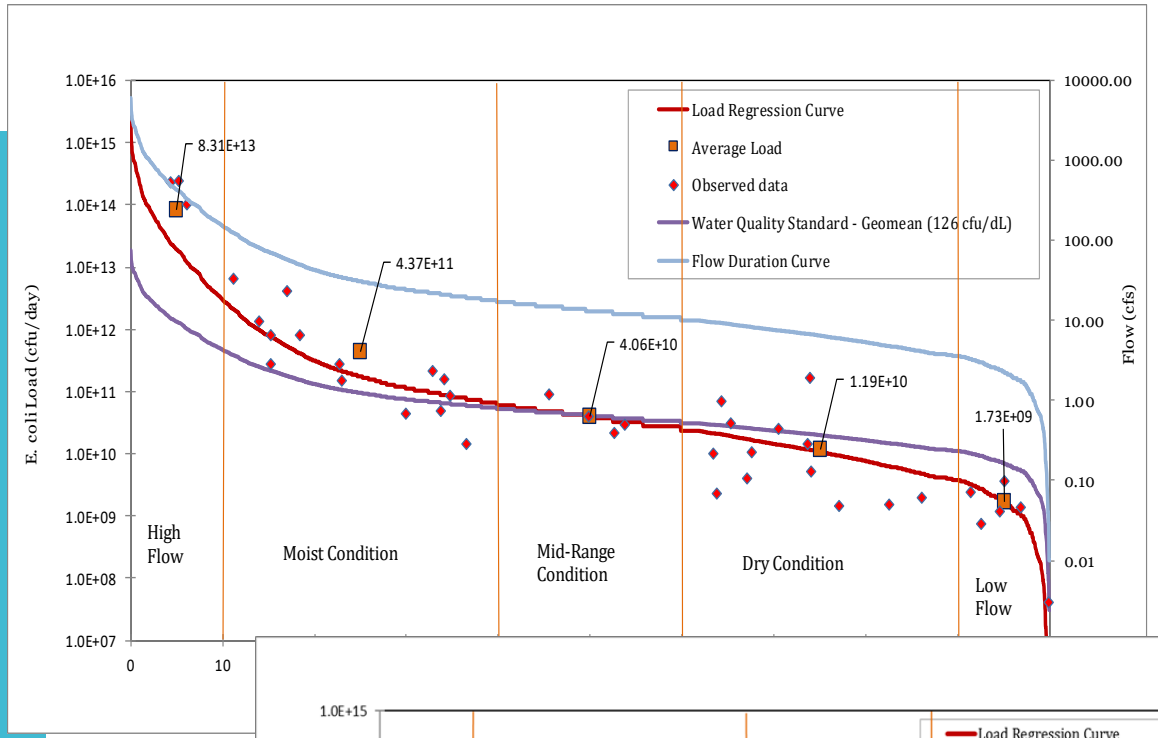
Cat and Dog Population Estimate, 2012

Segment	Estimated Households	Dogs	Cats
1107	519	303	331
1108	9,334	5,451	5,955
Total	9,853	5,754	6,286

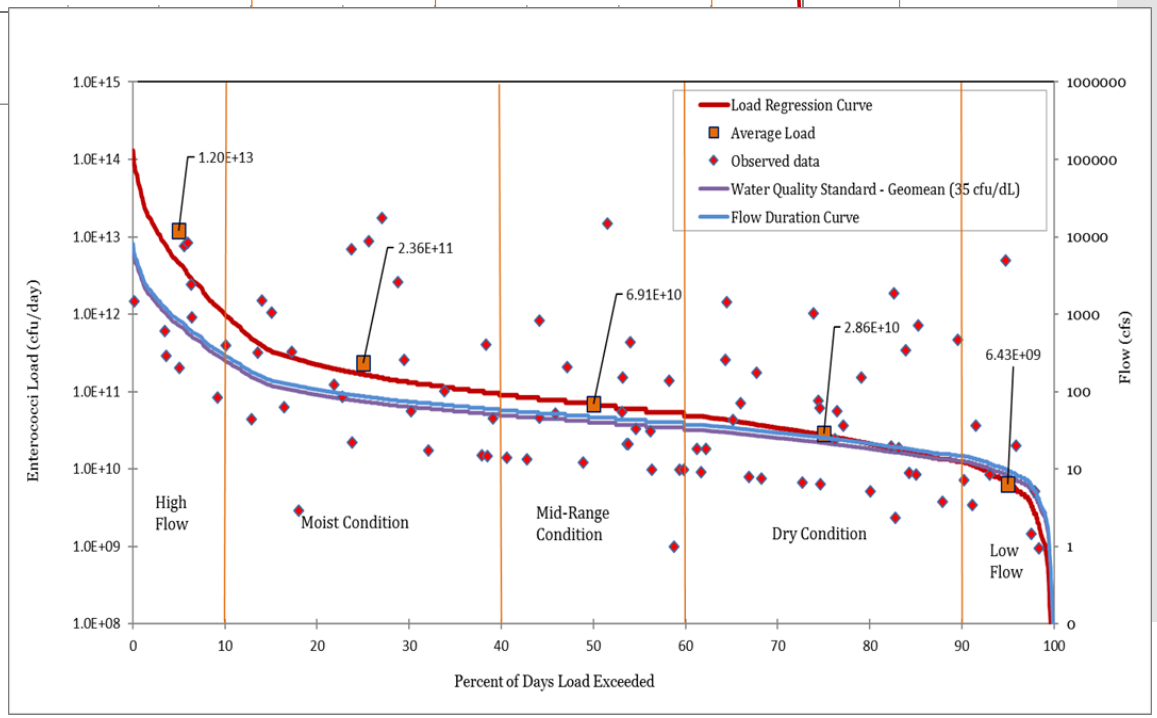
Feral Hog Population Estimate, 2012

Segment	Suitable Area (Acres)	Suitable Area (Sq. Mile)	Feral Hog Population
1107	22,950.81	35.86	47-90
1108	69,784.50	109.04	142-273

Chocolate Bayou: LDCs

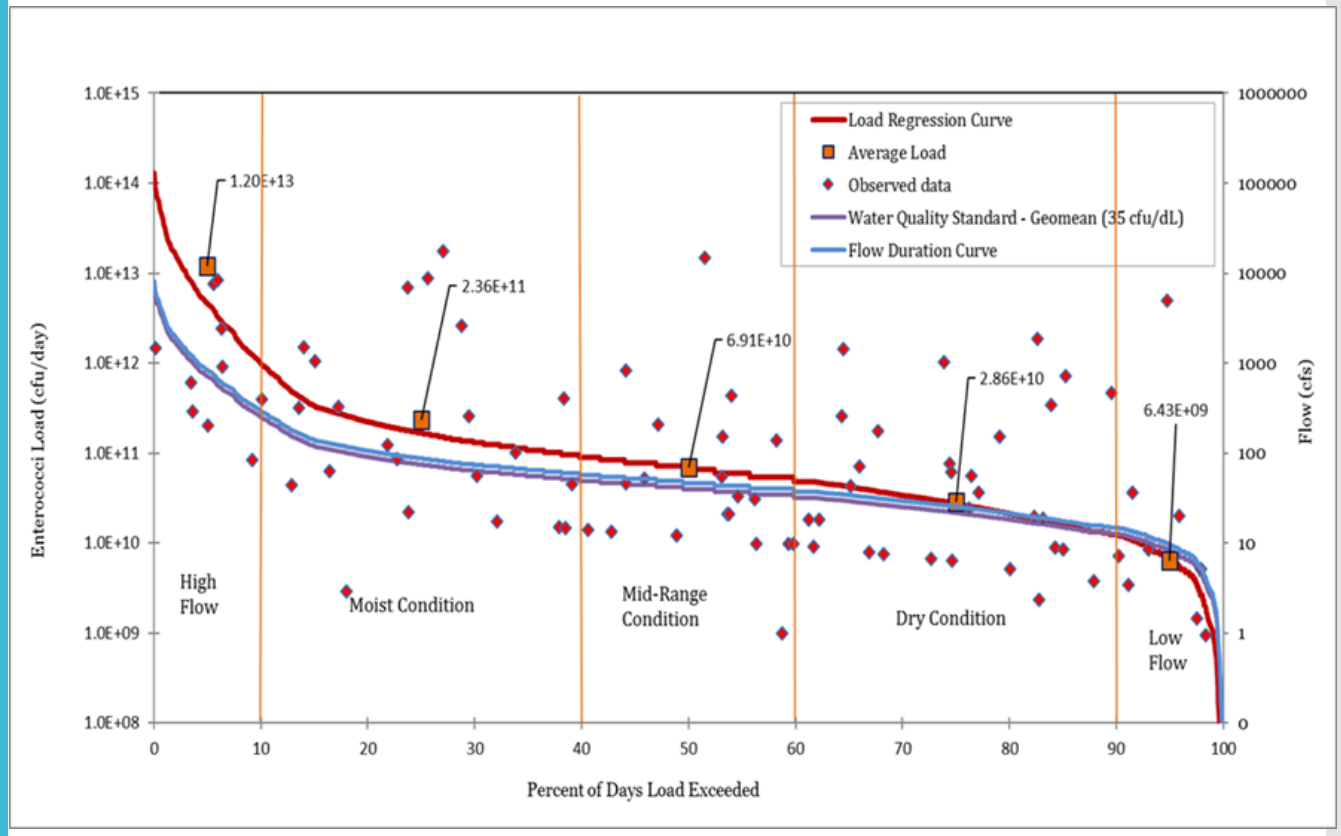


Above Tidal 11484



Tidal 11478

Load Reductions



Segment	High Flow Condition (0-10%)		Moist Condition (10-40%)		Mid-Range Condition (40-60%)		Dry Condition (60-90%)		Low Flow Condition (90-100%)	
	Geometric Mean (MPN/100mL)	Required Percent Reduction	Geometric Mean (MPN/100mL)	Required Percent Reduction	Geometric Mean (MPN/100mL)	Required Percent Reduction	Geometric Mean (MPN/100mL)	Required Percent Reduction	Geometric Mean (MPN/100mL)	Required Percent Reduction
1107	305.50	84.31%	87.09	56.63%	57.44	40.45%	44.46	18.82%	27.08	0.00%
1108	3488.08	92.53%	343.38	47.28%	118.47	0.00%	71.34	0.00%	30.66	0.00%

TMDL (Preliminary)

TMDL = WLA + LA + FG + MOS

Watershed	Segment	TMDL (Billion MPN/day)	MOS (Billion MPN/day)	WLA_{wwtf} (Billion MPN/day)	WLA_{sw} (Billion MPN/day)	LA (Billion MPN/day)
Chocolate Bayou Tidal	1107	718.01	21.08	44.72	18.46	633.75
Chocolate Bayou Above Tidal	1108	1,334.80	66.74	142.63	57.96	1,067.47

What's a Coordination Committee?

A proactive group of local and regional stakeholders helping to create and drive content for the TMDL / I-Plan documents.

Role of the Coordination Committee

- Attend Public Meetings
- Participate in Work Groups
- Act as Community Ambassadors
- Provide Input of Priorities for the Watershed
- Identify Appropriate Existing Measures
- Provide Input on Documents & Reports

Coordination Committee

Name	Entity Representing	Category
Christian Hernandez	4-H Program	Agriculture
Paul Anderson	MUD	Business / Industry
Rosalie Bates	Self	Citizen
Kay Tobola	Self	Citizen
Sarah Gossett	Galveston Bay Foundation	Environmental Group
Hugo Salinas	AUC Group (Rep 3 MUDs in Above Tidal CB)	Business / Industry
Brian Wilmer	City of Manvel	Municipal / City
Brian Koch	TSSWCB	Resource Agency

Coordination Committee Decision Process

FORMAL

- Estab[illegible]s that g[illegible]ern the actio[illegible]of the committee
- Adhere to Open Meeting Act Requirements

INFORMAL

- Develop a set of ground rules that will be used to govern the committee
- Committee members approve ground rules and their use

Informal Ground Rules

- Speak up
- Disagree respectfully
- Silence is presumed consent
- Listen during discussions
- Respect opinions and don't criticize people
- Be open to new ideas
- Silence cell phones
- Have fun

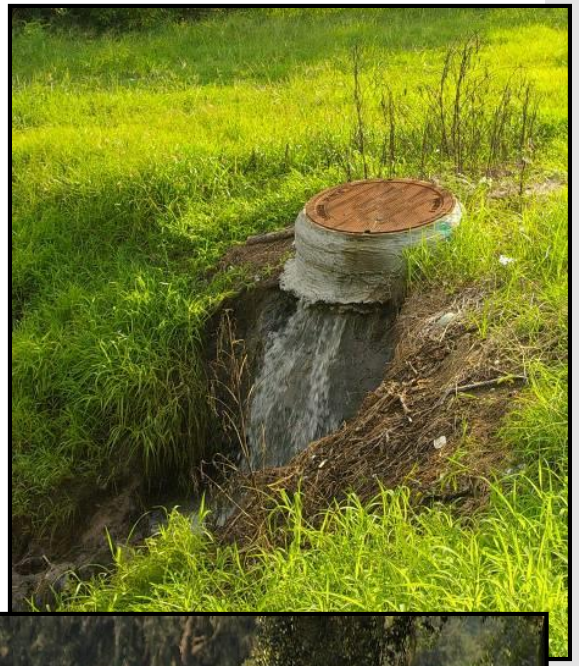
What are Existing Measures?

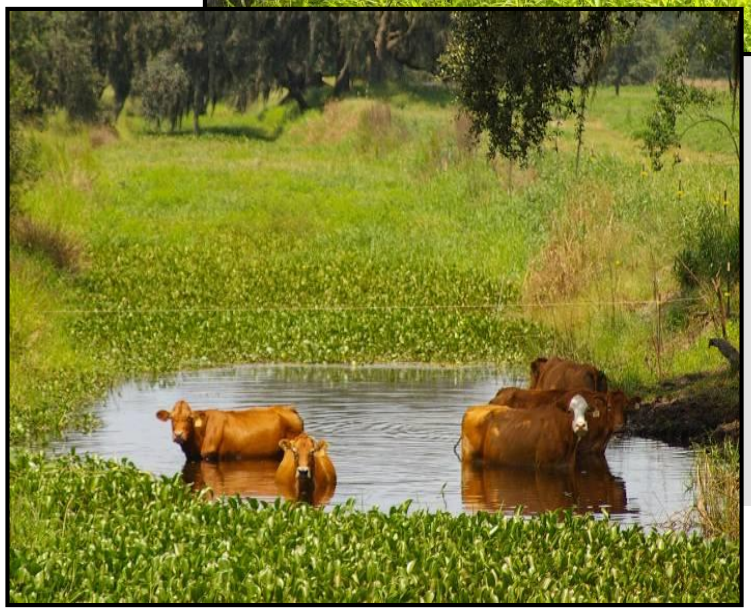
Existing measures are a menu of voluntary strategies stakeholders can use to reduce bacteria levels in Chocolate Bayou.

Developing Work Groups

Possible Sources of Bacteria

- Domestic pets (dogs, cats)
- Leaking wastewater infrastructure
- Wildlife (deer, bird, raccoon, etc.)
- Individual homeowner Onsite Sewage Treatment
- Urban lawns and landscaping
- Streets and parking lots
- Agriculture/Pasture
- Number and Types of Permittees





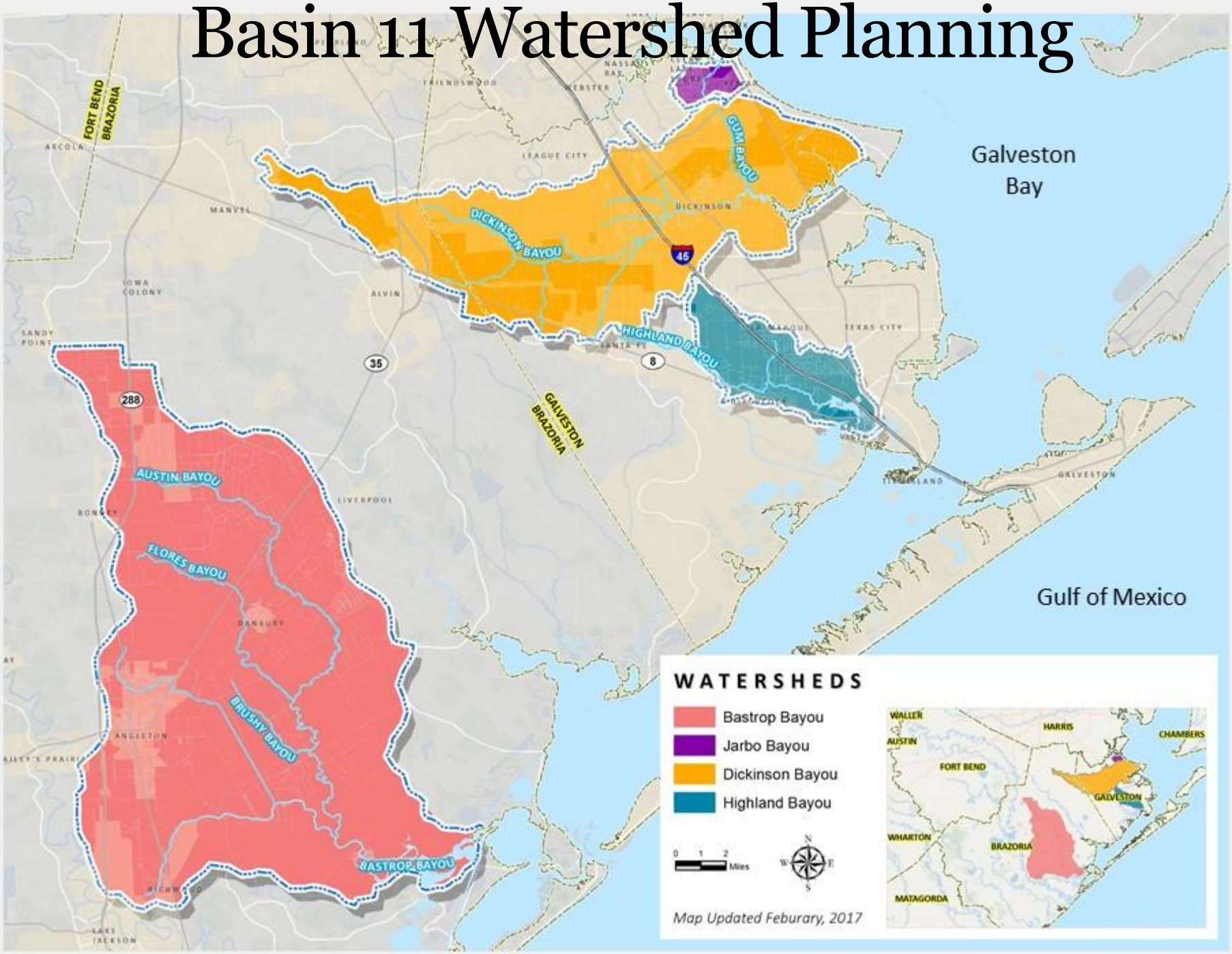
Suggested Work Group Structure

- Members should provide adequate representation from needed parties
- Have at least 1 work group member be from the Coordination Committee
  - Liaison to Coordination Committee that provides work group updates
- Adhere to same ground rules as Coordination Committee

Work Group Roles

- Responsible for assisting with the I-Plan review, determining progress, and coming up with recommended implementation strategies to include in the I-Plan
  - Could include barrowing language from existing I-Plans
- Each work group will only focus on work group specific issues
  - Example: Natural Resources group focuses on solutions to agriculture, habitat and wildlife related *E. coli* loading
- Work with project facilitator to draft ideas into work group specific report

Basin 11 Watershed Planning



Implementation Plans – Source Discussion

I - Plan

- Source Driven
- Determines HOW reductions will be made
- Based on stakeholder recommendations

Implementation: Workshops and Training

Texas Stream Team Training – Spring 2017

Texas Watershed Stewards Training/July 11, 2017

Next Steps in the I-Plan Process

- Work Groups Meet – I-Plan Strategies
  (February 5th – 16th)
- CC Meets – Review Strategies
  (February 19th – 23rd)
- H-GAC Drafts I-Plan
  (February 19th – March 9th)
- CC Meets –
  (March 12th – 14th)
- I-Plan Draft Submitted to TCEQ
  (March 15th)

Questions?

Do Watershed Plans Work?