The meeting will begin shortly

Please mute your microphone until called for questions.

Please disable your video unless you are speaking.

Please enter your name and title in the chat.

Please insert questions in chat or raise hand to speak.

This meeting is being recorded.

Brays & Sims Bayou
Watershed Partnership

Welcome to the first public meeting of the

BRAYS & SIMS BAYOU

WATERSHED PARTNERSHIP

January 22, 2026

Brays & Sims Bayou Watershed Partnership

Meeting Outline

- Introduction
- Watershed Overview
- Water Quality
- Partnership
- Next Steps
- Discussion

Brays & Sims Bayou
Watershed Partnership

INTRODUCTION

Brays & Sims Bayou
Watershed Partnership

Who We Are

Texas Commission on Environmental Quality (TCEQ)

lead state environmental management agency

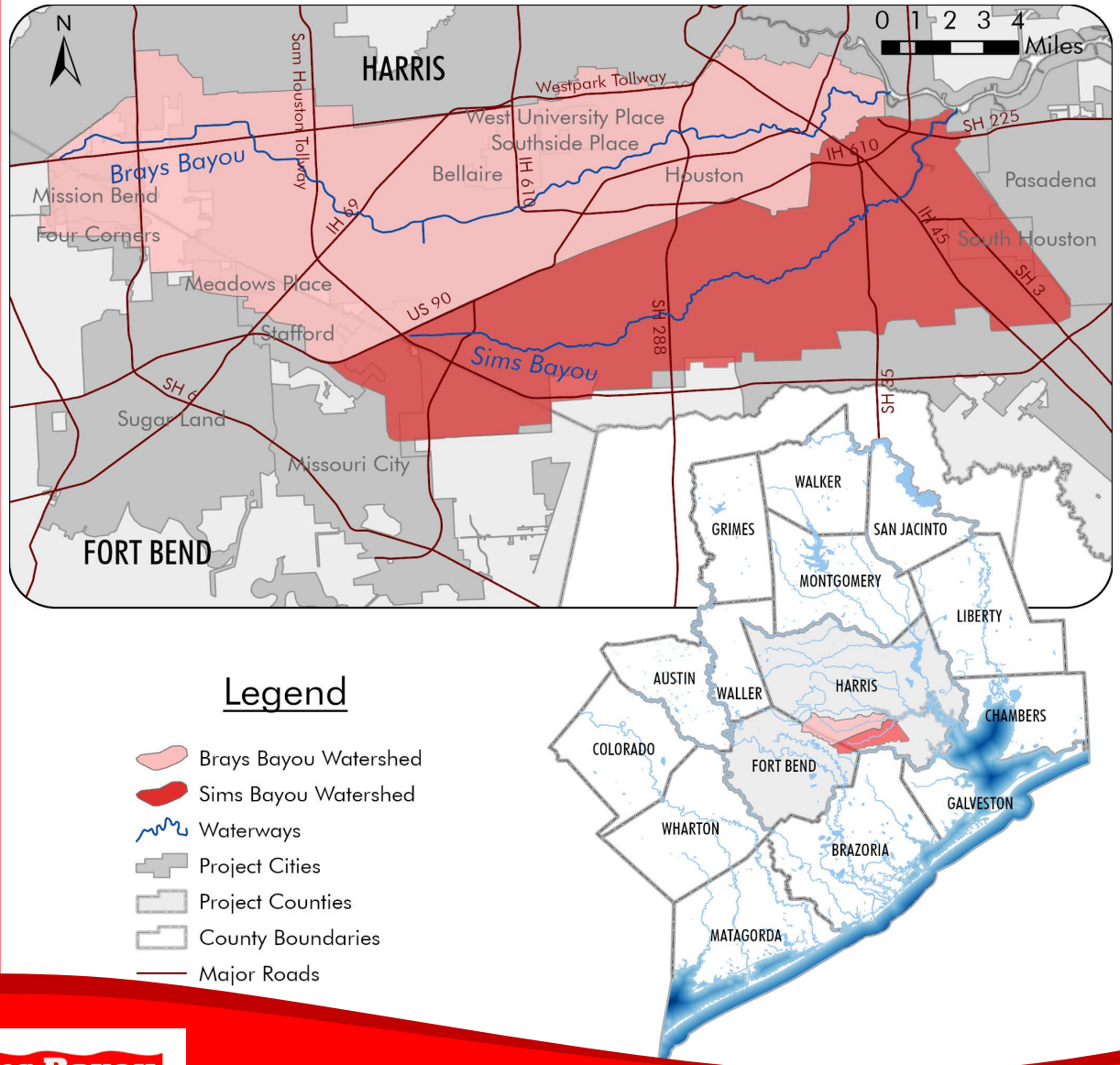
Houston-Galveston Area Council (H-GAC)

regional council of governments

Watershed Partnership

local stakeholders working to develop and implement a watershed protection plan for the Brays & Sims Bayou watershed

Where We Work



Brays & Sims Bayou Watershed Partnership

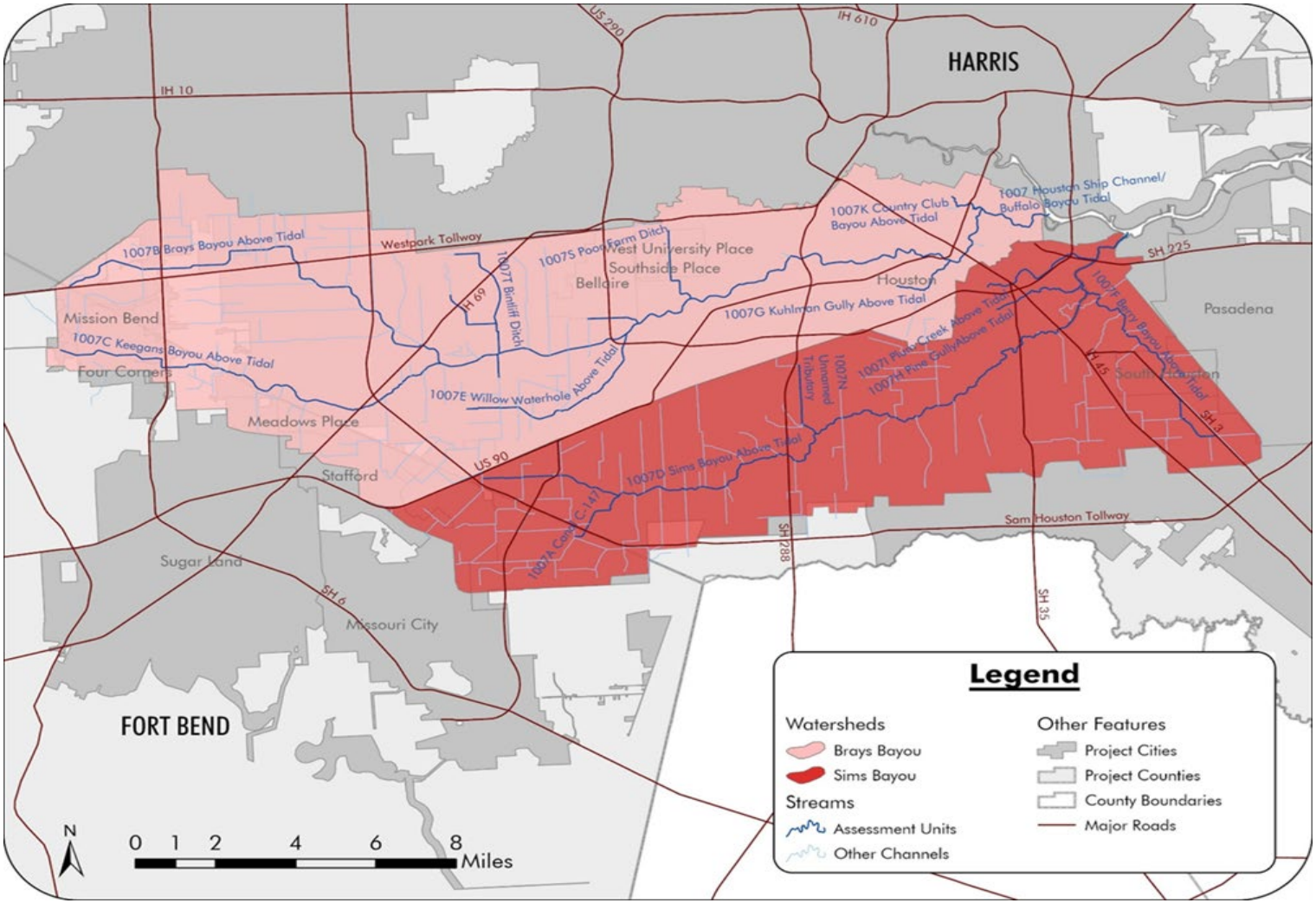
Why We're Here

Surface water quality in Brays & Sims Bayou is impaired due to high levels of fecal indicator bacteria. There are also concerns for aquatic life and general use due to high nutrient levels and depressed oxygen.

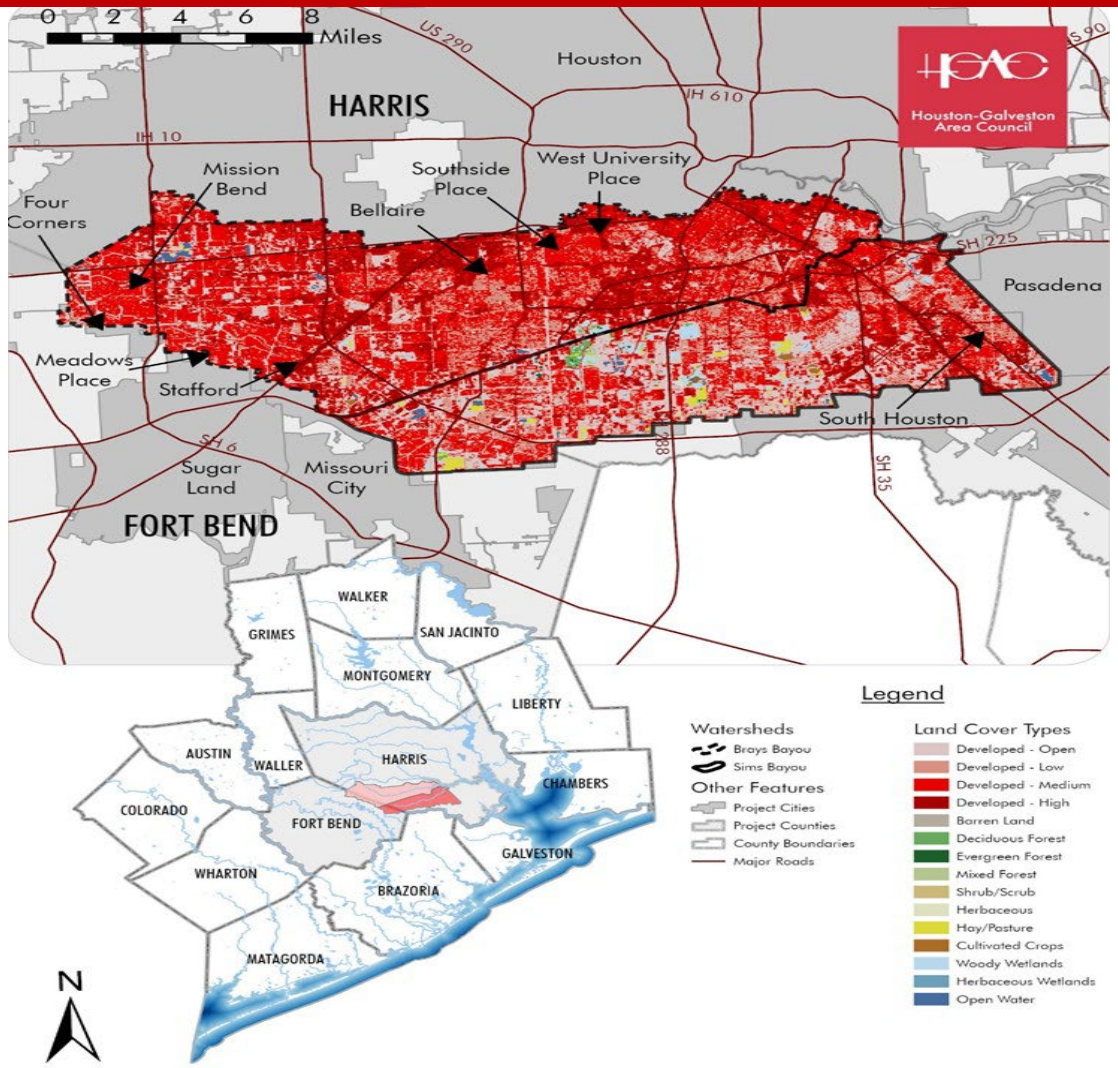
Brays & Sims Bayou
Watershed Partnership


WATERSHED OVERVIEW

Watershed Area & Stream Network

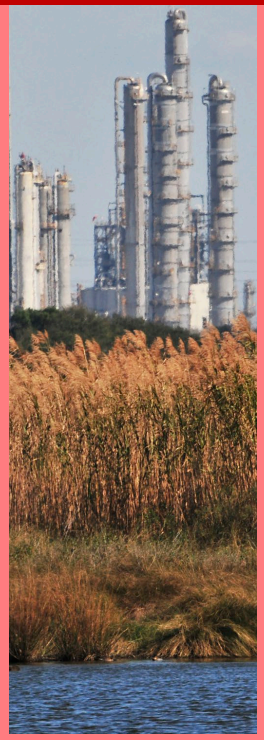


Land Cover


0 2 4 6 8 Miles
US 290
Houston
IH 610
HARRIS
IH 10
Houston-Galveston Area Council
Mission Bend
Southside Place
West University Place
Four Corners
Bellaire
SH 225
Pasadena
Meadows Place
Stafford
South Houston
SH 6
Sugar Land
Missouri City
FORT BEND
SH 35
WALKER
GRIMES
SAN JACINTO
MONTGOMERY
LIBERTY
AUSTIN
WALLER
HARRIS
CHAMBERS
COLORADO
FORT BEND
GALVESTON
WHARTON
BRAZORIA
MATAGORDA
N
Legend
Watersheds
Brays Bayou
Sims Bayou
Other Features
Project Cities
Project Counties
County Boundaries
Major Roads
Land Cover Types
Developed - Open
Developed - Low
Developed - Medium
Developed - High
Barren Land
Deciduous Forest
Evergreen Forest
Mixed Forest
Shrub/Scrub
Herbaceous
Hay/Pasture
Cultivated Crops
Woody Wetlands
Herbaceous Wetlands
Open Water


WATER QUALITY

Surface Water Uses



- Agricultural
- Municipal
- Industrial
- Recreational
- Natural

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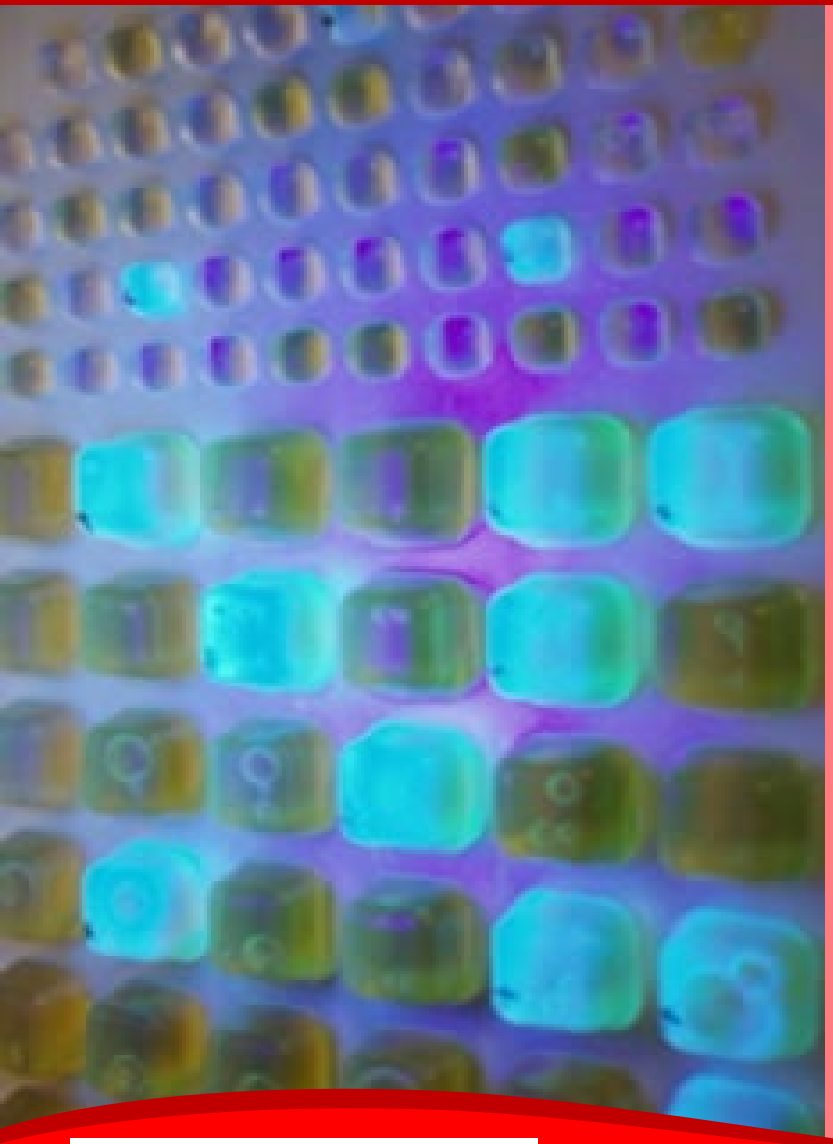
Assessing Water Quality

- Statewide monitoring
- TCEQ produces integrated report of results every two years
- Waterways exceeding standards are **impaired**

Status of Brays & Sims Bayou



- **Impaired** for contact recreation
- High levels of bacteria *Escherichia coli* (*E. coli*) indicate pollution from fecal waste
- Concerns for aquatic life and general use indicated by depressed oxygen and high levels of nutrients

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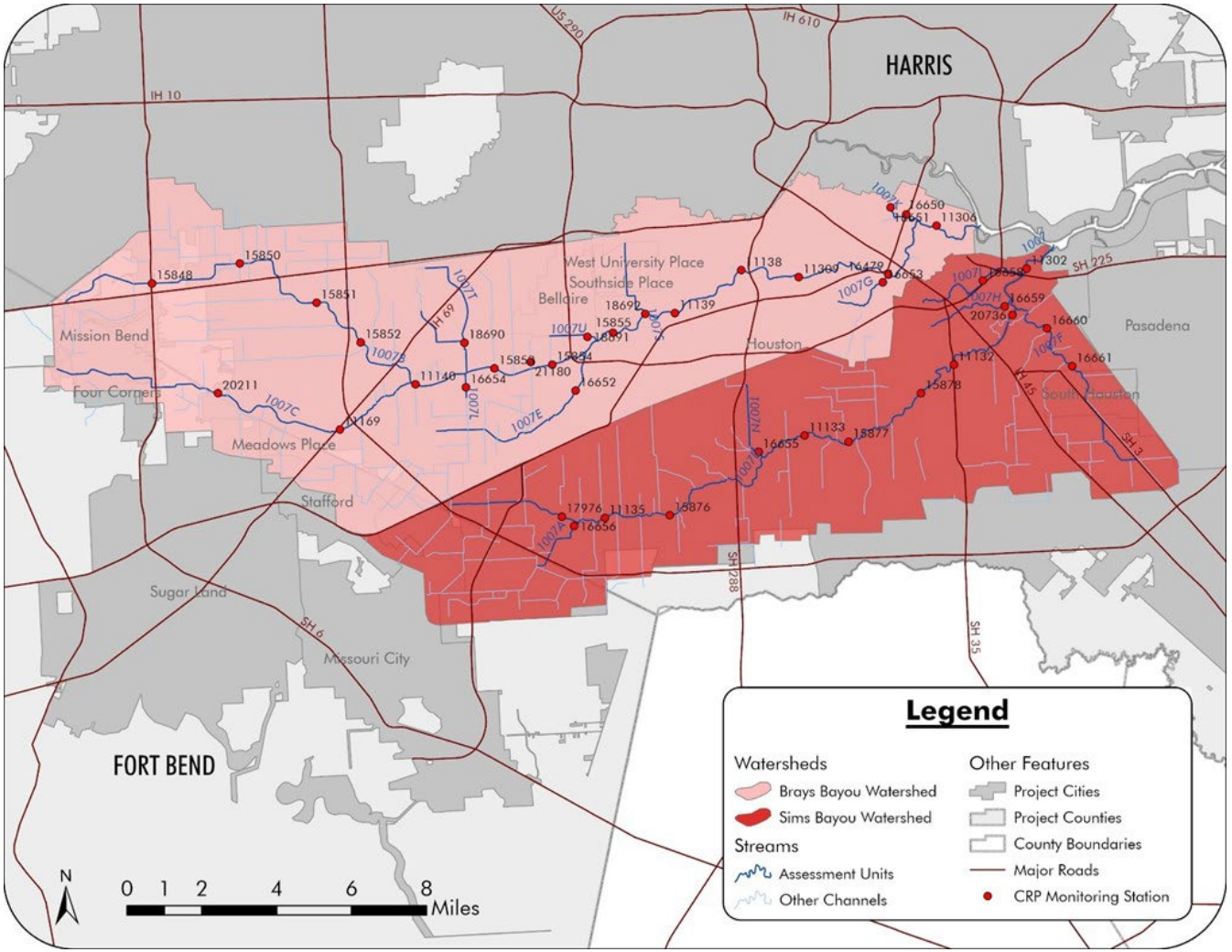
Bacteria Sources

- **Human Waste**
- Wastewater
- Septic/Aerobic Systems
- Illicit Sewage

- **Domestic Animal Waste**
- Pets
- Livestock

- **Wildlife and Invasive Species Waste**
- Deer and Other Wildlife
- Feral Hogs

MONITORING


HARRIS
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SH 288
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SH 6
IH 69
Mission Bend
Four Corners
Meadows Place
Stafford
Sugar Land
Missouri City
West University Place
Southside Place
Bellaire
Houston
Pasadena
South Houston
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16653
1007G
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16651
11306
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1007H
11302
16659
20736
16660
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15878
1007F
1007N
1007J
11133
18877
16655
17976
11135
16656
15876
1007A
0 1 2 4 6 8 Miles
N
Legend
Watersheds
Brays Bayou Watershed
Sims Bayou Watershed
Streams
Assessment Units
Other Channels
Other Features
Project Cities
Project Counties
County Boundaries
Major Roads
CRP Monitoring Station

Ambient Analysis for Brays Bayou: Bacteria

Segment Name	Parameter	Criteria (MPN/100 mL)	Number of Samples	Geometric Mean (MPN/100 mL)	Date Range
Brays Bayou Above Tidal	*E. coli*	126	309	2,256.84	02/04/2020 - 12/03/2024
Houston Ship Channel/Buffalo Bayou Tidal	Enterococci	35	457	98.35	01/08/2020 - 12/04/2024
Willow Waterhole Bayou Above Tidal	*E. coli*	126	31	951.24	02/04/2020 - 12/03/2024
Kuhlman Gully Above Tidal	*E. coli*	126	30	673.79	02/13/2020 - 10/29/2024
Bintliff Ditch	*E. coli*	126	31	9,202.87	02/04/2020 - 12/03/2024

Ambient Analysis for Sims Bayou: Bacteria

Segment Name	Parameter	Criteria (MPN/100 mL)	Number of Samples	Geometric Mean (MPN/100 mL)	Date Range
Canal C-147	*E. coli*	126	31	102.66	02/17/2020 - 11/19/2024
Sims Bayou Above Tidal	*E. coli*	126	217	520.64	02/17/2020 - 11/21/2024
Berry Bayou Above Tidal	*E. coli*	126	31	3,196.27	03/03/2020 - 11/21/2024
Houston Ship Channel/Buffalo Bayou Tidal	Enterococci	35	457	98.35	01/08/2020 - 12/04/2024
Plum Creek Above Tidal	*E. coli*	126	31	1,748.71	03/03/2020 - 11/21/2024

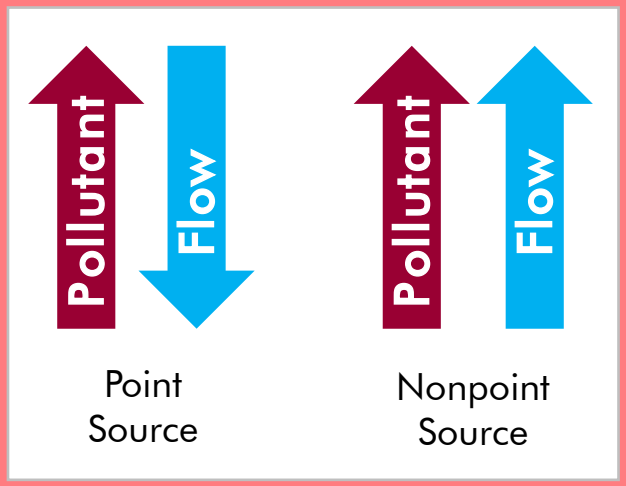
Ambient Analysis for Brays And Sims Bayou: Dissolved Oxygen

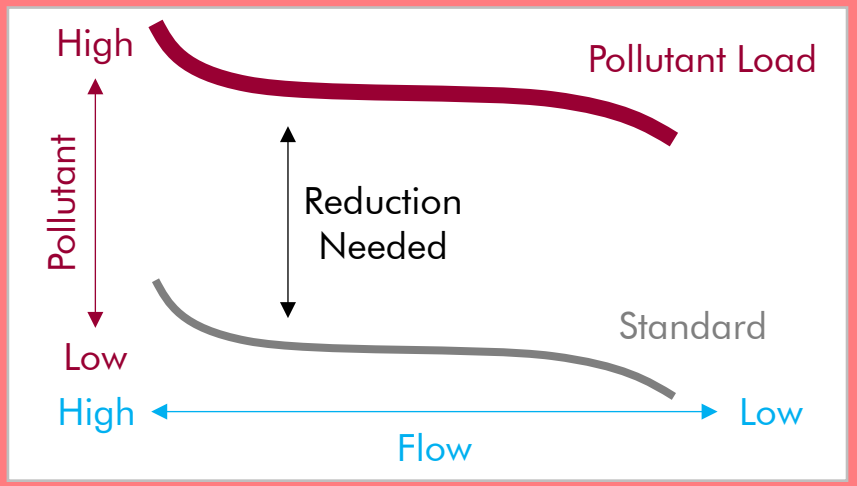
Segment Name	Criteria (mg/L)	Mean Exceedances (Samples Exceeding Standard/n)
Houston Ship Channel/Buffalo Bayou Tidal	1.5	0.63 (22/517)
Brays Bayou Above Tidal	2.0	1.15 (2/282)
Sims Bayou Above Tidal	2.0	0.65 (2/207)
Willow Waterhole Above Tidal	2.0	0.0 (0/29)
Berry Bayou Above Tidal	2.0	0.0 (0/31)
Plum Creek Above Tidal	3.0	1.46 (18/30)
Country Club Bayou Above Tidal	3.0	1.52 (27/59)
Bintliff Ditch	3.0	0.0 (0/29)

Ambient Analysis for Brays And Sims Bayou: Nutrients

Segment Name	Nutrient Screening Levels - Mean Exceedances (Samples Exceeding the Standard/n)		
	Total Phosphorus	Nitrate	Ammonia
Houston Ship Channel/Buffalo Bayou Tidal	1.30 (348/532)	4.65 (445/502)	1.05 (154/532)
Brays Bayou Above Tidal	1.51 (283/308)	7.23 (276/308)	1.11 (85/307)
Sims Bayou Above Tidal	2.14 (168/217)	5.19 (165/217)	0.78 (30/217)
Kuhlman Gully Above Tidal	0.0 (0/30)	0.0 (0/30)	0.47 (1/30)
Pine Gully Above Tidal	0.0 (0/31)	0.0 (0/31)	0.94 (10/31)

Relationship To Streamflow





Load Duration Curve Results: Brays Bayou

Stream Flow Conditions	Bacteria Load Reduction Estimate			
	Brays Above Tidal-Headwaters	Brays Above Tidal-Middle	Brays Tidal	Kuhlman Gully
High Flow	99%	99%	97%	96%
Moist Conditions	97%	97%	80%	89%
Mid-Range Conditions	94%	94%	59%	83%
Dry Conditions	93%	92%	34%	77%
Low Flow	92%	90%	-48%	63%

Load Duration Curve Results: Sims Bayou

Stream Flow Conditions	Bacteria Load Reduction Estimate			
	Sims Above Tidal-Headwaters	Sims Above Tidal-Middle	Sims Tidal	Berry Bayou
High Flow	99%	94%	92%	99%
Moist Conditions	88%	84%	70%	96%
Mid-Range Conditions	77%	77%	52%	95%
Dry Conditions	71%	72%	34%	94%
Low Flow	62%	57%	-12%	92%

Key Findings

- Fecal waste loads exceed the standard throughout the watershed in high flow through dry conditions
- Loading is below the standard for low flow conditions in Brays Tidal and Sims Tidal
- Loading is variable in other flow conditions at different points throughout Brays and Sims Bayou

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Watershed Partnership

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Watershed Partnership

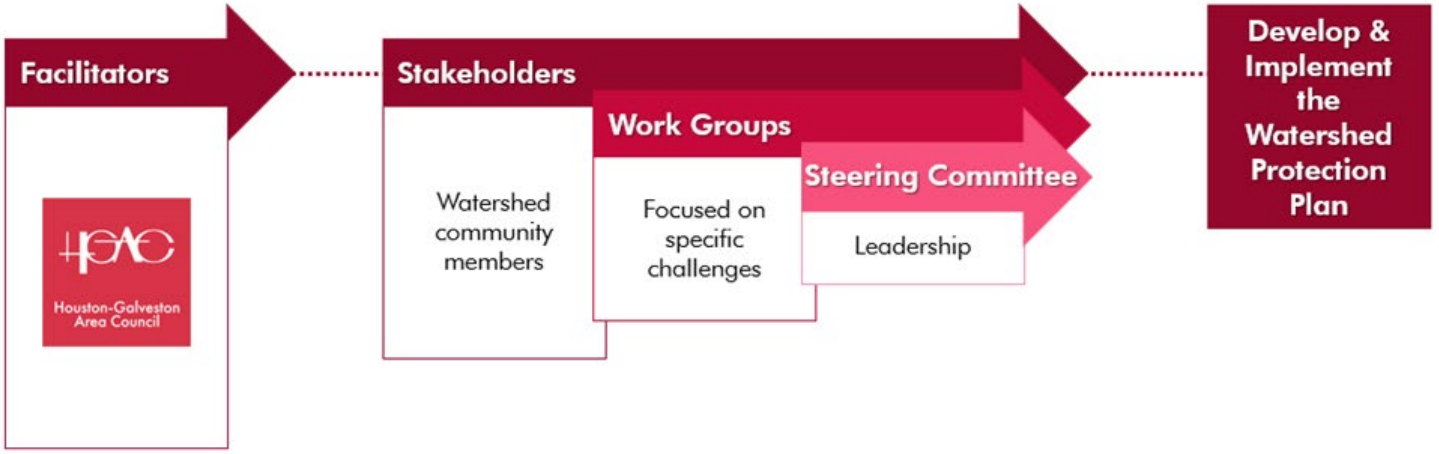
Taking Action

H-GAC needs your help to develop a **Watershed Protection Plan** for the Brays and Sims Bayou Watershed

- Non-regulatory
- Roadmap and reference guide
- **Led by a local stakeholder partnership**

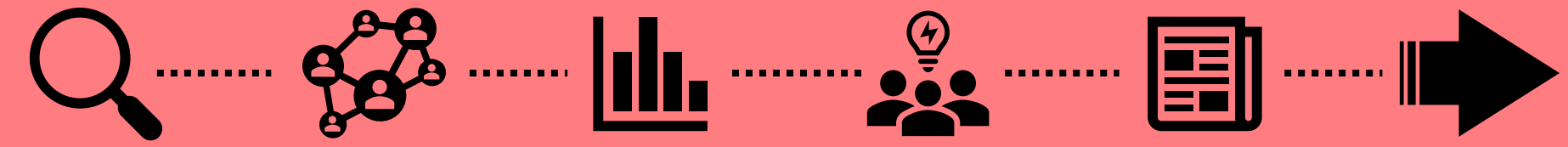
Brays & Sims Bayou Watershed Partnership

Partnership Structure



Timeline

You Are Here



Identify Water Quality Issues

Form Partnership

Discuss and Model

Identify Solutions

Submit WPP

Implement!

2025 → 2027

Brays & Sims Bayou Watershed Partnership

How Can We Help?

- Tell us about your projects and organizations!
- Tell us how we can:
  - Amplify
  - Collaborate
  - Coordinate

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NEXT STEPS

Short Term Goals

- Accept nominations for the Steering Committee
- Review modeling results at next meeting in March 2026
- Refine technical information, receive your insight and feedback
- One-on-one meetings with stakeholders

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POLL QUESTION 1:

What is your preference for informational meetings (e.g., sharing results of models and analyses)? ***Choose only one***

- ❍ In-person
- ❍ Virtual

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POLL QUESTION 2:

What is your preference for interactive meetings (e.g., revising models, assembling sections of the watershed protection plan)?
Choose only one

- ❍ In-person
- ❍ Virtual

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POLL QUESTION 3:

For future meetings, what time of day is preferred? ***Select all that apply***

- ❑ Mornings (between 8:00 a.m. and 12:00 p.m.)
- ❑ Afternoons (between 1:00 p.m. and 5:00 p.m.)
- ❑ Evenings (between 5:00 p.m. and 8:00 p.m.)

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POLL QUESTION 4:

For future meetings, what day of the week is preferred? ***Select all that apply***

- ❑ Monday
- ❑ Tuesday
- ❑ Wednesday
- ❑ Thursday
- ❑ Friday
- ❑ Saturday
- ❑ Sunday

Brays & Sims Bayou Watershed Partnership

DISCUSSION & QUESTIONS

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https://www.h-gac.com/watershed-based-plans/brays-sims-bayou

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EPA

Texas Commission on Environmental Quality

H-GAC Houston-Galveston Area Council

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