



Watershed-Based Planning

Clean Waters Initiative

August 26, 2021



Acknowledgements



- TCEQ Total Maximum Daily Load (TMDL) Program – Austin
- TCEQ 319 Non-Point Source Program – Austin
- TSSWCB 319 Non-Point Source Program – Temple

Water Quality Management

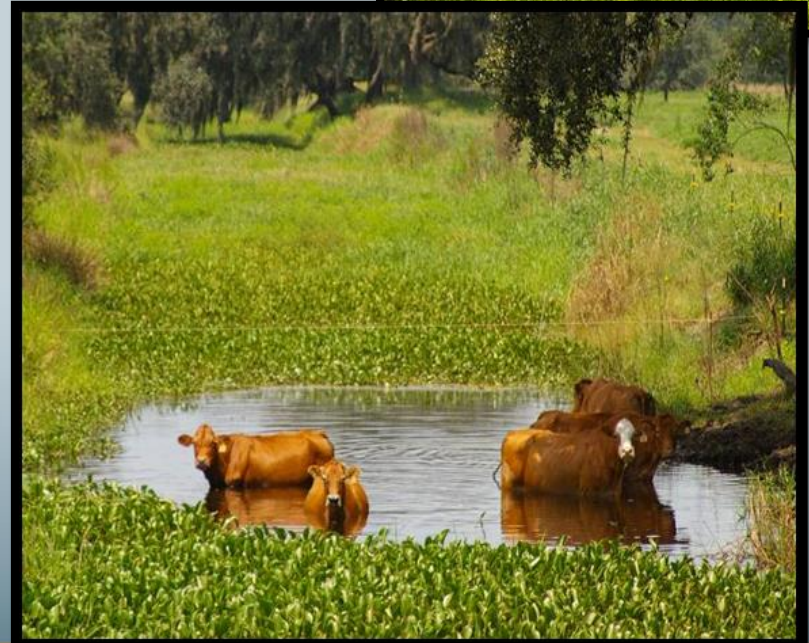
- Monitoring
- Assessment
- Address Impairments



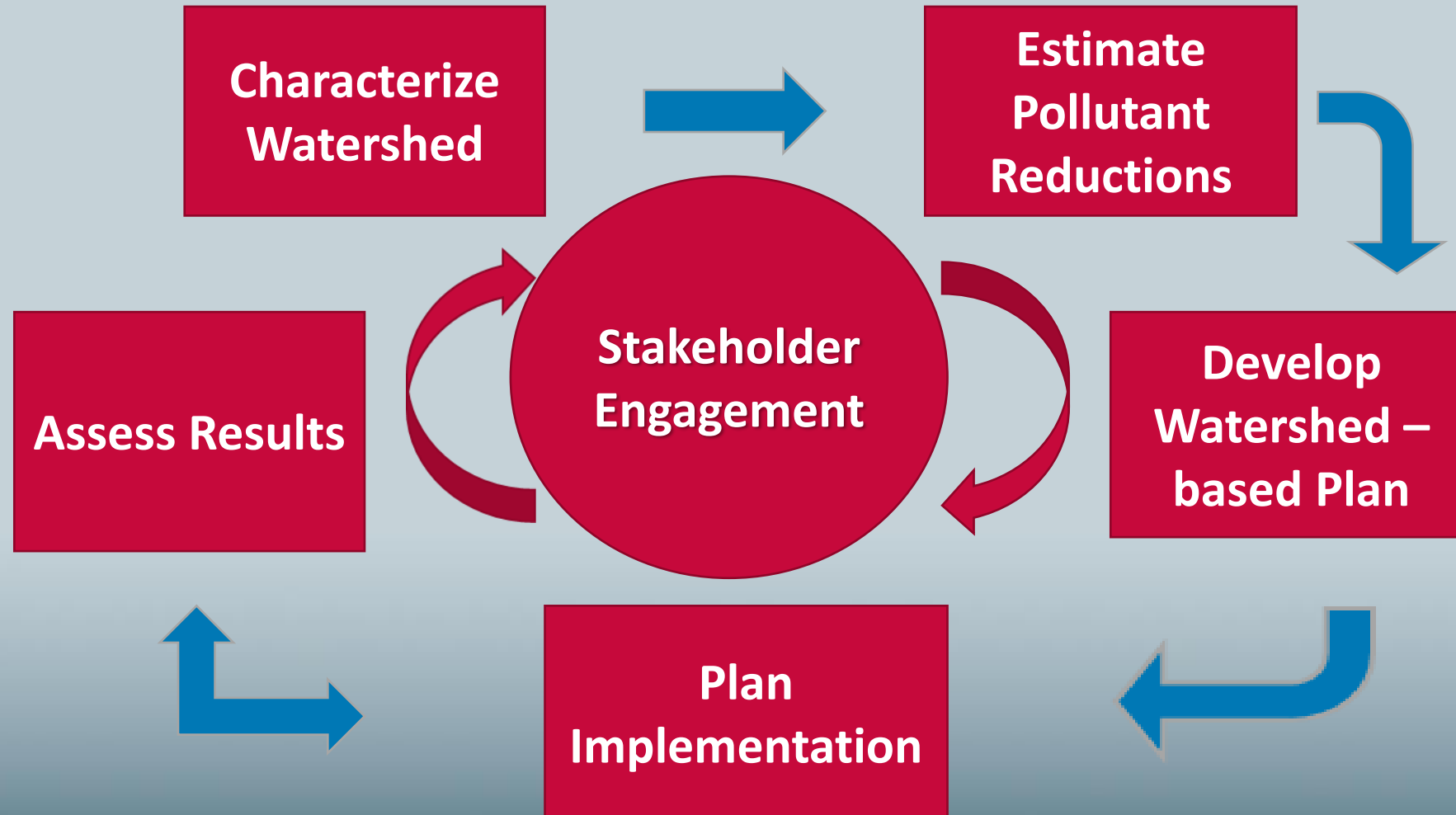
Watershed-based Planning

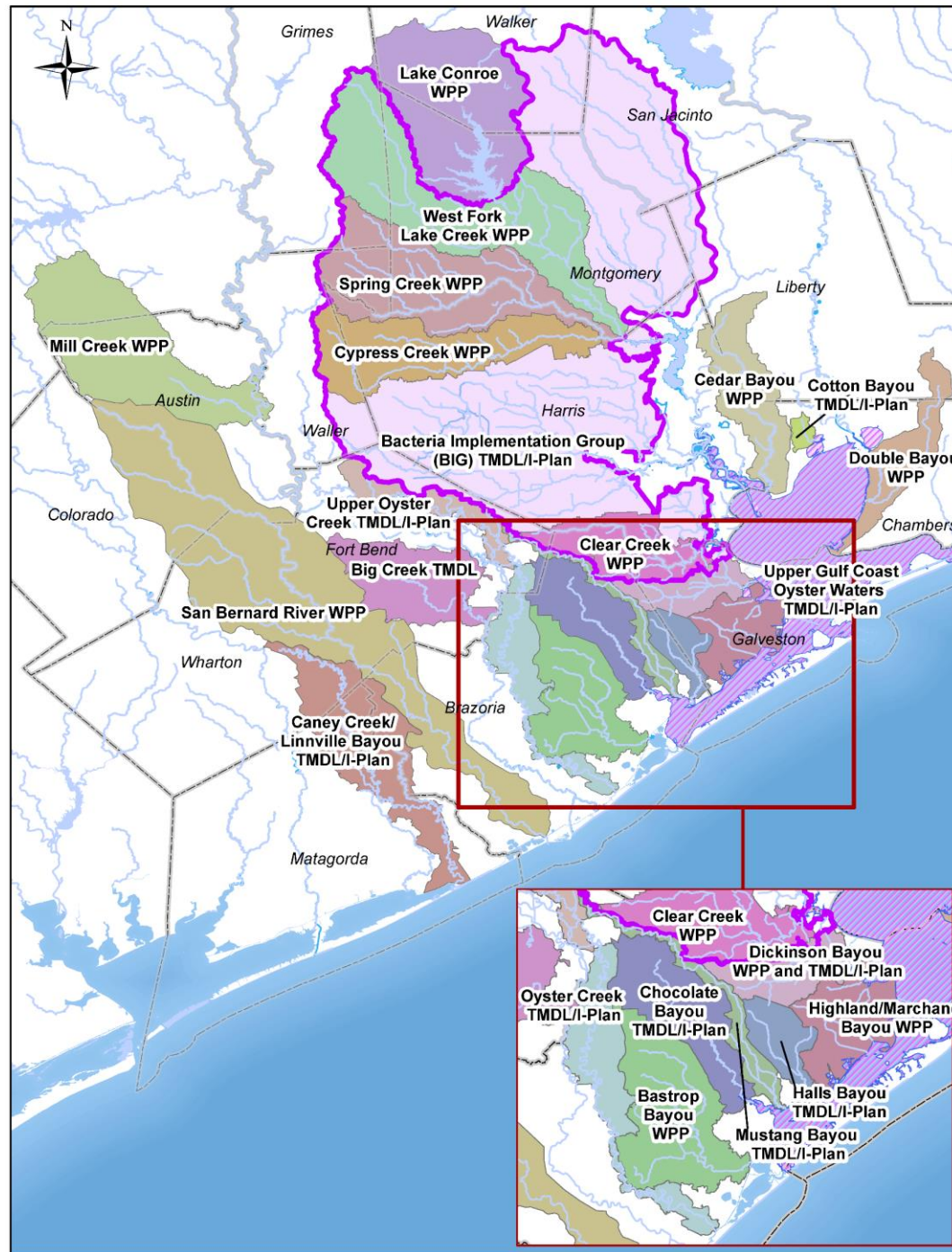
- Total Maximum Daily Load
 - $TMDL = WLA + LA + FG + MOS$
 - TMDL Implementation Plan (I-Plan)

- Watershed Protection Plan

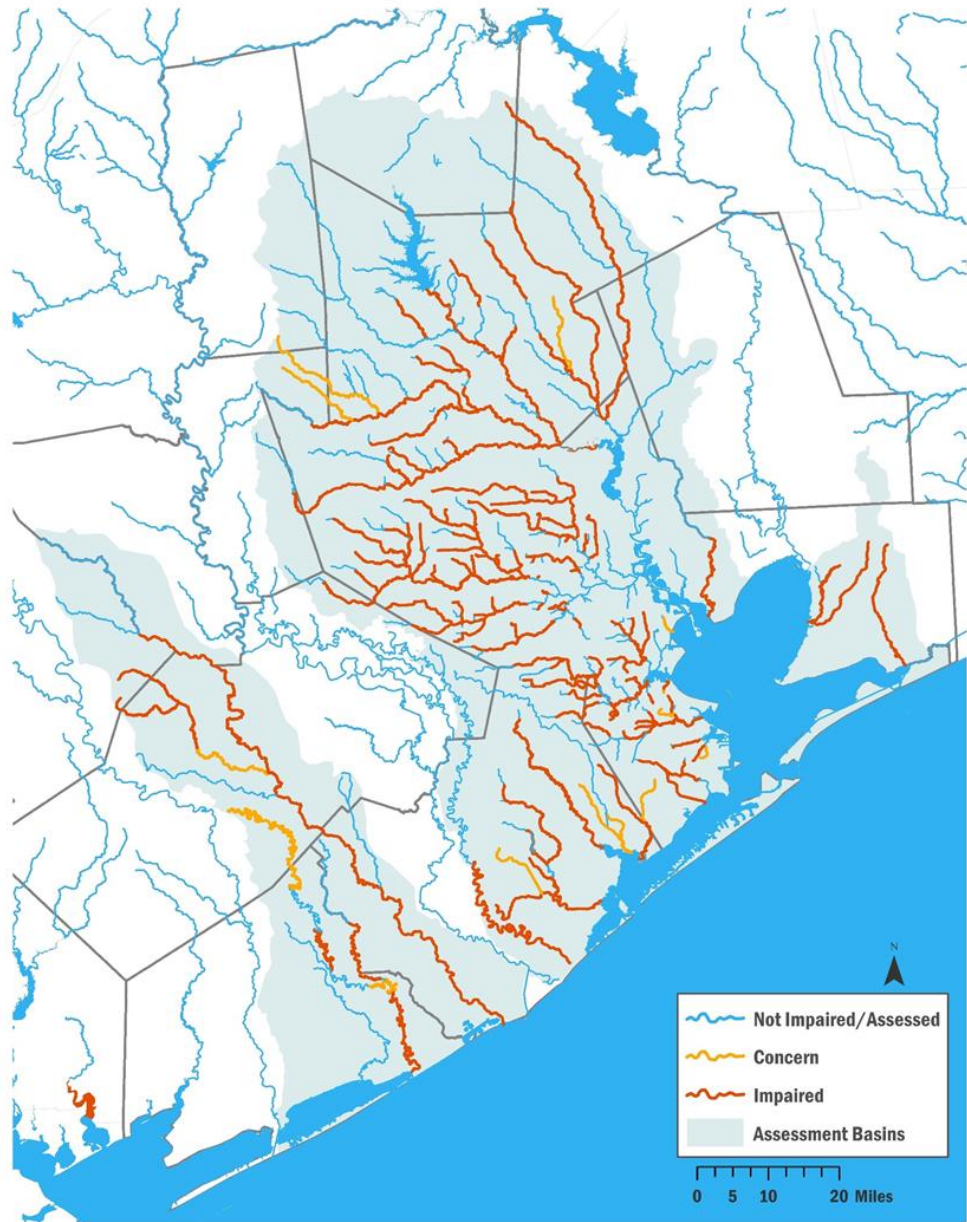


Steps in a Watershed-Based Plan





Bacteria Impairments and Concerns



Water Quality Impairments

- TCEQ's 2020 Integrated Report for Surface Water Quality



Watershed-Based Plan Development

- Voluntary
- Stakeholder Developed
- Identifies Management Measures
- Implementation Road Map

Implementation Plan for Two Total Maximum Daily Loads for Indicator Bacteria in the Chocolate Bayou Watershed

Segments: 1107 and 1108

Assessment Units: 1107_01 and 1108_01



January 2020

Management Measures

- *Support Rural Land Management Initiatives*
- *Promote Safe OSSF Use and Maintenance*
- *Improve Wastewater Treatment Facility and Collection System Function*
- *Address Fecal Deposition of Feral Hog Populations*
- *Address Fecal Deposition of Dog Waste*
- *Support Urban Stormwater Management*



Implementation

■ Outreach

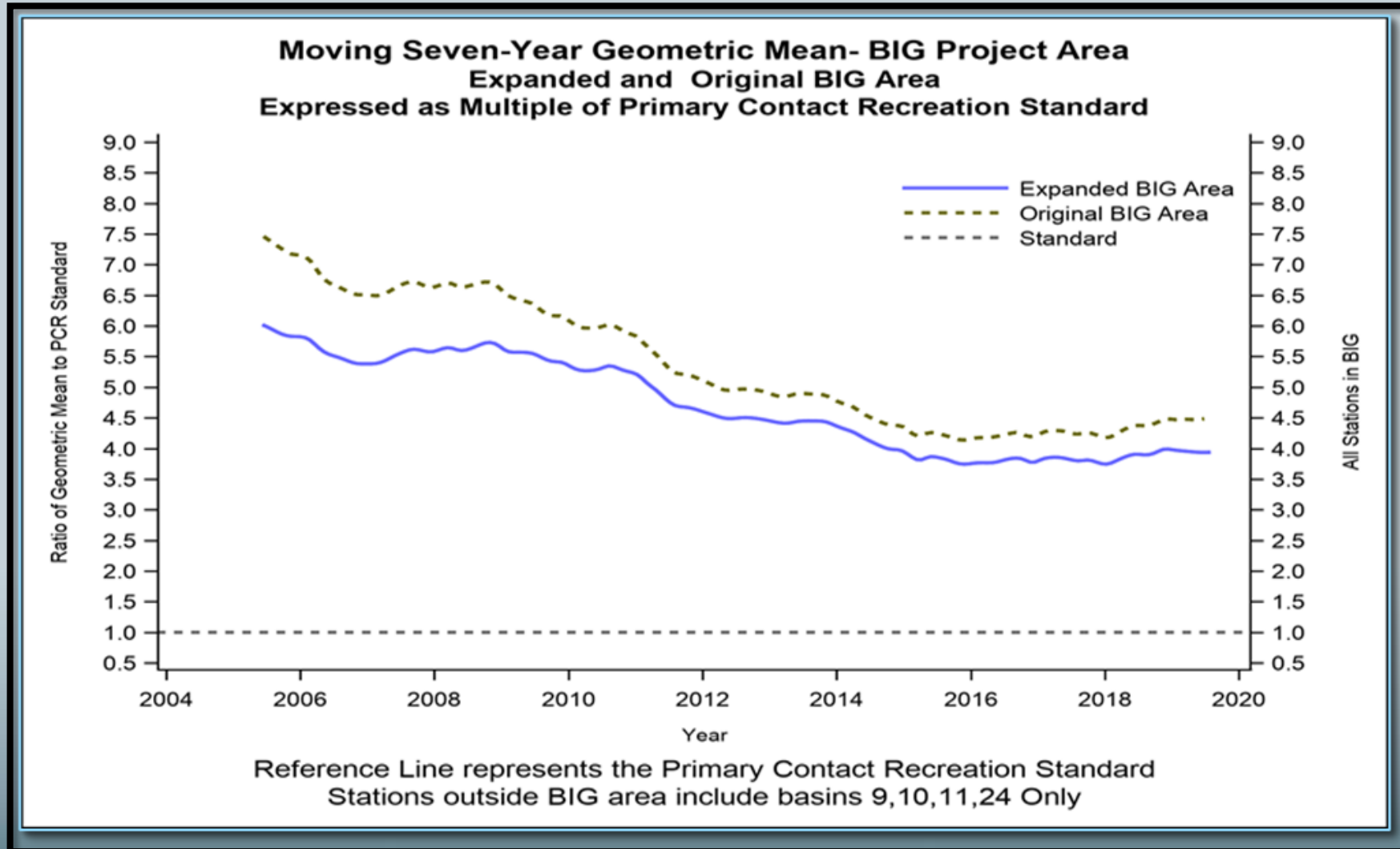
- TrashBash®
- Olin Take Child To Work Fair
- Texas Stream Team Training
- OSSF Workshops
- Ag/Feral Hog Workshops
- Green Infrastructure Workshops

■ Structural

- Pet Waste Stations
- Evaluating/Repairing OSSFs



Bacteria Trends



Exploration Green



Multi-Use

- Water Quality
 - Flood Mitigation
 - Recreation
 - Wildlife Habitat
-
- Exploration Green Detention Facility | Clear Lake City Water Authority (clcwa.org)

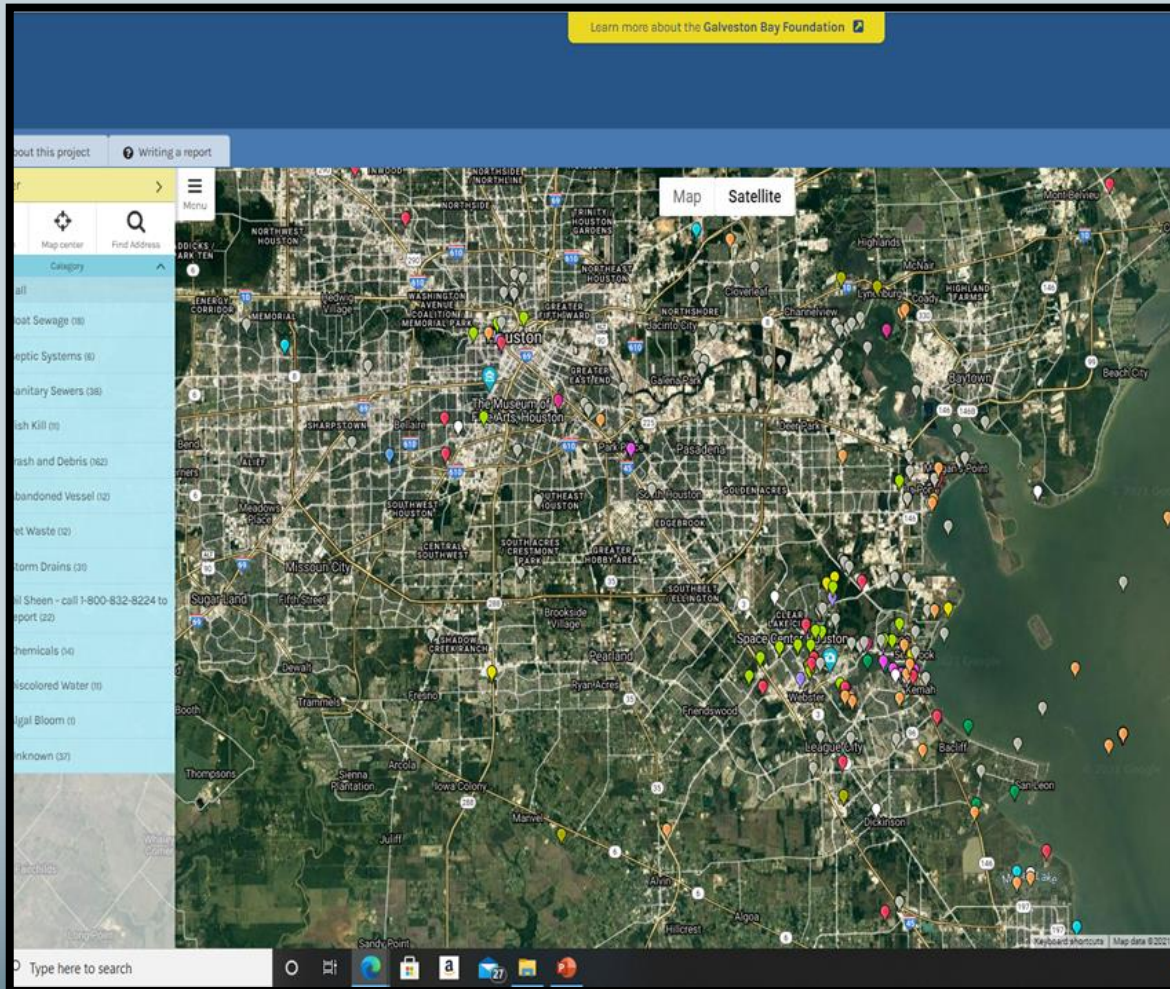
Top Five/Least Five IDDE Model Program

- Three Phases
 - Rapid Survey
 - Wet/Dry Weather Source Identification
 - Notify Local Jurisdictions
- Quality Assured Data
- Model IDDE Program



<https://h-gac.com/bacteria-implementation-group/reports>

Galveston Bay Action Network

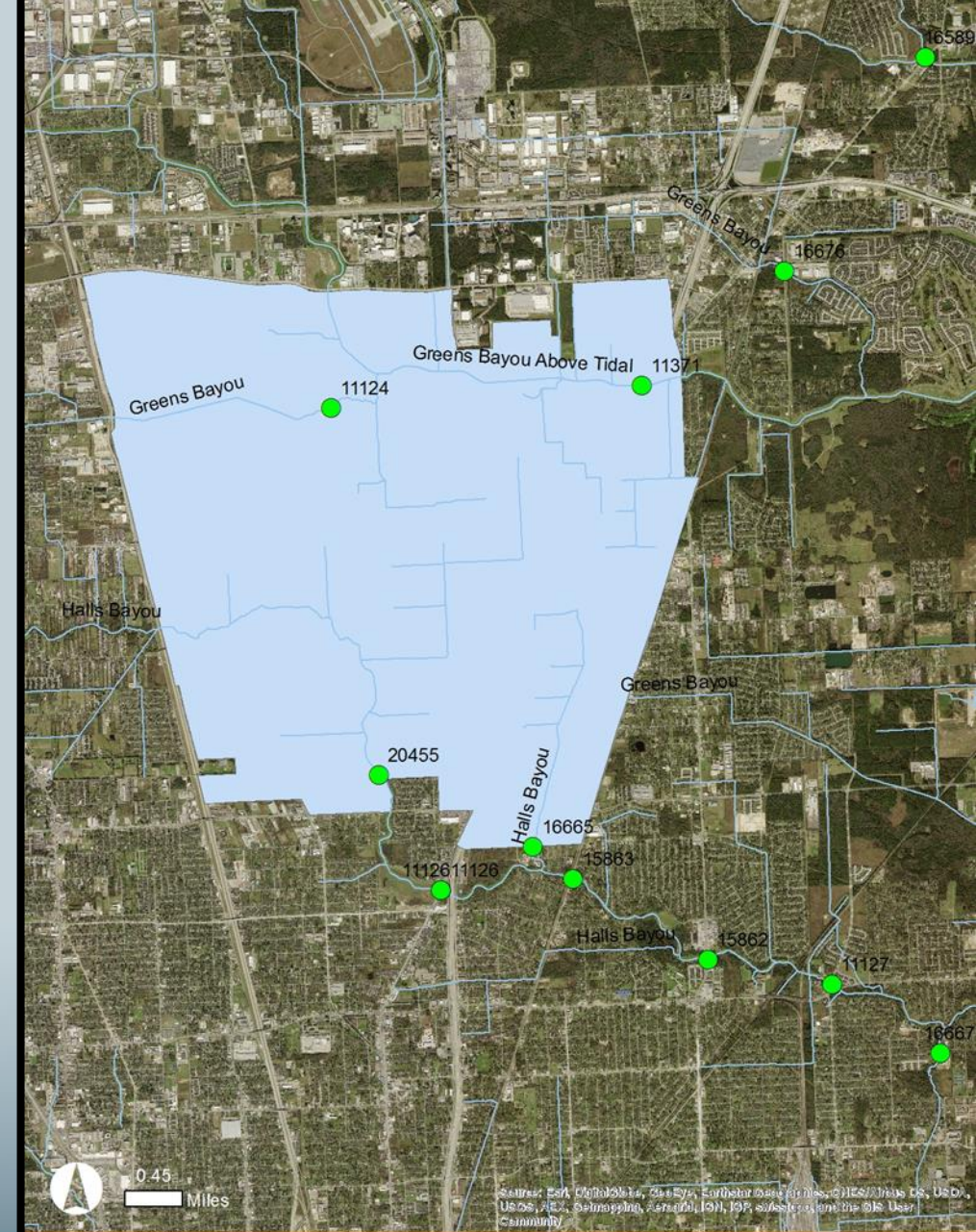


- Online Pollution Reporting Tool
- Phone App
- Reporting:
 - Boater Wastes
 - Construction Run-off
 - Sanitary Sewer Overflows
 - Septic System Failures

<https://m3.mappler.net/gban/>

ALDINE WESTFIELD CASE STUDY

- Coordinated Partner Effort
 - Harris County
 - East Aldine Management District
- Monitoring Sites
 - Halls Bayou
 - Greens Bayou



Thank You

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