

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.



Houston-Galveston
Area Council

NATURAL RESOURCES ADVISORY COMMITTEE

AGENDA

Thursday, August 7, 2025, 1:30 PM

Hybrid In-Person/Zoom Meeting

NRAC Agenda

1. Call to Order/Welcome/Introductions

2. Certify Quorum

A quorum of 12 is required to conduct committee business.

NRAC Agenda (continued)

3. Approve Meeting Report

Request approval of May 1, 2025 meeting report. Copy shared via email and available on the NRAC webpage.

NRAC Agenda (continued)

4. Membership

H-GAC staff will provide a brief status update on membership.

NRAC Agenda (continued)

5. Environmental Committee Highlights

Coordinators for H-GAC environmental committees will provide information on activities and updates from the past quarter.

- Regional Flood Management Committee (Amanda Ashcroft)
- Solid Waste Management Committee (Erin Livingston)

NRAC Agenda (continued)

6. Environmental Program Highlights

H-GAC Staff will highlight Community & Environmental Planning projects to seek comment and feedback from Committee members.

- H-GAC Microplastics Study (Jenny Oakley)
- OSSF Remediation for Vulnerable Communities (Bill Ervin)
- Watershed Based Plans Update (Rachel Windham)
- Parks and Natural Areas Roundtable Update (Andrea Tantillo)

Repair & Replacement of OSSFS Disadvantaged Communities with Vulnerable Populations

- Used the Regional Equity Tool to identify communities
 - Economically disadvantaged based on census data
 - High numbers of OSSFs near impaired waterways
 - Excluded areas with planned service connection projects
- Top 2 communities in Harris County
 - Greenspoint/Adline area
 - Houmont Park/Beaumont Place neighborhoods
- Hold Homeowner Education Workshops in identified communities
- Repair or replace up to 25 OSSFs for qualifying homeowners
- Calculate bacteria load reduction



This project is also funded in part by TCEQ through a grant from the United States Environmental Protection Agency.

NRAC Agenda (continued)

6. Environmental Program Highlights

H-GAC Staff will highlight Community & Environmental Planning projects to seek comment and feedback from Committee members.

- H-GAC Microplastics Study (Jenny Oakley)
- OSSF Remediation for Vulnerable Communities (Bill Ervin)
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PARKS AND NATURAL AREAS ROUNDTABLE



Monday, July 14 – Award Winner Spotlight, Online Mapping Program



22 people attended and participated in the roundtable, information exchange

Annual Awards Cycle

Activity	Timeline
Review Application and Select Judges	July and August 
Advertise Awards/Solicit Applications	August
Accept Applications	August 25-September 30
Judging	Early October
PNA Roundtable Previews Award Recommendations Via Email	Mid October
National Resources Advisory Committee Previews Award Recommendations	Early November
Notify Winners	Mid December/January
H-GAC Board recognizes winners	January
Advertise Recognition Event	January/early February
Host recognition event	Friday in early February



**Parks and
Natural Areas
2025 Awards**

APPLY NOW!



Winning projects serve as models for the H-GAC region on how parks can improve water quality, habitat, and quality of life.

Apply at h-gac.com/parks

Applications due 8/25/25–9/30/25

A program of the Houston-Galveston Area Council



Houston-Galveston
Area Council

20th Annual Awards



- Success stories about previous awards and award winners
- Speaker – may be someone from one of the early awards – other ideas
- Event sponsorship available to cover cost of awards, catering, printing, etc.

Next Meeting

October 6, 2024

Houston-Galveston Area Council

2 p.m.

Thank You!

ANDREA TANTILLO

Principal Program Coordinator

Houston-Galveston Area Council

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www.h-gac.com

Andrea.Tantillo@h-gac.com

Find more at: h-gac.com/parks-and-natural-areas/awards



NRAC Agenda (continued)

7. Subcommittees

Water Innovation Strategies of Excellence Subcommittee

Staff coordinator, Rachel Windham, will provide an update on the status of the Water Innovation Strategies of Excellence Awards and future action.

2025 EVALUATIONS

For more information, visit:
<https://www.h-gac.com/wise-awards>



Project Title	Winner or Special Recognition	Category
Texas Watershed Steward Program	WINNER	Education and Public Awareness
Houston Parks and Recreation Department's Water Management Plan	WINNER	Policy and Planning
Jersey Village 2024 Water and Wastewater Master Plan	Special Recognition	
Wastewater Treatment Plant, Greenwood Utility District	WINNER	Completed Effort (Greater Than \$200,000)
Marissa Llossa, Houston Parks Board	TIE	Individual Excellence
Urban Forestry Drone Program, City of Pearland	WINNER	Program Performance
Arts in the Park, City of La Marque	WINNER	Completed Effort (Less Than \$200,000)
Mahan Park Boat Ramp Expansion, City of La Marque	Special Recognition	
Tom Douglas, Various Organizations	TIE	Individual Excellence

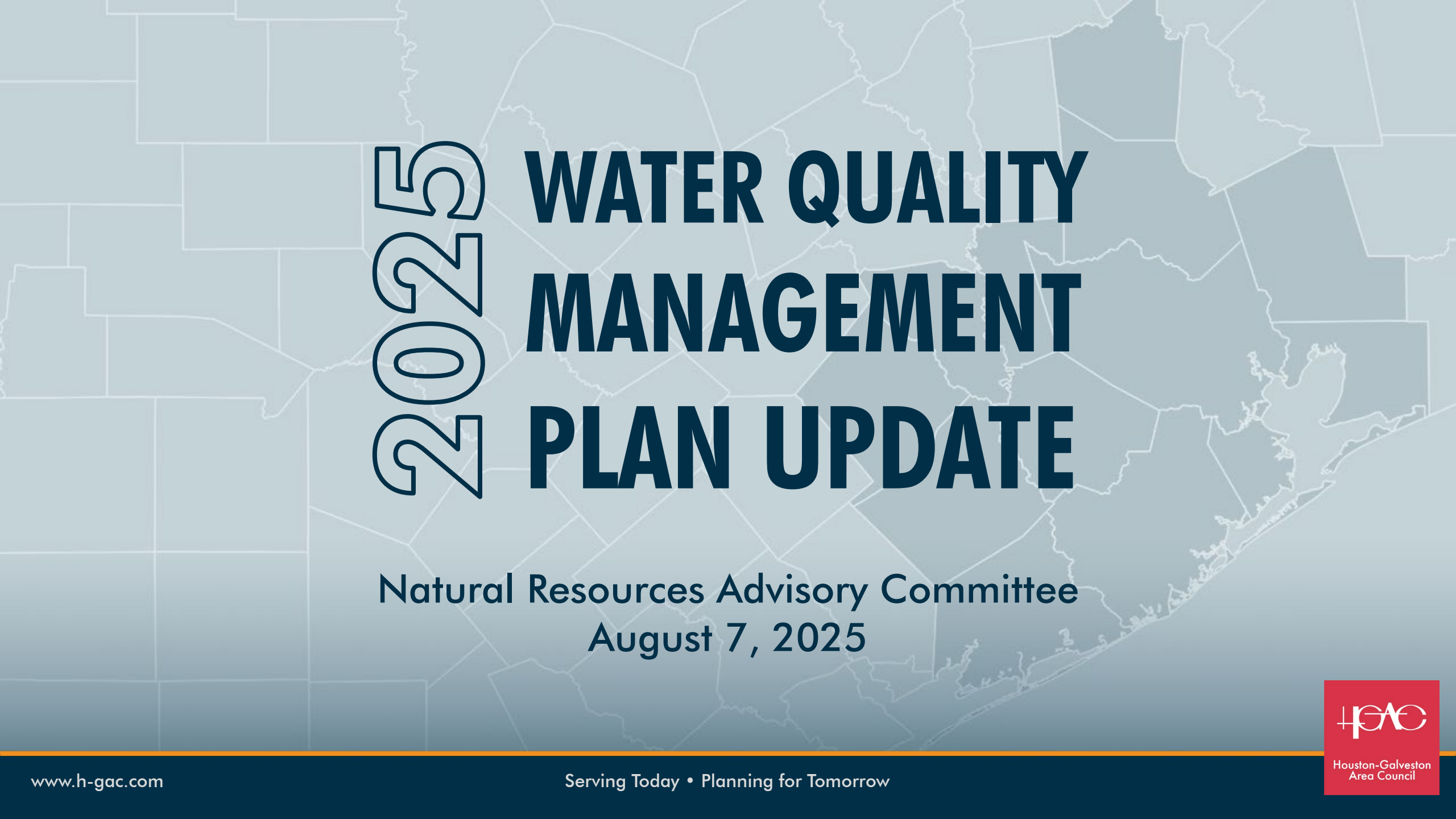


NRAC Agenda (continued)

8. Topic of the Day

Bill Ervin, Senior Planner at H-GAC, will provide an overview of the Draft 2025 Water Quality Management Plan Update which involves the collection and analysis of water quality and locational data related to wastewater sources. A copy of the document was provided digitally to members prior to the meeting.

Representatives will consider and take action on a recommendation to the H-GAC Board of Directors to accept the Water Quality Management Plan Update.



2025 WATER QUALITY MANAGEMENT PLAN UPDATE

Natural Resources Advisory Committee
August 7, 2025

Acknowledgements

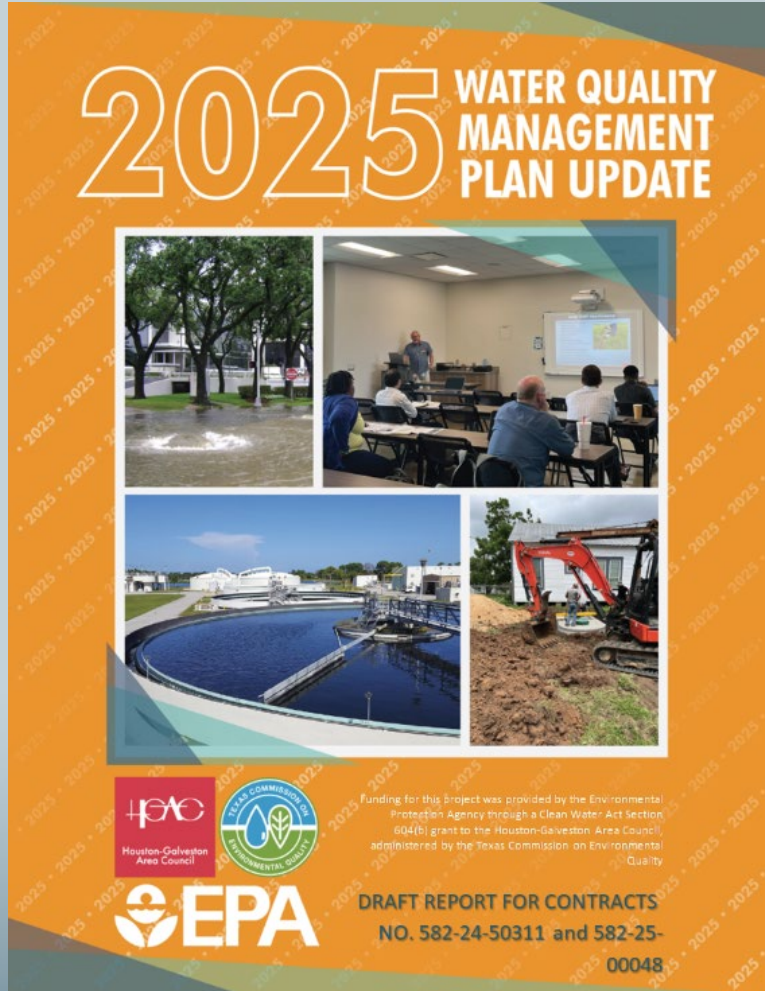
Funding for this project was provided by the United States Environmental Protection Agency (EPA) through a Clean Water Act Section 604(b) grant to the Houston-Galveston Area Council (H-GAC), administered by the Texas Commission on Environmental Quality (TCEQ).

TCEQ Contract Numbers 582-23-40182 and 582-24-50311



EPA

FY 2024 Water Quality Management Plan Update



- Project involves acquiring, compiling, and evaluating regional wastewater infrastructure and effluent monitoring data
- Data is compiled and combined with data from EPA and TCEQ to form an integrated data set
- Data is used by various programs and projects to support current and future planning decisions
- Update becomes part of the State's Water Quality Management Plan (WQMP)

Primary Project Objectives

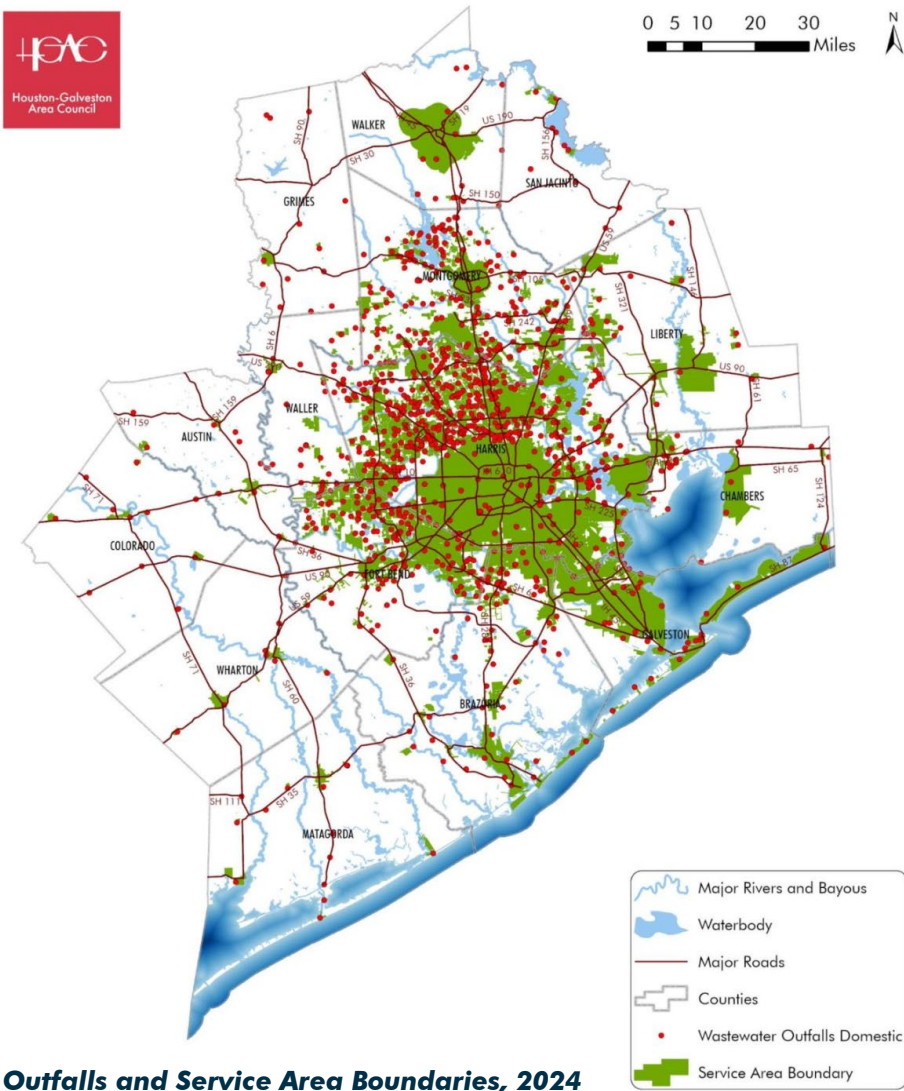
- Wastewater Data Update and Coordination
- Conformance Review for Clean Water State Revolving Fund (CWSRF) Projects
- Support Watershed Planning
- On-Site Sewage Facility (OSSF) Planning, Support, and Outreach
- OSSF Mapping Tool Expansion
- Water Quality Management Plan Update Report

Wastewater Data Update and Coordination



- Mapped wastewater treatment facility (WWTF) outfalls and service area boundaries
- Analysis of wastewater effluent discharge monitoring report (DMR) and sanitary sewer overflow (SSO) data
- Conducted outreach related to employment in the wastewater industry

Wastewater Data Update and Coordination (cont.)



Wastewater Infrastructure Spatial Data

- Acquired and reviewed the domestic wastewater outfall location data for the 15-County region from TCEQ
 - 13-County H-GAC Region + San Jacinto and Grimes Counties
- Updated the Service Area Boundaries GIS layer for domestic outfalls with any new permittees
 - While revising the data for 2025, wastewater mainline data from the City of Houston Geolink HUB was used to refine SAB delineation

Outfalls and Service Area Boundaries, 2024

Wastewater Data Update and Coordination (cont.)



Wastewater Effluent Monitoring Data Analysis

- Acquired and analyzed data collected between 1/1/2020 and 12/31/2024 for:
 - DMR data from EPA and TCEQ with a focus on bacteria
 - Self-reported SSO data acquired from TCEQ
- This data is used by other programs and projects
 - Bacteria Implementation Group (BIG)
 - Total Maximum Daily Load (TMDL) development
 - Watershed Protection Plan (WPP) development
 - Clean Rivers Program (CRP)

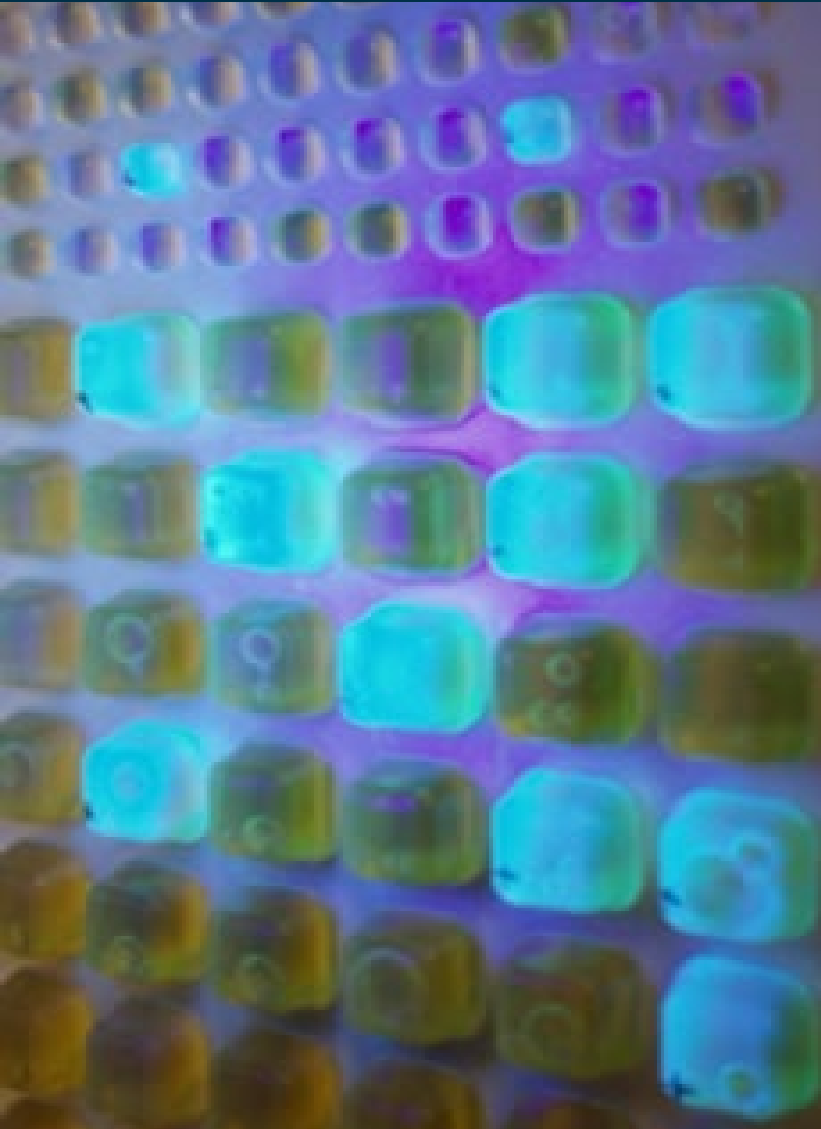
Wastewater Data Update and Coordination (cont.)



Key Findings - DMR

- 1,443 permitted wastewater outfalls in the region
- DMR data of any kind reported for 1,073 outfalls
- 938 facilities reported bacteria data in 2024
- The largest size category of WWTFs reporting bacteria data is <0.1 MGD (n=269, or 28% of total)
- 80% of WWTFs reporting bacteria data in the region (n=757) are less than 1 MGD

Wastewater Data Update and Coordination (cont.)



Key Findings – DMR (cont.)

- Bacteria permit compliance is high
 - 94% of Single Grab Sample results
 - 98% of Geometric Mean results
- The largest estimated bacteria load comes from facilities in the 1 to 5 MGD size category (n=143)
- The second largest estimated bacteria load comes from facilities in the greater than 10 MGD category (n=33)
- The lowest estimated bacteria load comes from facilities in the less than 0.1 MGD category (n=269)

Wastewater Data Update and Coordination (cont.)



Key Findings - SSO

- 252 permitted dischargers (29%) reported SSOs in 2024
- 1,802 SSOs reported
- Reported combined SSO discharge volume of 11,289,100 gallons
- Rain/inflow/infiltration was the leading cause of SSO events in 2024 (51% of all SSOs) followed by line blockages from fats, oils, and grease (16%)
- Rain/inflow/infiltration also contributed to the largest total volume of discharge in 2024 (4,999,200 gallons)

Wastewater Data Update and Coordination (cont.)

Industry Outreach

- H-GAC and the Association of Water Board Directors co-hosted nine stakeholder meetings in FY2025.
- The website is a centralized location to learn about the career opportunities available and to attract new talent.
- The stakeholder group is in the process of reviewing and approving the final pages of the website.
- H-GAC is currently working to establish MOUs with stakeholders to help maintain the website and provide for video and ad production in the future.

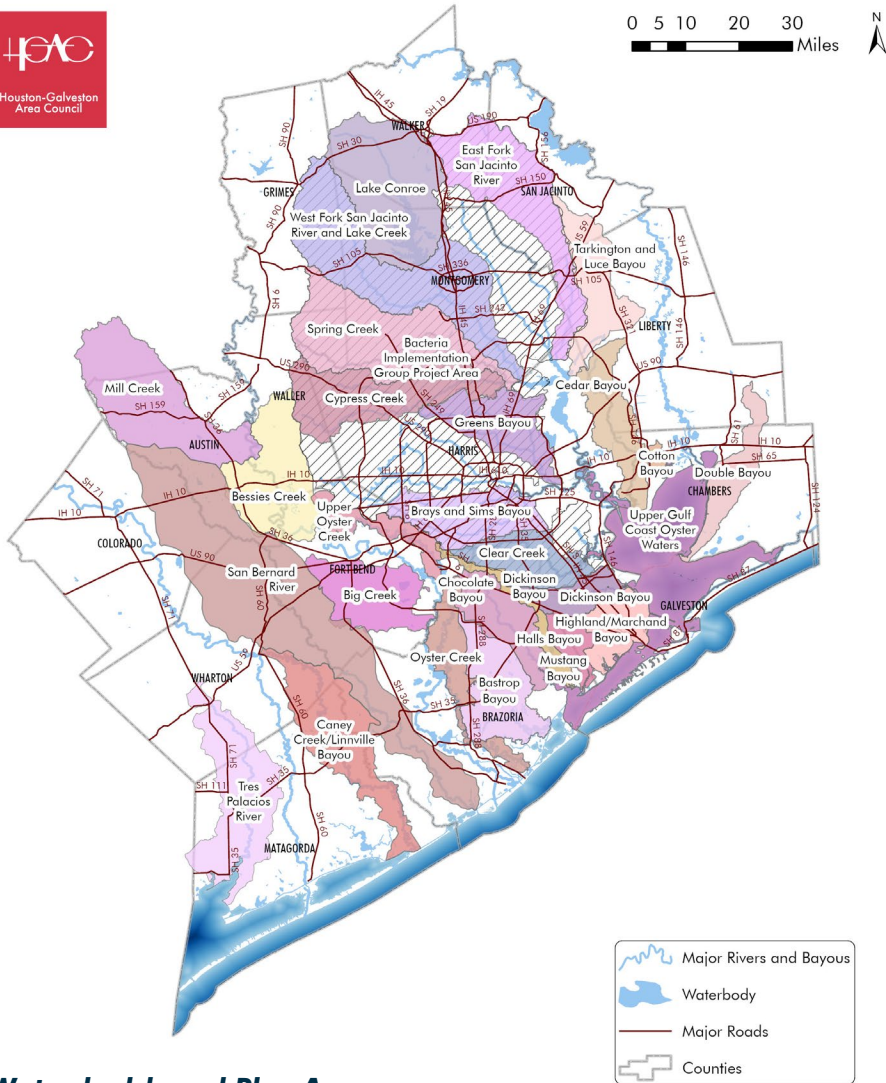


Conformance Review for CWSRF Projects

- Upon TCEQ request, H-GAC reviewed two Clean Water State Revolving Fund (CWSRF) applications for compliance with regional goals and objectives

Requesting Entity	Project Summary	Findings
City of La Marque	The project is for rehabilitation and replacement of the City of La Marque's wastewater collection system. The project would rehabilitate the sanitary sewer collection system through trenchless technology using Pipe Busting, Cured-in-Place Pipe (CIPP) construction methods, or complete sewer replacement, and manhole rehabilitation or replacement.	Based upon our review, H-GAC staff finds that by mitigating I&I and associated SSOs, this project is consistent with regional goals as defined in the <i>FY 2022 Houston-Galveston Area Regional Water Quality Management Plan</i> .
City of Cleveland	The project is for the decommissioning of the existing West wastewater treatment plant (WWTP), construction of a lift station and force main to the existing East WWTP, re-routing the existing force main, evaluate and perform upgrades to the Southside lift station. Also included in the scope of the project is replacing 67% of the existing wastewater collection systems. By decommissioning the West WWTP and replacing most of the wastewater collection systems pipes it will alleviate aging infrastructure and improve the efficiency of upgraded WWTP.	Based upon our review, H-GAC staff finds this project is consistent with regional goals as defined in the <i>FY 2024 Houston-Galveston Area Regional Water Quality Management Plan</i> .

Support Watershed Planning



Watershed-based Plan Areas

Plan Facilitation and Coordination

- Galveston Bay Estuary Program subcommittee membership.
- Coordination with the CRP on the development of the Basin Highlights Report.
- Participation in the BIG OSSF and Illicit Discharge Regional Workgroup.
- Promotion of OSSF projects, including the SEP for the Homeowner Wastewater Assistance Program.
- Preparation of OSSF education and outreach programs and materials for the Coastal Communities project.
- Participation in the Watershed Coordinator's Roundtable.
- Coordination with ongoing TMDL, WPP, CWI and other efforts.

Support Watershed Planning (cont.)



Urban Forestry

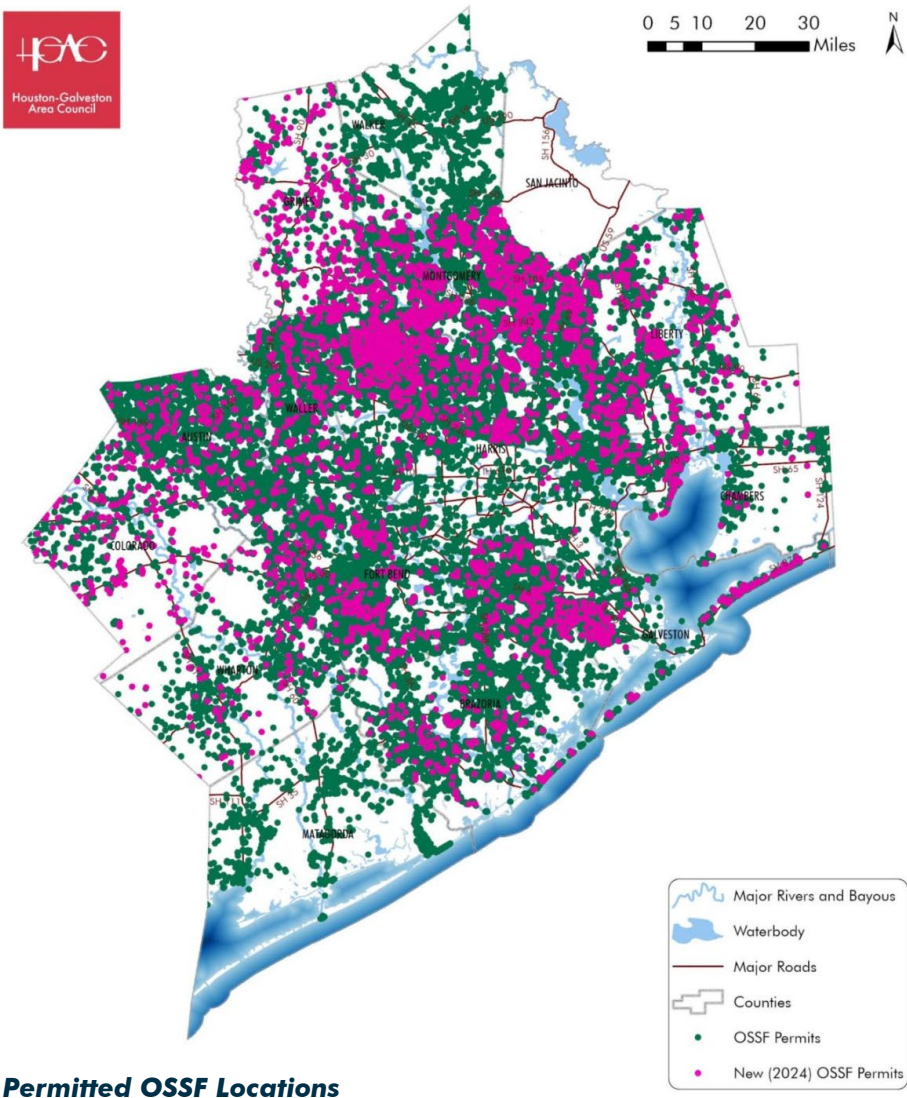
- Served on and/or coordinated with regional and national forestry projects including:
 - Cities in Forests national association of municipal forestry programs.
 - Leadership role in Texas Forests and Drinking Water Partnership.
 - Leadership role in Houston Area Urban Forestry Council.
 - H-GAC Regional Conservation Initiative.
- Partnered with Texas A&M Forest Service to develop and implement the Green Futures corporate sustainability program to promote and fund riparian reforestation plantings.
- H-GAC has supported our local governments and organizations with direct support through:
 - Assisting the City of Houston with coordination support.
 - Assisting the Houston Area Urban Forestry Council in the planning for its annual tree planting competition and urban forestry education events.
 - Assisting various entities with letters of support, funding research, program coordination, or other minor data projects to support forestry efforts.

OSSF Planning, Coordination, and Outreach



- Permitted OSSF Database Update
- Unpermitted OSSF Analysis
- Updates to Harris County OSSF Historical Permit Data
- Coordination with Authorized Agents
- Supplemental Environmental Program (SEP) Coordination and Outreach Activities
- OSSF Outreach and Education

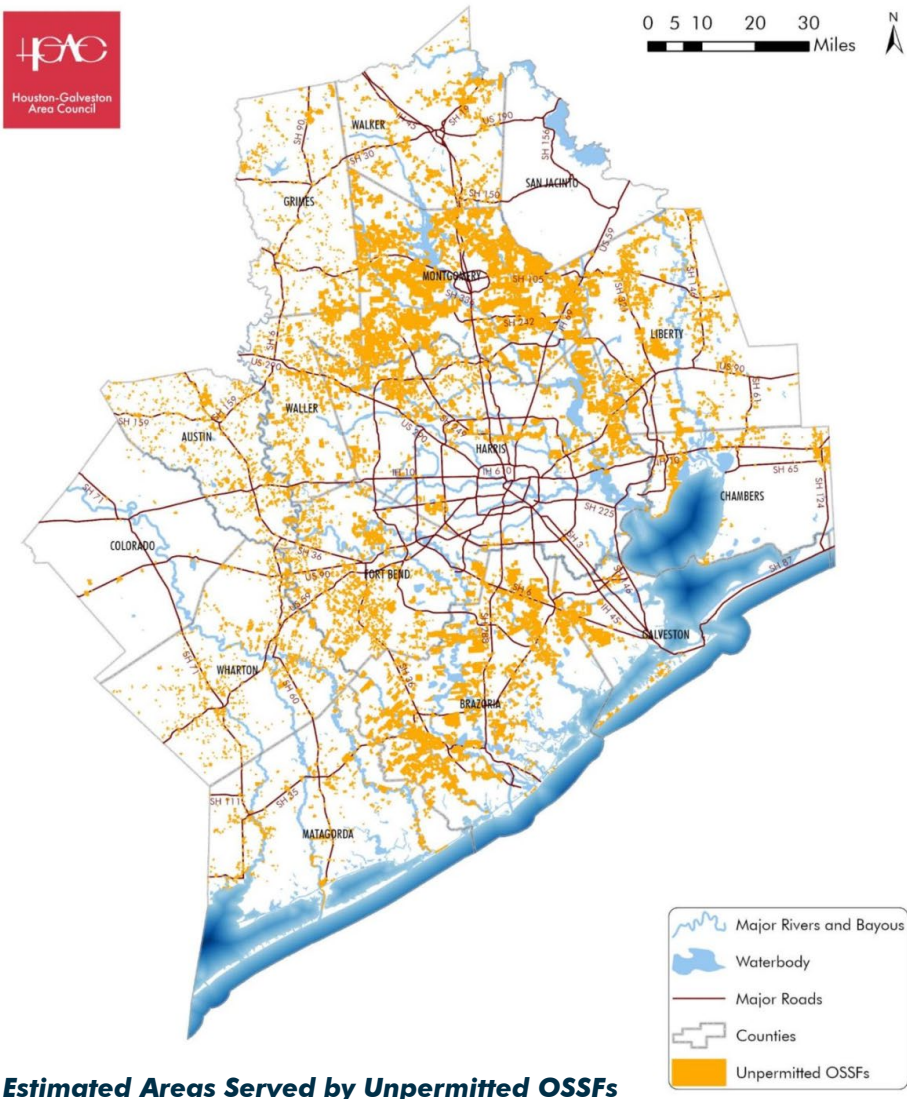
OSSF Planning, Coordination, and Outreach (cont.)



Permitted OSSF Database Update

- Added new permitted systems through 12/31/2024
- 5,950 new permitted OSSFs added in 2024
 - Total permitted systems include first time data submittals from Colorado County and Brookside Village.
 - Attempts to acquire data from San Jacinto County continue to be unsuccessful.
 - Matagorda and Walker counties did not report new data in 2024
- 150,465 permitted systems in the database

OSSF Planning, Coordination, and Outreach (cont.)



Unpermitted OSSF Analysis

- H-GAC continues to use the 9-1-1 addresses methodology rather than using parcel and census block data to estimate the number of potential unpermitted systems in the region
- Updates to the SAB using City of Houston wastewater mainline data resulted in the removal of approximately 20,000 parcels from the unpermitted area estimate
- H-GAC will continue utilize these methods to revise SABs and refine unpermitted estimates in future updates.
- 190,112 unpermitted systems (estimated)
- 340,577 total OSSFs (permitted and unpermitted; estimated) in region

OSSF Planning, Coordination, and Outreach (cont.)

STRUCTURE	DATE	PERMIT
SEPTIC ONLY	901024	254255
SEPTIC ONLY	901024	254270
SEPTIC ONLY	901029	254396
RESIDENTIAL	821022	167910
RESIDENTIAL	830909	191847
RESIDENTIAL	820108	145350
REBUILT HOUSE	890424	240363
RESIDENTIAL	850528	214344
RESIDENTIAL	791011	105241
RESIDENTIAL	800603	114013
RESIDENTIAL	791219	107842
RESIDENTIAL	790501	096465
RESIDENTIAL	790501	096464
RESIDENTIAL	790723	101065
RESIDENTIAL	790323	094394
RESIDENTIAL	800710	115336
RESIDENTIAL	840316	201887
RESIDENTIAL	810406	129929
RESIDENTIAL	790524	097996
RESIDENTIAL	810218	126161
RESIDENTIAL	810226	127281
RESIDENTIAL	830415	181073
RESIDENTIAL	800701	115309
RESIDENTIAL	810602	134052
RESIDENTIAL	801114	122660
RESIDENTIAL	820823	163459
RESIDENTIAL	810420	130885
RESIDENTIAL	830318	178577

Updates to Harris County OSSF Historical Permit Data

- In 2024, H-GAC acquired a scanned copy of Harris County's Early Permitting System (EPS) database
 - Contained roughly 14,816 records
 - 69% of the scans (9,665) were legible enough to match to H-GAC's STAR*Map data
- In 2025, we were only able to add 34 additional records. All others were either indecipherable or not a current address.
- Records with addresses/parcels that no longer exist will not be added to the database

OSSF Planning, Coordination, and Outreach (cont.)



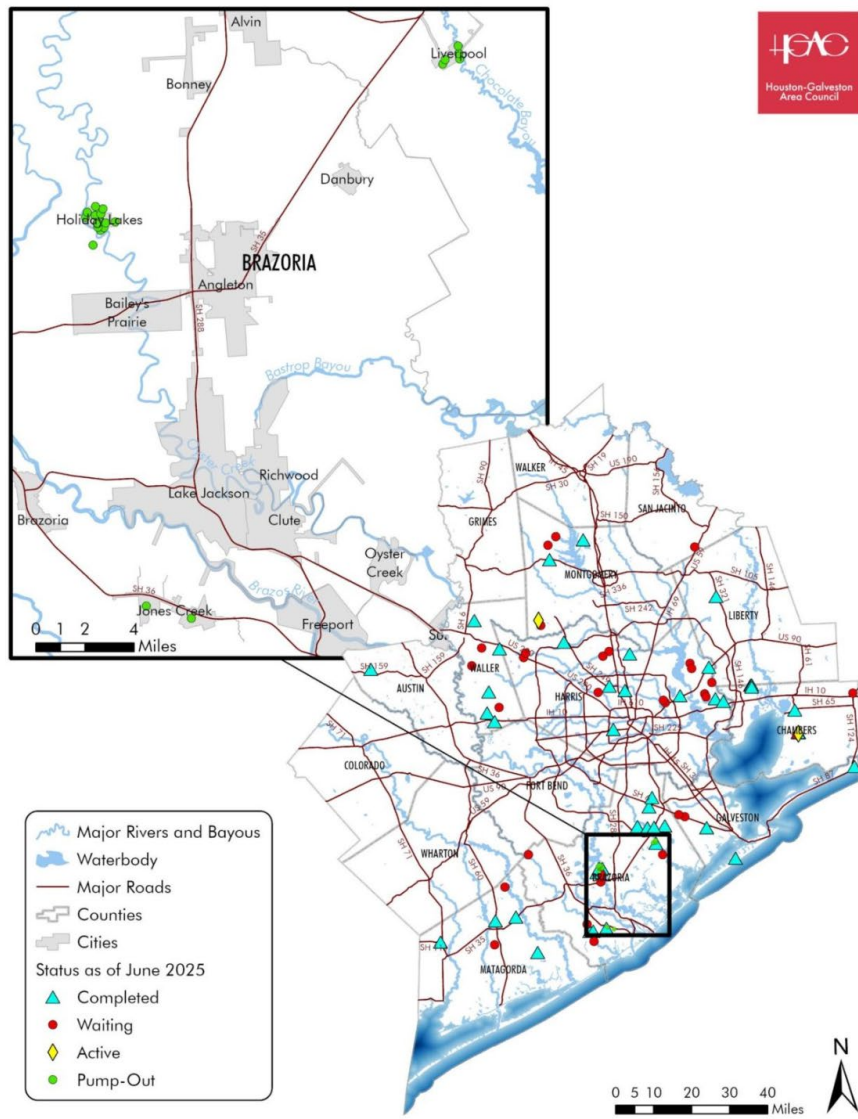
Coordination with Authorized Agents

- Coordinated with multiple entities to update the OSSF database
- H-GAC facilitates data gathering from Coastal Zone counties (Brazoria, Chambers, Galveston, Harris, and Matagorda), to share with Texas A&M AgriLife Extension, for a Coastal Zone OSSF database for TCEQ.
- On 8/22/24, H-GAC hosted a Clean Waters Initiative Workshop centered on OSSF information for Authorized Agents and Designated Representatives

SEP Coordination and Outreach

- Program assists homeowners with OSSF repairs or replacements
- The WQMP contract supports planning, coordination, and outreach, but does NOT fund repairs or replacements
- Funding provided through the TCEQ SEP Program, the Harris County District Attorney's Office, and industry partners

OSSF Planning, Coordination, and Outreach (cont.)



County	Replacement	Repair	Pumpout	Active	Waiting
Austin	1	-		-	-
Brazoria	7	7	22	-	8
Chambers	3	-	-	1	2
Colorado	-	-	-	-	-
Fort Bend	-	-	-	-	-
Galveston	3	-	-	-	2
Grimes	-	-	-	-	-
Harris	6	2	-	-	10
Liberty	1	4	-	-	-
Matagorda	3	1	-	-	2
Montgomery	2	2	-	1	6
San Jacinto	-	-	-	-	1
Walker	-	1	-	-	2
Waller	7	-	-	-	2
Wharton	-	-	-	-	-
TBD	-	-	-	-	2
TOTAL	33	17	22	2	37

OSSF Planning, Coordination, and Outreach (cont.)

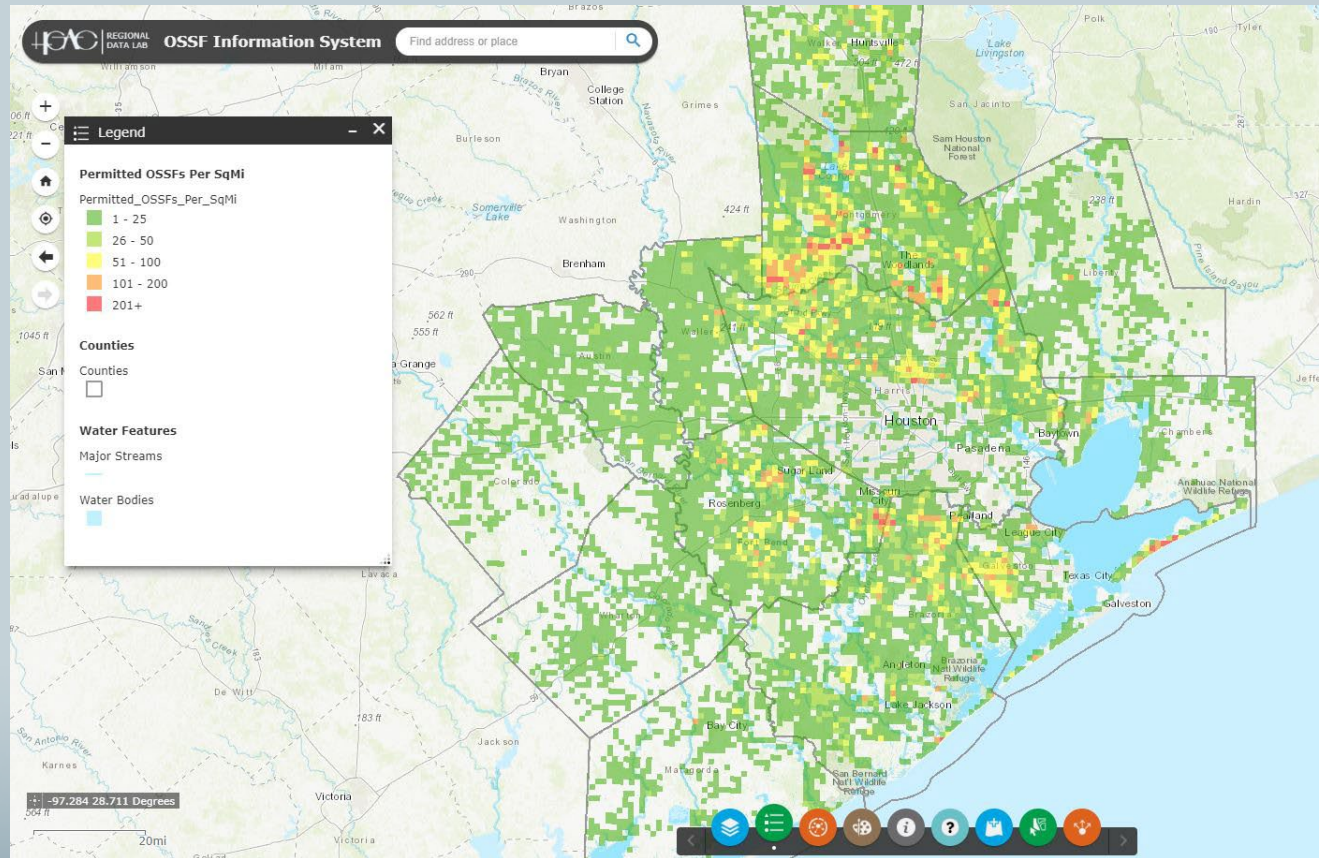
OSSF Outreach and Education

- Over the last 12 months, H-GAC has replaced 3 OSSFs with 2 additional systems due to be installed in August.
- Over the last 12 months, 3 systems were repaired.
- During this period H-GAC was able to connect one homeowner to sanitary sewer, allowing for the abandonment of a failing OSSF.
- H-GAC in partnership with Wells Fargo H-GAC was able to provide an additional 18 OSSF no cost pumpouts to vulnerable communities over the past 12 months.
- H-GAC developed on-line videos for the OSSF Homeowner Education Course posted on the website and YouTube.
- H-GAC now has a Spanish version of the OSSF Homeowner Education Course available for in-person training or via the website.

OSSF Mapping Tool Expansion

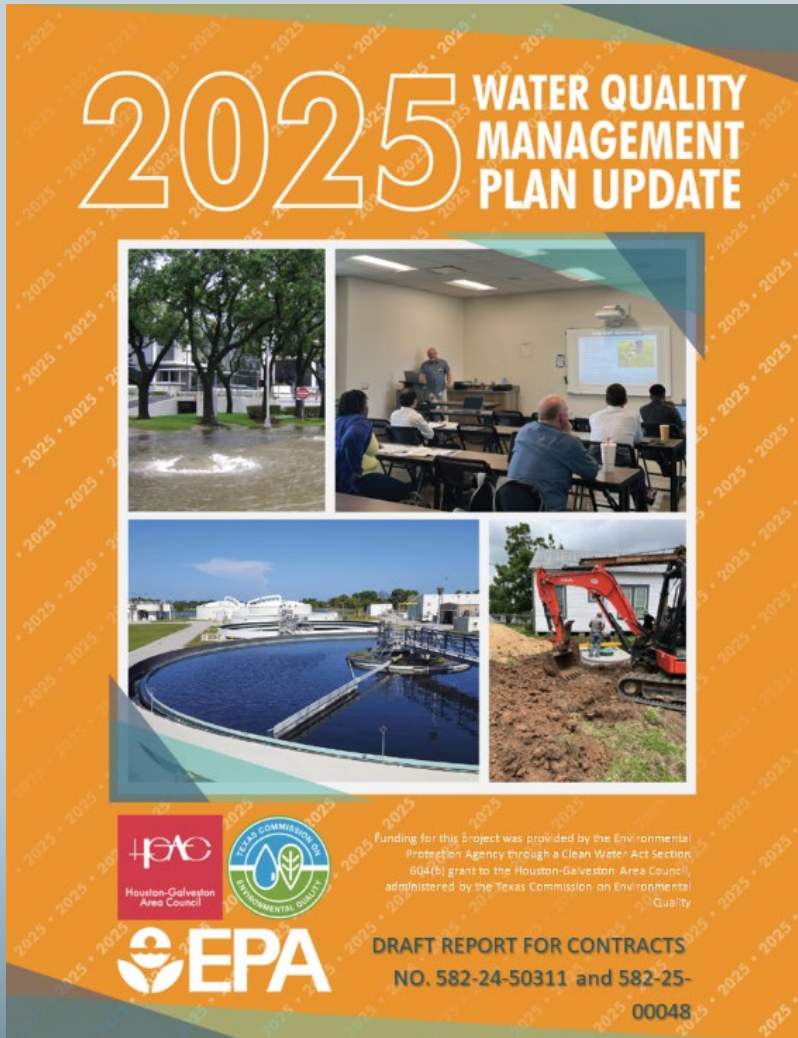
Feasibility Study

- H-GAC continues to work with the North Central Texas Council of Governments (NCTCOG) on the potential of integrating their OSSF data into the H-GAC OSSF database
- NCTCOG has submitted test data which has been reviewed and added to H-GAC's mapping tool.
- H-GAC continues to look for additional new partnerships across the state.



<https://datalab.h-gac.com/OSSF/>

WQMP Update Report



The goal of this task is to provide TCEQ with a comprehensive report on water quality management activities in the Region and includes the following deliverables:

- Draft WQMP Update
 - 30-day comment period (Texas Water Code § 26.037)
 - Comments from NRAC members will be accepted through today
 - Response to Comments
 - Included in the Appendices of the final report
- Final WQMP Update

WQMP Update/Final Report (cont.)

Water Quality Management Plan Update Report Timeline

Task	Date
Draft WQMP Update Report distributed to NRAC and posted to H-GAC website	7/1/2025
30-Day Public Comment Period opens	7/1/2025
Public Comment Period closes	8/7/2025
 Present Draft WQMP Update Report to NRAC for recommendation to Board of Directors	8/7/2025
Revise Draft WQMP Update Report to address public and NRAC comments	8/1/2025 – 8/18/2025
H-GAC Board of Directors meeting	8/19/2025
Submit Final WQMP Update Report and documentation of public comment period to TCEQ	8/31/2025
Upload Final WQMP Update Report to H-GAC website	8/31/2025

- The Final WQMP Update Report will be submitted to TCEQ for approval and incorporation into the state's Water Quality Management Plan

Final Comments



Action Requested

H-GAC staff requests that the NRAC recommend to the H-GAC Board of Directors that the Board accept the FY 2025 *Water Quality Management Plan Update* as amended, based upon comments received from NRAC and the public during the public comment period.

Comments or Questions?



Bill Ervin

Senior Planner

Houston-Galveston Area Council

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Funding for this project was provided by the United States Environmental Protection Agency through a Clean Water Act Section 604(b) grant to the Houston-Galveston Area Council, administered by the Texas Commission on Environmental Quality.

TCEQ Contract Numbers 582-23-40182 and 582-24-50311



NRAC Agenda (continued)

9. Roundtable Discussion

NRAC members can bring up issues of import and/or interest for edification and/or discussion at this time. Please take advantage of this agenda item.

NRAC Agenda (continued)

10. Public Comment

Members of the public can sign up to public comment. Three minutes allotted for each public comment.

NRAC Agenda (continued)

11. Next Meeting Date

Unless otherwise notified, the next scheduled meeting is:

Thursday, November 6, 2025 from 1:30 to 3:30 p.m.

This meeting will be held as a hybrid in-person/online event.

12. Adjourn

Regional Flood Management Committee



- Met on July 16, 2025
- Heard presentations from:
 - 2025 Hurricane Preparedness Resources – H-GAC
 - San Jacinto Regional Flood Plan – Freese & Nichols
 - Green Infrastructure Online Resources – Texas Community Watershed Partners
 - Flood Reduction of Applied Blue-Green Infrastructure – Texas A&M Galveston
- The next meeting will be in person at H-GAC on:

October 15th

1:30 p.m. - 3:30 p.m.