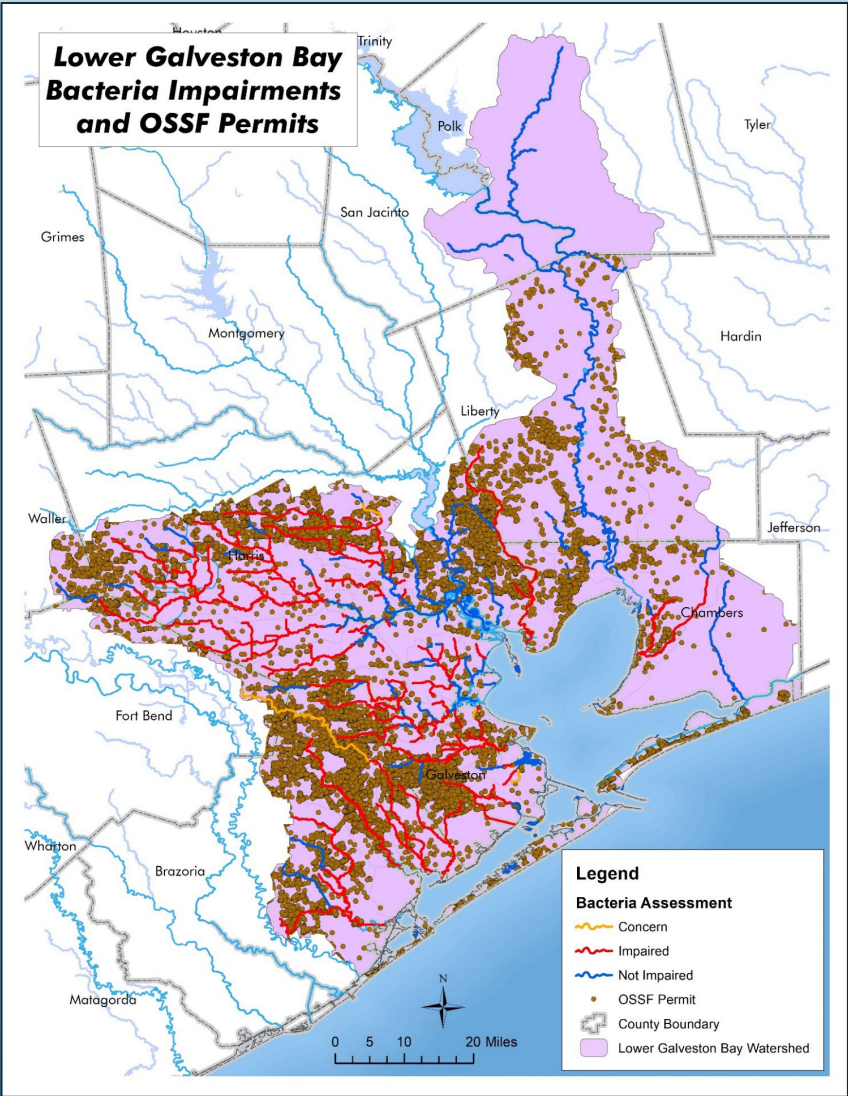


A light blue map of the Houston-Galveston Area Council region, showing county boundaries and the Gulf of Mexico coastline. The map is centered behind the title text.

OSSF Repairs and Replacements in Disadvantaged Communities

Funding through the BIL/IIJA
Houston-Galveston Area Council
Kendall Guidroz

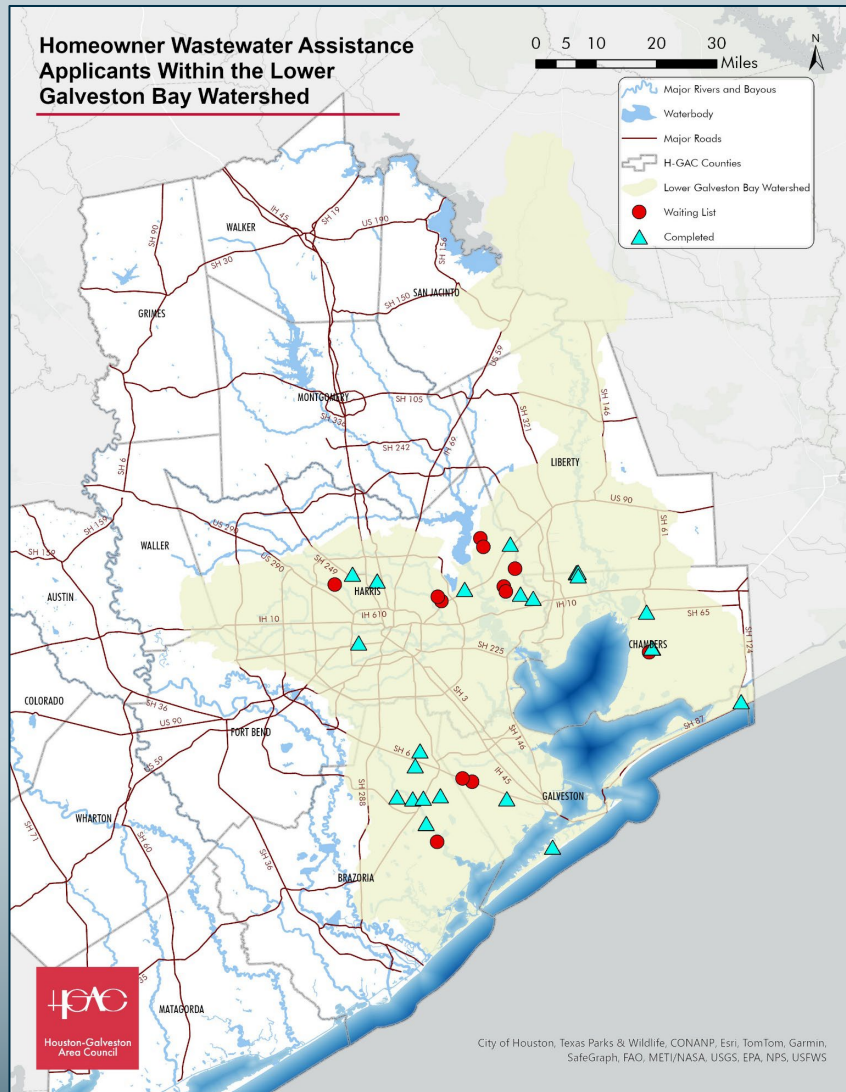
Failing On-Site Sewage Facilities (OSSFs)



Permitted OSSFs in LGBW	Estimated Unpermitted OSSFs in LGBW	Total Estimated OSSFs in LGBW	Estimated failure rate for Texas	Potential Failing OSSFs in LGBW
42,526	58,851	101,377	12%	12,166

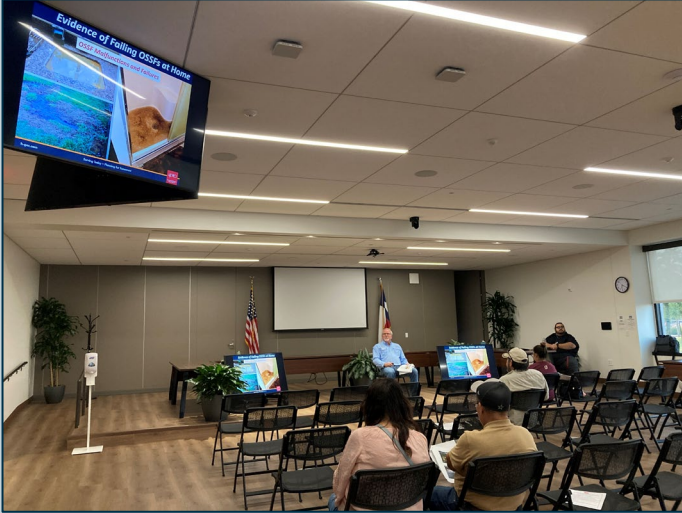
Potential Daily E.coli Load Per Day = $\frac{7.58 \times 10^{10} \text{ cfu } E. coli}{\text{day}}$

Homeowner Wastewater Assistance Program



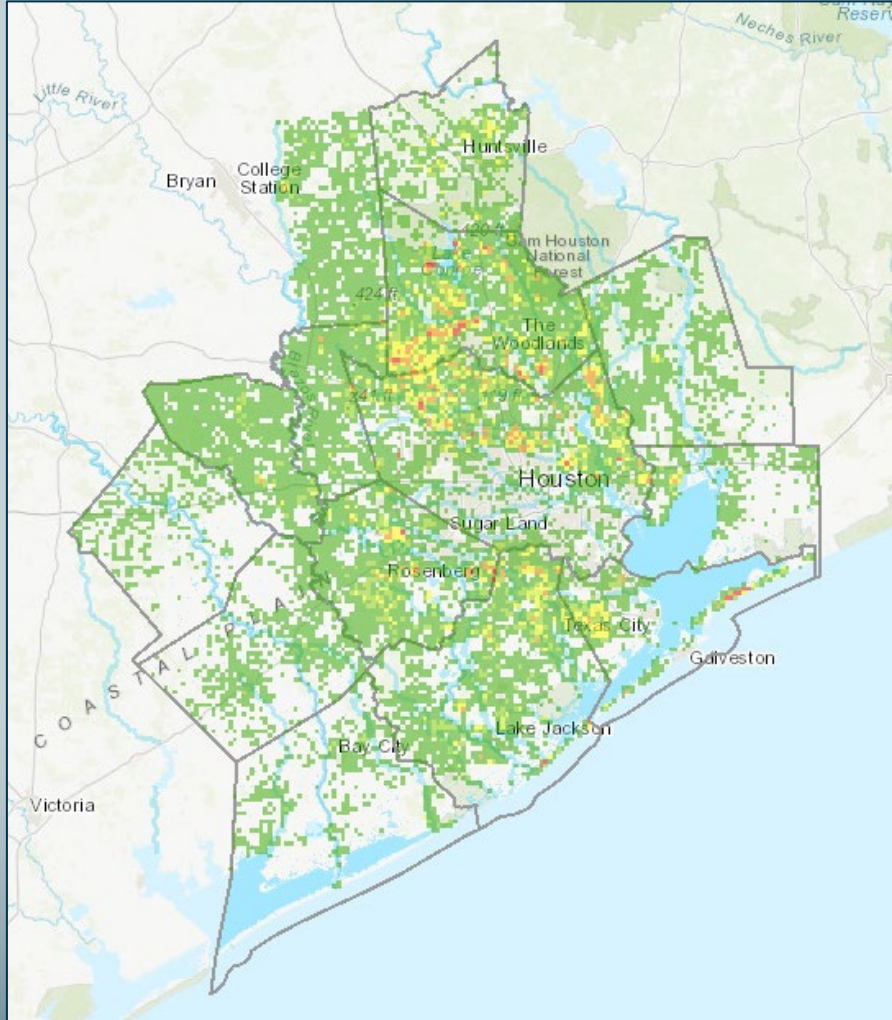
- Covers the cost of repair or replacement of failing OSSFs (includes two years of maintenance)
 - No cost sharing by homeowner
 - Must own and reside in home
 - Make at or below 80% of median household income for the county
 - Eligible even if under enforcement action
- Primary Funding source is a TCEQ Supplemental Environmental Project
 - Funding limited and inconsistent
 - 1-5 OSSFs addressed per year

Homeowner Education Workshops



- Free workshop providing homeowners information on:
 - The basics of conventional and aerobic OSSFs
 - Signs of system malfunctions or failures
 - The importance of routine maintenance
 - Important Do's and Don'ts for maintaining an OSSF
- Any community can request a workshop just for education, but workshops are also required for residents who receive assistance from some of our projects
- Does not certify attendees to maintain their own system

Growing Need and Limited Resources



- Age of systems
- New developments and homeowners
- SEP limitations

Addressing OSSFs in Disadvantaged Communities with Vulnerable Populations

Two projects have used similar strategies to:

- Identify Priority Watersheds and Coordinate with Stakeholders
 - Utilize the Regional Equity Tool to identify communities with economic barriers and other potential vulnerabilities.
 - Partner with local officials or organizations trusted by residents
- Host Homeowner OSSF Education Workshop(s) in prioritized watersheds
 - Workshop attendance required to qualify for OSSF repair or replacement
- Address failing or malfunctioning OSSFs in the priority watersheds
 - Community pumpouts or full system repairs and replacements, depending on funding source

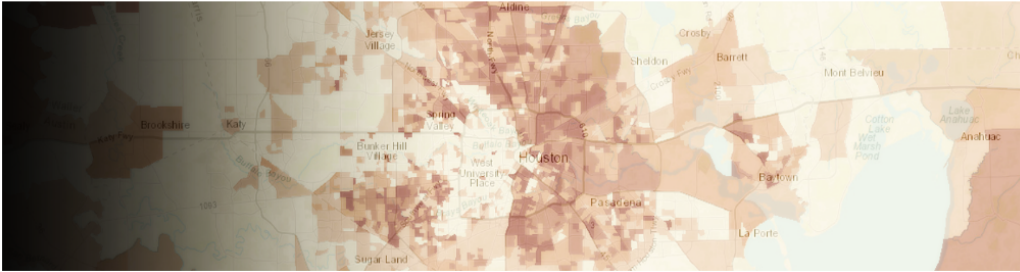


H-GAC's Regional Equity Tool

Regional Equity Tool

[Introduction](#)[Regional Equity Profile](#)[Vulnerable Population Density](#)[Regional Climate & Economic Justice Screen Tool](#)[Instant Summary Map](#)[Equity Advanced Tool](#)[More Info.](#)

Introduction



Regional Equity Tool is an interactive mapping application/tool that identifies the distribution of H-GAC region's vulnerable, low to moderate income population, and historic settlements. The tool lists H-GAC and other local agencies current and future planning projects. Users can utilize this tool to better understand the sociodemographic and community characteristics of a given study/project area and enhance their decision-making process. The application includes data such as:

Demographic data <ul style="list-style-type: none">• Census Demographic Data• Vulnerable Population Data• HUD Low-Moderate Income data	Community and Transportation Plans <ul style="list-style-type: none">• Transportation Projects 2045 Regional Transportation Plan• Livable Center Studies• Metro Moving Forward Projects• H-GAC Parks & Natural Areas (PNA) Data• Historic Preservation (Historic Settlements)	Accessibility and Safety Indicators <ul style="list-style-type: none">• Regional Crash Data• Regional Accessibility Score• Sidewalk Inventory• Regional Public Transit Routes
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Regional Equity Profile - is an interactive tool that provides a quick summary of key demographic variables for a user defined geography in the 13-County H-GAC region. The tool also summarizes various socioeconomic indicators that measures social vulnerability.

Vulnerable Population Density - is a data visualization tool that displays the distribution of vulnerable populations using a hexagonal grid of 3 square miles. It identifies areas with high concentration of vulnerable population along with historic trends between 2013 and 2023. The data is based on US Census American Community Survey. The data is based on US Census American Community Survey.

Regional Climate & Economic Justice Screen Tool - White House Council on Environmental Quality (CEQ) released this tool as a critical component of the President's environmental justice commitments in Executive Order 14008, including the Justice40 Initiative, a commitment to deliver 40 percent of the overall benefits of Federal climate, clean energy, affordable and sustainable housing, clean water, and other investments to disadvantaged communities that are marginalized, underserved, and overburdened by pollution produced.

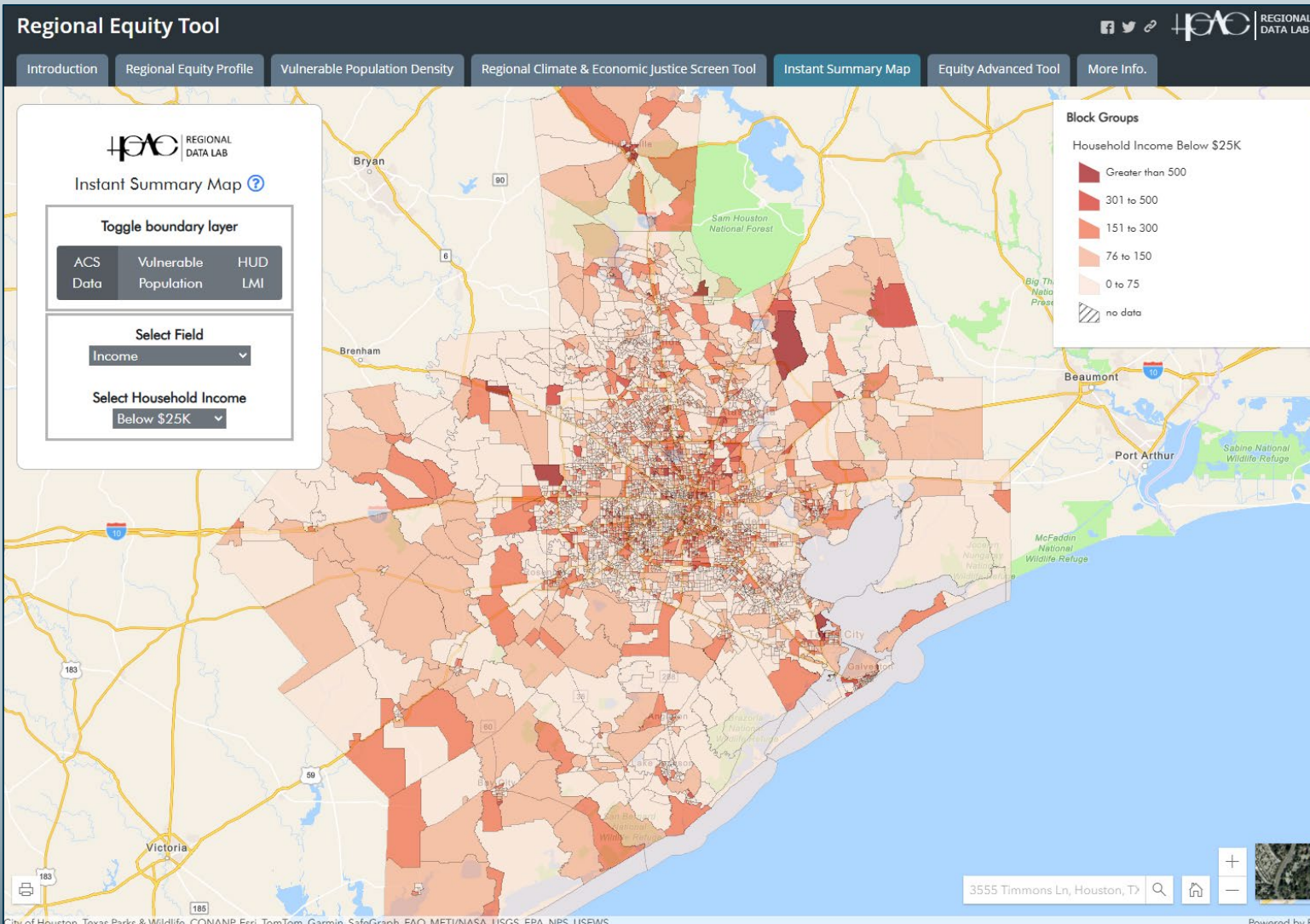
Instant Summary Map - is a data visualization tool that instantly produces printable maps of various demographic and vulnerability indicators. The tool also allows the users to overlay maps with future planning projects such as METRO Moving Forward, H-GAC RTP projects, and Livable Centers.

- Online GIS-based interactive tool
 - Utilizes census data and census blocks
 - Identifies 8 population vulnerability factors

H-GAC's Regional Equity Tool

- Vulnerability factors considered in Regional Equity Tool Analysis
 - Poverty/ low-income households (regional basis, not national)
 - Non-Hispanic, non-white populations
 - Hispanic populations
 - Limited English proficiency (not well or not spoken at all)
 - Disabled family members
 - Elderly residents (75+)
 - Car-less residents
 - Households with single mothers and children under 18

H-GAC's Regional Equity Tool



- Online GIS-based interactive tool
 - Can get instant summaries for the different vulnerability factors
 - Advanced features allow for specific queries
 - Ability to add other GIS layers onto the map

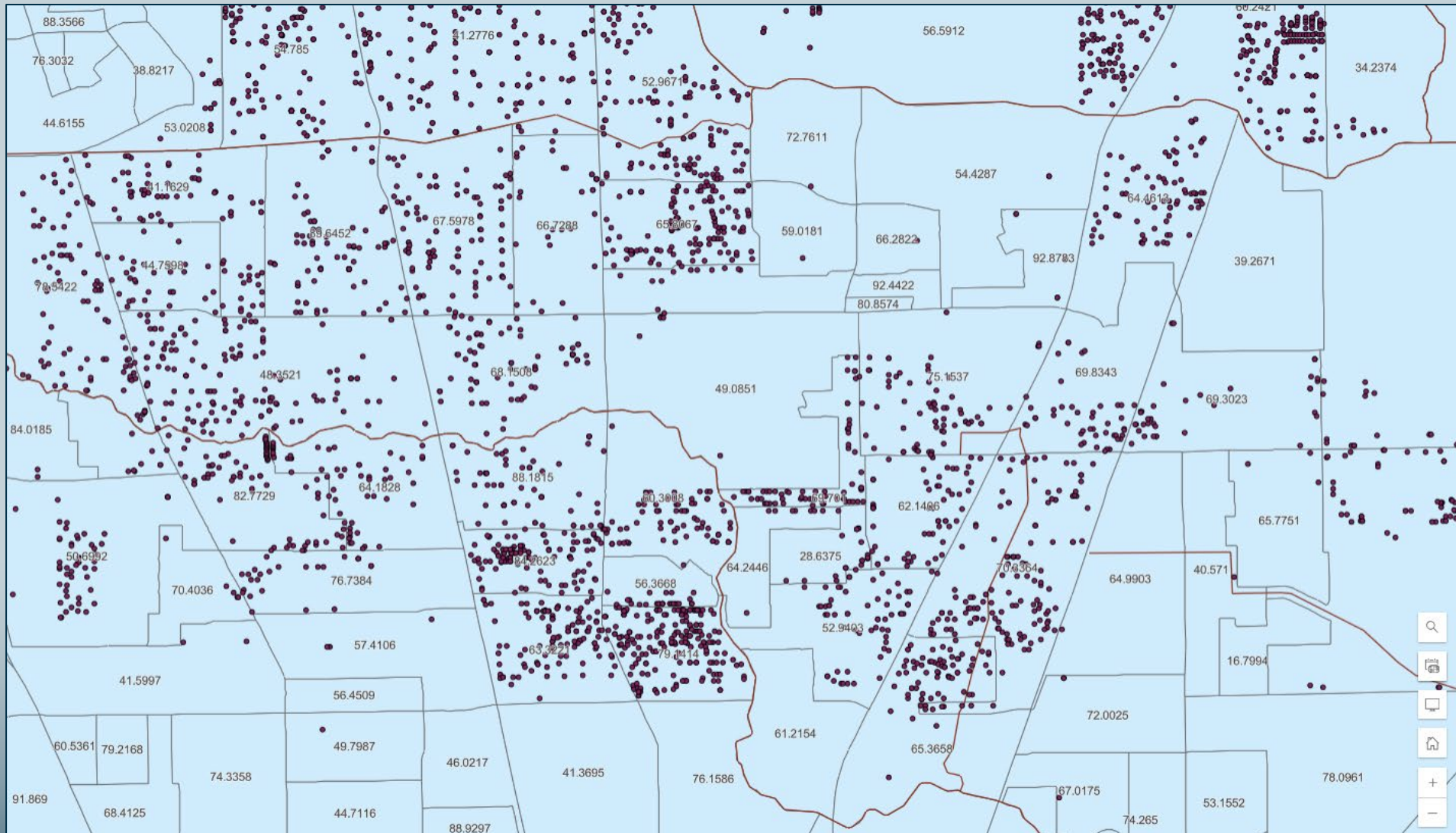
Current Project: Repair & Replacement of OSSFs

- Identify priority communities
 - Areas with high concentrations of OSSFs near impaired waterways
 - Focus on the income/poverty vulnerability factor
 - 1st Priority Community – East Aldine Management District
- Host OSSF Homeowner Education Workshops
 - At least one per focus community
- Repair or Replace up to 25 failing OSSFs

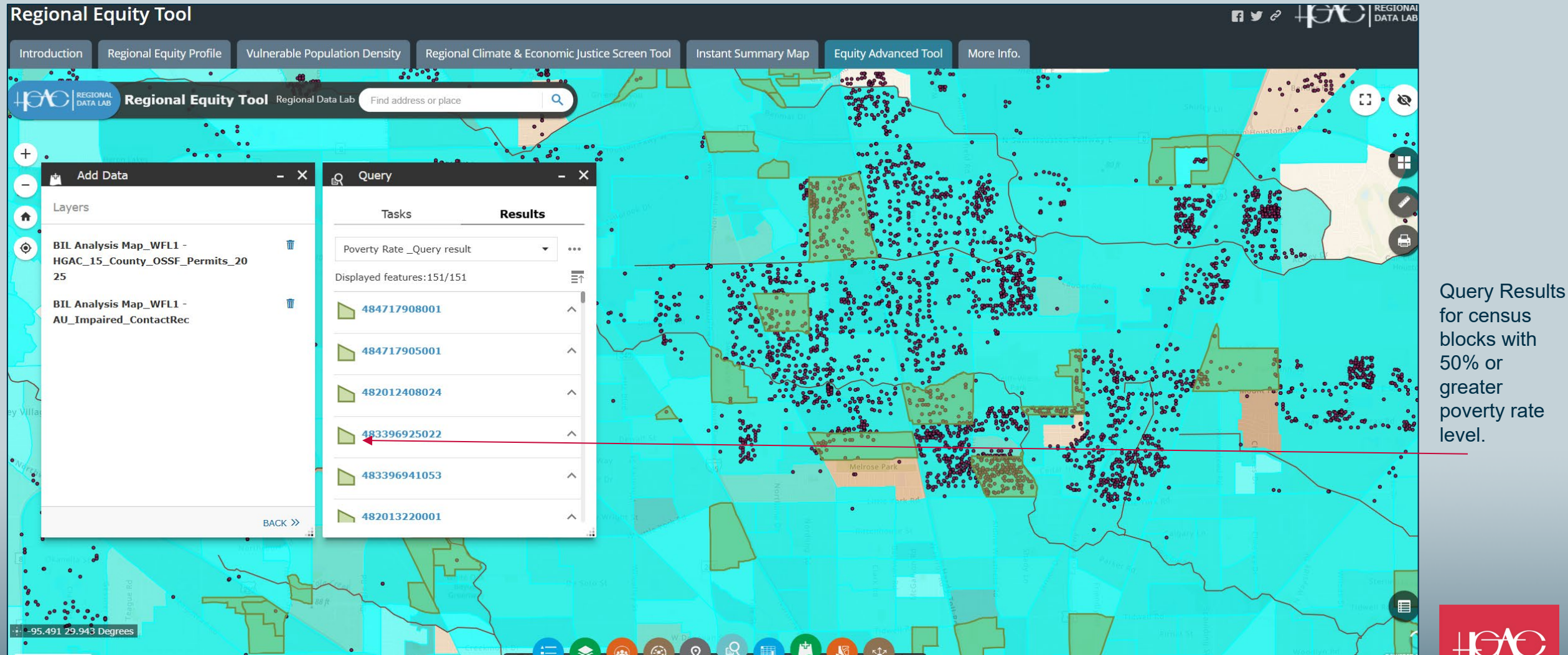


This project is funded in part by TCEQ through a grant from the United States Environmental Protection Agency.

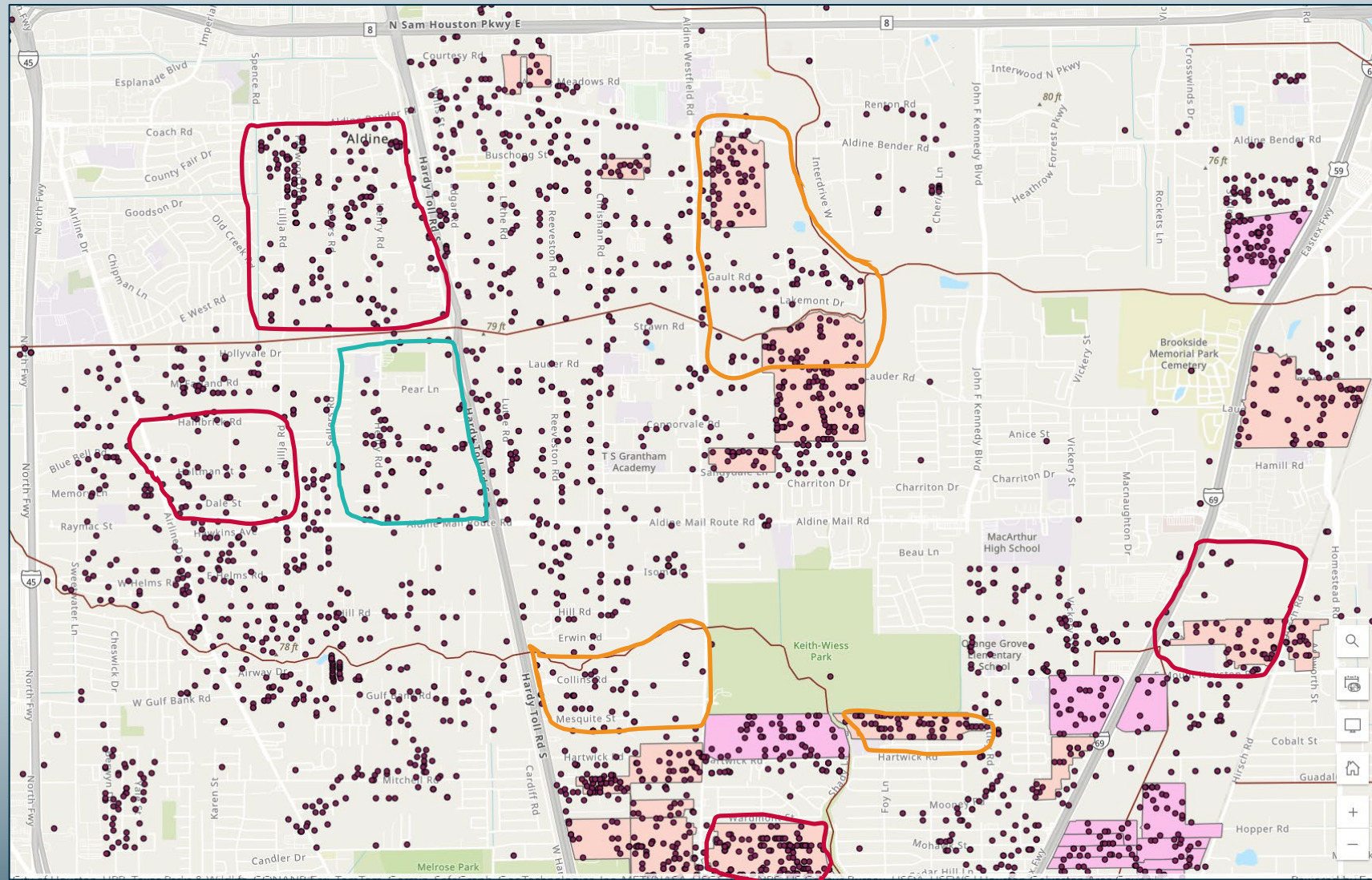
Current Project: Repair & Replacement of OSSFs



Current Project: Repair & Replacement of OSSFs



Current Project: Repair & Replacement of OSSFs



- In the analysis top 5
- In the analysis top 10
- In the analysis top 15

Current Project: Repair & Replacement of OSSFs

■ Key Partners

- East Aldine District*
- Greens Bayou Coalition
- Harris County Pct. 2
- Harris County Authorized Agent and Engineering Department

■ East Aldine District

- Workshop location
- Local advertisement and community engagement
- Provided in-person translation services for workshops
- A trusted resource for residents through the whole process

4 signs of a failing septic system

- Strong odor from septic tank or drainfield
- Pooling water or muddy soil in drainfield
- Bright green spongy grass even in dry weather
- Sewage backups or slow draining sinks and tubs

Proper maintenance can help prevent septic system failures. Learn more at www.epa.gov/septic/septic-smart-homeowners or a Homeowner Education Workshop

Free On-Site Sewage Facility (Septic System) Homeowner Education Workshop!
Saturday, December 6, 2025, 10:00am to 12:00pm
East Aldine District, 2909 East Aldine Amphitheatre Dr., Houston, TX 77039

* Eligible attendees may apply for a no-cost system repair or replacement for a failing system *

Program Contact: ossf@h-gac.com

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

4 señales de falla en un sistema de aguas residuales

- Mal olor proveniente del tanque séptico o del área de drenaje
- Césped verde brillante y esponjoso, incluso en clima seco
- Agua estancada o suelo fangoso alrededor del área de drenaje
- Rebose de aguas residuales o drenajes lentos en lavabos y bañeros

El mantenimiento adecuado puede ayudar a prevenir fallas en el sistema séptico. Obtén más información en www.epa.gov/septic/septic-smart-homeowners o en un taller educativo para propietarios de viviendas.

Taller gratuito sobre Instalaciones Sépticas (Aguas Residuales) Educación para propietarios de viviendas!
sábado, 6 de diciembre, 2025, 10:00am a 12:00pm
East Aldine District, 2909 East Aldine Amphitheatre Dr., Houston, TX 77039

* Los asistentes elegibles pueden aplicar para la reparación o el reemplazo de su sistema sin costo alguno *

Contacto del Programa: ossf@h-gac.com

Este proyecto está parcialmente financiado por la TCEQ a través de una subvención de la Agencia de Protección Ambiental de los Estados Unidos.

H-GAC's Homeowner Wastewater Assistance Program can provide no-cost repair or replacement of failing on-site sewage facilities for qualifying applicants.

ELIGIBILITY REQUIREMENTS

- ✓ Attend the Homeowner Education Workshop hosted in your community.
- ✓ Applicant must be the homeowner and reside in the home.
- ✓ Applicant must not earn more than 80 percent of the median household income (80% in Harris County = \$58,483.00).
- ✓ Homeowner can be eligible even if under enforcement action for violation of TCEQ rules.

FREQUENTLY ASKED QUESTIONS

- Q: Where does the program funding come from?**
A: This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement (4T-02F61501) to TCEQ. The contents of this document do not necessarily reflect the views and policies of the EPA, nor does the EPA endorse trade names or recommend the use of commercial products mentioned in this document.
- Q: What will I learn at the workshop?**
A: The workshop will cover basic components of an on-site sewage facility (conventional septic systems and aerobic systems) and proper maintenance. It does not provide for or allow homeowners to inspect their own systems in place of a maintenance contract.
- Q: What do I need to provide to verify eligibility?**
A: You will need to provide documentation showing that you own the home (ex. deed) and reside in the home (ex. current utility bill). You will also need to provide documentation on the household income (ex. income tax return).
- Q: How will my information be stored/used?**
A: Your information will only be used to validate eligibility and will be stored only until work is completed. No personal information will be shared with any third parties.
- Q: Will I need to provide anything else to complete the installation?**
A: Property owners will need to provide a property survey for system design, and will need to have access to an external 120v, 30amp electrical disconnect near the site for installation. The installation and work area should also be moved.
- Q: What if I don't meet the no-cost repair or replacement requirements listed?**
A: Everyone is encouraged to attend the workshop to learn about their system and proper maintenance. Proper maintenance can extend the life of your system and reduce the risk of failure.

Current Project: Repair & Replacement of OSSFs

- Results and Takeaways
- Aldine area with focus on East Aldine Management District
 - More difficult to define distinct communities in this area of Houston
 - Multiple high ranking census blocks from analysis in and adjacent to East Aldine Management District

Workshop Location	Workshop Date	Attendees	Possible Applicants*	Resulting Repairs/Replacements**
East Aldine	10/21/25	8	4	0
East Aldine	12/6/25	16	11	4
East Aldine	01/10/2026	Pending		
Total		24	15	4

*This is the number of attendees who took applications and indicated they would be applying.

**At the time of this presentation no repairs/replacements have been completed, but this is the number of attendees who have been approved.