

Flushing Out Onsite Sewage Facility (OSSF) Problems in the Houston- Galveston Region

Will Merrell

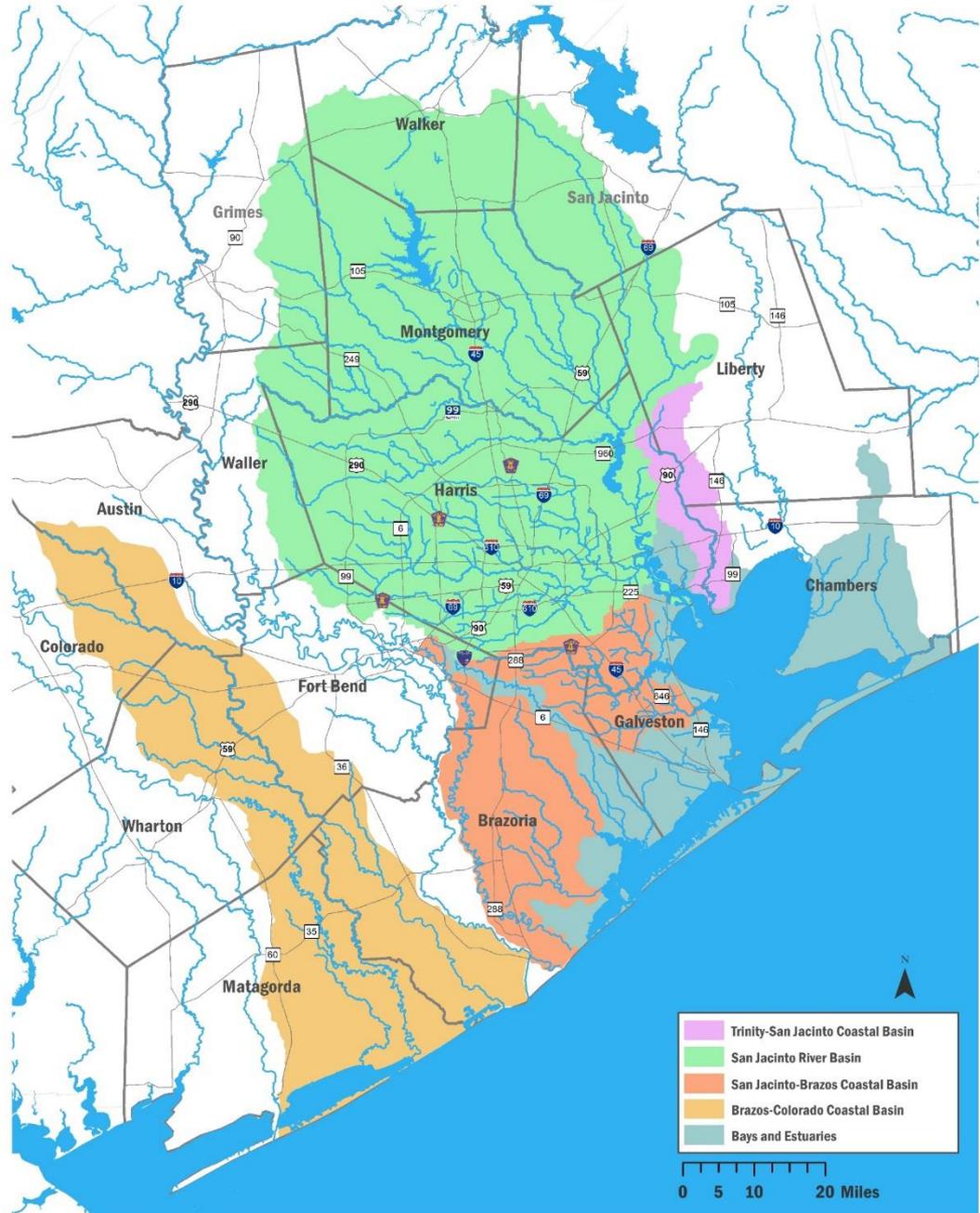
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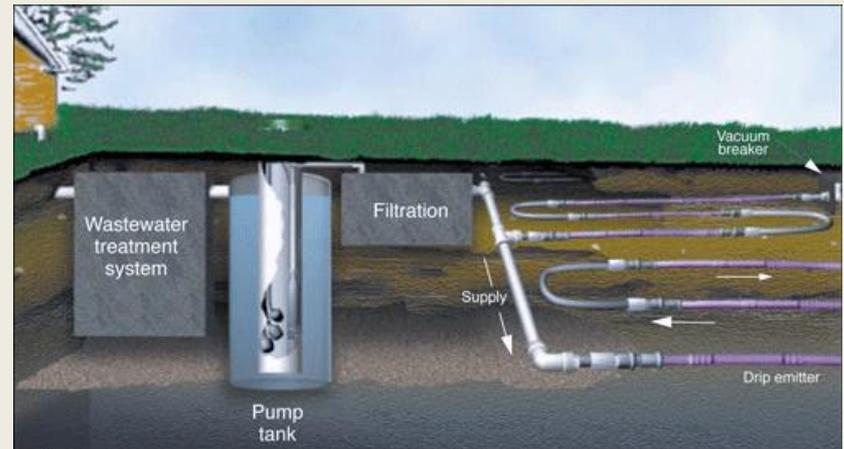
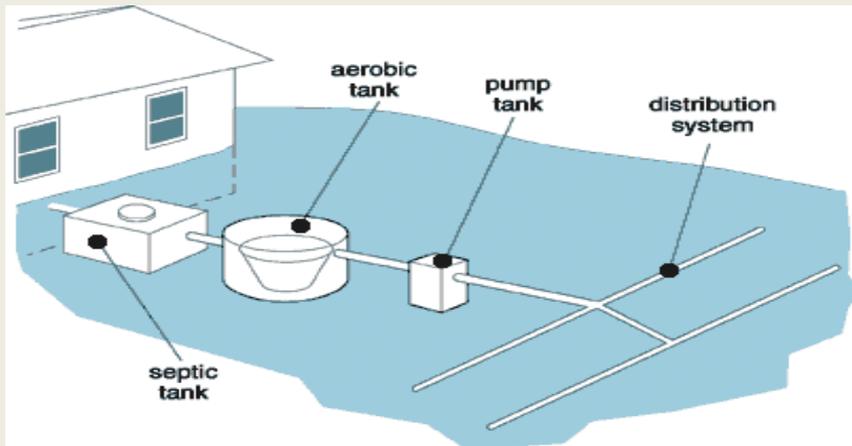
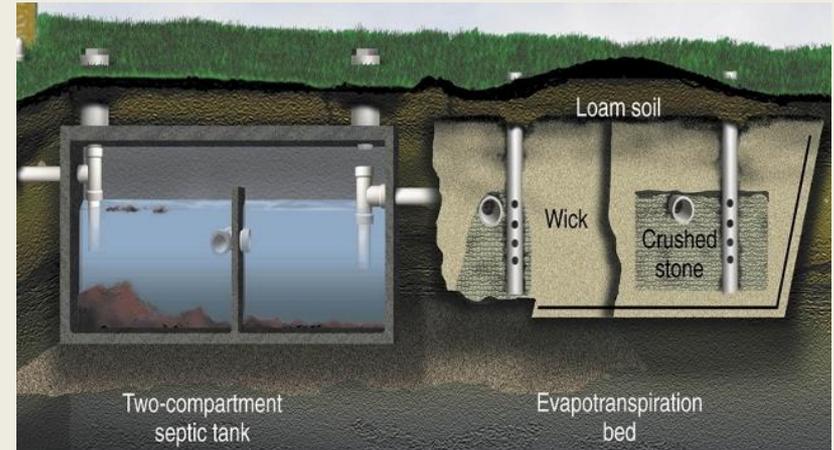
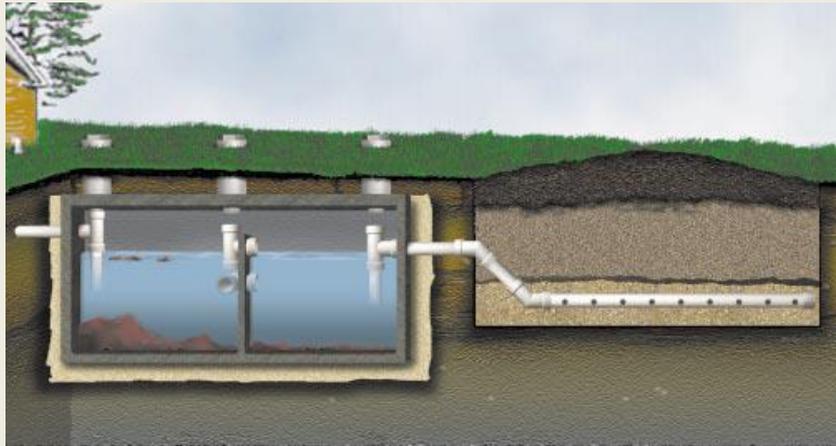
CRP Basins



H-GAC Clean Rivers Program Basins



Onsite Sewage Facilities



Regional Bacteria Impairments and Concerns



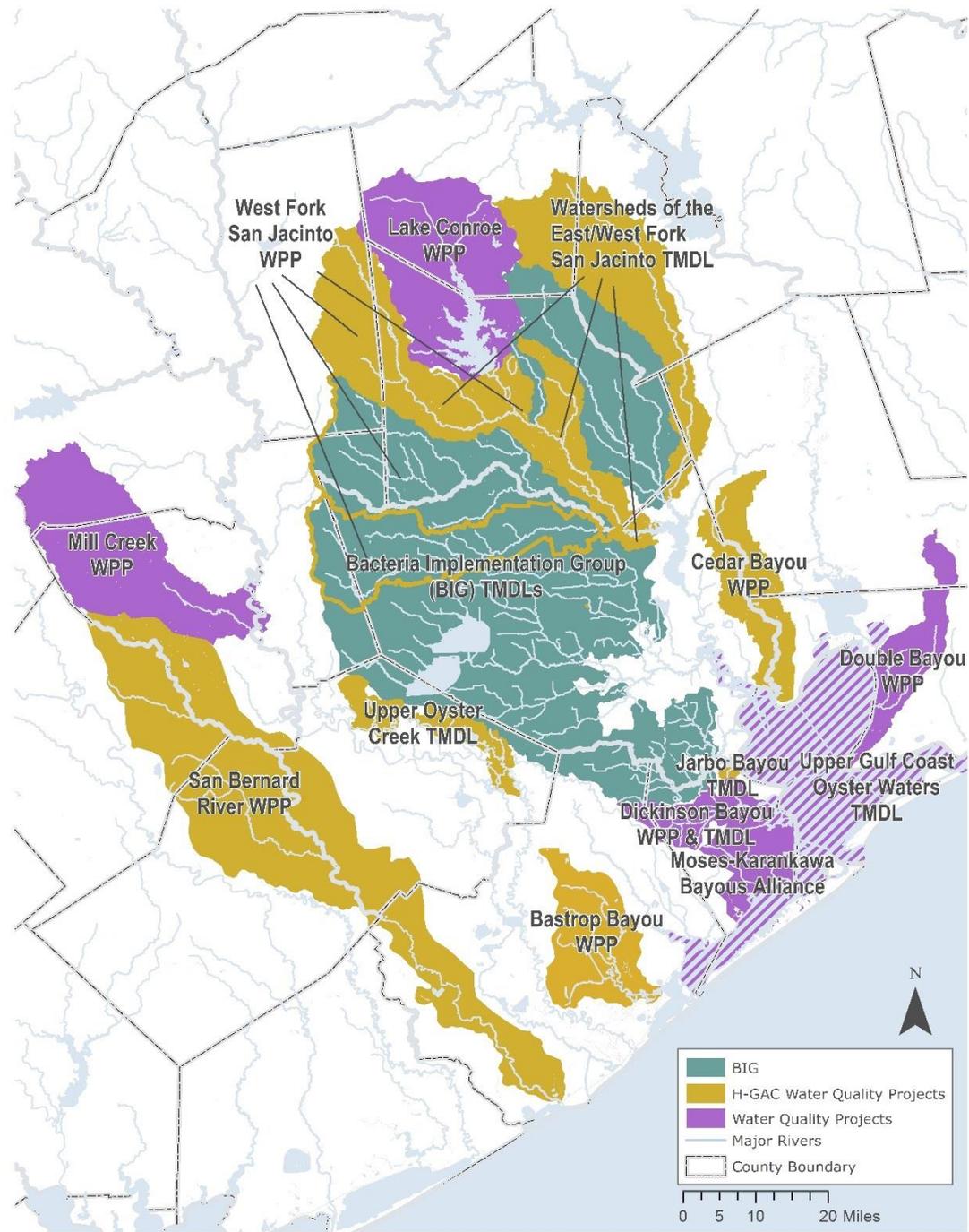
- Pathogens (Bacteria) are the Primary Water Quality Issue in the H-GAC Region
- 50% of Assessed Waterbodies Impaired



Bacteria Impairments and Concerns

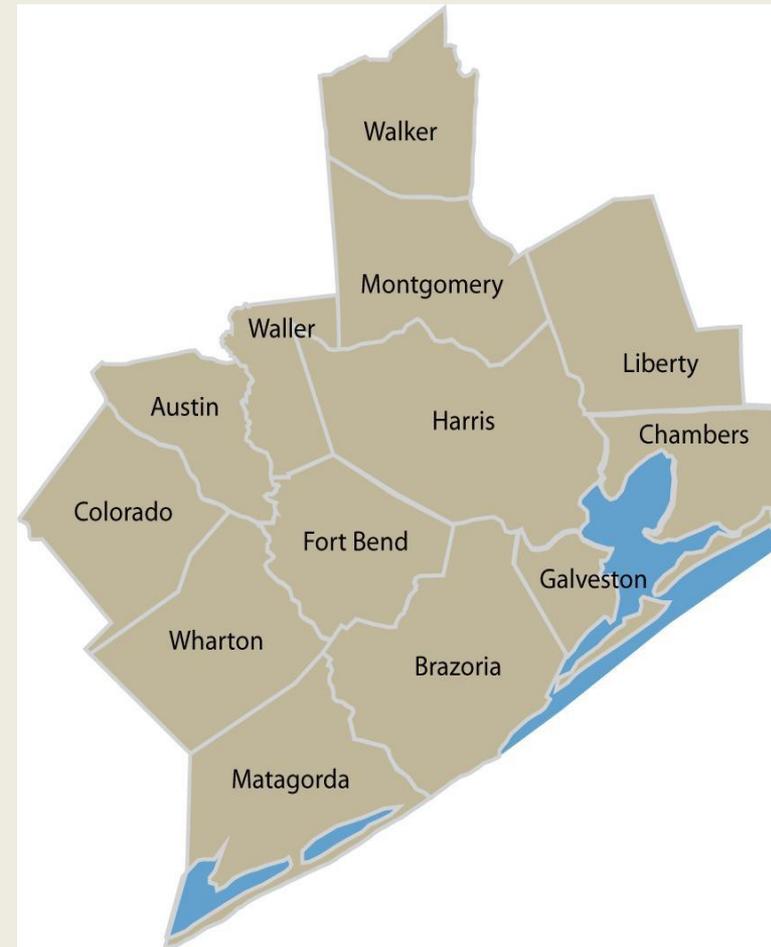


Regional Bacteria WQ Projects



Preliminary Research

- ~2 Million OSSFs in Texas
- H-GAC Region Estimation:
300,000+ or 15% of all systems





Preliminary Research

“In order for a Designated Representative to fulfill the responsibilities of the job, it is important to have a complete understanding of the number and location of the OSSF systems within his/her jurisdiction.”

Study to Determine the Magnitude of, and Reasons for, Chronically Malfunctioning OSSFs in Texas, TOWTRC, 2001, p. 71.



Challenges to Addressing OSSFs

- Permit Records
 - No Common Source/Format of Data
 - Levels of Precision
 - Lack of Electronic Records
- Unpermitted/Grandfathered Systems
 - 1989
 - Location
 - Condition
 - Intended Use, Soil Type, Occupancy, Climate, etc.?

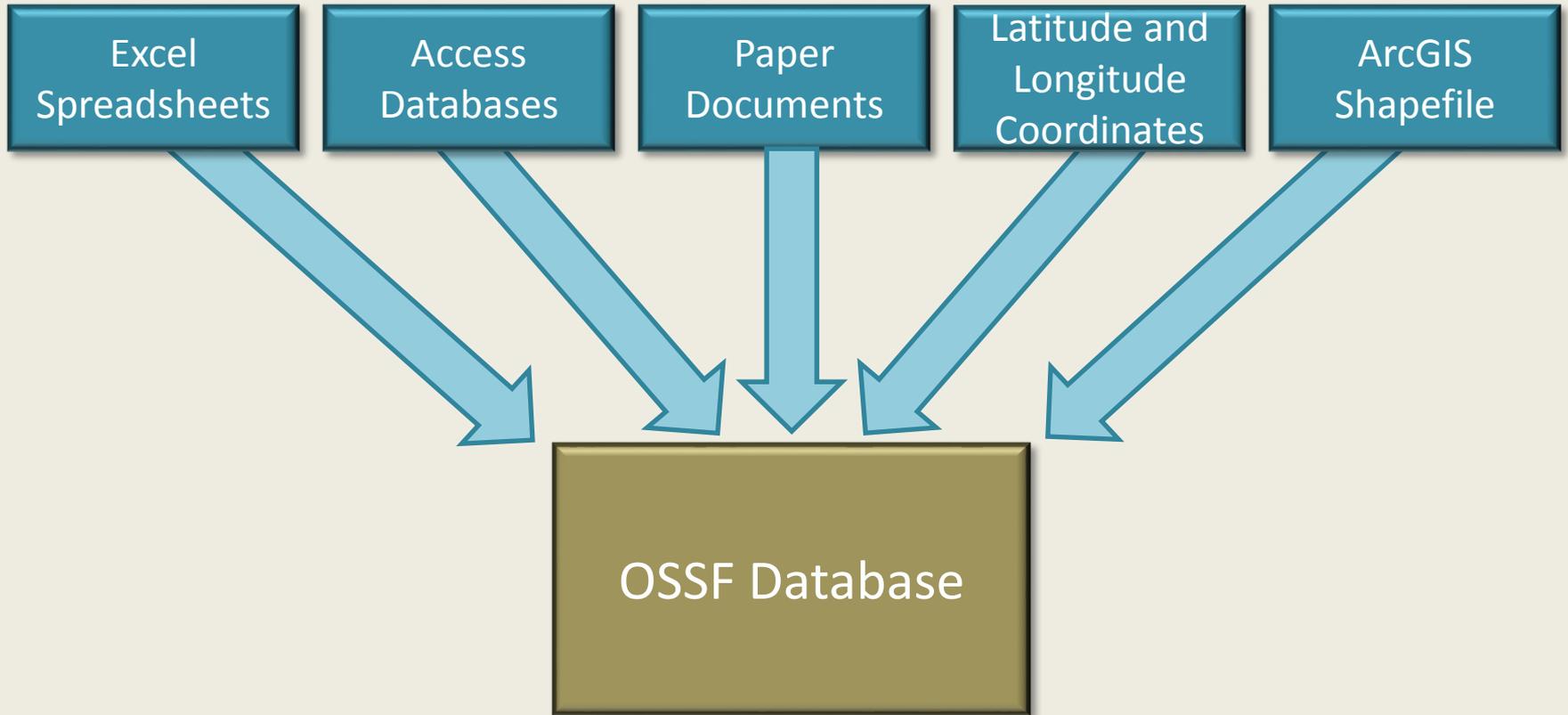


Collecting Data

- Contacted DR's
- MOST Challenging Part of the Project



Editing Data



107,986 Records Received

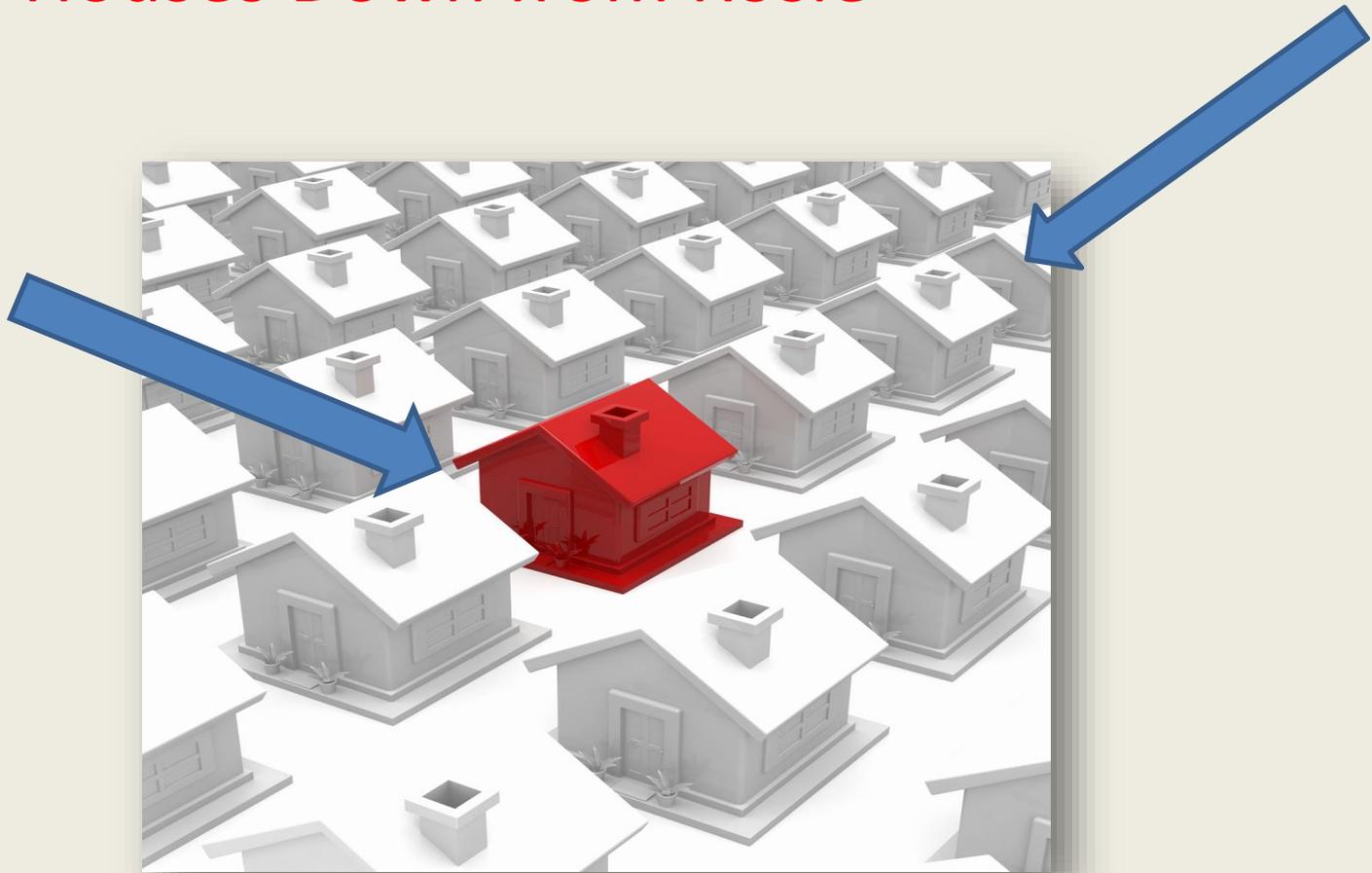


Editing Data – Insufficient Records

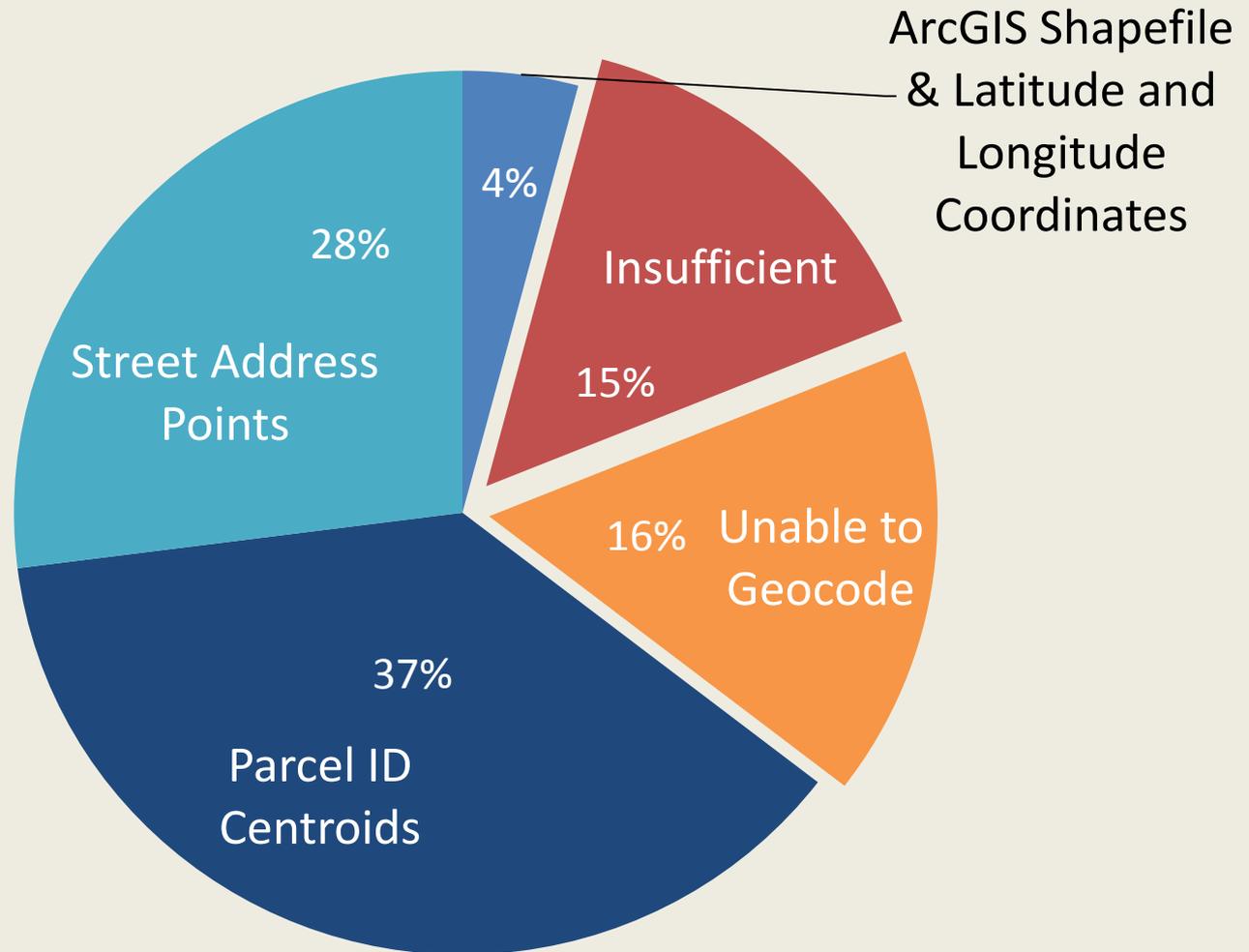
“Three Houses Down from Rosie”

Three Houses Down?

Rosie



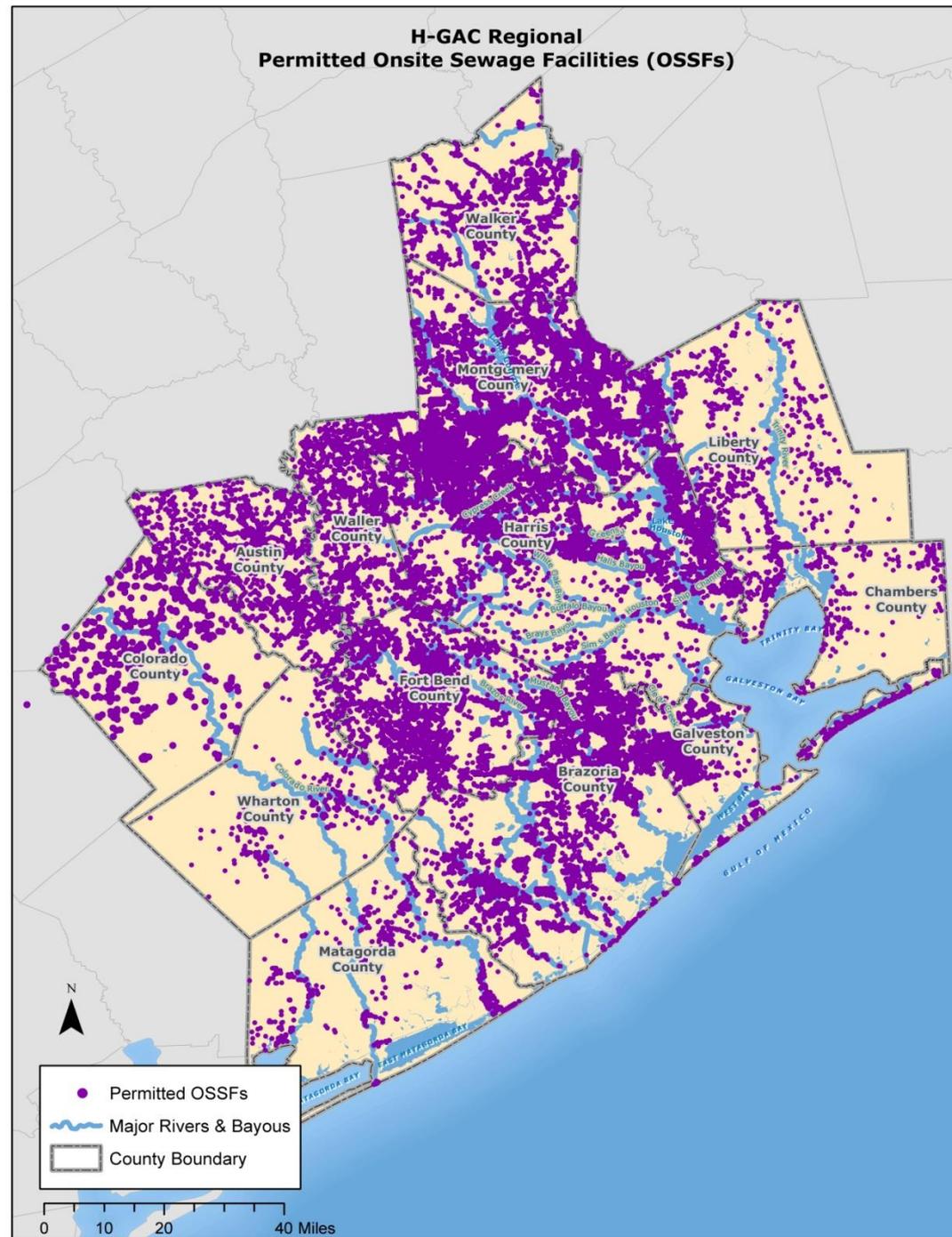
Building the Geo-database



Permitted OSSF Locations



- 107,986 Records Collected
- 73,870 Records Identified
- 34,116 Records Remaining



Implementing GPS



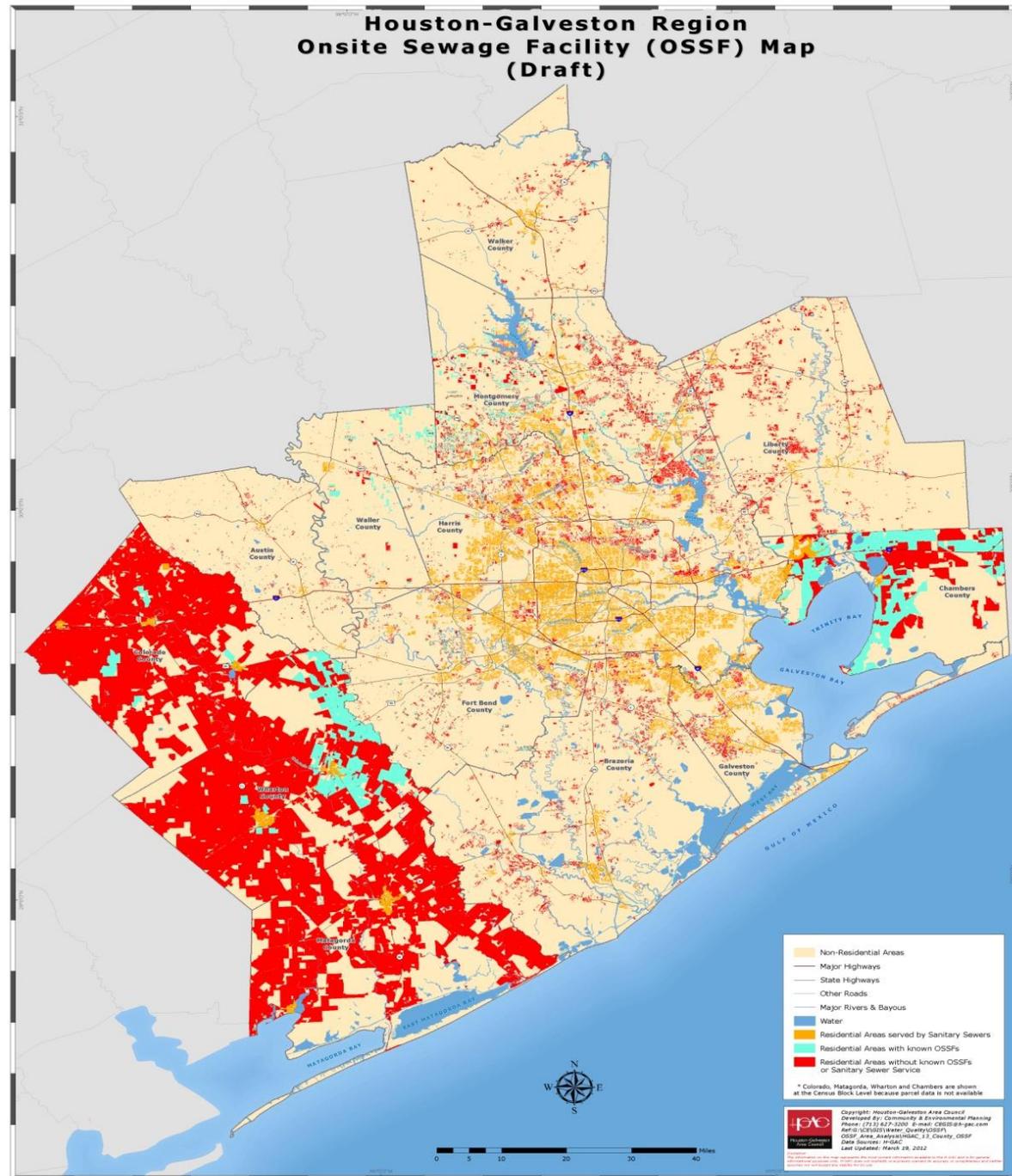
- Precision and Accuracy
- Using TCEQ OPP 8.12 Standards
 - Receiver Procurement
 - Training

Unknown OSSFs



Identify

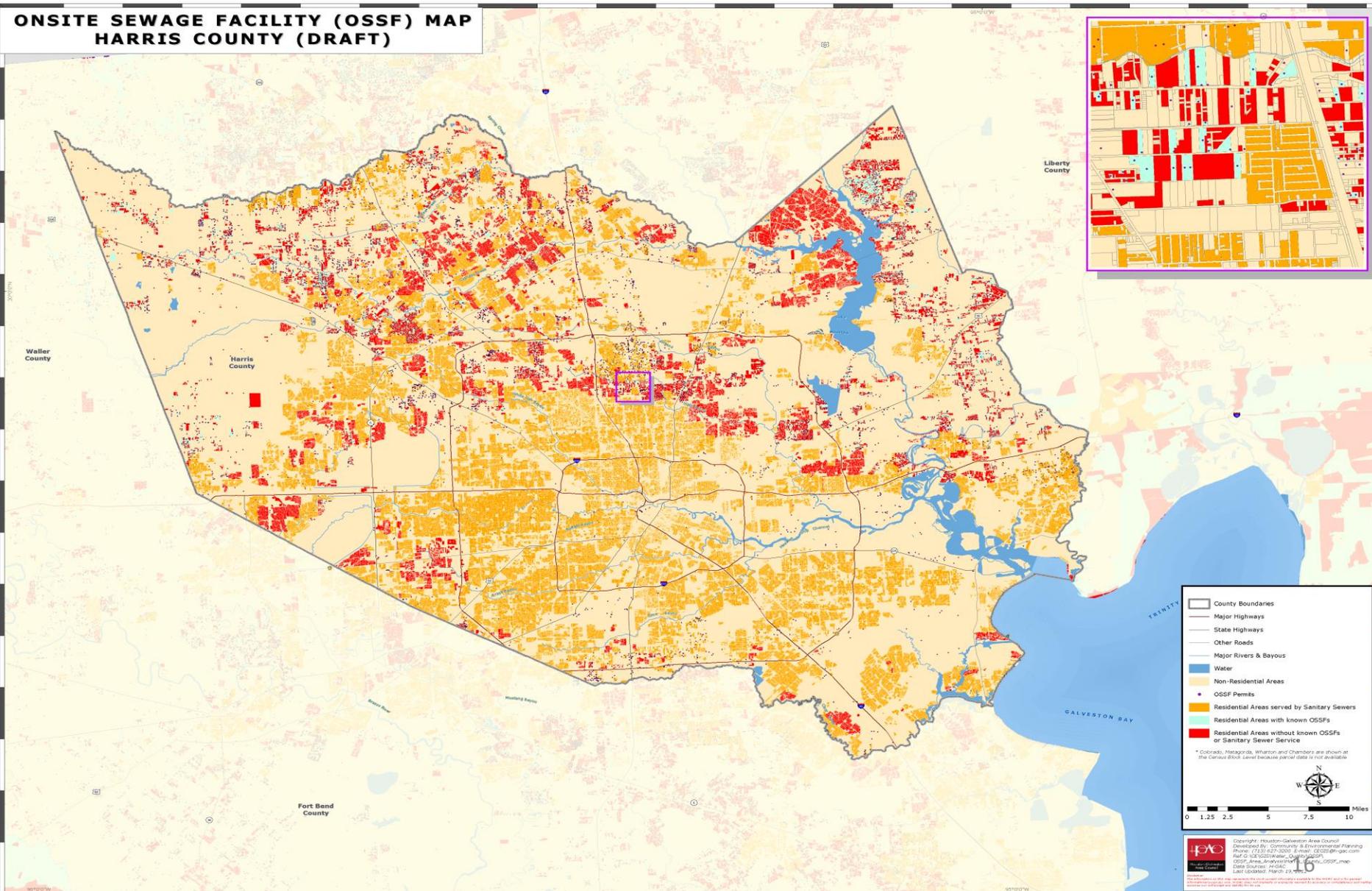
- Grandfathered
- Illegal (Bootleg) Systems
- Systems We Might have Missed





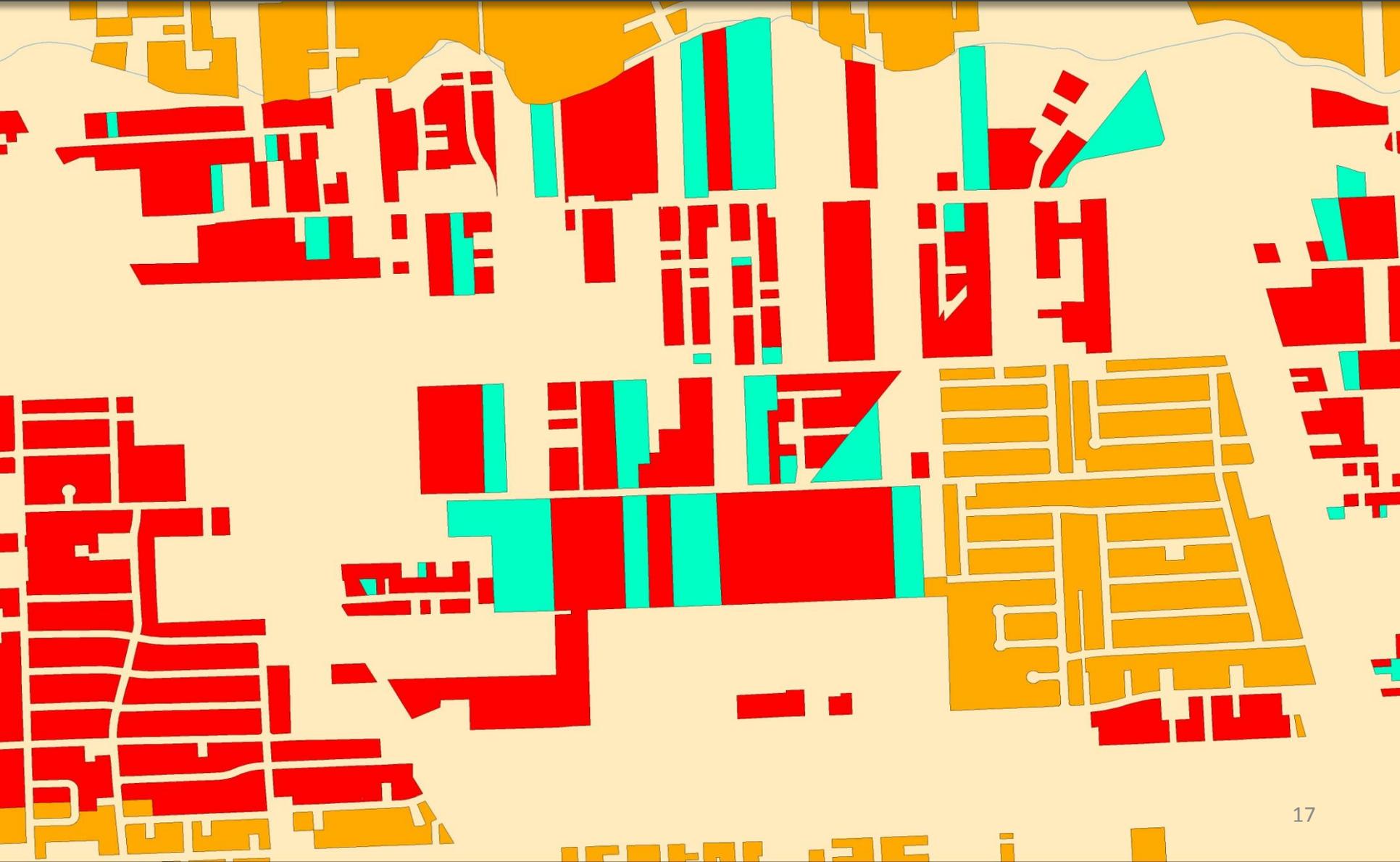
Unpermitted/Grandfathered OSSFs

**ONSITE SEWAGE FACILITY (OSSF) MAP
HARRIS COUNTY (DRAFT)**



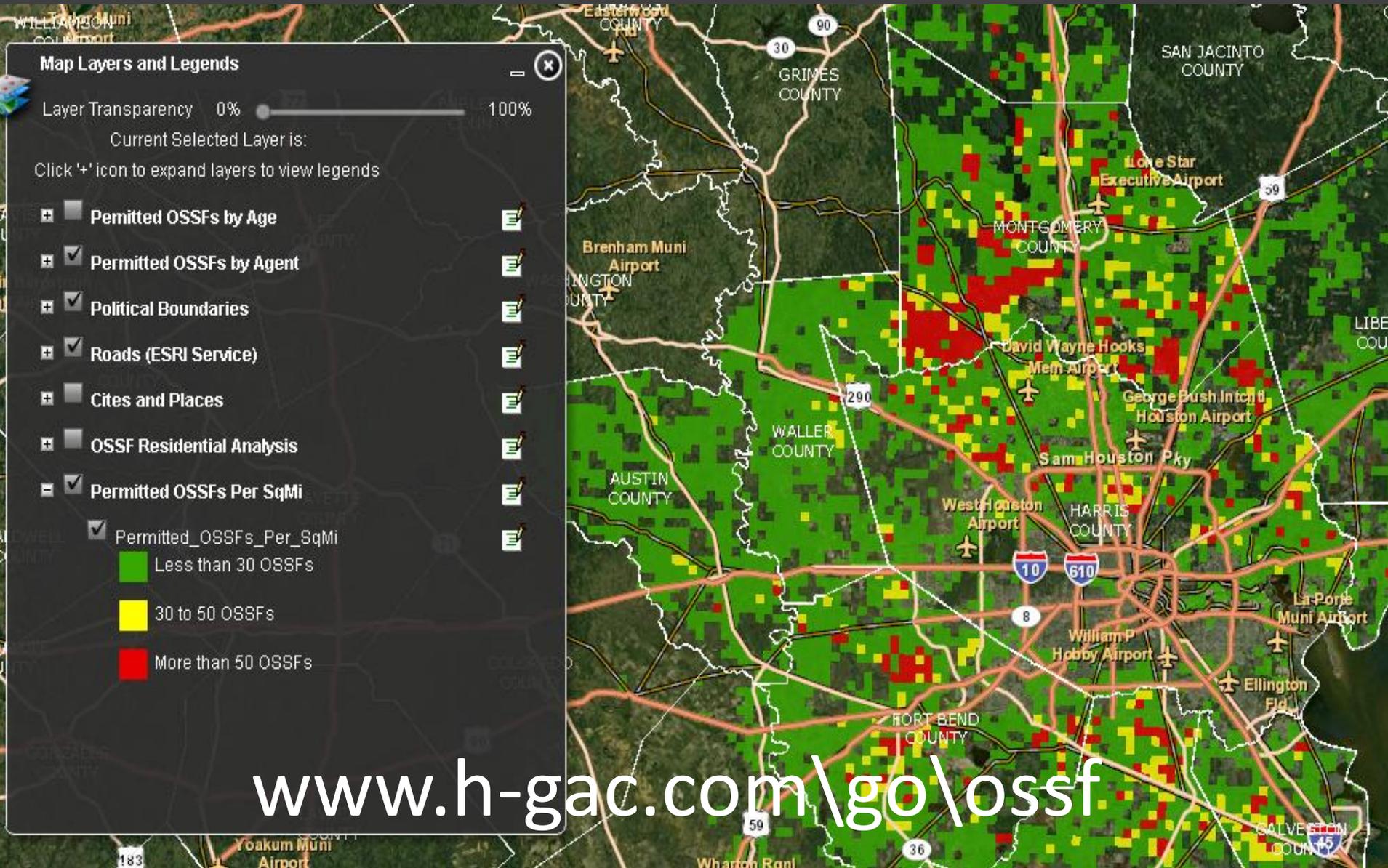


Unpermitted/Grandfathered OSSFs





OSSF Information Map





Why?

- Point of Sale Inspection
- OSSFs Optional Systems
- New Homeowner Education





What the Curriculum Covers:

- OSSF Components
- Homeowner Maintenance
- System Failures
- OSSFs in Texas
- What's Required/
Not Required
- Safety
- Equipment
- System Location
- Separation Distances
- Interior Home Plumbing

Real Estate Onsite Sewage Facility (OSSF) Visual Inspection Program

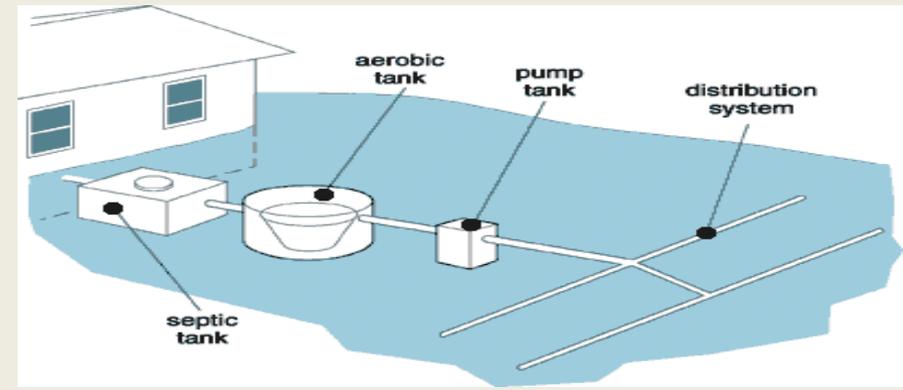
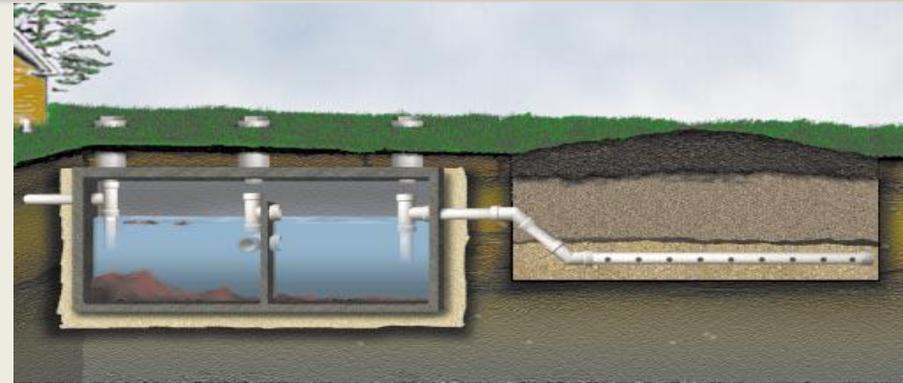


Presented by





- Conventional System
 - Drain Field
- Low Pressure Dosing
 - Distribution Pipes
- Aerobic Treatment Unit
 - Spray Distribution





Supplementary Environmental Projects

- Texas Water Code § 7.067 Statute
- 10% Administrative Costs



H-GAC OSSF SEP Program

Approved by TCEQ &
HGAC Board

- Cap at \$492,000
- OSSF Replacements
or Repairs
- 50 – 100 Systems
- Keeps \$ in
Community



Questions?

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