Onsite Sewage Facility (OSSF) Mapping Project

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Houston-Galveston Area Council

RECOVERY.GOV

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Introduction: Critical Need

Source of Nonpoint Bacteria Pollution

Critical Need

"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, p. 71.

TEXAS ON-SITE
WASTEWATER TREATMENT
RESEARCH COUNCIL

Critical Need

- Estimated 2 Million OSSFs in Texas
- H-GAC Region Estimation: 250,000+
- Systems installed prior to 1989 Considered Grandfathered
- Region contains over 12.5% of all OSSFs

Critical Need

Reasons for Mapping as Identified by the Bacteria Implementation Group (BIG) OSSF Workgroup Meetings:

- Identifying and Maintaining Location Information
- Determining Sources of Bacteria for Impaired Waterways

Critical Need

Reasons for Mapping as Identified by the Bacteria Implementation Group (BIG) OSSF Workgroup Meetings:

- Inspection and Maintenance Scheduling and Tracking
- Determining the Number of Systems Added Each Year
- Identifying Growth Clusters

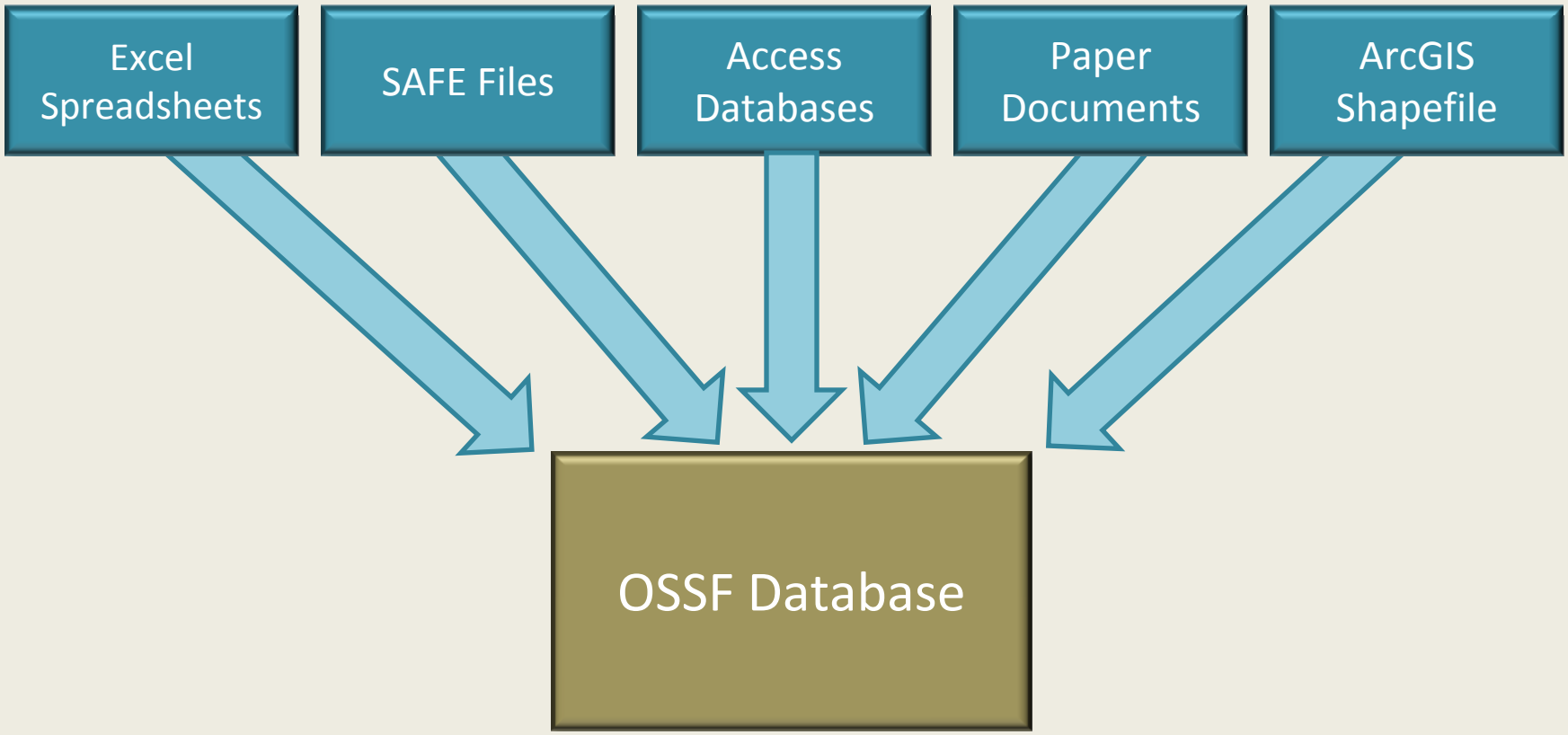
Phase I: Collecting Data

- Contacted authorized agents through telephone calls and e-mail
- Most challenging part of project

Phase I: Collecting Data

- Majority of the data received through e-Mail
- Drove to offices and collected permit data

Phase II: Editing Data

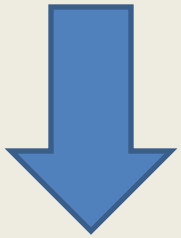


104,986 Records Received

Phase II: Editing Data

- Data had to be edited into the same fields

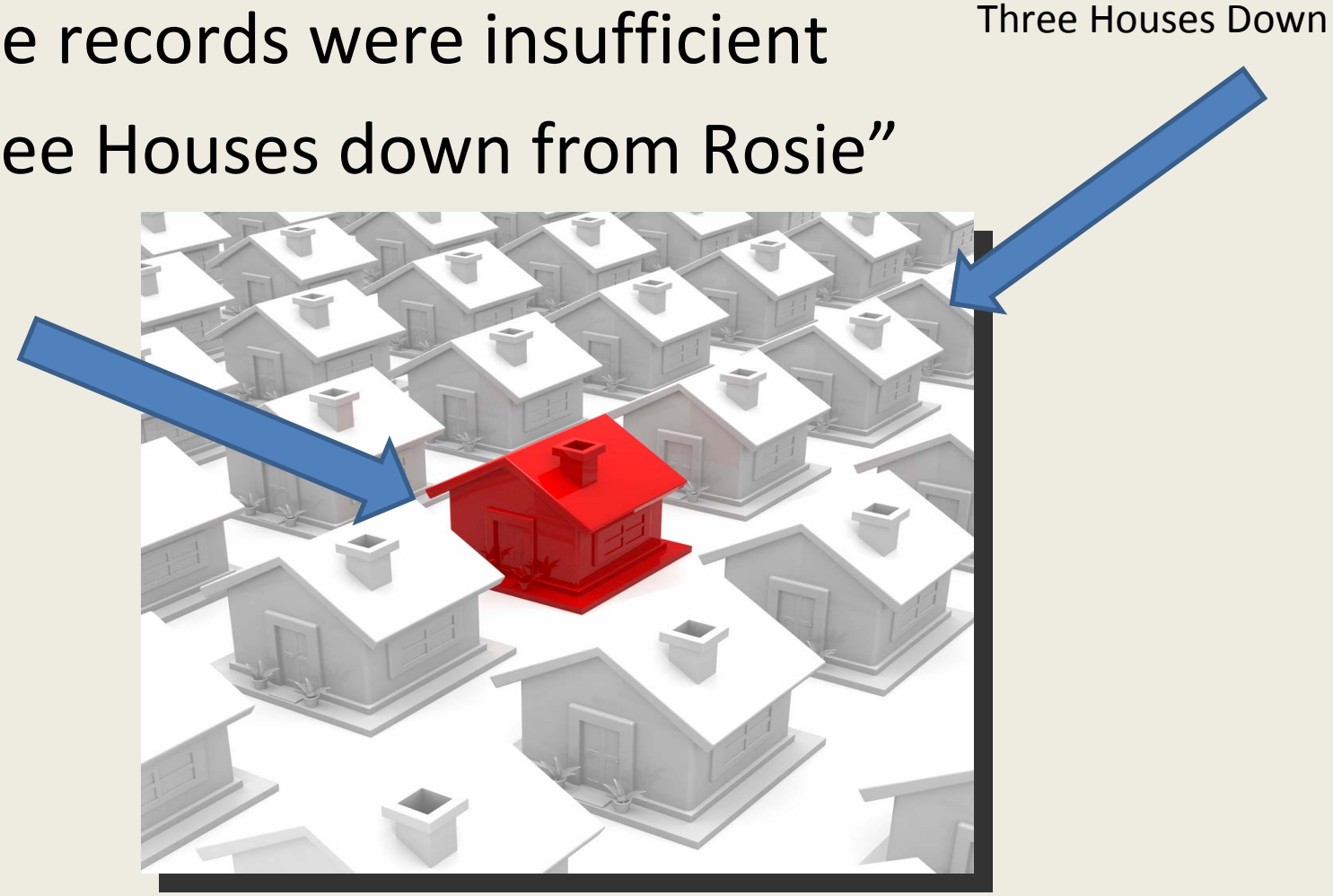
3555 Timmons Lane, Suite 120 Houston, Texas 77027



Street_Num	Street_Name	Street_Type	Unit_Num	City	State	Zip_Code
3555	Timmons	Ln	Suite 120	Houston	TX	77027

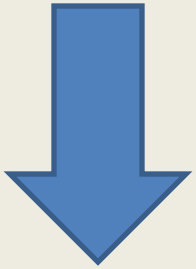
Phase II: Editing Data

- Some records were insufficient
- “Three Houses down from Rosie”



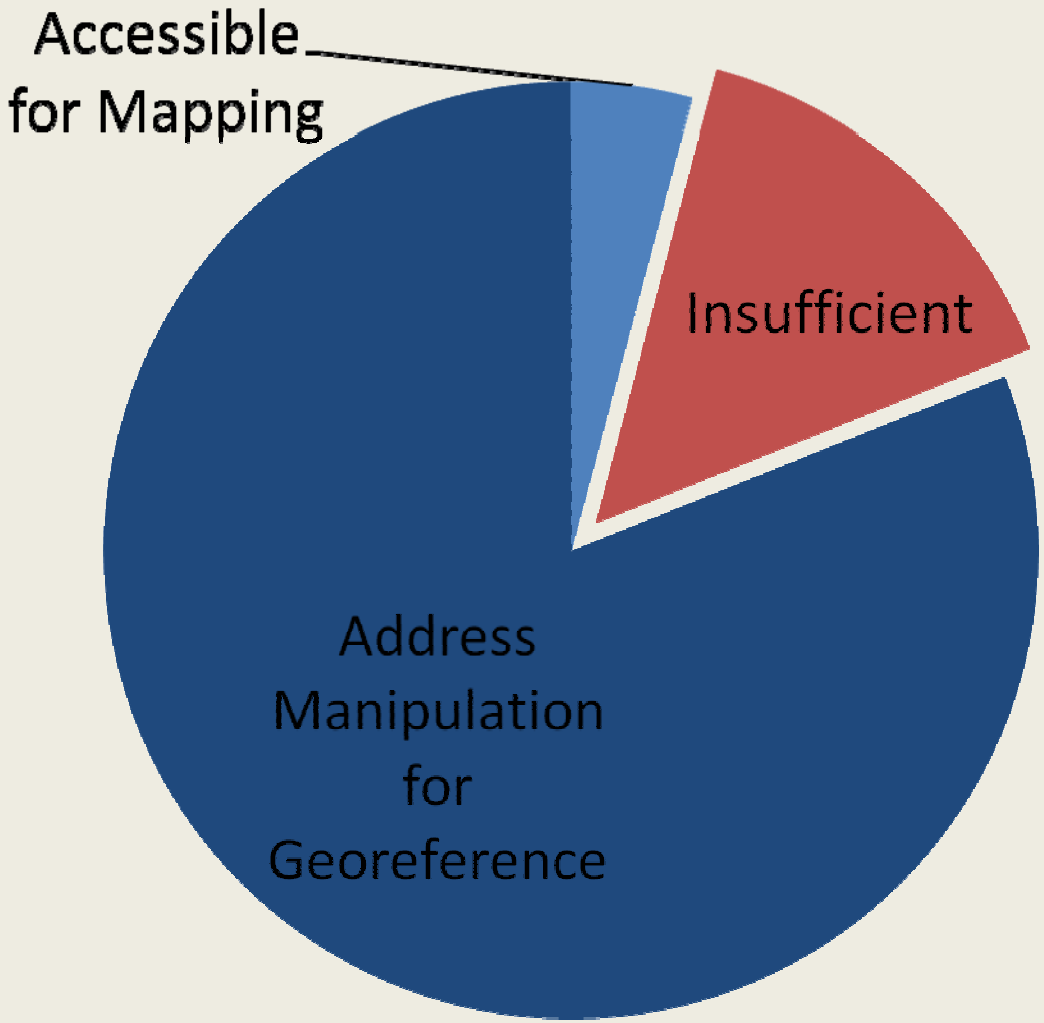
Phase II: Editing Data

- Some records were missing essential fields
- Timmons Lane, Texas

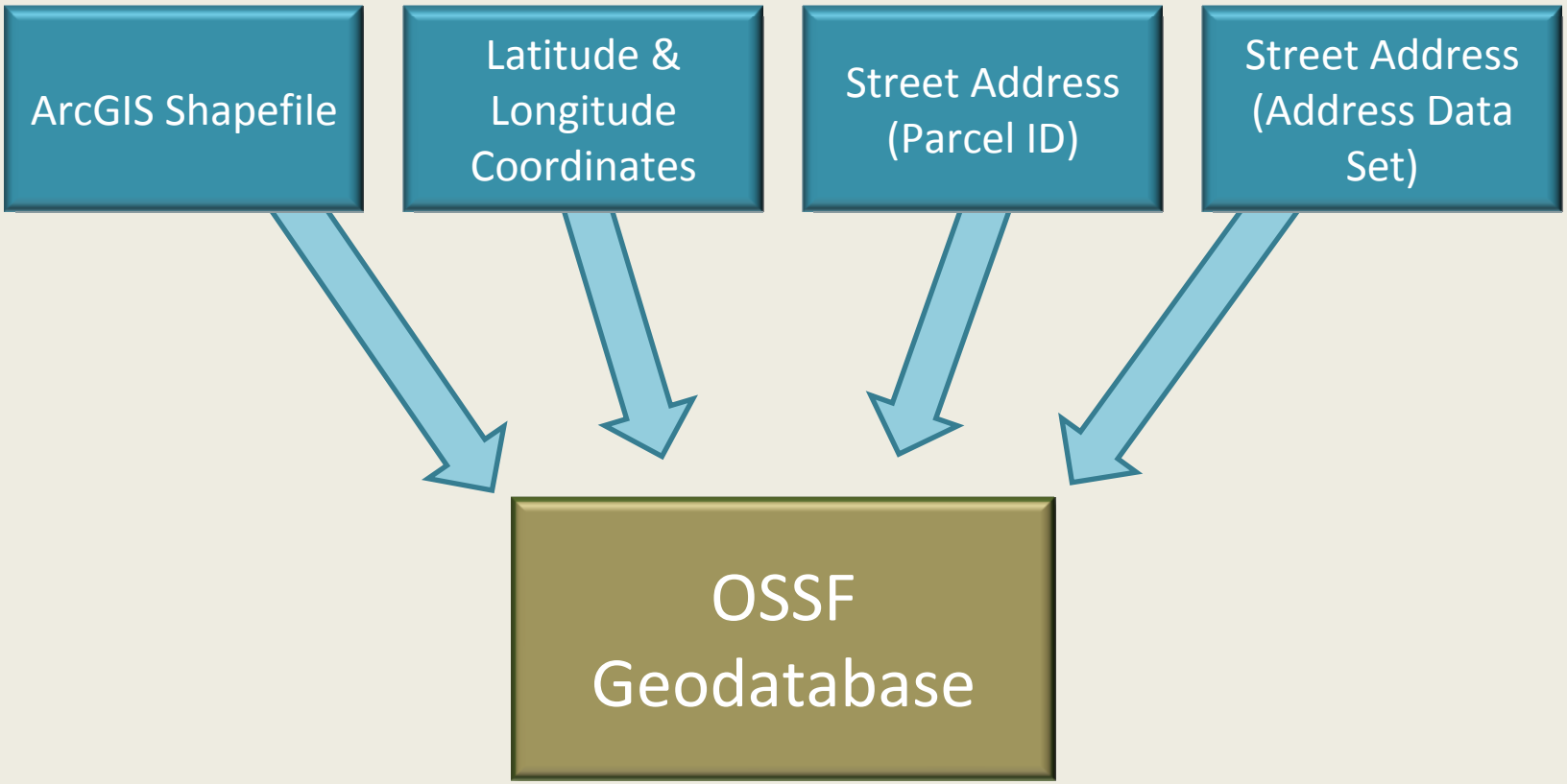


Street_Num	Street_Name	Street_Type	Unit_Num	City	State	Zip_Code
	Timmons	Ln			TX	

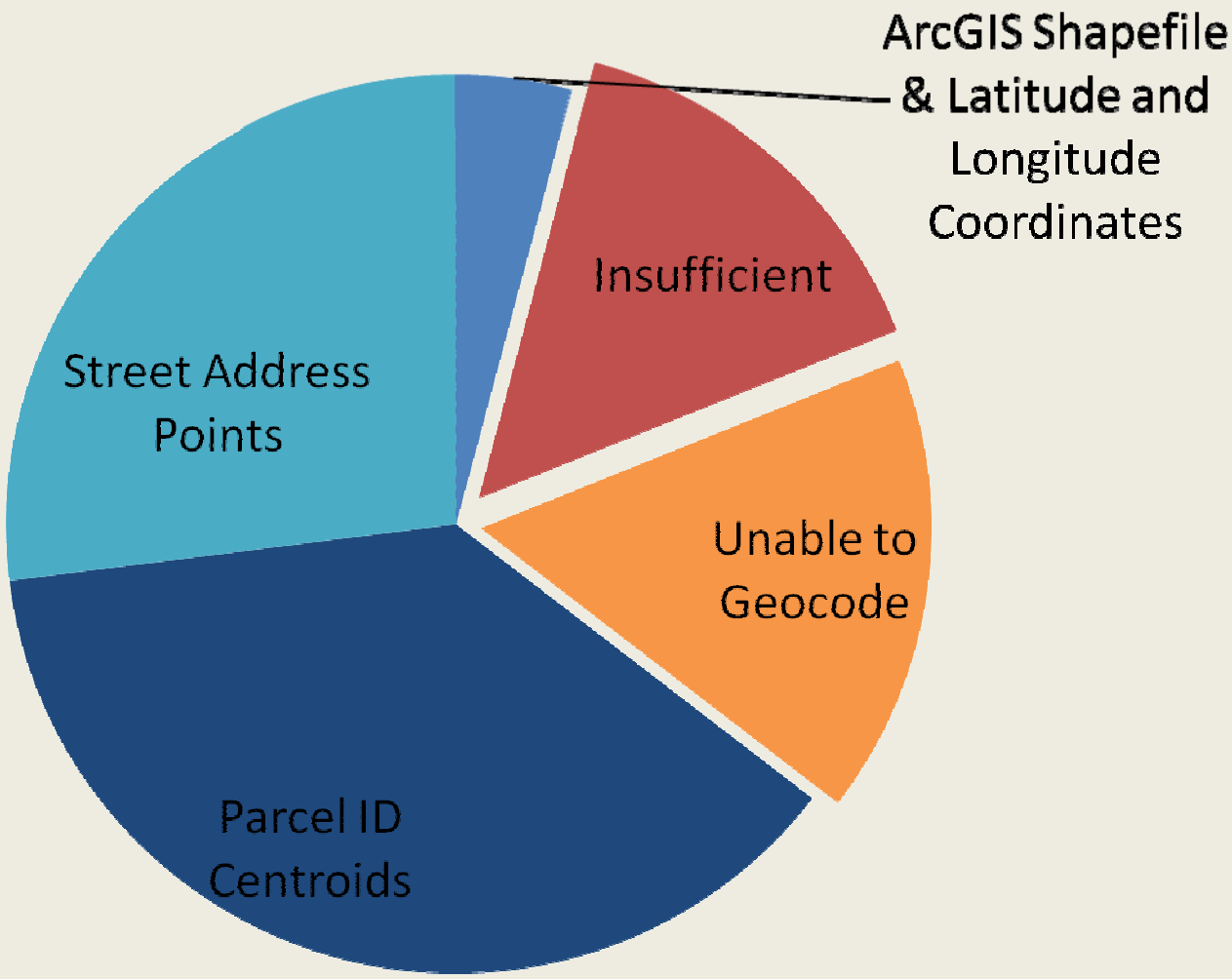
Phase II: Editing Data



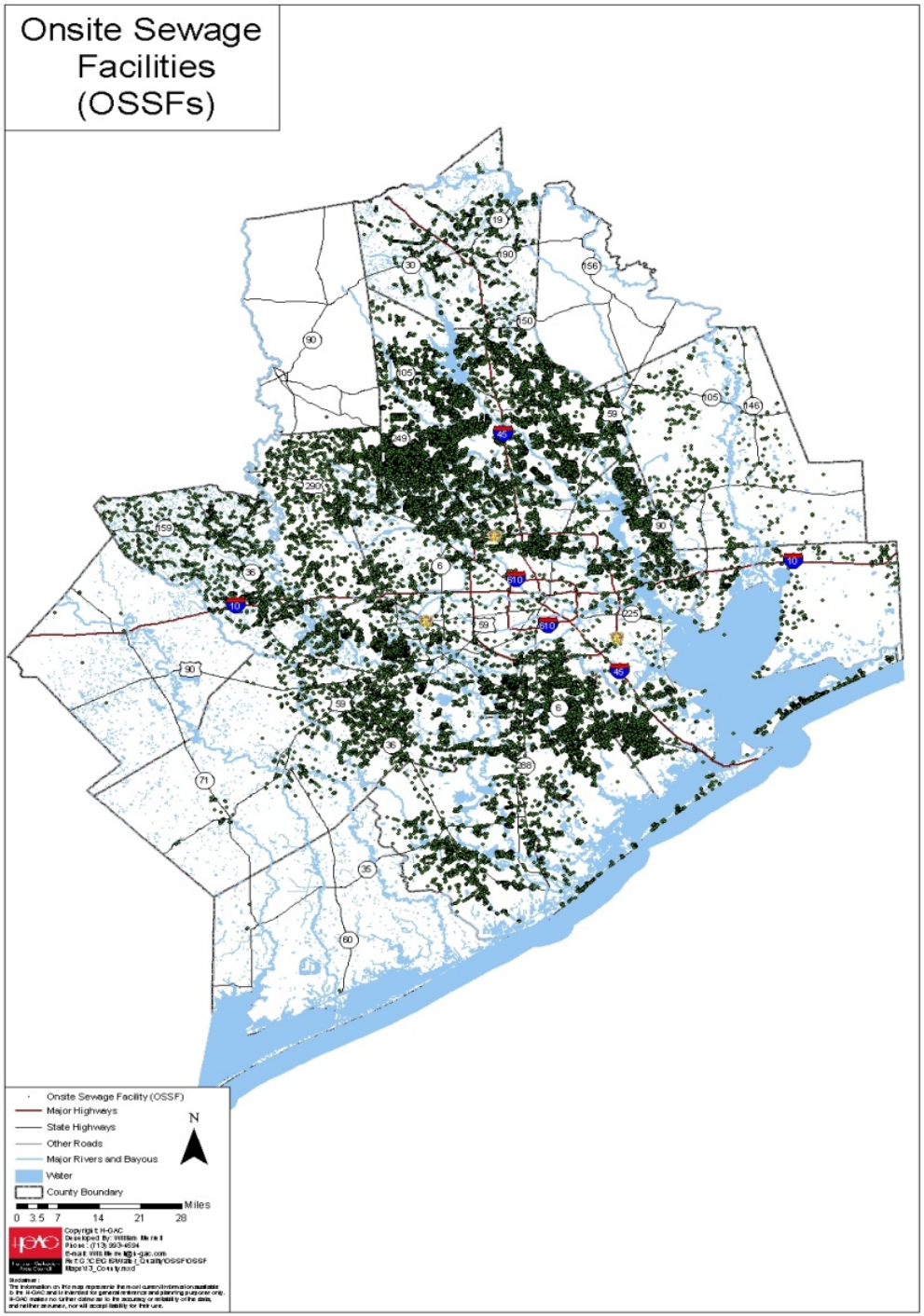
Phase III: Building the Geodatabase



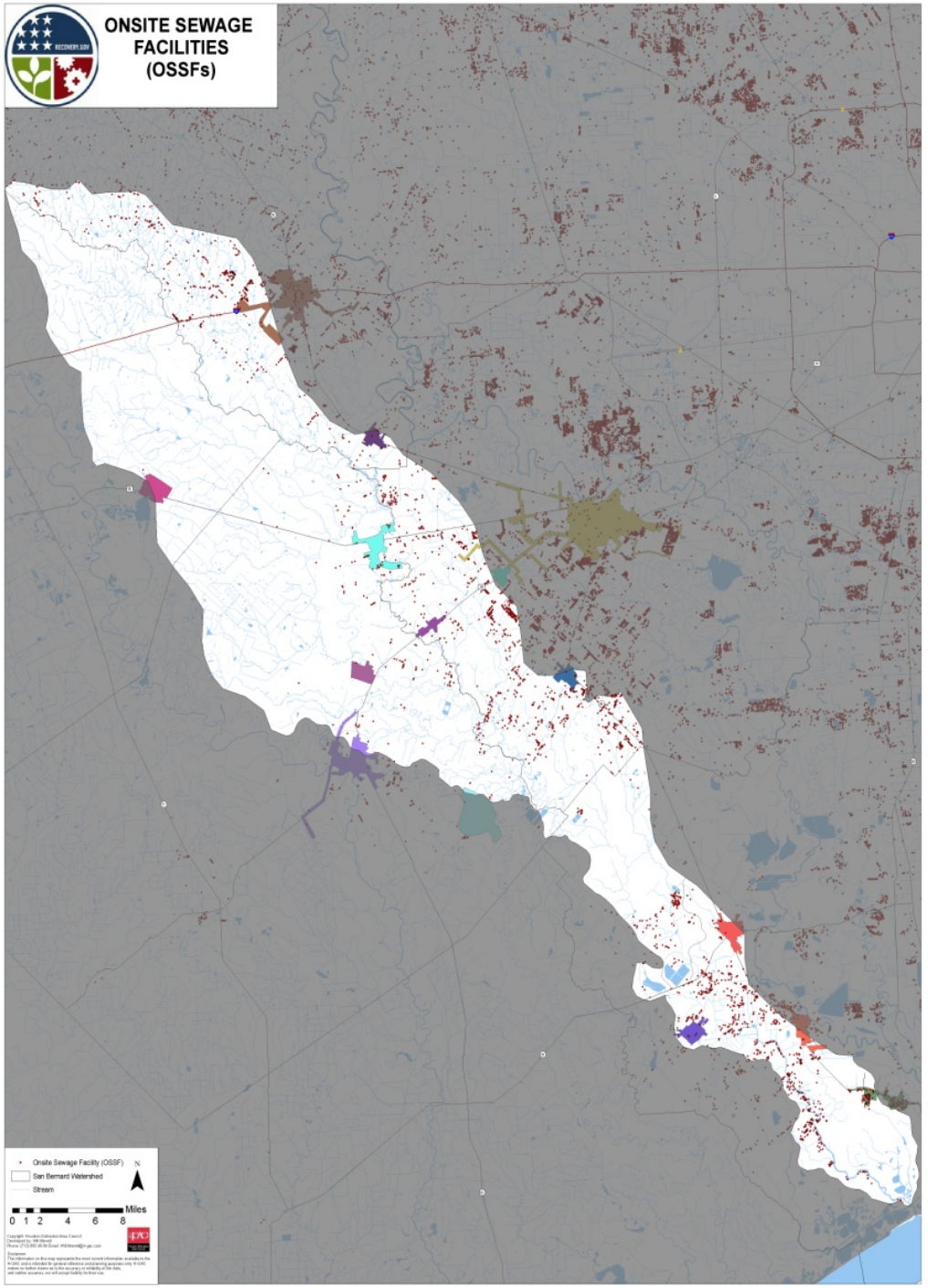
Phase III: Building the Geodatabase



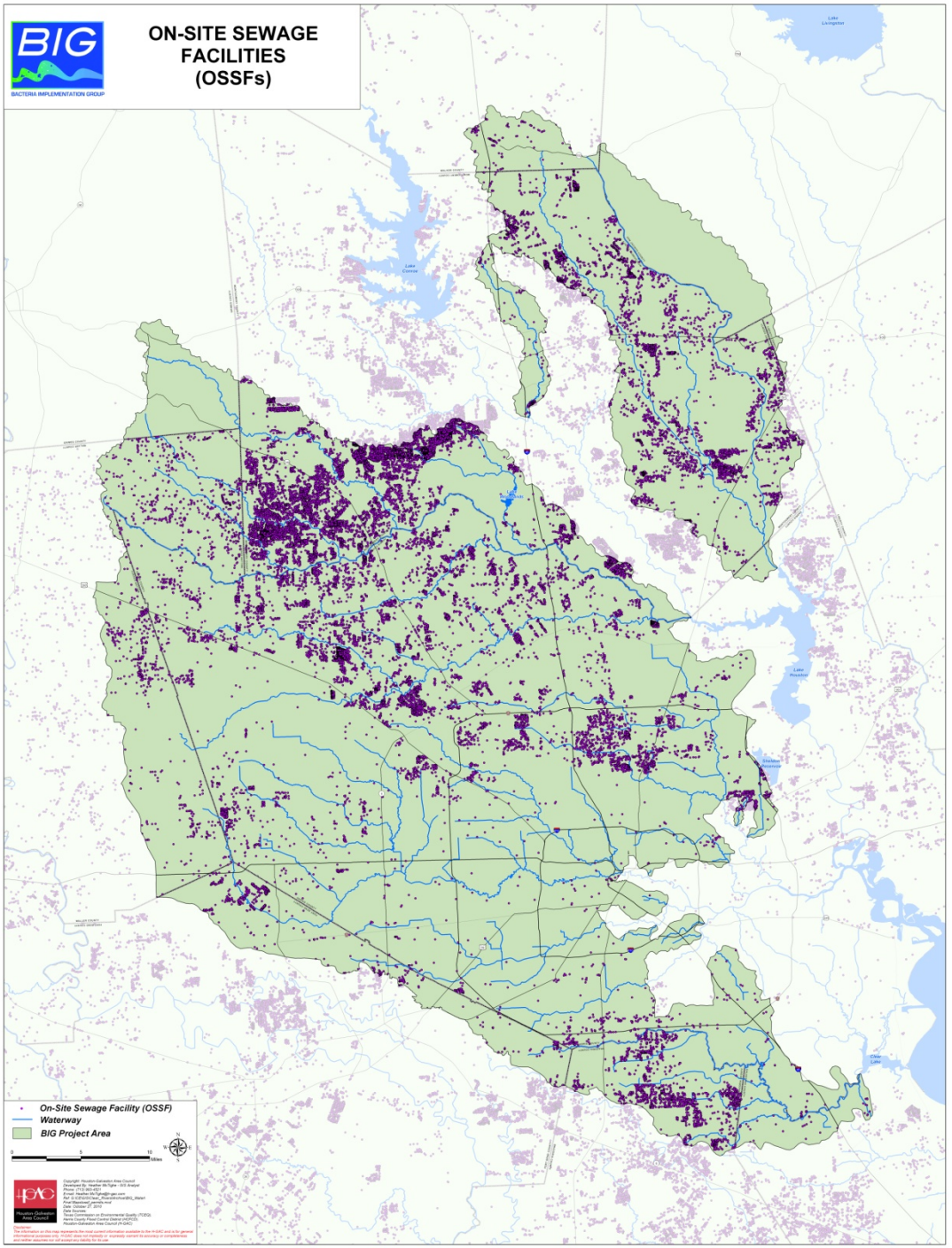
Applications: H-GAC Region



Applications: San Bernard Watershed



Applications: BIG Project Area



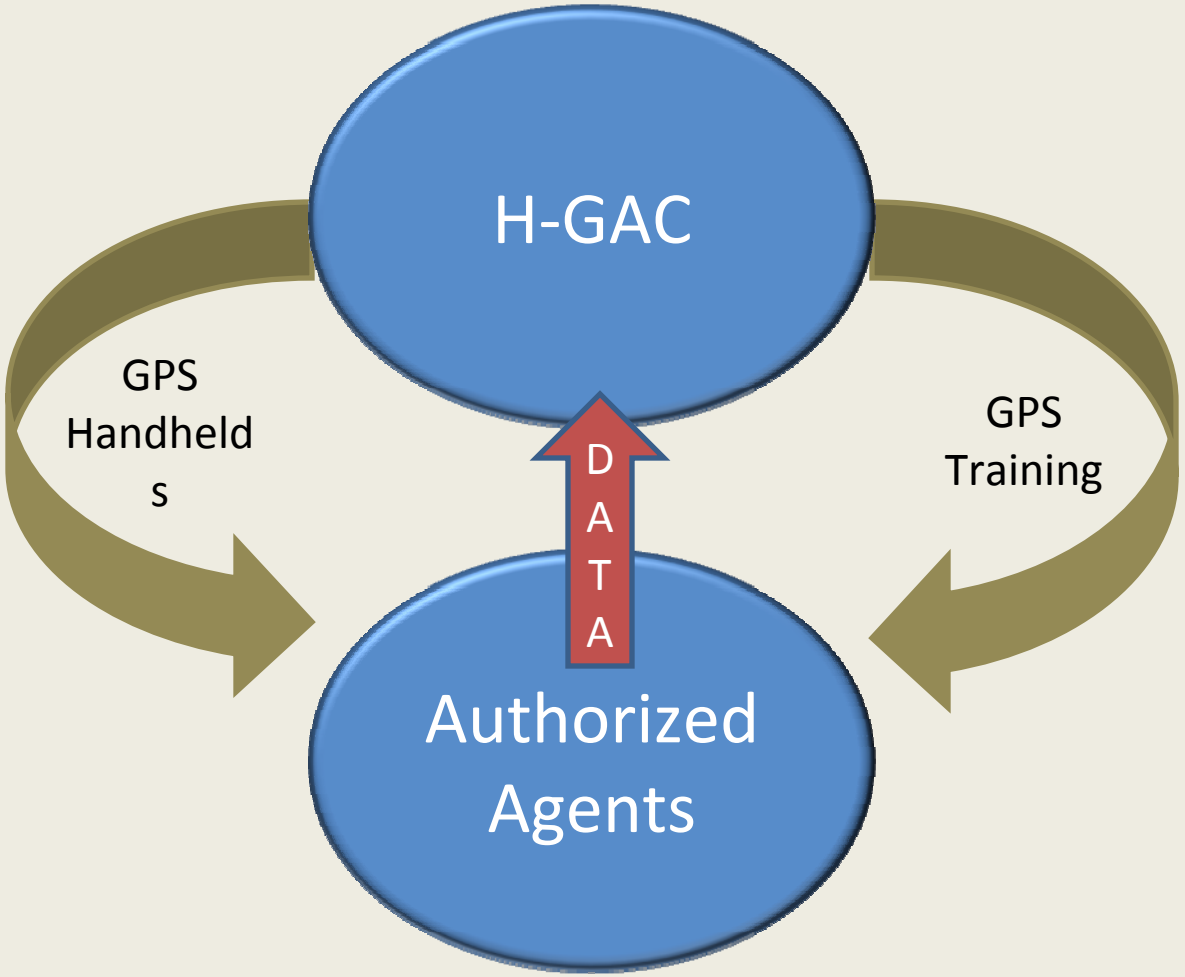
Future Endeavors

- Expanding Permit Geodatabase
- Instruction Manual for Submitting Data
- Collecting Complaint and Failure OSSF Data
- Identify Unpermitted OSSF

Future Endeavors

- Applied for 319 Grant “Onsite Sewage Facility GPS Procurement, Education, and Implementation Program”
- Limitations of street address geocoding
- Precision with GPS handhelds
- Eliminating “lost” records

Future Endeavors: 319 Grant



Questions?

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