



BIG'S TOP FIVE MOST & TOP FIVE LEAST IMPAIRED WATER BODIES



May 23, 2017

BIG Spring Meeting

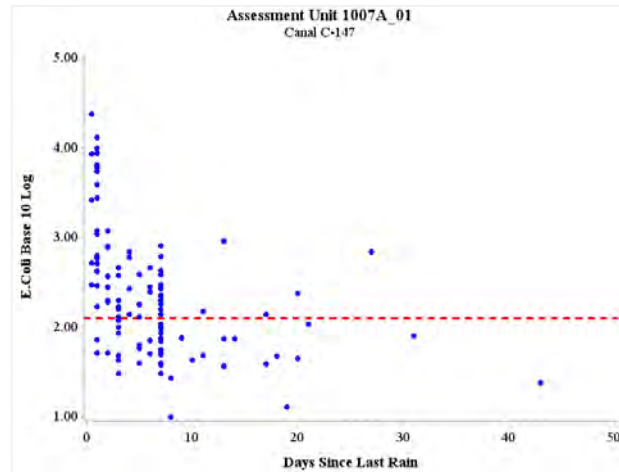
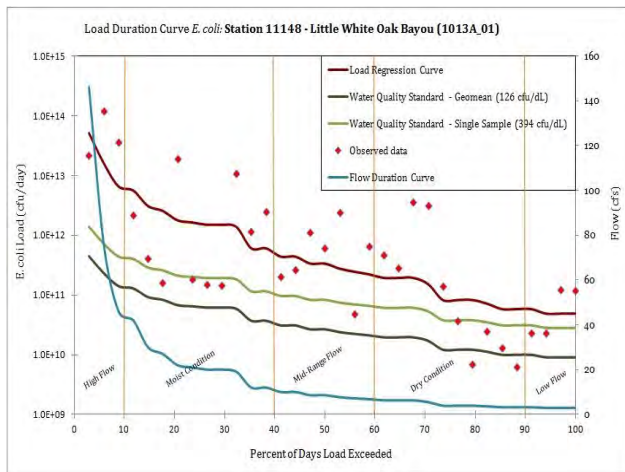
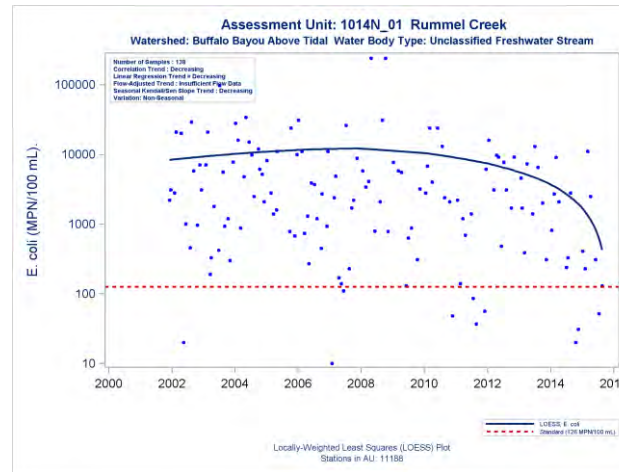
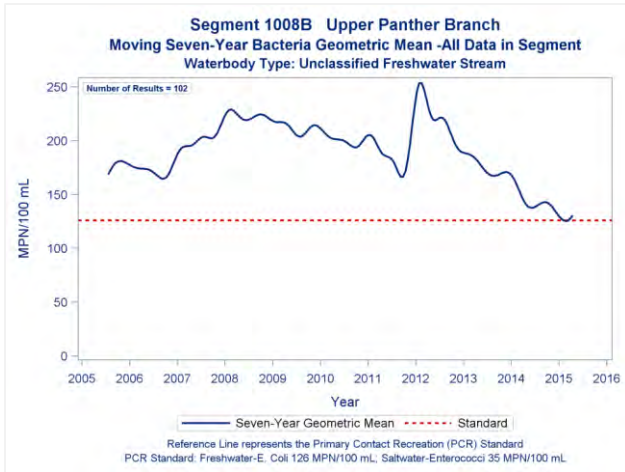
Overview

- Purpose:
 - ▣ Identify potential bacteria sources and seek to eliminate them by working with local jurisdictions.

- Methods:
 - ▣ Phase I – Desk review; workgroup; prioritization; bacteria screening
 - ▣ Phase II – Bacteria source identification
 - ▣ Phase III – Report findings; agency action



Phase I: Desk Review



Phase I: Technical Workgroup

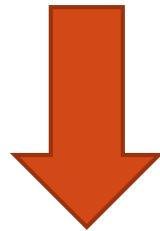
- Bayou Preservation Association
- City of Houston Public Works and Engineering
- City of Houston Health Department
- Harris County Pollution Control Services Department
- Harris County Flood Control District
- Harris County Engineering Department
- City of Bellaire
- Galveston Bay Estuary Program
- Houston-Galveston Area Council
- Citizens Environmental Coalition
- San Jacinto River Authority
- Texas Commission on Environmental Quality

Phase I: Prioritization

Top 10 Lists



Top 5 Lists



Top 2 Lists

Phase I: Bacteria Screening

Top 2 Least Impaired

Canal C-147 (1007A_01)

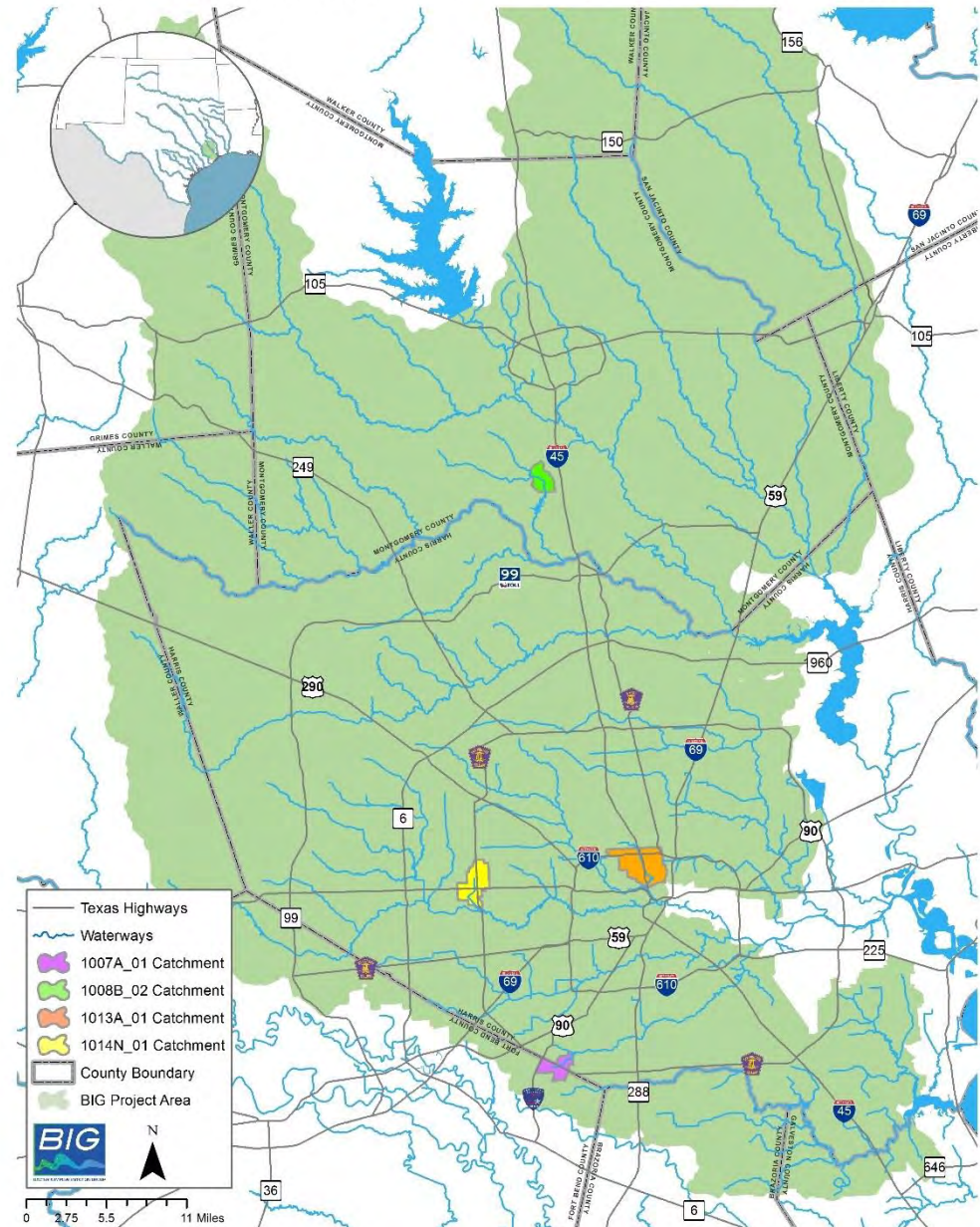
Upper Panther Branch
(1008B_02)

Top 2 Most Impaired

Rummel Creek (1014N_01)

Little White Oak Bayou
(1013A_01)

BIG Top 5 / Least 5 Assessment Unit Catchment Areas

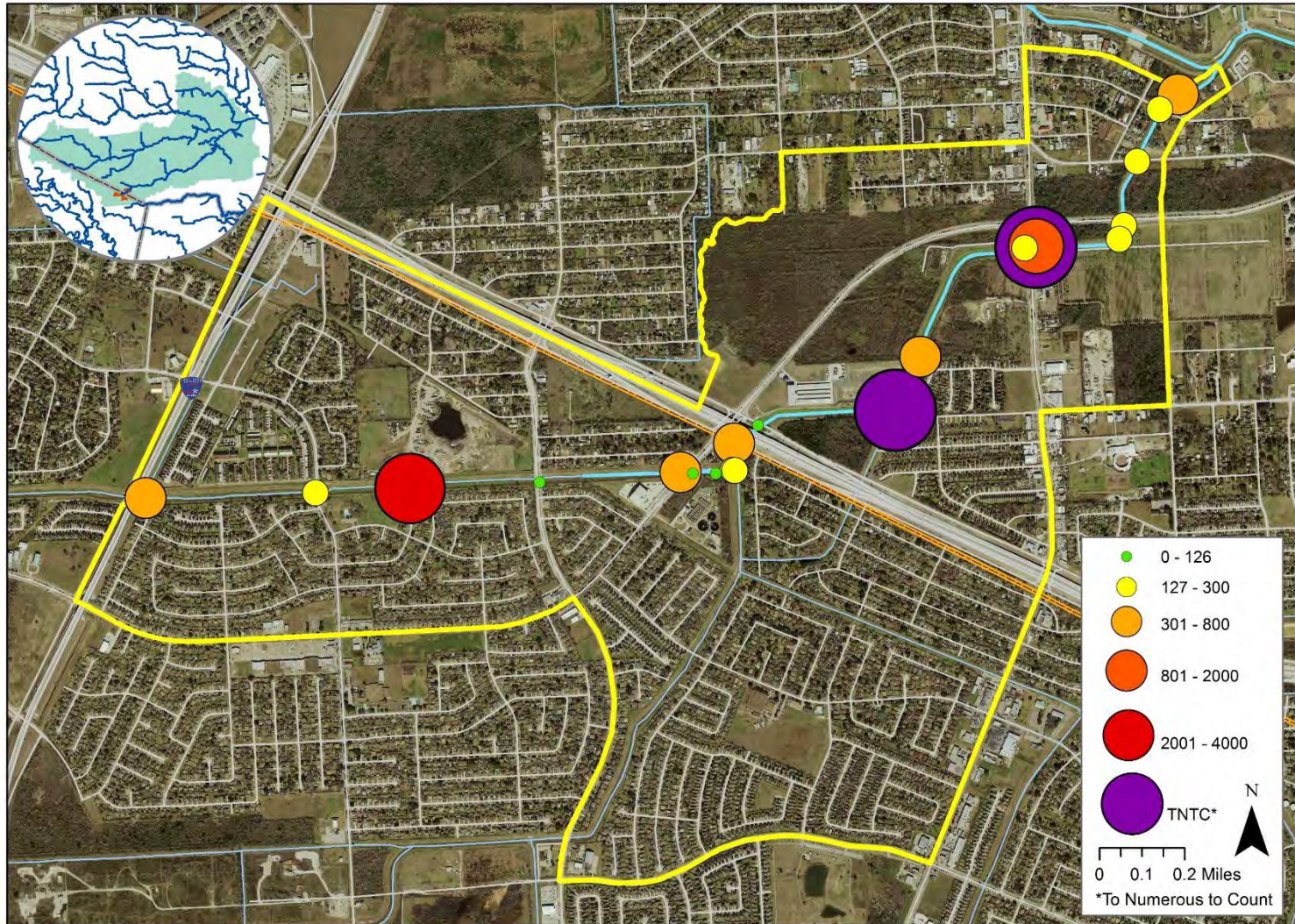


Phase I: Bacteria Screening

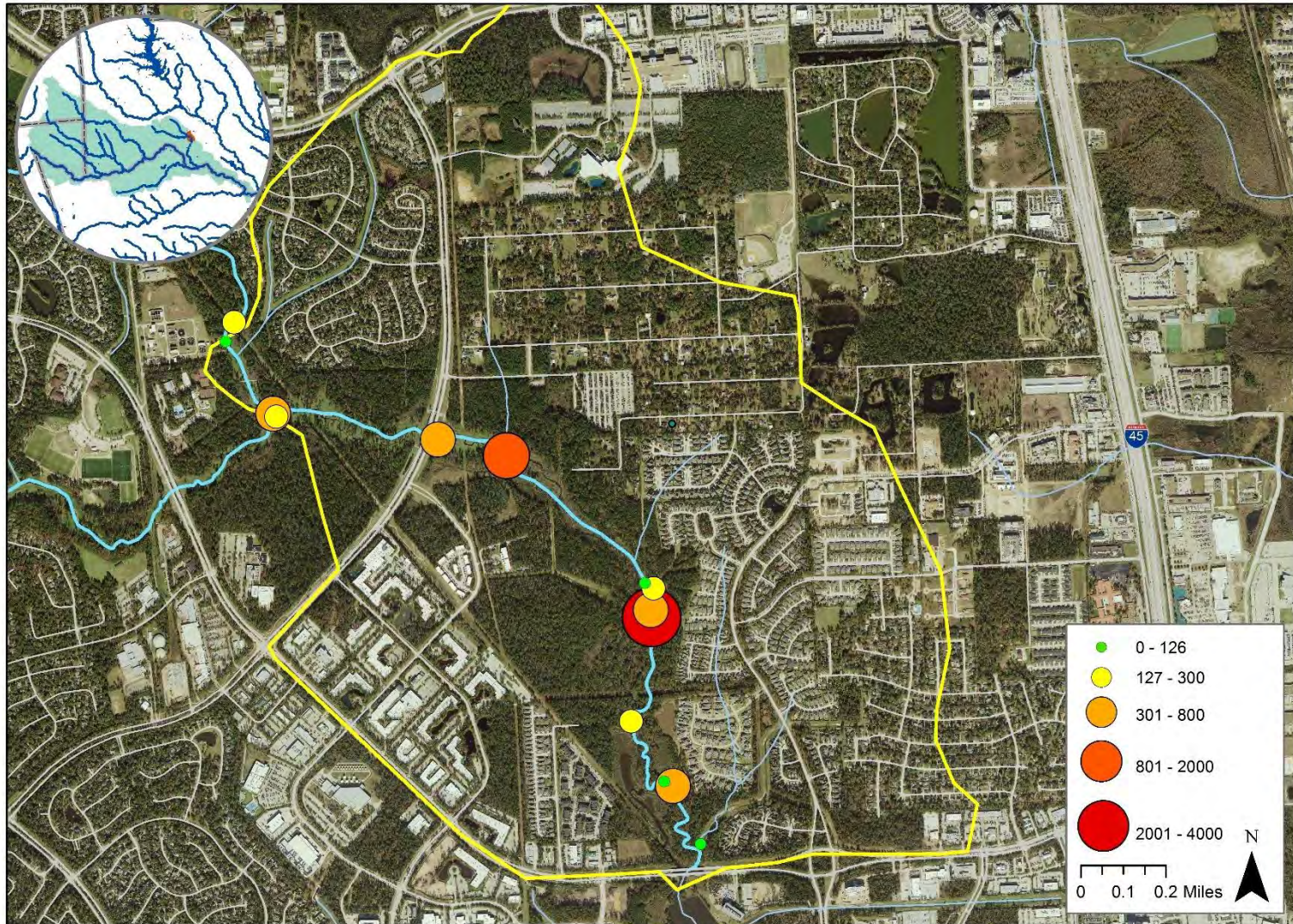
- Document all outfalls and tributaries
- Collect samples from discharging outfalls, tributaries, and surface waters
- Measure *E.coli* using Coliscan Easygel method



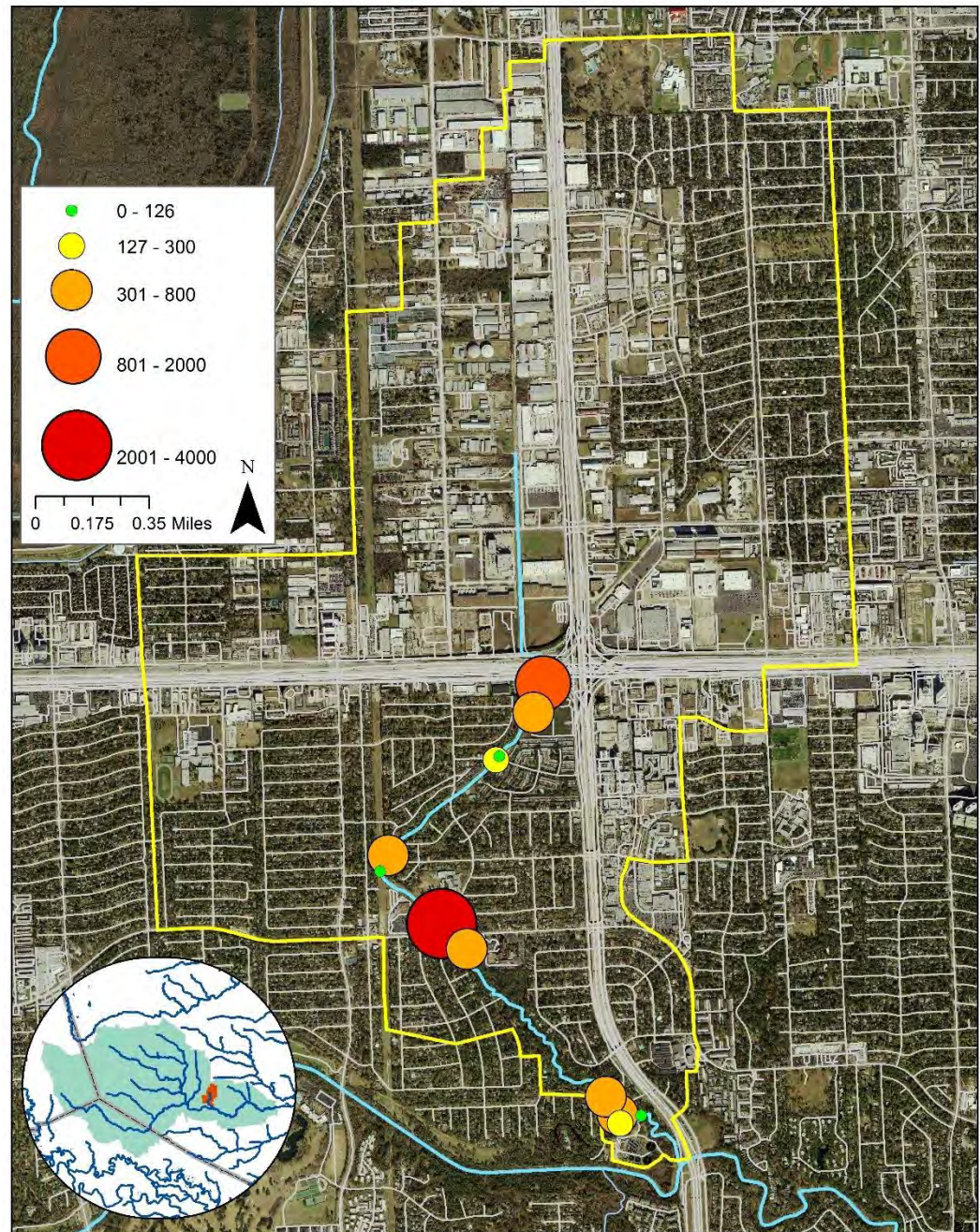
Phase I: Canal C-147



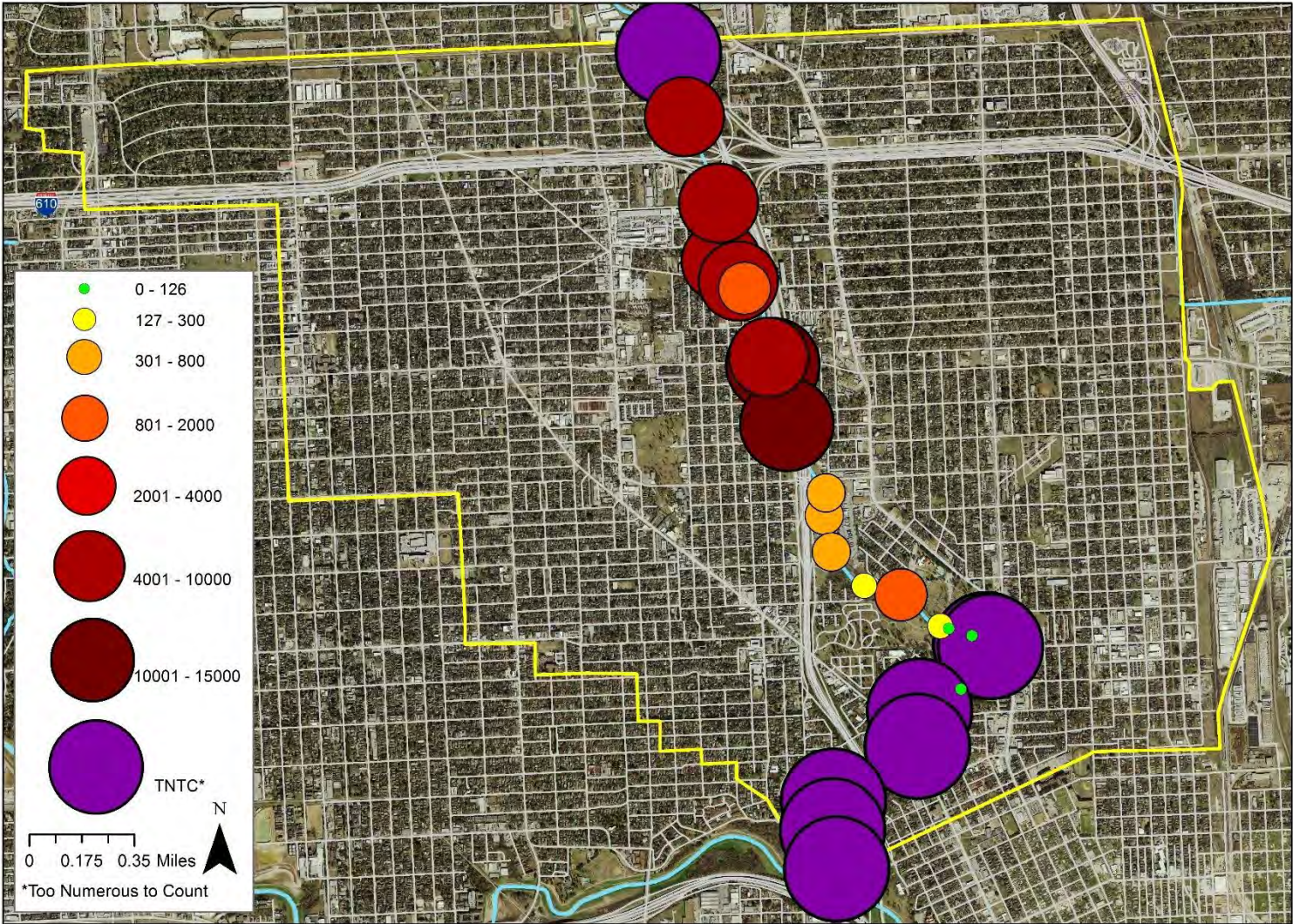
Phase I: Upper Panther Branch



Phase I: Rummel Creek



Phase I: Little White Oak Bayou



Phase II: Bacteria Source Identification

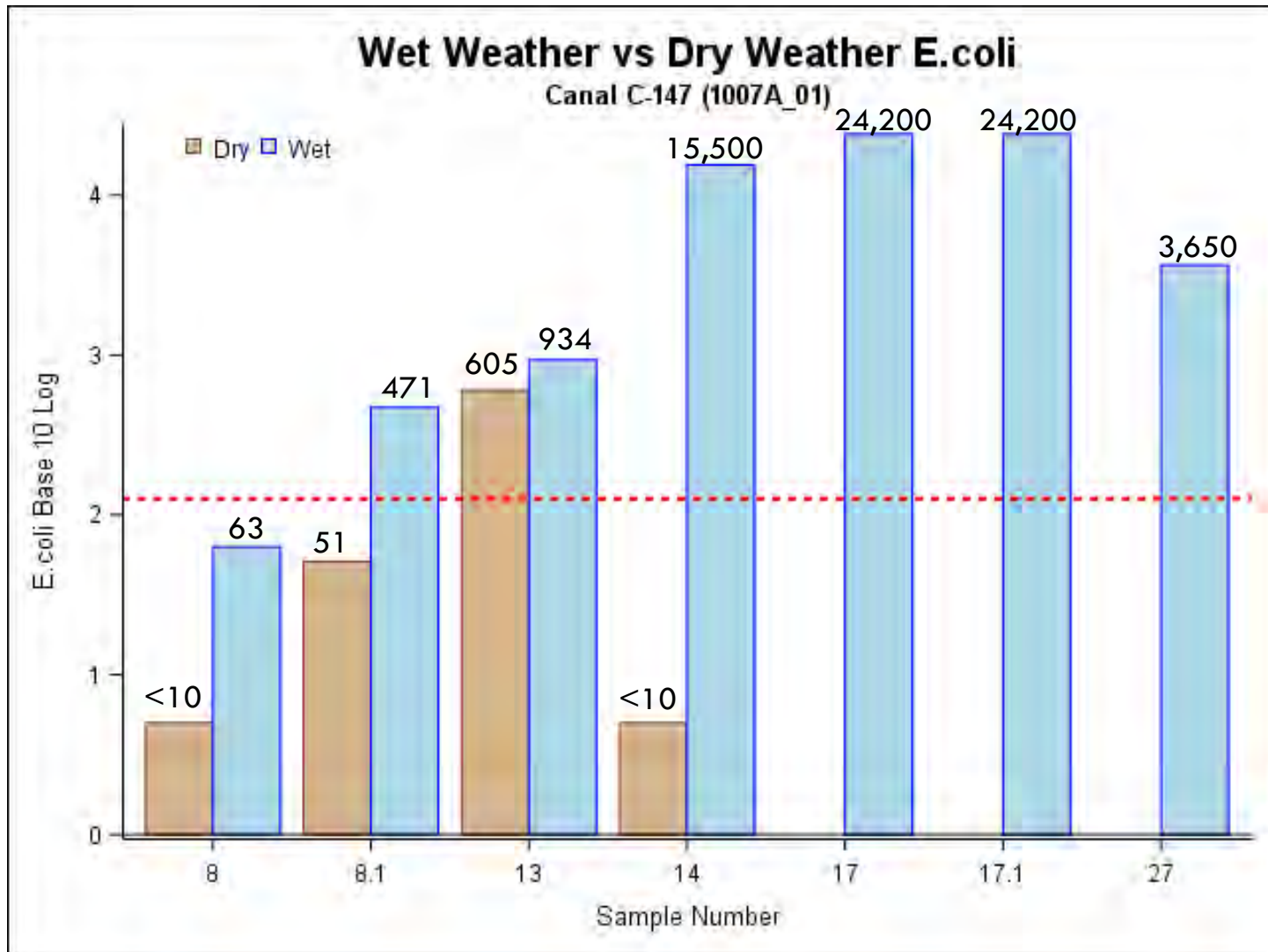
- Wet weather and dry weather sampling
- Bacteria analysis at NELAP certified laboratory
- Collection of field water quality data using multiparameter data sonde



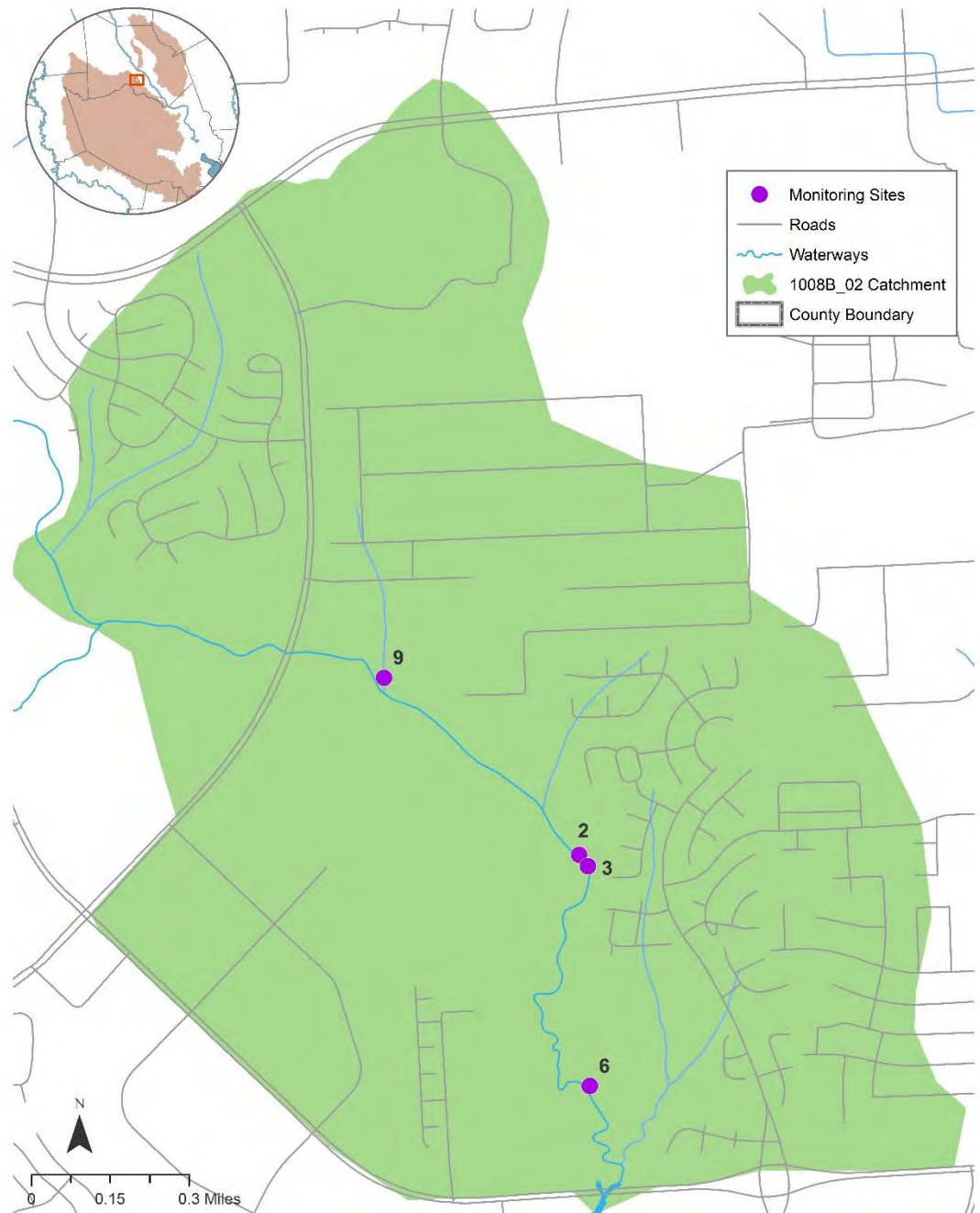
Phase II: Canal C-147



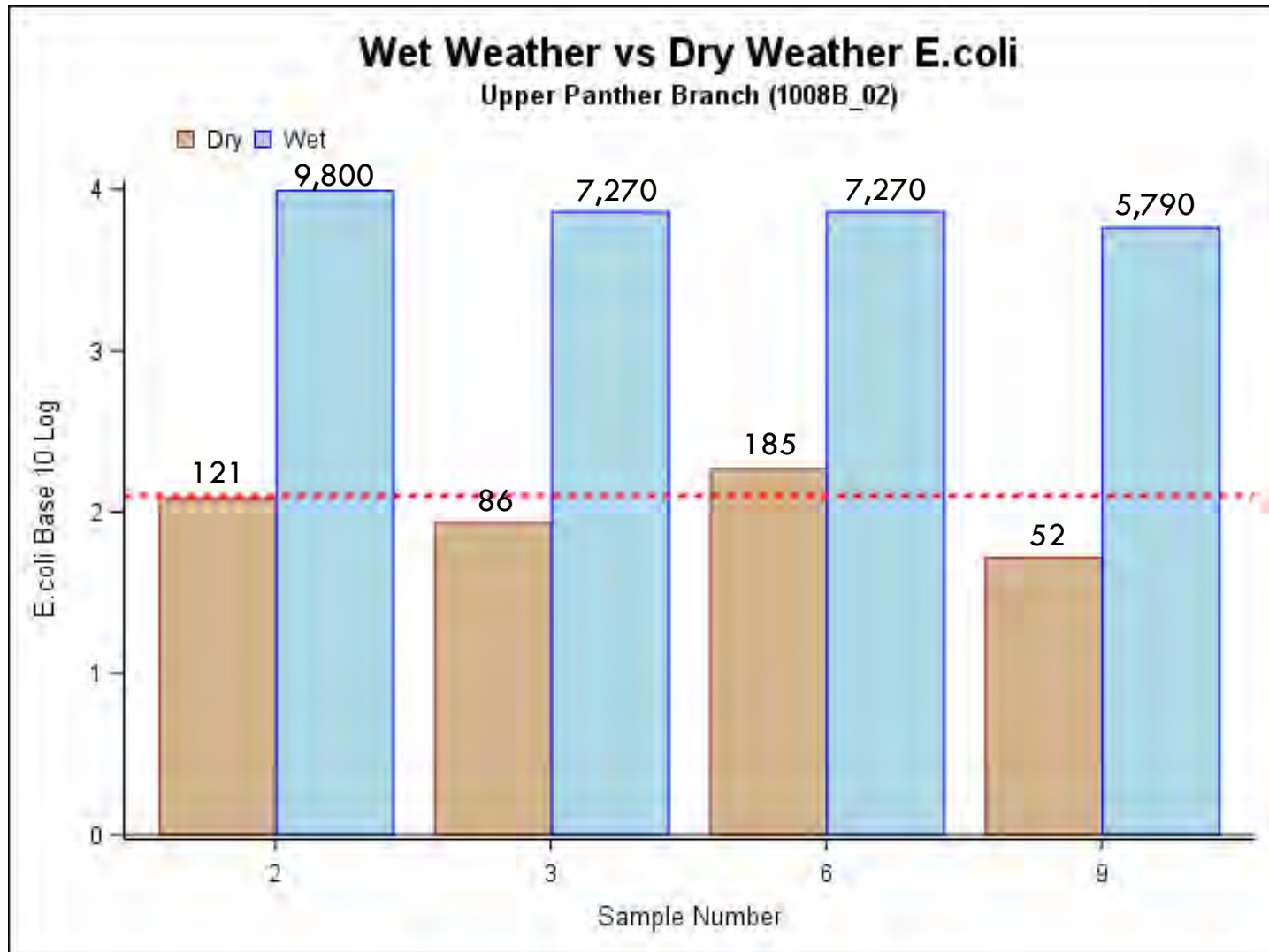
Phase II: Canal C-147



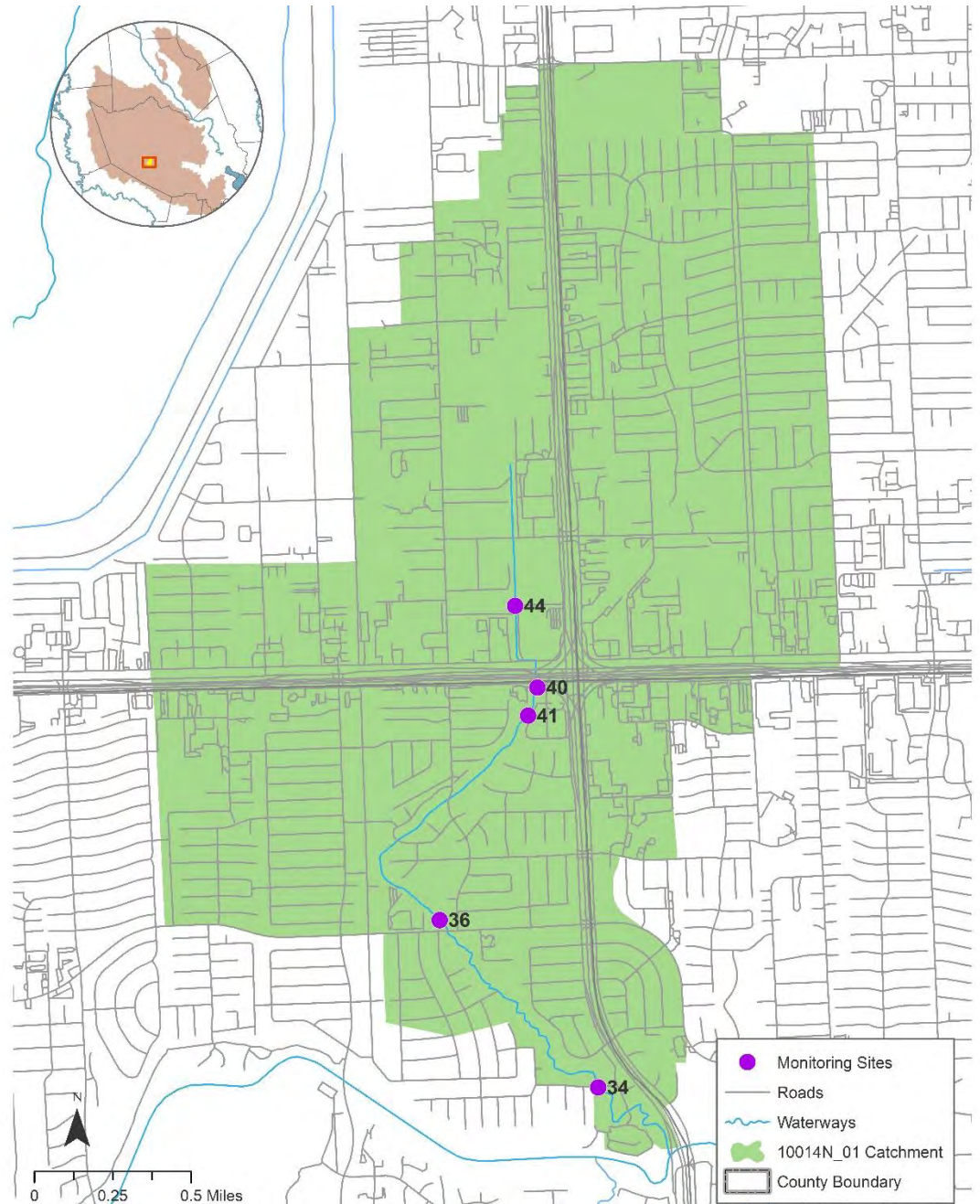
Phase II: Upper Panther Branch



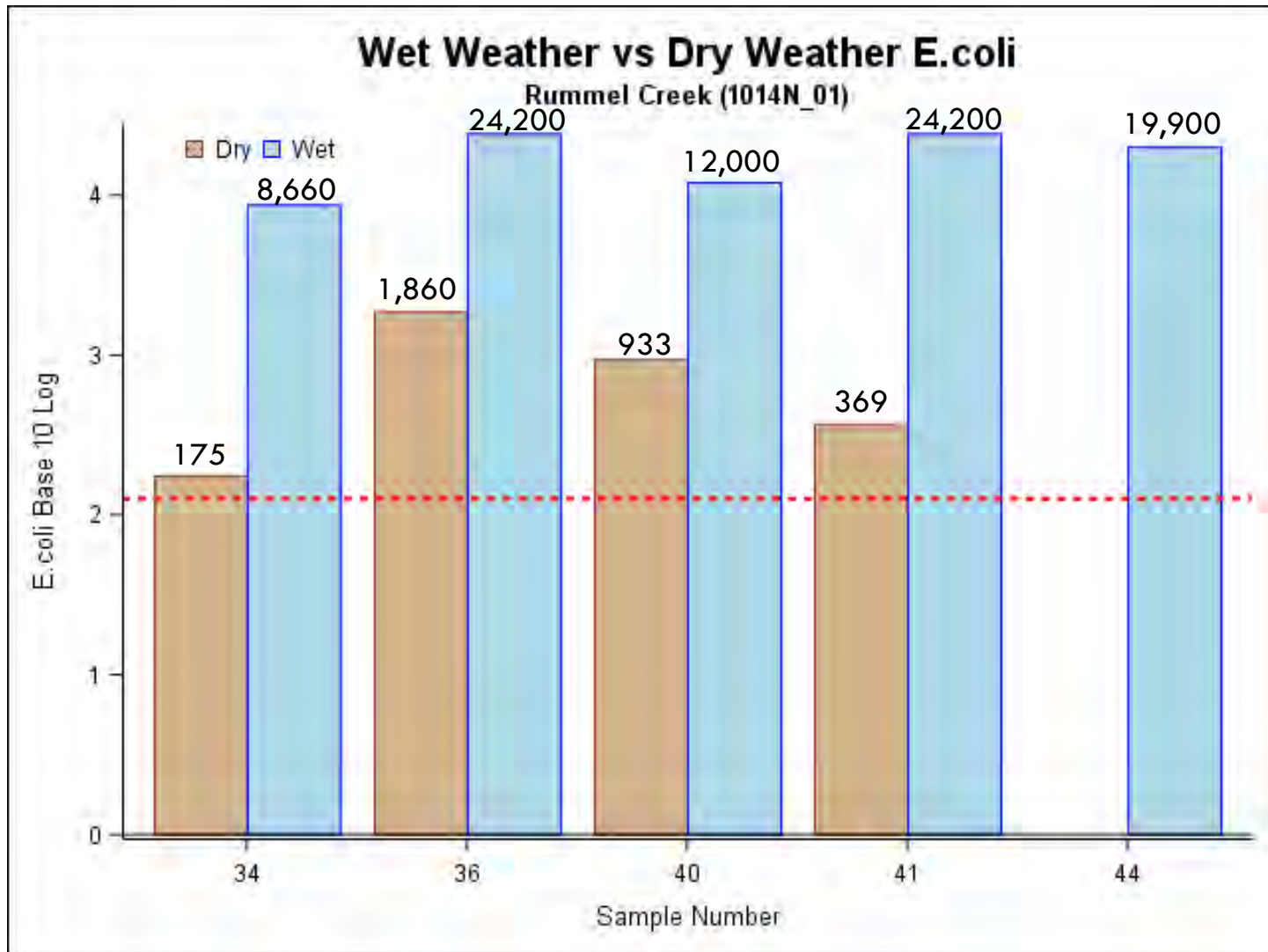
Phase II: Upper Panther Branch



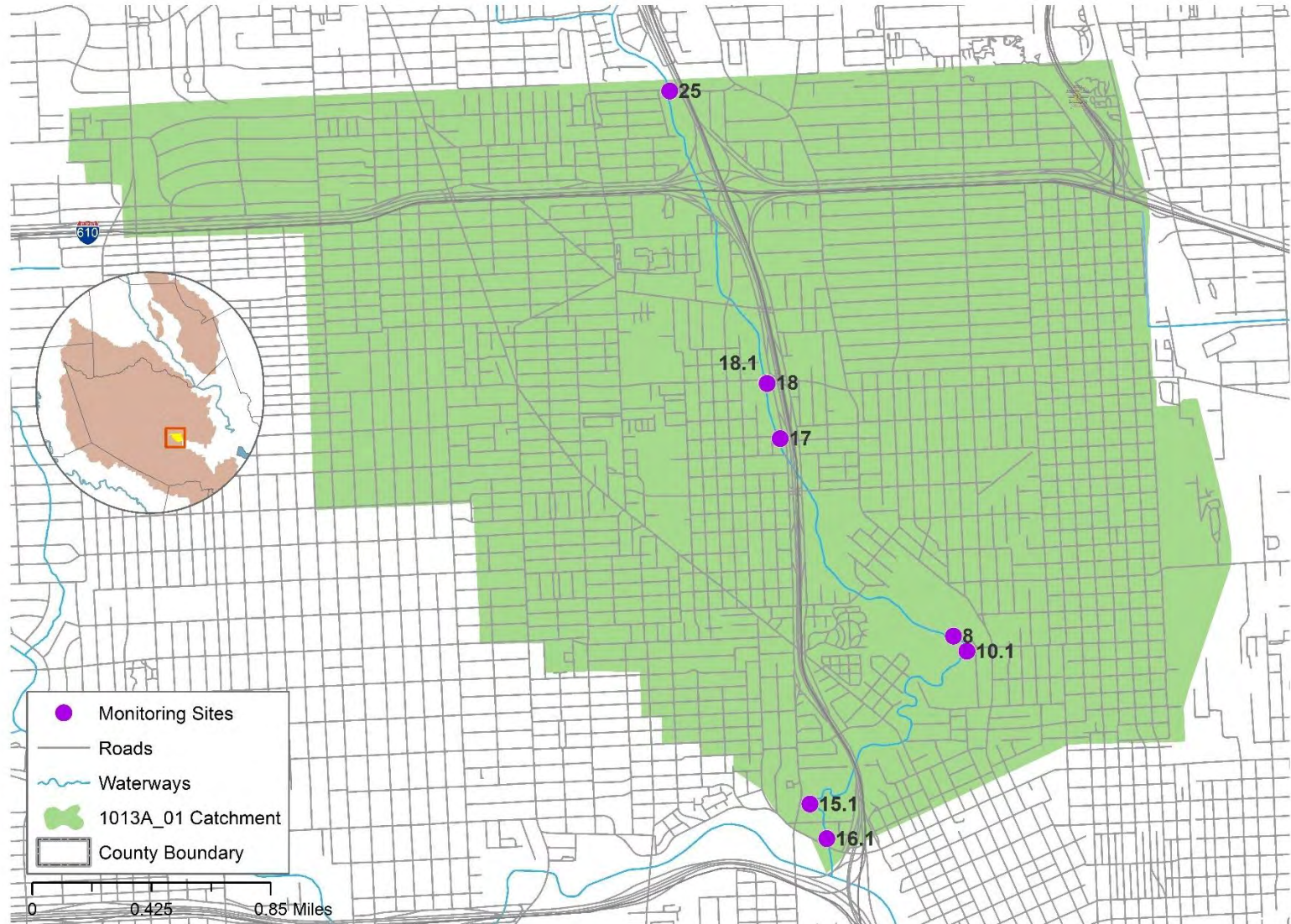
Phase II: Rummel Creek



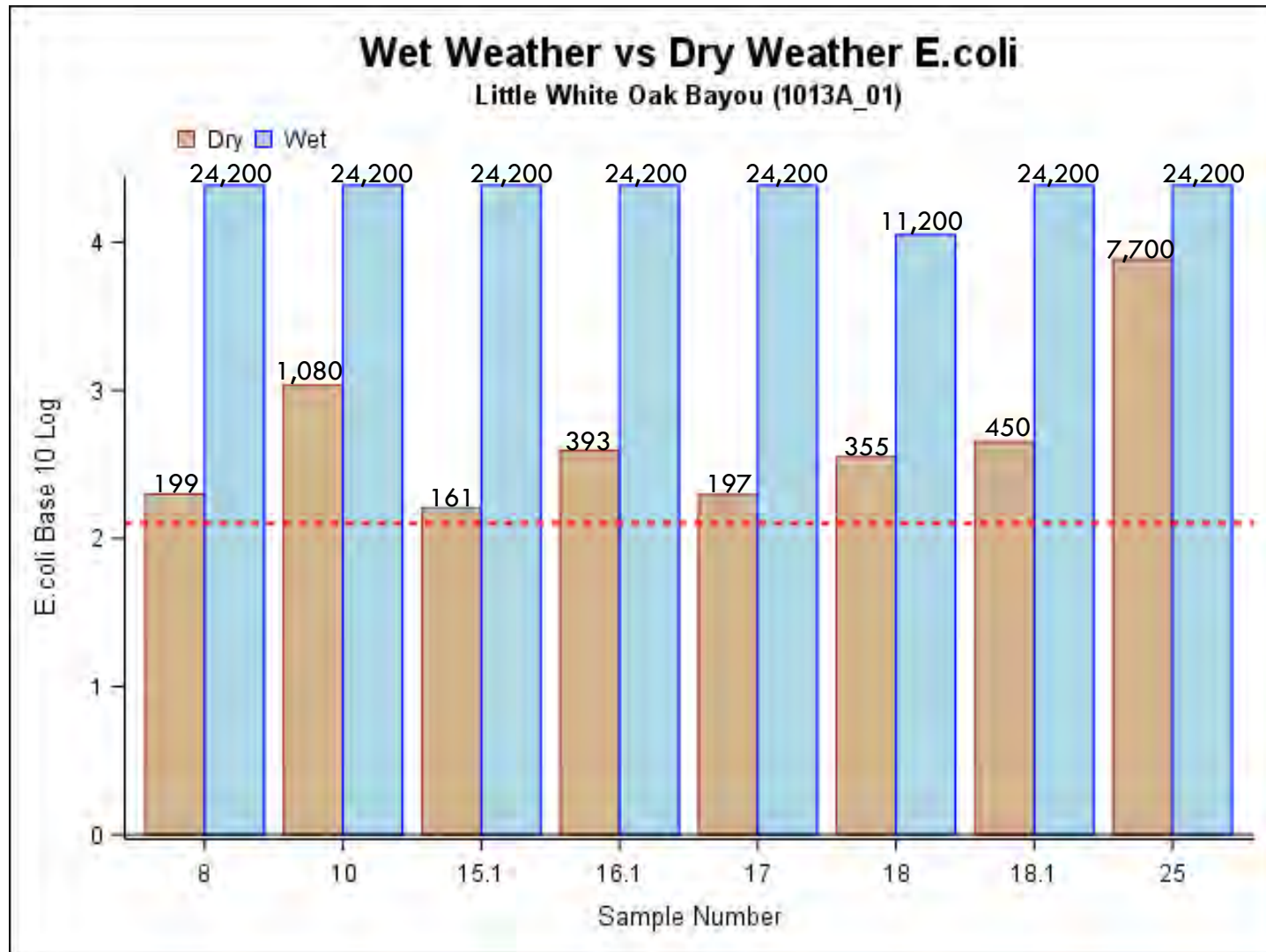
Phase II: Rummel Creek



Phase II: Little White Oak Bayou



Most Impaired: Little White Oak Bayou



Phase III: Report Findings

- Phase I results reported through Preliminary Action Report
- Phase II results reported through Bacteria Source Identification Report
- Meetings, emails, conference calls, 311
- BIG website

Phase III: Agency Action

- Canal C-147
 - ▣ Leak testing
 - ▣ Leak repair



Phase III: Agency Action

- Upper Panther Branch
 - ▣ Resident education



Phase III: Agency Action

- Little White Oak
 - Leak testing
 - Ongoing repairs
 - Increased WWTF sampling
 - Trash Bash Site



Phase III: Agency Action

- Rummel Creek
 - ▣ Increased WWTF sampling
 - ▣ Leak testing



Wrapping Up

- Final Report available June 2017

- Benefits of project model:
 - ▣ Focus investigative efforts on areas that would make the greatest impact
 - ▣ Getting key players involved early on
 - ▣ Cost effective coordinated effort for MS4 permit holders

Questions?

Paniz Miesen
Senior Planner

Paniz.Miesen@h-gac.com

832-681-2523

Houston-Galveston Area Council
3555 Timmons Lane
Houston, TX 77027



Project funded through grants from the U.S. Environmental Protection Agency through the Texas Commission on Environmental Quality's Galveston Bay Estuary Program