



St. Tammany Parish Decentralized Management Program

St. Tammany Parish Government

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St. Tammany Parish Government

About Us

St. Tammany is a multi-faceted, culturally rich, economically diverse, exceptional place to live, work and explore. Every community within our Parish has its own distinctive identity, yet each are bound together by a deep-rooted sense of pride.

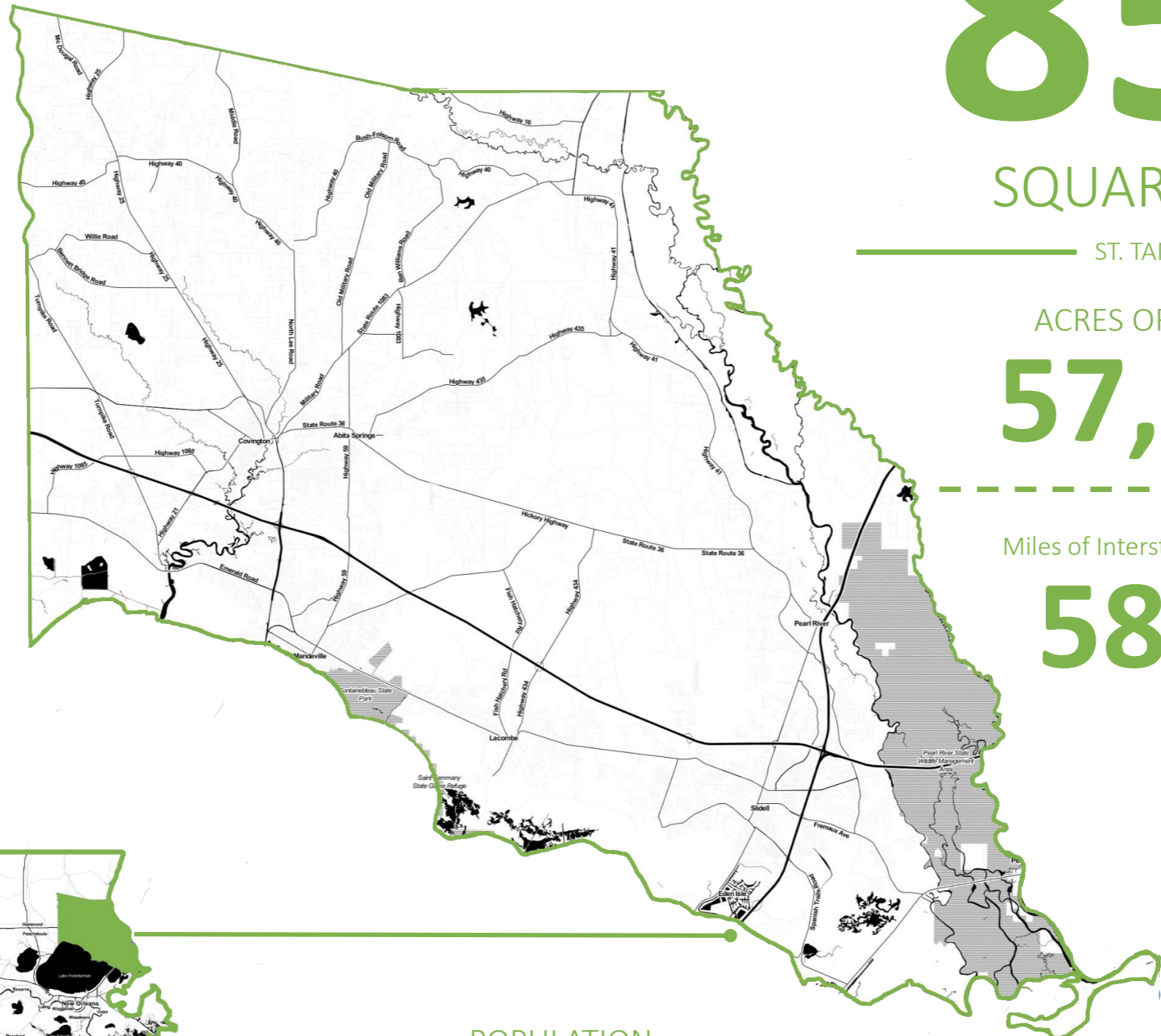
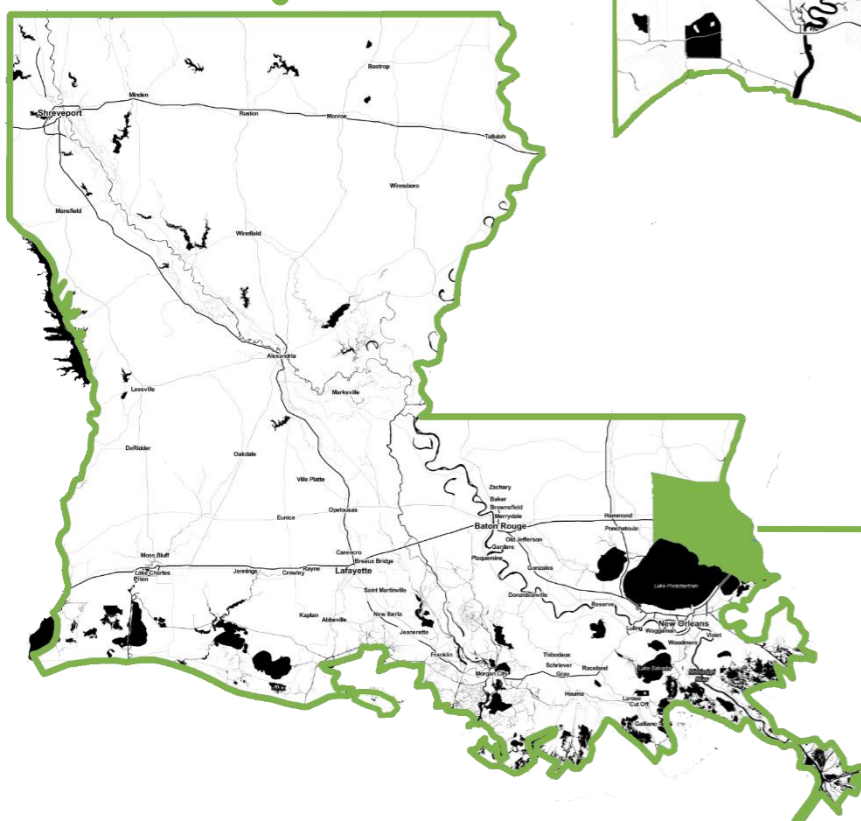
Our Parish offers fertile ground for businesses and families to thrive. Our educational system is top-ranked in the State and our residents collectively achieve some of the highest levels of education throughout the region. We are known for our highly trained, well-equipped workforce. These factors contribute to consistently low unemployment rates; often below state, regional and national averages.

St. Tammany is well-known for our thriving active lifestyle. Lake Pontchartrain skirts our shores and beckons seafarers, swimmers and sunbathers. Winding rivers offer paddlers serene navigable blueways. The 28-mile Tammany Trace, parallel equestrian trail, and wildlife conservation area, links various parks and providing beautiful vistas of rivers, bayous and streams.

We have a deep appreciation for the vibrancy we have cultivated through our entrepreneurial exceptionalism, our thriving, diverse economy, our traditions, our hospitable, balanced lifestyle and the cultural arts.



St. Tammany Parish Government About Us



854

SQUARE MILES

ST. TAMMANY

ACRES OF WETLANDS

57,057

Miles of Interstate

58

Miles of Federal Highway

74

POPULATION

~250,000

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St. Tammany Parish Government

Our Mission

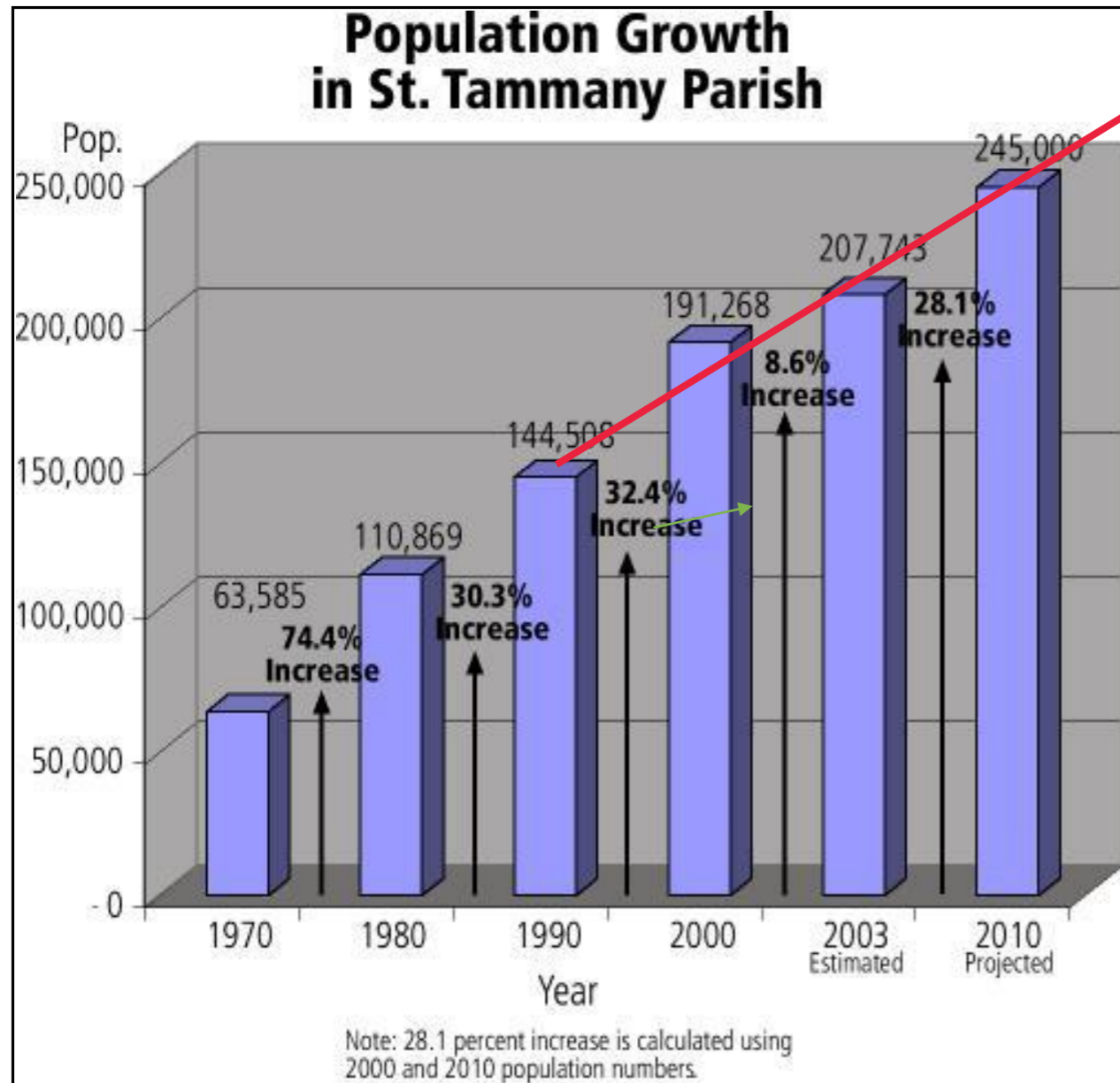
“The mission of the St. Tammany Parish Decentralized Management Program is to protect and enhance water quality in St. Tammany Parish through a targeted watershed approach.”



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Population “Driver”



- St Tammany Parish is one of the fastest growing Parishes in LA
- Since 1990, St. Tammany Parish has increased in population from ~145,000 to ~250,000
- An increase of **> 70% in 30 years!**
- Construction to accommodate this growth has impacted many of the Parish streams and rivers



Regulatory “Driver”

As a consequence, many of the stream segments in St. Tammany Parish have been listed on EPA’s 303(d) list of Impaired Waterbodies

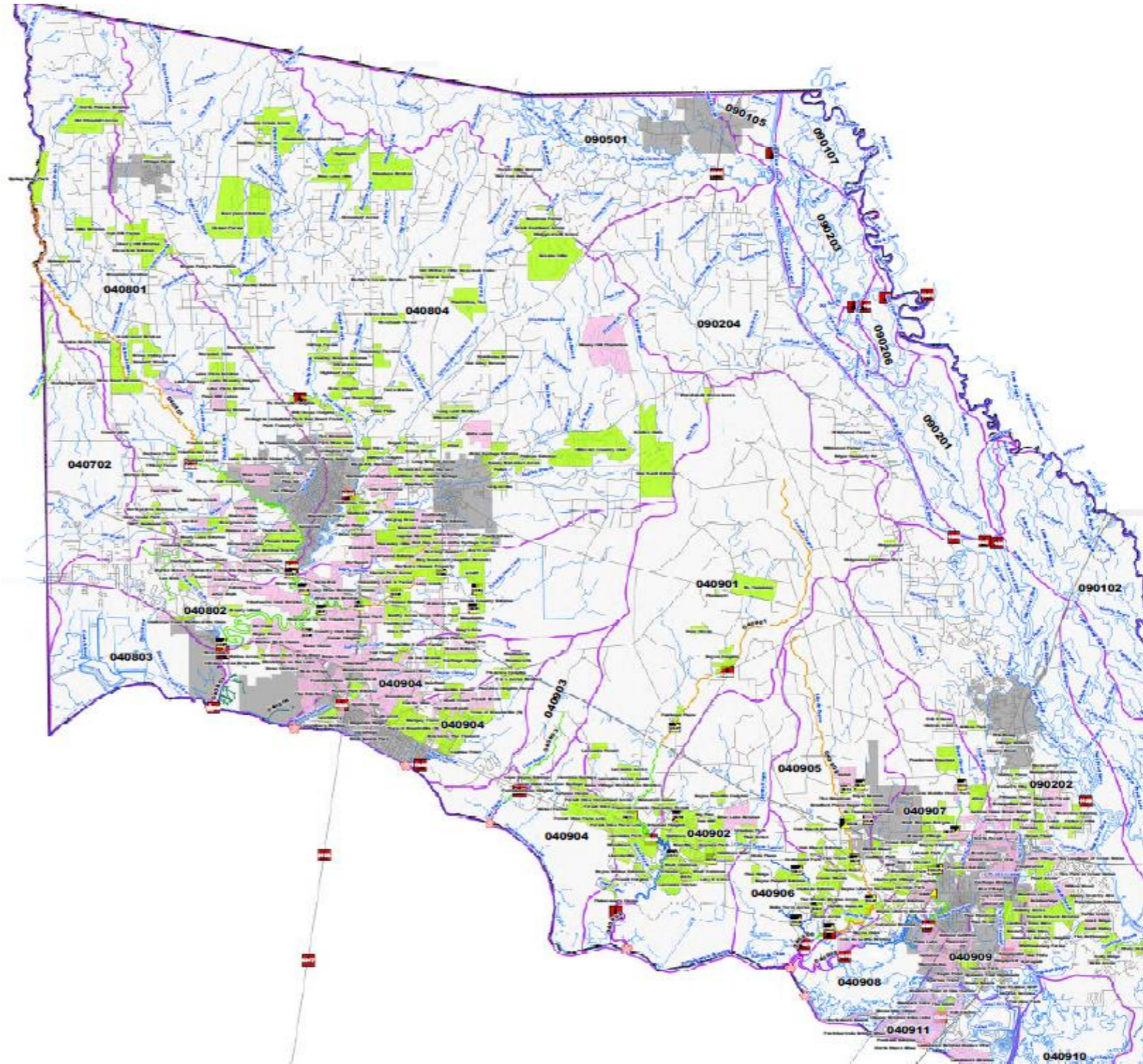
- EPA Total Maximum Daily Loads (TMDL’s) have been completed for **BOD, Nutrients, and fecal Coliforms** to force the Parish to improve water quality that meets the Clean Water Act goals of ***“fishable & swimmable”***
- The major source of these constituents in the watersheds are from Nonpoint Sources (NPS)
- These NPS are predominantly underperforming wastewater treatment plants or individual residential treatment plants



Mosquito carriers of West Nile Virus are frequently found in the organic-rich septic ditches

Regulatory “Driver” (Continued)

- There are ~ 1200 subdivisions & phases in STP to date many of which are “unsewered” (green areas on map)
- *Per LDH, there are ~ 35,000 unsewered residences in STP*



St. Tammany Parish is taking multiple approaches to address the impairments in the Watersheds

Sewer Inspection Program (SIP)
Electrical Transfer
(since 2002)

Pollution Source Tracking
EPA Grants
(since 2016)

Department of Environmental Services
Decentralized Management Program (DMP)
(since 2017)

Sewer Inspection Program (SIP)

- Residents and commercial entities in unincorporated St. Tammany Parish apply for on-site inspection in order to transfer electricity from one owner/occupant to another
- The program was established when Council Ordinance 2455 was adopted in September 2002
- Inspections began 2003; Today ~14 SIP inspections are conducted per day
 - >26,000 inspections have been conducted
 - >25,000 Sewerage Inspection Permits have been issued



EPA Grants: Pollution Source Tracking in Watersheds

Includes: on-site inspections, re-inspections (should a system fail), homeowner education and outreach, water quality monitoring and sampling

Bayou Liberty 1 & 2:

~ 4,000 inspections over 3 years

34 unsewered subdivisions within the watershed (including Ozone Woods)

Abita River:

~2,500 inspections over 3 years

32 unsewered subdivisions within the watershed (including Tammany Hills)

Ponchitolawa Creek:

~1,700 inspections over 1 year

20 unsewered subdivisions within the watershed



Goals of the Grant Programs

Instruct homeowners on proper operation and maintenance of their aerated treatment units

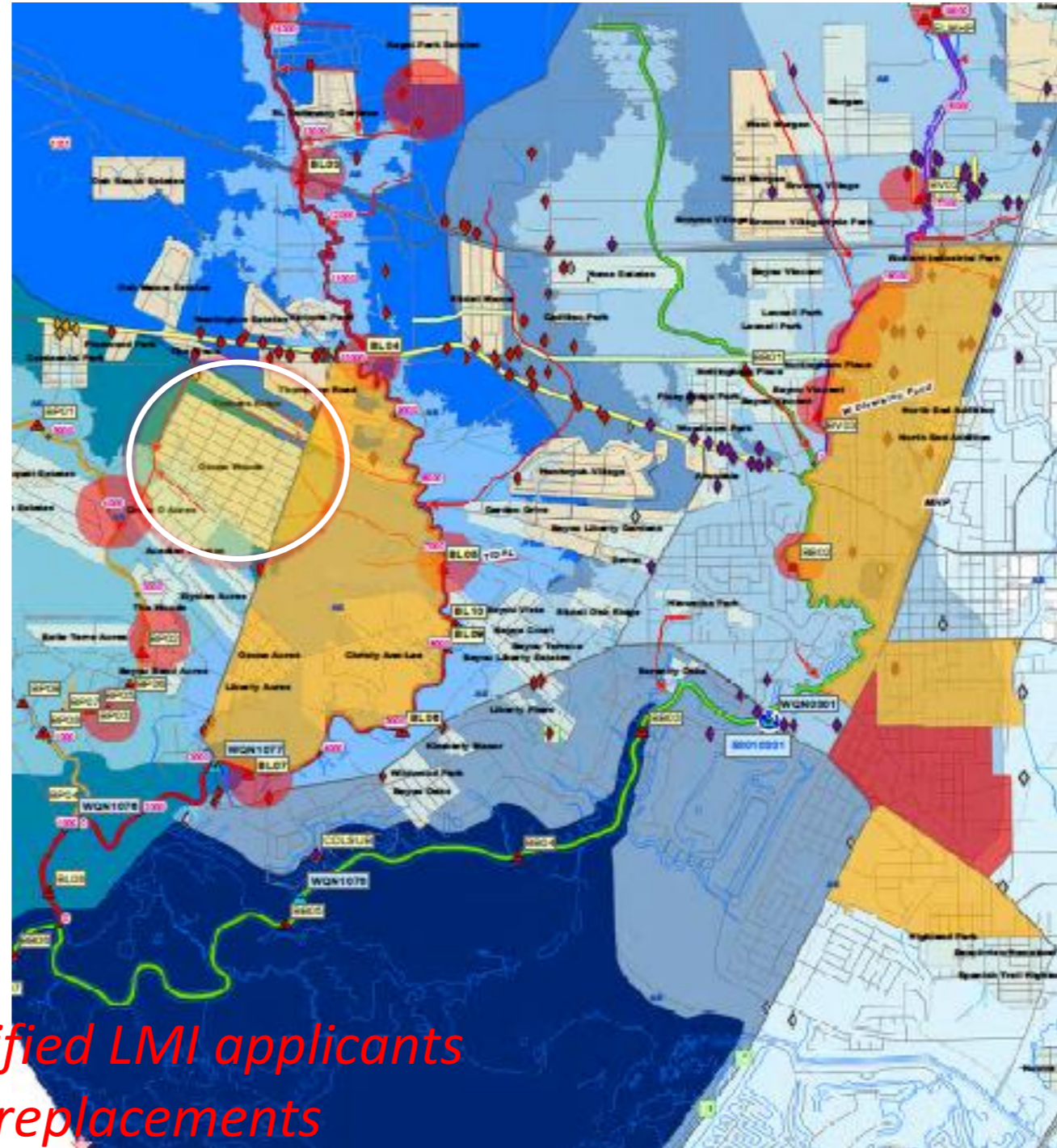
Attain compliance through current Parish ordinances

Sample and quantify organics, nutrients and fecal coliform removal with subsequent DO improvement, due to improved ATU performance

“Pollution Source Tracking in Bayou Liberty Watershed” *Pilot Program*

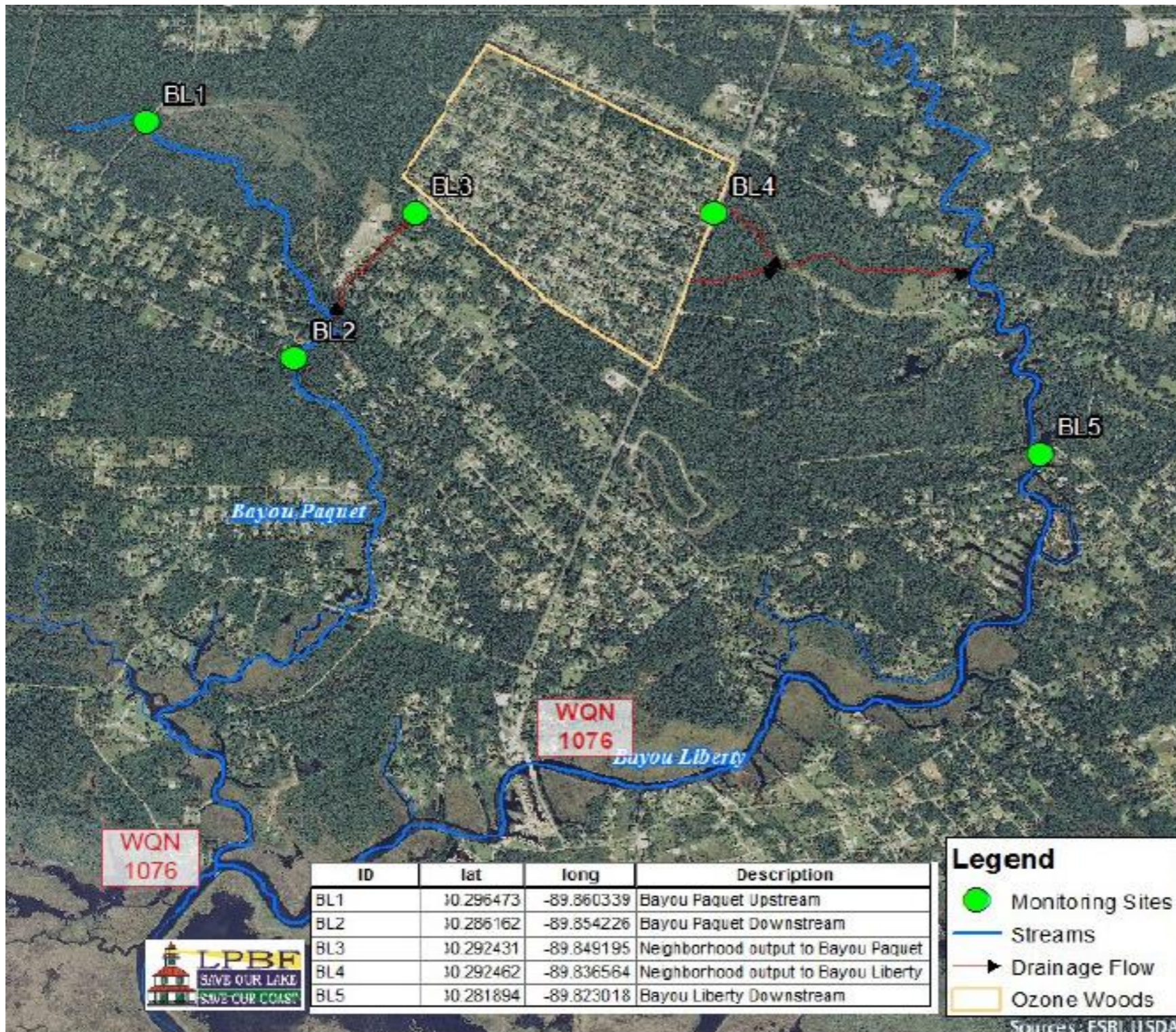
Ozone Woods Subdivision

- EPA grant (2016-2019)
- Selection criteria for inspection areas were based upon:
 - Dense development (856 homes)
 - LMI Residences
 - Proximity to DO Hot Spot
 - Proximity to LDEQ WQMS



CDBG grant funding helps qualified LMI applicants pay for repairs and septic tank replacements

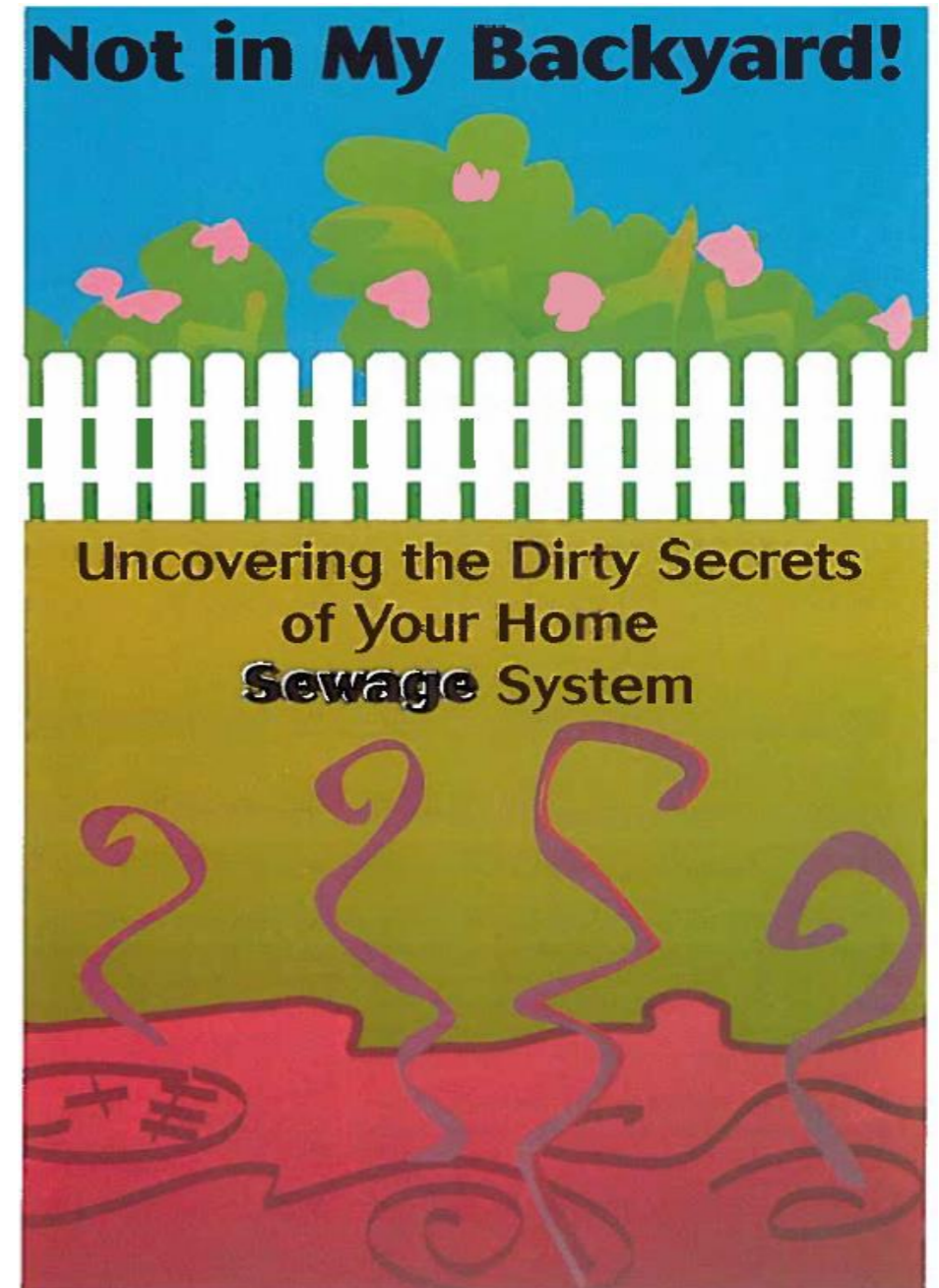
WQ Sample Sites in Bayou Liberty Watershed



- BL1 is upstream of the study site
- BL2 is on the main stem of Bayou Paquet (impacted by Ozone Woods)
- BL5 is on the main stem of Bayou Liberty (impacted by Ozone Woods)
- BL3 & BL4 are subdivision outfalls (highest concentration of pollutants)

Educating Homeowners

- Homeowners are taught proper Operation & Maintenance of their sewage treatment systems
- A brochure (by LPBF) is left after initial inspections that review proper O&M
- Homeowners of failed systems are allowed time for repairs:
 - 1st Failure – 60 days (reinspect)
 - 2nd Failure – 30 days (reinspect)
 - 3rd Failure – 30 days & Enforcement Letter
 - 4th Failure – 21 days (reinspect)
 - 5th Failure – JP Court
- * System replacement – 180 days



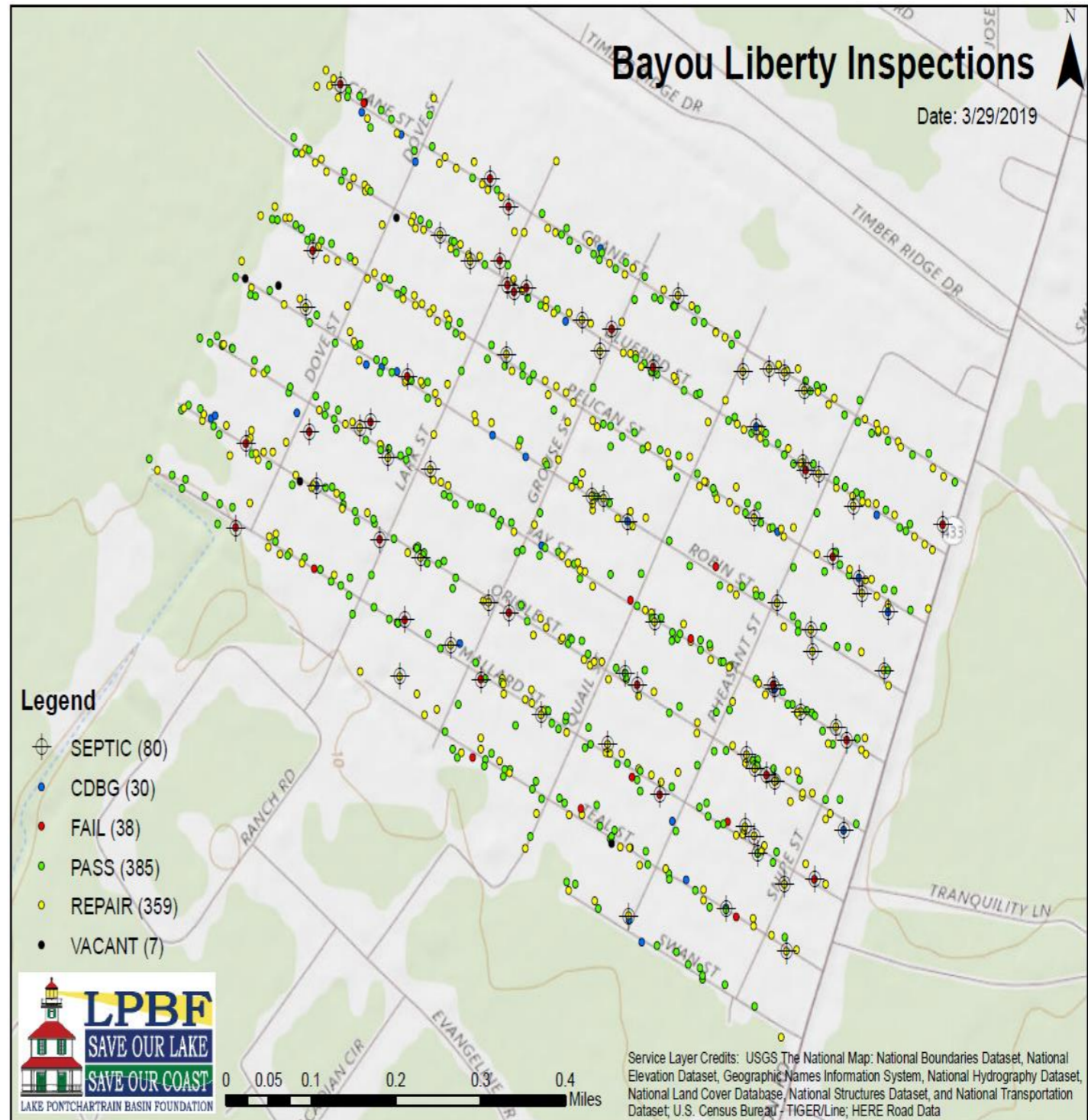
Enforcement

- After 3rd inspection fails, STP sends an enforcement letter stating that fines of \$100/day (not to exceed \$10,000) may be levied.
 - Homeowners are given additional 30 days
 - Most noncompliant units are repaired at this point
 - When the enforcement letter is sent, Parish sends a CDBG grant application for “Repair & Replace,” in the event the homeowner is LMI
- If no response, a FINAL notice is sent informing the homeowner they may receive a summons to Justice of Peace Court, where they will be assessed court costs, fines & compelled to fix the unit
 - Only 11 of 5,500 systems received summons
 - To date, 2 have gone to court



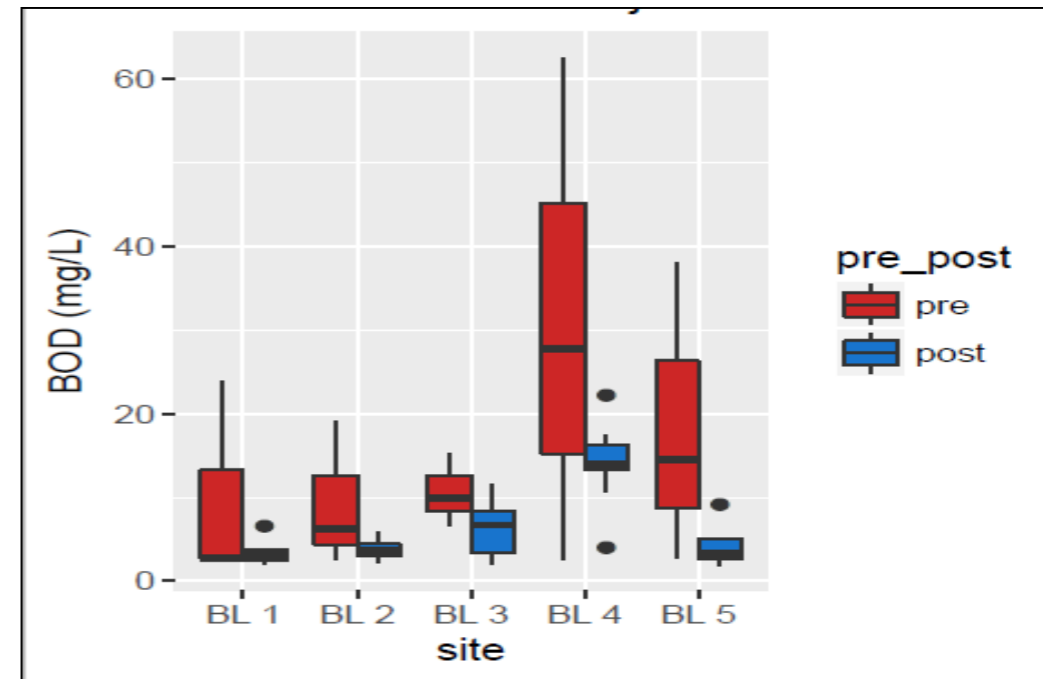
Ozone Woods SD Improvements: Inspections

- 856 homeowner on-site systems had initial inspections
 - 724 individual ATUs
 - 132 unpermitted septic tanks
- 436 of the ATUs and all 132 septic tanks failed inspections (66% initial failure rate)
- 347 of the ATUs have passed inspections and 82 of the septic tanks have been replaced (80% PASS rate on ATUs and 66% on septic tanks)!



Ozone Woods SD Improvements: WQ

- Lower final concentrations and lower variability
- Reductions up to:
 - BOD₅ 434%
 - Conductivity 725%
- Homeowner systems are not rated for nitrogen, but improved O&M resulted in reductions up to:
 - TN 60%
 - NO₂-NO₃ 169%
- Even without chlorination, reductions up to:
 - FC 53%

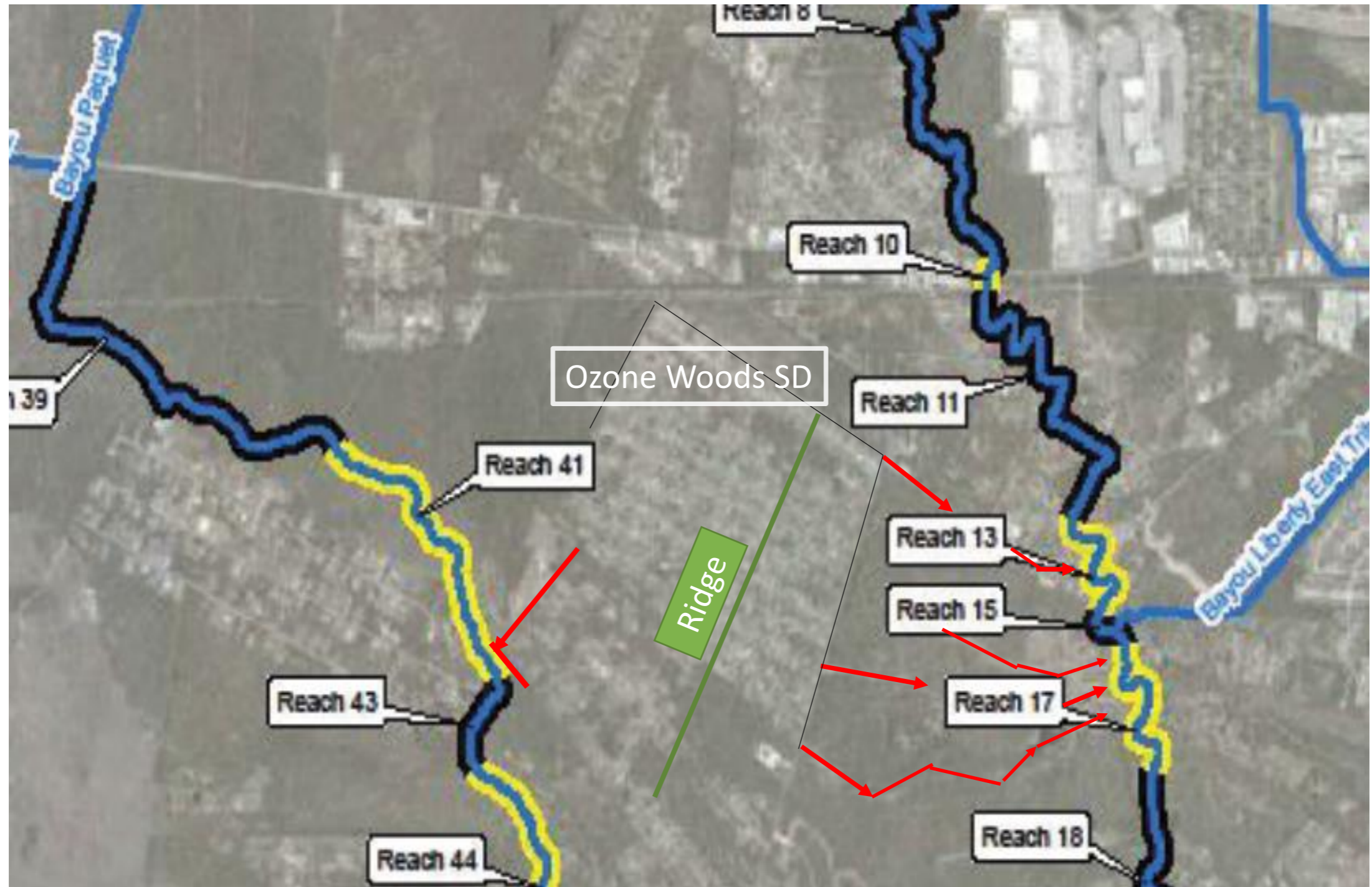


% Change (means) from Pre-Inspections								
Site	DO	Conduc-tivity	BOD ₅	FC	TSS	TN	TP	NO ₂ -NO ₃
BL1	3.1%	-725.0%	-223.4%	28.3%	-44.0%	-1.1%	64.5%	29.6%
BL2	6.5%	-56.3%	-169.6%	84.0%	37.4%	-45.9%	-20.6%	-106.8%
BL3	-81.6%	-38.3%	-95.6%	-21.3%	-192.8%	-60.8%	9.5%	-169.0%
BL4	6.2%	-11.0%	-181.8%	-53.0%	-70.5%	-15.1%	12.2%	-90.8%
BL5	-33.0%	-674.8%	-434.3%	92.4%	61.2%	-10.0%	34.2%	63.3%

*215,500 GPD of improved discharges resulted from the inspection program...
600 lbs/day of BOD₅ removed!*

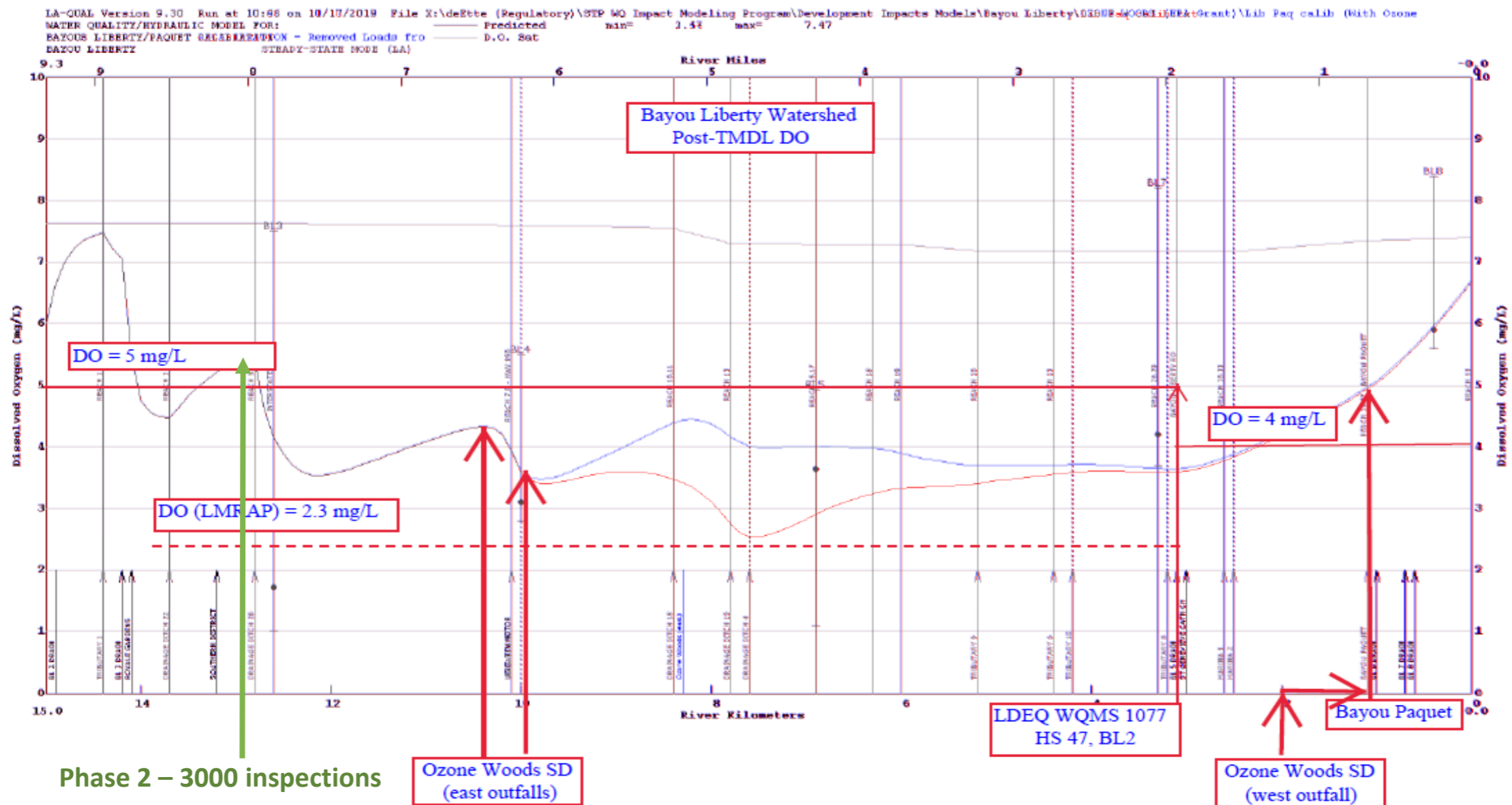
Ozone Woods SD Outfalls & Model Reaches

- Ozone Woods SD (west outfall) to Bayou Paquet (Reach #41-43)
- Ozone Woods SD (east outfall) to Bayou Liberty (Reaches #13,15,17)



Ozone Woods SD Improvements: WQ

- 856 inspections
- 215,500 GPD of improved discharges resulted from the inspection program
- 600 lbs/day of BOD₅ removed



Phase 2 of the inspection program in Bayou Liberty will have 3000 inspections

Ozone Woods SD Improvements: Ditches



LDEQ Environmental Leadership Award (ELP)

- Results of the Bayou Liberty Watershed Pilot Project were phenomenal!
- For this program, St Tammany Parish was awarded LDEQ's Outstanding Achievement Award under the Environmental Leadership Program (ELP) in April 2019



Decentralized Management Program

- Department of Environmental Services (DES) inspectors began inspections in July 2017 (1.5 yr. after pilot program)
- 13 additional subdivisions in 2 additional watersheds have been inspected door-to-door



Compliance Rates are Amazing!

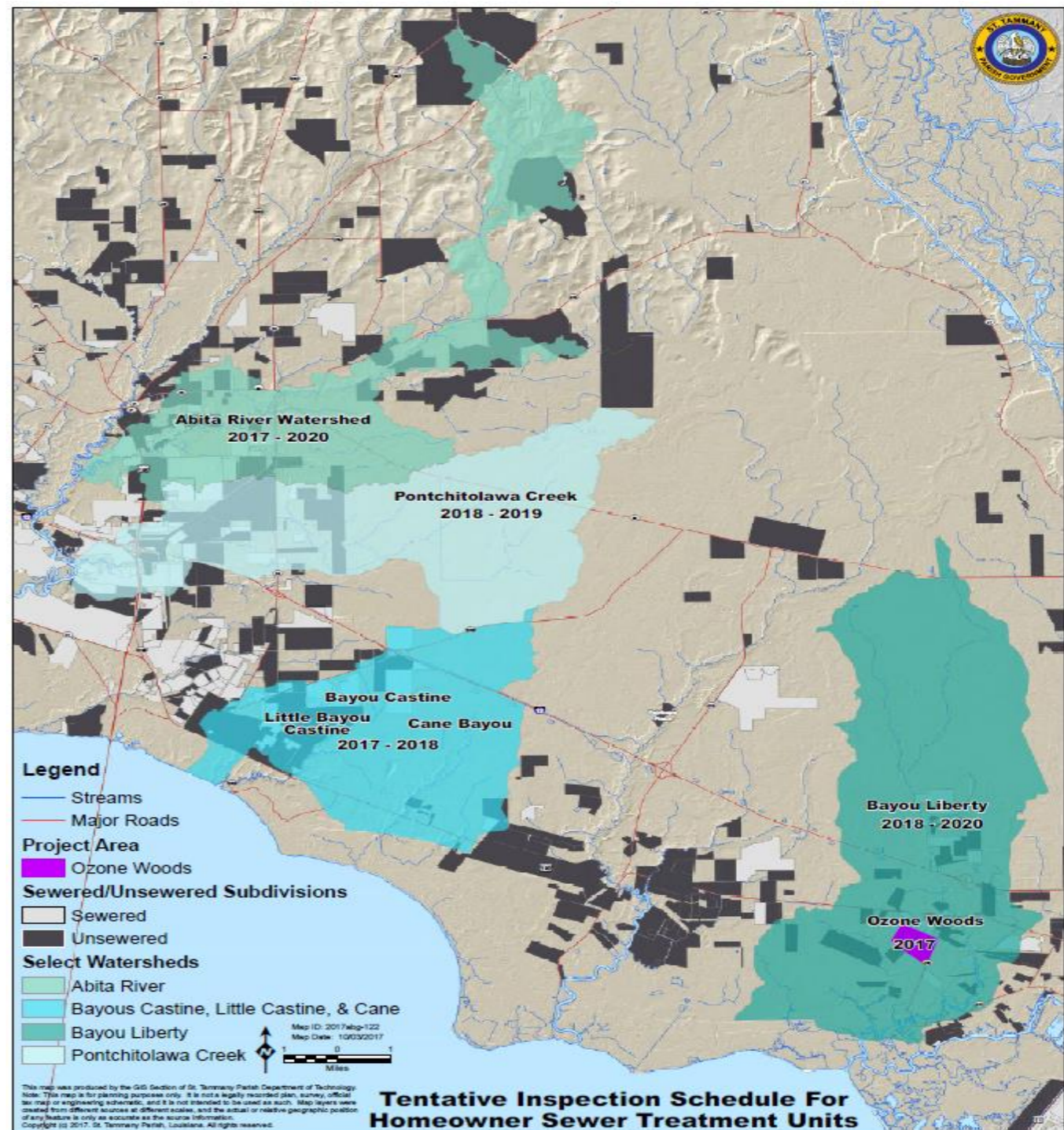
As with the grant-funded Pilot Program:

- Typically, there is an initial failure rate of 50%
- Ordinances allow us to enforce compliance
- Some subdivisions have a 100% compliance rate!



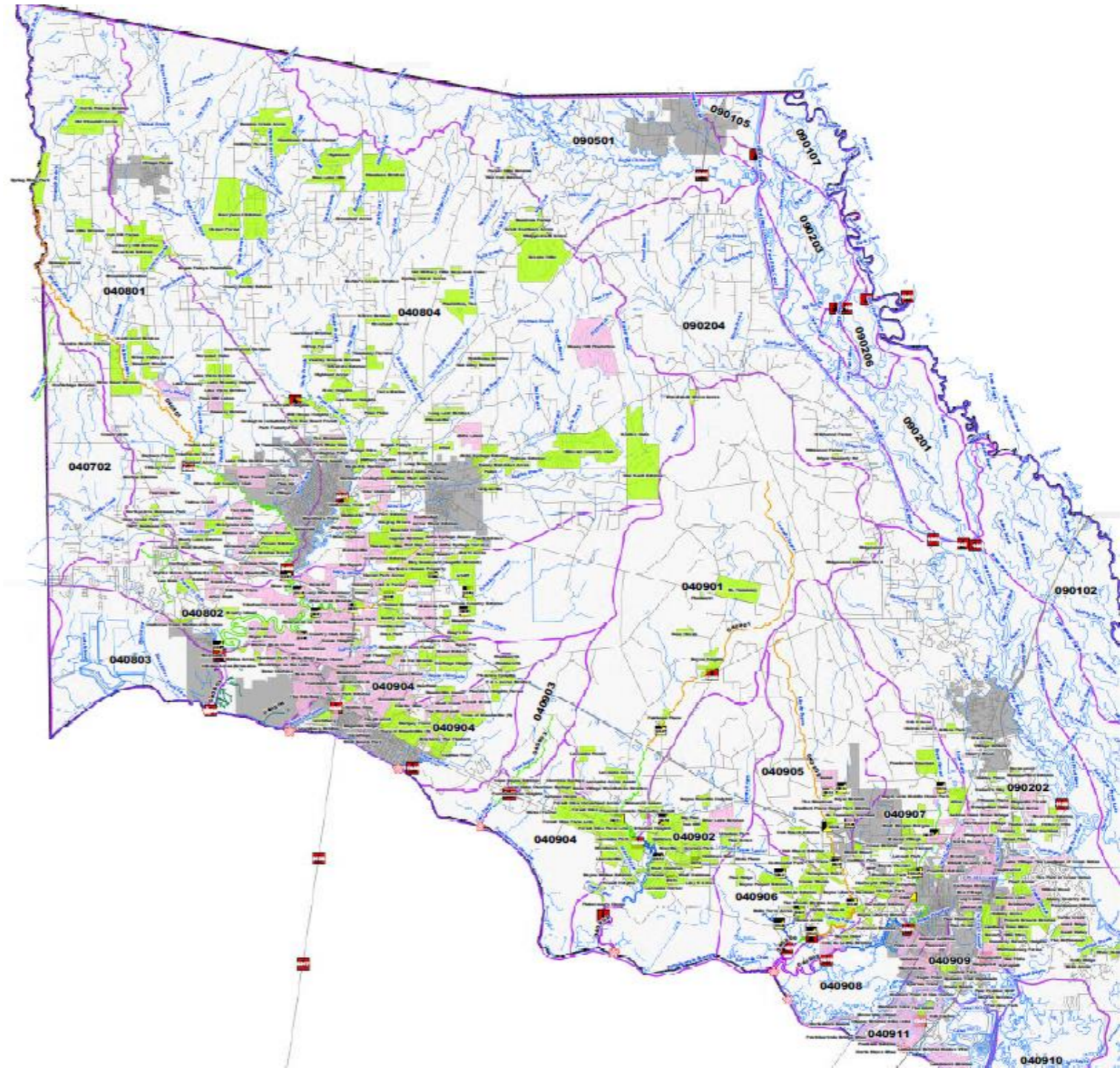
Combining the Pollution Source Tracking and the Decentralized Management Program

- >5,000 individual home on-site sewer systems have had initial inspections in 16 subdivisions & 5 watersheds since 2017
- >2,300 of those failed initial inspections
- >1,800 of those have made the necessary repairs to their sewer system
- >8,000 total inspections have been conducted between the two programs (including initial and re-inspections of failed on-site sewer systems)



Decentralized Management Program: Ongoing

- Share QAPP, *in situ* & sampling data with LDEQ
- Continue the DMP throughout unincorporated St. Tammany Parish
- DES inspectors will continue inspecting and instructing homeowners regarding proper O&M of their sewer systems



Continued WQ Improvements

As more individual on-site sewer systems are repaired and the ecosystem stabilizes, we can expect to see greater WQ improvement throughout the Parish... and de-listing of impaired waterbodies



Our Vision

St. Tammany Parish will be the place to be along the I-12 Corridor. Through EFFICIENT, TRANSPARENT and ACCOUNTABLE operations, St. Tammany Parish Government will promote a STRONG ECONOMY with INNOVATIVE DEVELOPMENT, while investing in our natural environment and cultural diversity, to preserve the QUALITY OF LIFE that makes St. Tammany Parish vibrant and unique.



Contact Us

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Questions or Comments?

Thank you for your attention and interest in our GREAT Parish! If you think of other questions, please feel free to contact us.

We will be happy to assist you.