

# Keeping the Field Safe: Bureau of Engineering Services

**Jeremy Harris, P.E.**  
*Compliance Engineer*

**Barbara Featherston, P.E.**  
*District IV Engineer*

**Dan MacDonald, P.E., M.B.A.**  
*Deputy Chief Engineer of Infrastructure and Finance*

# Agenda

- Water System Emergency Response
- Failing Water Systems
- Drinking Water Revolving Loan Fund
- Message from the Chief

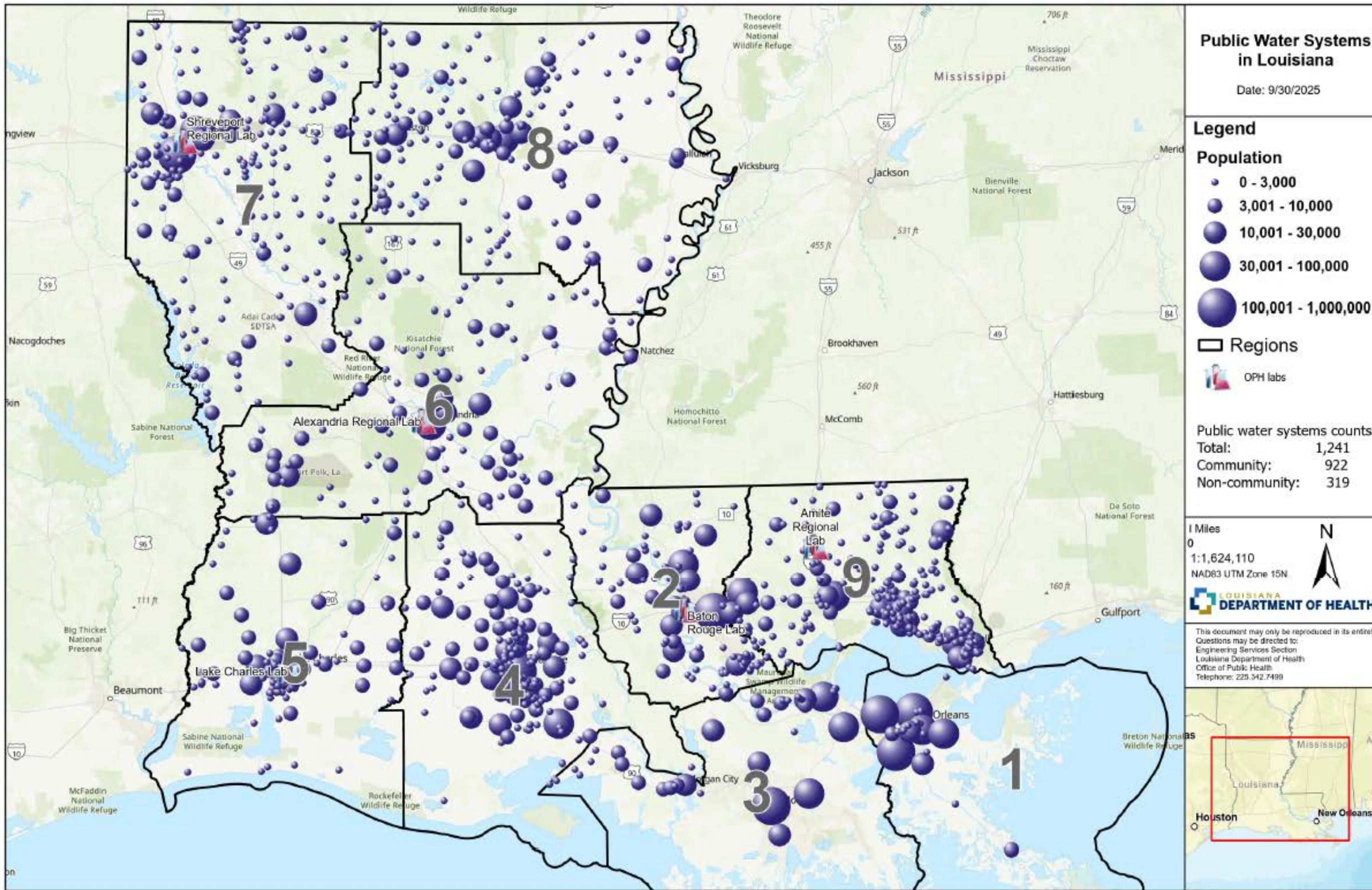
# Water System Emergency Response

**Jeremy Harris, P.E.**  
*Compliance Engineer*

# Engineering Services Overview

LDH – Bureau of Engineering Services at a glance (normal operations):

- **Safe Drinking Water Program:** Regulates over 1,200 public water systems for compliance with state and federal drinking water regulations.
  - **Water Sampling and Sanitary Surveys:** Conducts infrastructure inspections and sampling to ensure compliance with National Primary Drinking Water Regulations.
- **Water and Wastewater Operator Certification Program:** Ensures operators possess the qualifications and competence to manage plant operations and ensure water quality meets public health standards.
- **Drinking Water Revolving Loan Fund:** Provides low-interest loans and technical assistance to public water systems for infrastructure upgrades and compliance with drinking water regulations. Funded by federal capitalization grants from the U.S. EPA.
- **Permitting of Water and Wastewater Infrastructure:** Reviews engineering and permitting of new construction or modification of water and wastewater infrastructure.



# Priority #1



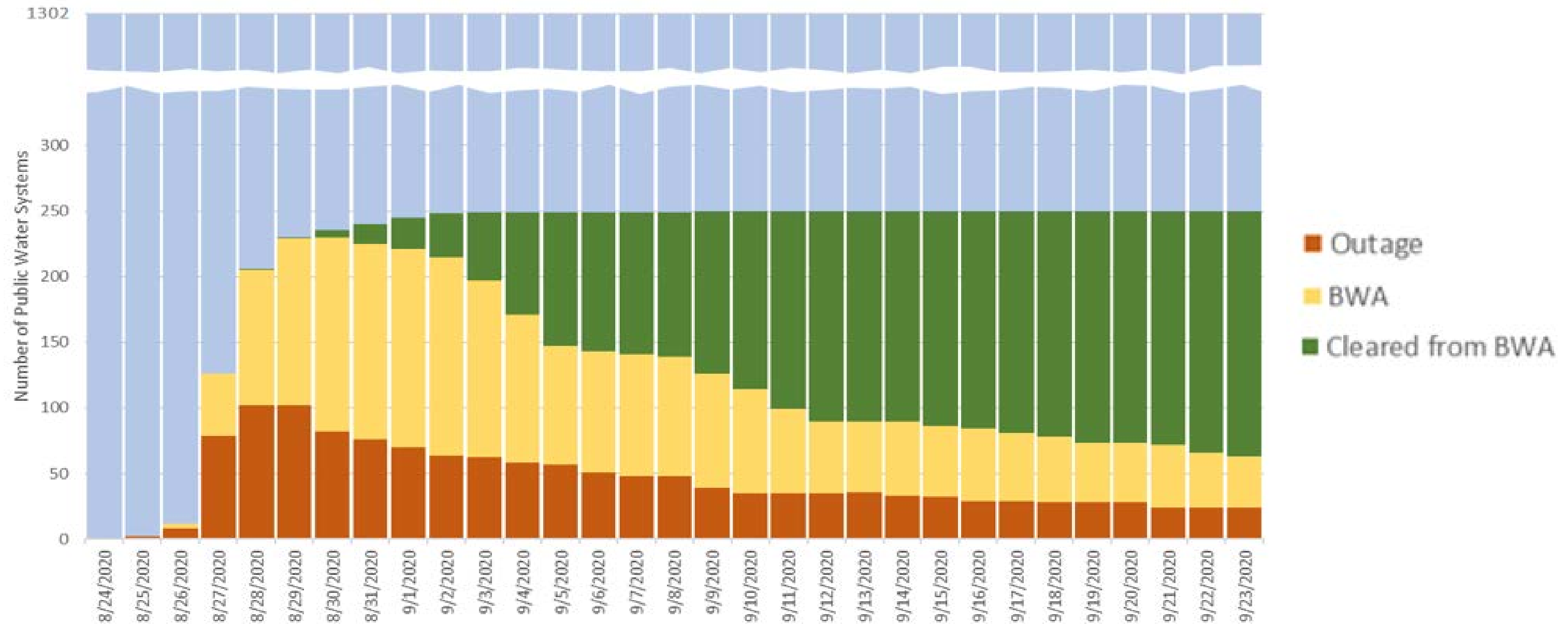
- Engineering Services has numerous routine tasks, but **emergency response is Priority #1 during an emergency event.**
- Staff are trained to shift focus while ensuring crucial routine tasks are still being performed.
- Emergency events seem to be occurring more frequently and in different forms, not exclusive to hurricane season.

# Emergency Response Roles and Responsibilities

- Our program is integrated in GOHSEP Emergency Support Function-12 (Utilities).
- During an event, Engineering Services staff perform assessments to determine the operability of public water systems. This information is used to generate water advisory reports (i.e., water outage, boil water, and cleared).
- Water advisory reports are distributed to the public and to our state and federal partners, who use them to make critical decisions such as the potential need to evacuate hospitals, prisons, and nursing homes; generator prioritization; bottled water distribution; and bulk water hauling.
- Information must be accurate and reported timely.

# Hurricane Laura Drinking Water Impacts

Hurricane Laura Statewide Drinking Water Impact and Recovery Progression



# Emergency Preparedness



**Preparation is key to an effective response.**

- DWERT (Drinking Water Emergency Response Tool)
  - A new online tool used to track our assessments and the operability of water systems.
- Staff have standing contact assignments to allow for established relationships for assessment accuracy.
  - Friendly regulators are here to help.

# Other Emergency Response Roles & Responsibilities

## Other responsibilities:

- Conduct investigative water sampling as needed (saltwater intrusion, St. Joseph Water System, backflow events, Smitty's fire, etc.).
- Provide technical assistance.
- Coordinate with water systems, sample trucks and state labs to clear boil advisories (18-hour test with 30-hour sample viability timeframe).
  - State Lab can provide the mobile laboratory and staff support if needed to expedite the clearance of boil advisories.
- Every event is different — flexibility is key!

# Tiger Team

- Louisiana has experienced an increase in environmentally-related emergencies.
- These events threaten drinking water quality and the health and safety of Louisiana residents.
- The establishment of an Engineering Emergency Response Unit named “Tiger Team” will:
  - Enhance statewide emergency readiness;
  - Provide immediate response to statewide emergencies;
  - Ensure faster, coordinated response to protect residents and drinking water;
  - Strengthen public health protection and resilience; and
  - Prevent delays in normal business operations.

# Emergency Response (December 2022 – August 2025)

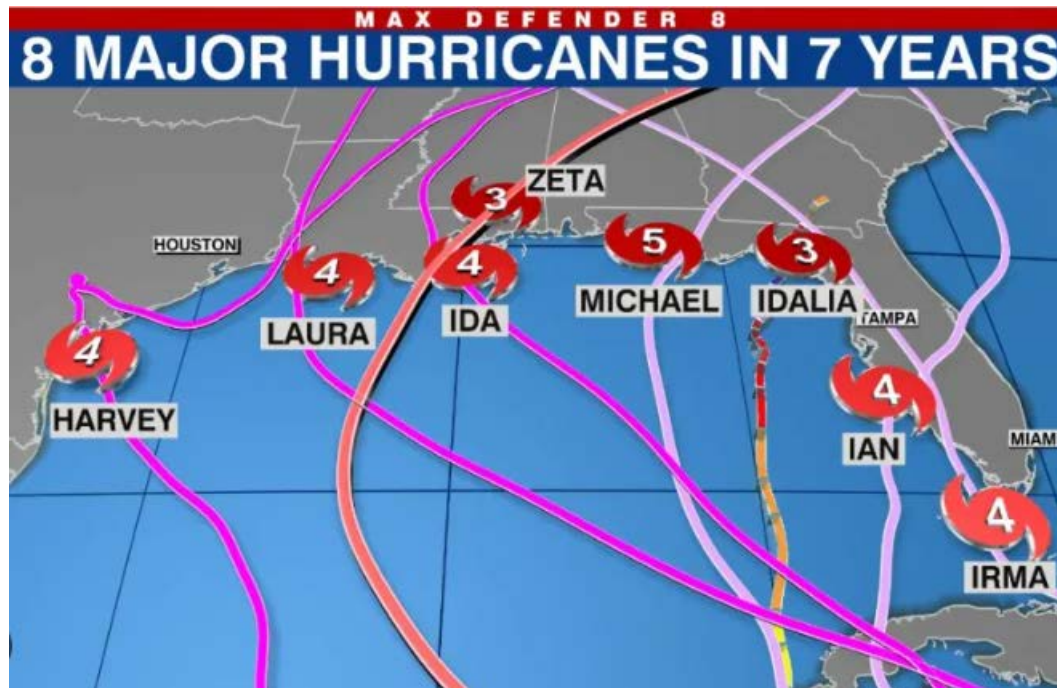
Environmentally-related emergencies include:

EVENT	SEOC ACTIVATION TIME
Winter Weather	December 2022 – January 2023
Summer Drought – Heat Wildfires	August 2023
Saltwater Intrusion	September – December 2023
Winter Weather	December 2023 - January 2024
Hurricane Beryl	July 2024
Walnut Bayou Backflow (Paraquat) Incident	August 2024
Hurricane Francine	September 2024
Saltwater Intrusion	September – October 2024
Winter Weather	January – February 2025
Smitty's Facility Fire	August 2025

# Hurricane Laura



# Miscellaneous Information



- Main factors that influence the number of water systems impacted include location of impact, type/magnitude of the event, and duration of power outage or freeze.
- Water systems under a boil advisory cannot sample until normal power has been restored.
- We have not supported technology or procedures that would allow a facility to have a status independent of its supplier.
- LDH has provided guidance to critical customers (e.g., hospitals) on best practices for emergency water usage:
  - Well and/or storage: Less than 60 days of operation
  - > 60 days would be regulated as a public water system

# Failing Water Systems

**Barbara Featherston, P.E.**

*District IV Engineer*

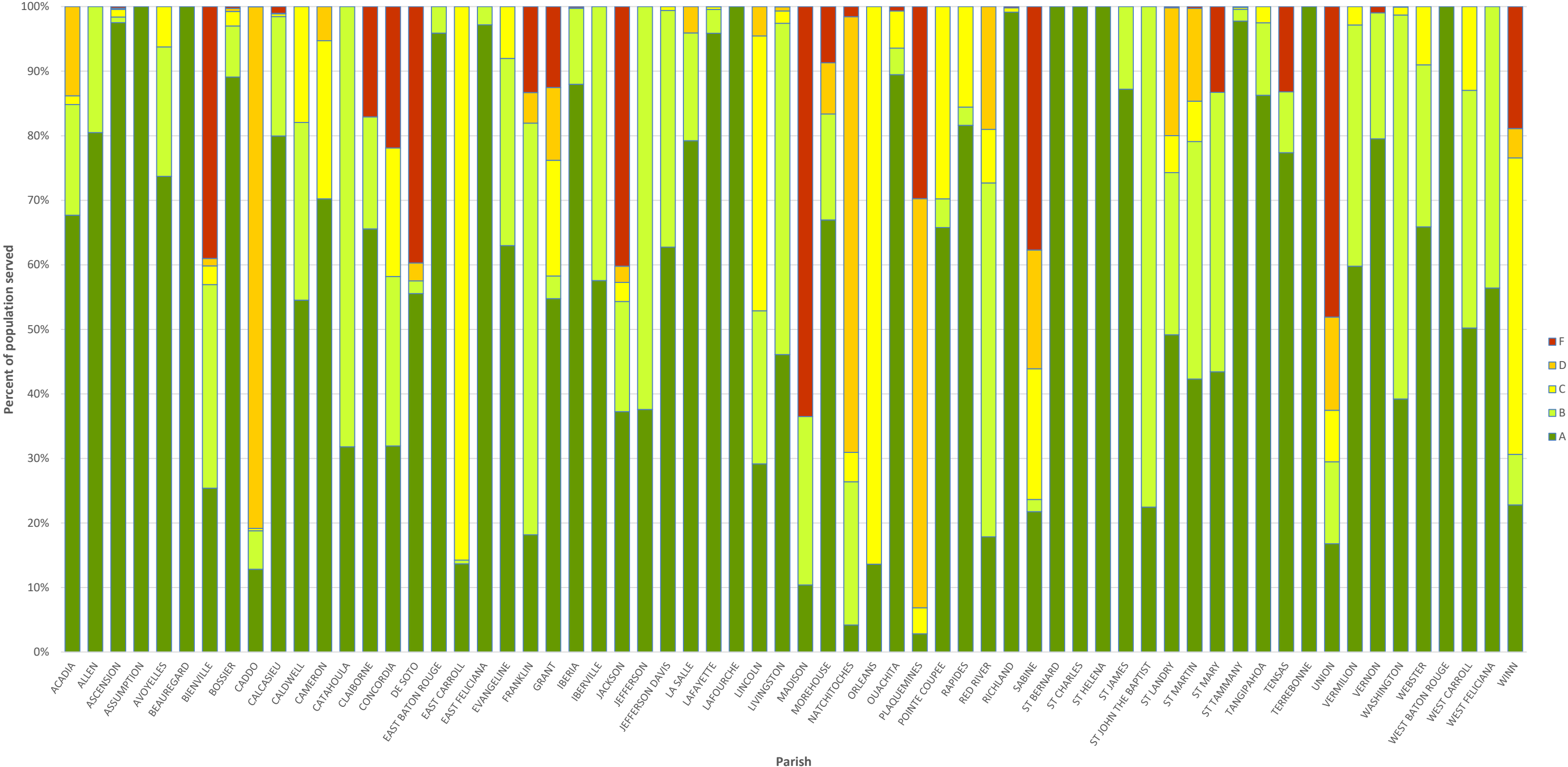
# Community Water System Accountability Rule

## Grading Schedule:

- **Federal Water Quality Violations: 30%**
  - Maximum contaminant level violations, non-compliance with administrative orders
- **State Violations: 10%**
  - Chlorine residual compliance
- **Financial Sustainability: 10%**
  - Implement rate study, current audit, fiscal administrator
- **Operation and Maintenance Performance: 15%**
  - Unresolved significant deficiencies related to operations
- **Infrastructure Violations: 20%**
  - Unresolved significant deficiencies related to infrastructure
- **Customer Satisfaction: 10%**
  - Documented complaints
- **Level of Secondary Contaminants: 5%**
  - Presence of iron and/or manganese

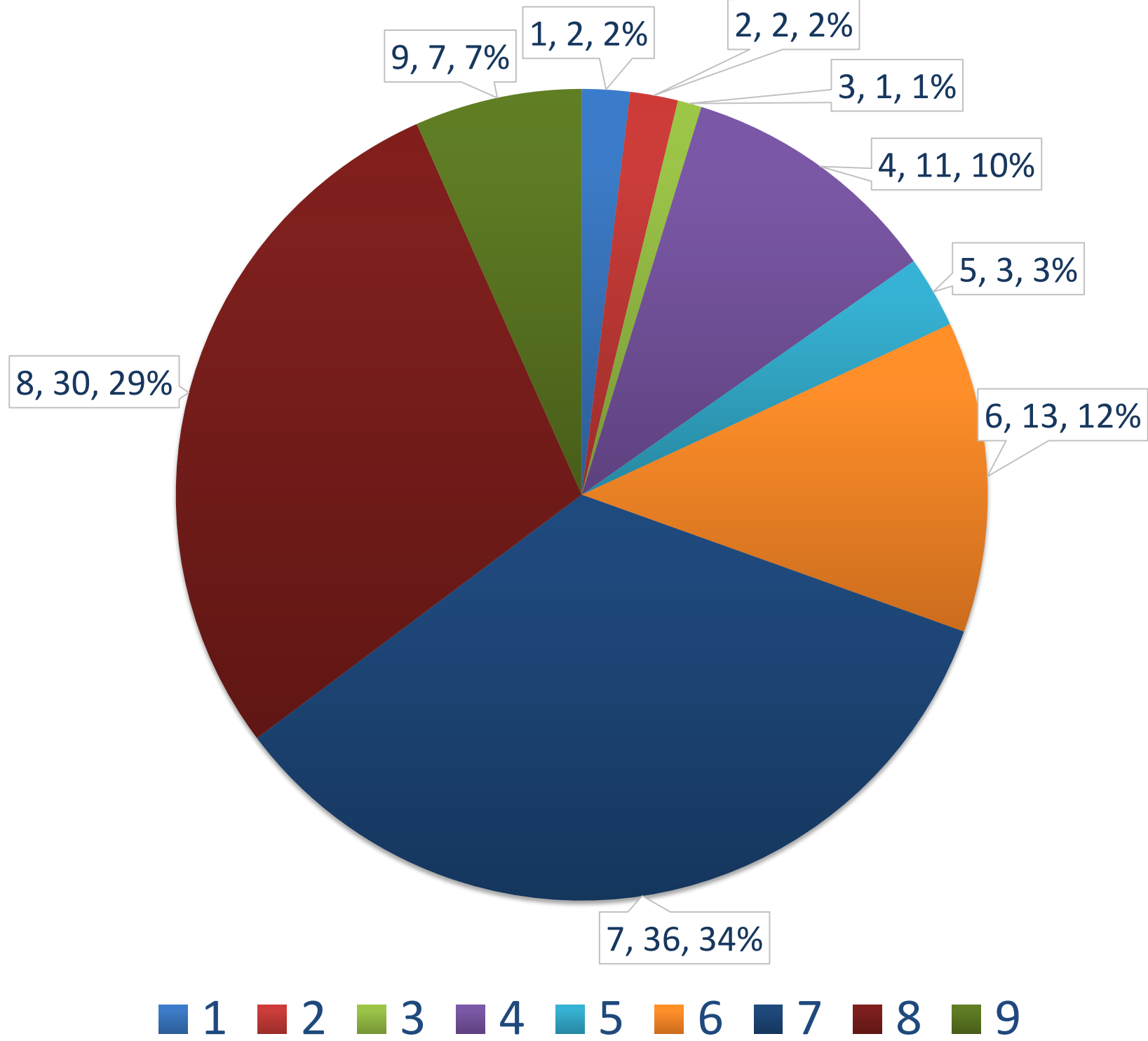
# Targeting Failing Water Systems

Grade distribution by Parish (percent of population served in each Parish)

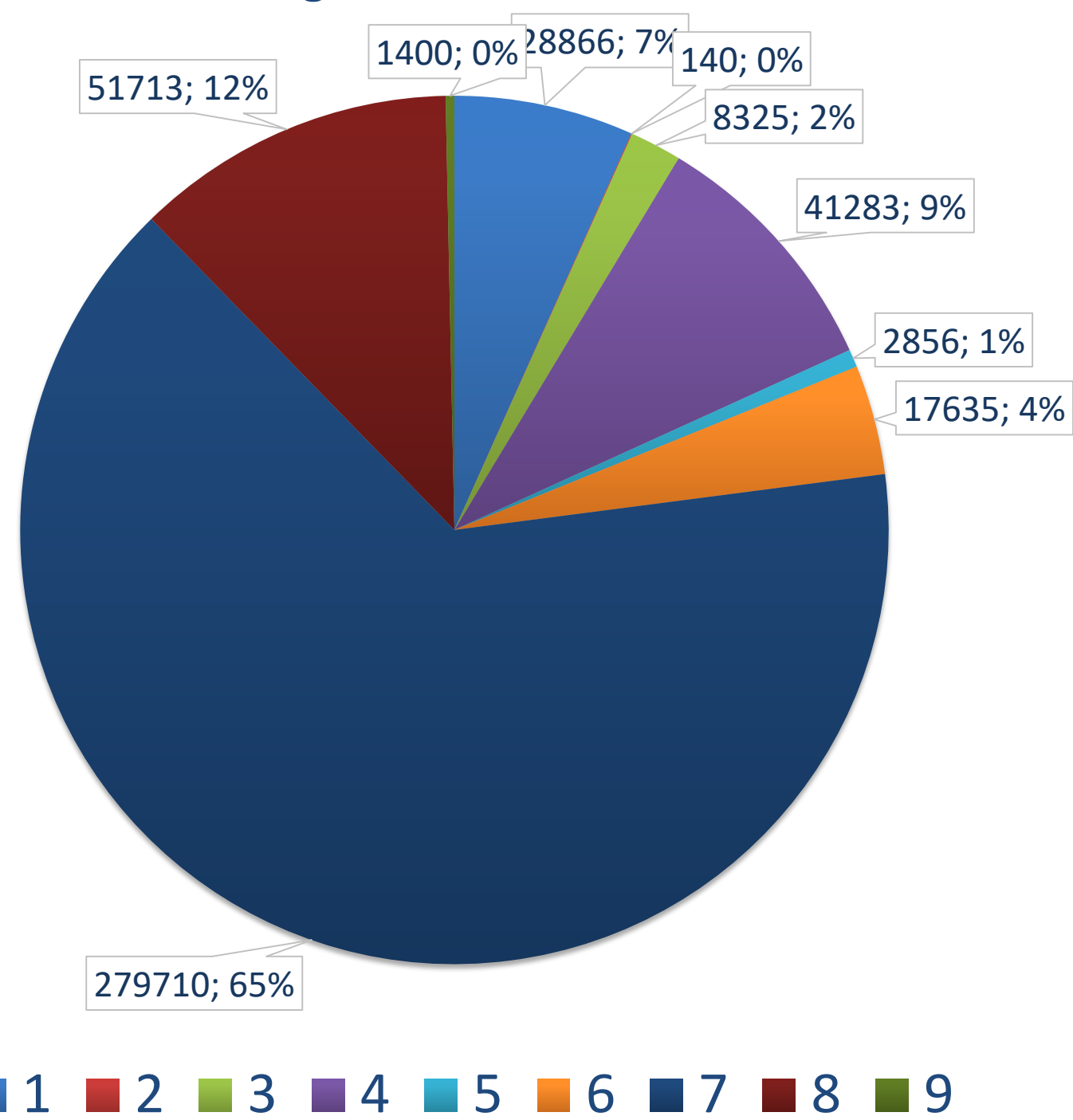


# Targeting Failing Water Systems

Count of D and F systems by LDH Region



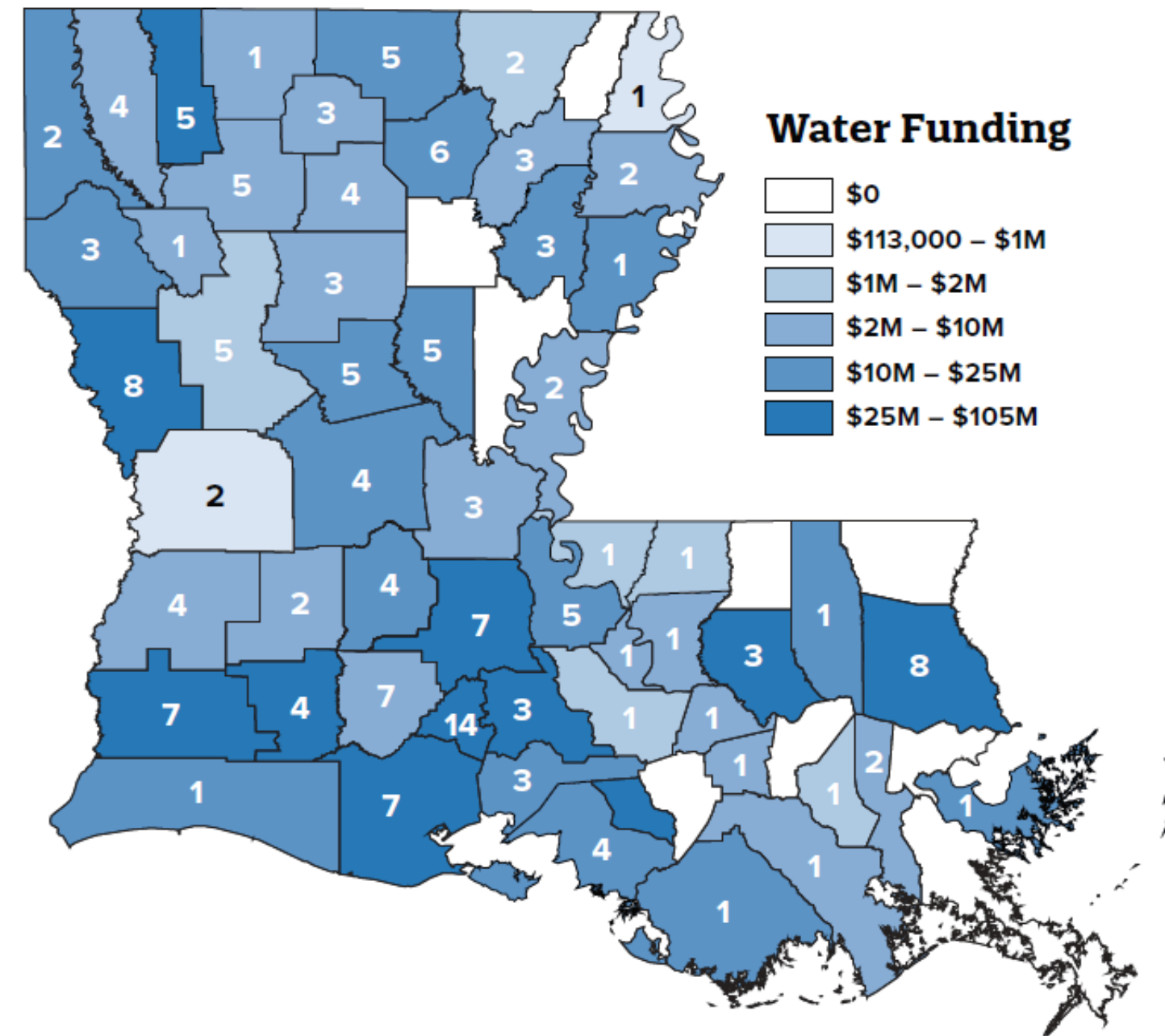
Population served by D and F systems by LDH Region



# Water Sector Program Notes

- The map shows the impact of funding by the number of projects and total funding award in each parish.
- There are **59 projects** to eliminate administrative orders.

## Water Projects: 180



# The 4 R's

## **Receivership**

- Community Water System Accountability Rule empowers this measure
- Additional legislation to provide for support of making tough decisions to remove current control

## **Recurring Investments**

- Legislature has moved to continue funding rounds for water infrastructure improvement with state funds

## **Restructuring Water System Assessments**

- EPA requirement?
- LDH mission

## **Revolving Loan Fund**

- Funding opportunities (loan and federal grants)

# Time Out – Flag on the Play



# Infrastructure Speaks – Are We Listening?



# Drinking Water Revolving Loan Fund

**Dan MacDonald, P.E., M.B.A.**  
*Deputy Chief Engineer of Infrastructure and Finance*

# DWRLF Mission and Purpose

## Mission:

- To improve the public health of Louisiana residents by assisting public water systems (PWS) with delivering safe and affordable drinking water.

## Purpose:

- To provide support in the form of low-interest loans and technical assistance to Louisiana public water systems to help promote compliance with state and federal drinking water regulations, which helps ensure the provision of safe drinking water to protect public health.



# DWRLF Legislative Background

The DWRLF was formed in 1997 with the enactment of the Amendments to the Safe Drinking Water Act:

- Enacted by 1996 amendments to the Safe Drinking Water Act
  - Section 1452 of the Safe Drinking Water Act, as amended
  - 42 U.S.C. 300j-12: State Revolving Loan Funds
- Defined in Code of Federal Regulations (CFR)
  - 40 CFR Part 35 Subpart L
- Created in Louisiana via Act 480 in 1997
- Amended via Act 67 of 2003 and Act 39 of 2006 (to make some clarifications and provide for the Environmental Determination to be performed by LDH instead of LDEQ)

# DWRLF – State Revolving Funds

- The Drinking Water Revolving Loan Fund (DWRLF) is Louisiana’s state revolving fund (SRF) for drinking water and is operated through LDH/OPH’s Bureau of Engineering Services.
- SRFs for drinking water were first established by the 1996 amendments to the Safe Drinking Water Act and are funded in every state through annual capitalization grants from the U.S. EPA that require a 20% state match.
- **Simply put:**
  - LDH/OPH’s DWRLF is an infrastructure bank that provides below-market low-interest loans (currently at 2.45%) to public water systems for Louisiana water system infrastructure improvement projects **only**.
  - Every now and then, we get some additional money from impactful acts.

# DWRLF – Impactful Act (IIJA)

## Infrastructure Investment and Jobs Act (IIJA) of 2021:

The IIJA provided additional funds for five years (2022, 2023, 2024, 2025, and 2026) through the SRFs for three separate and distinct pots, each with its own specific purpose and principal forgiveness (free money) opportunity:

### 1. **General Supplemental (GS):** These funds can be used on any improvements normally eligible to the DWRLF.

- The annual allotment for the General Supplemental fund is expected to be \$31,379,000.
- In Louisiana, eligible projects will receive 49% subsidy (PF) (with a cap of \$3 million in PF)/51% loan.
- The interest rate for the loan portion of projects will remain at 2.45%. Eligible projects are projects that are normally considered eligible under the DWRLF program annual capitalization grant.
- Examples include distribution, treatment, new or rehab storage tanks and water treatment plants, and new wells or intakes.

# DWRLF – Impactful Act (IIJA)

- 2. Emerging Contaminants (EC):** These funds have a focus on the removal of perfluoroalkyl and polyfluoroalkyl (PFAs) and other emerging contaminants from drinking water. Eligibility for use of these funds includes projects targeting the removal of any contaminants listed on EPA's Contaminant Candidate Lists (CCL) 1 through 5.
- The annual allotment for the Emerging Contaminants fund is expected to be \$10,430,000.
  - In Louisiana, these funds are being used mostly for manganese removal projects (i.e., brown water). Manganese is problematic in Louisiana, which currently has a health advisory when levels of manganese are too high. All projects using this fund are eligible to receive 100% principal forgiveness.
  - Examples include new source, treatment (pressure filters), and consolidation.

# DWRLF – Impactful Act (IIJA)

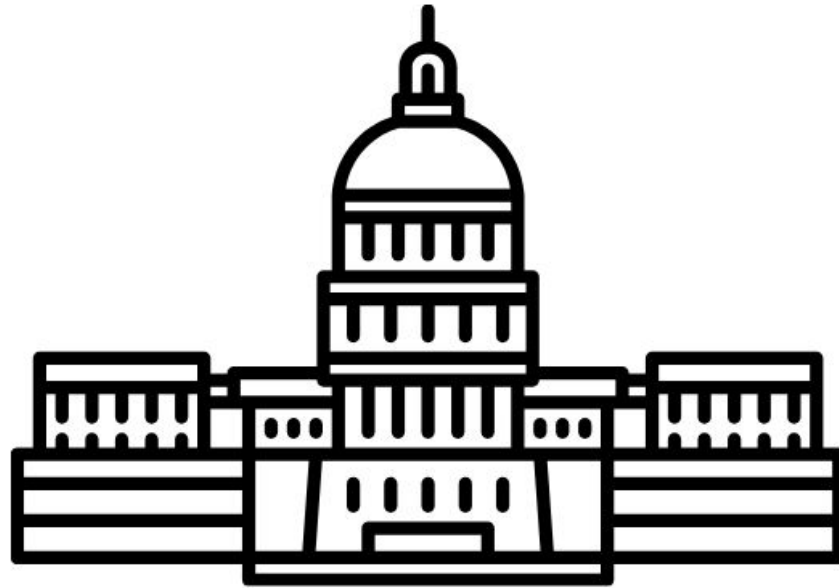
**3. Lead Service Line Replacement (LSLR):** These funds focus on EPA’s “get the lead out” initiative and are allocated for the identification and removal of lead service lines.

- The annual allotment for the Lead Service Line Replacement fund is expected to be \$66,617,000.
- Similar to the general supplemental fund, the mandated subsidy is 49% and the remaining 51% is low interest loan (but not capped at \$3 million free). However, LDH is offering 0% interest on the loan portion of the project.
- Examples include LSLR inventories and complete removal of lead service lines.

# DWRLF Program Funding

- The base DWRLF program funds available each year come from three sources:
  - Annual SRF Federal Capitalization Grant from the U.S. EPA to each state.
  - Annual State Match Funds (20%). The first two years, we were funded by the Legislature, but since 2001, the program borrows the needed funds from a local bank and pays it back the next day with repaid principal (legal shell game that allows us not to have to use State General Funds).
  - Annual principal and interest from existing loan repayments.
- Minus the set-asides:
  - The set-asides are a portion of each grant that is used to fund the administration of the program and other related state drinking water programs, as well as technical assistance providers.
  - Set-asides (max 31% of cap grant)
    - Administration (i.e., salaries, equipment, contracts, etc.): 4%
    - Small systems technical assistance: 2%
    - State program management: 10%
    - Local assistance and other state programs: 15% max

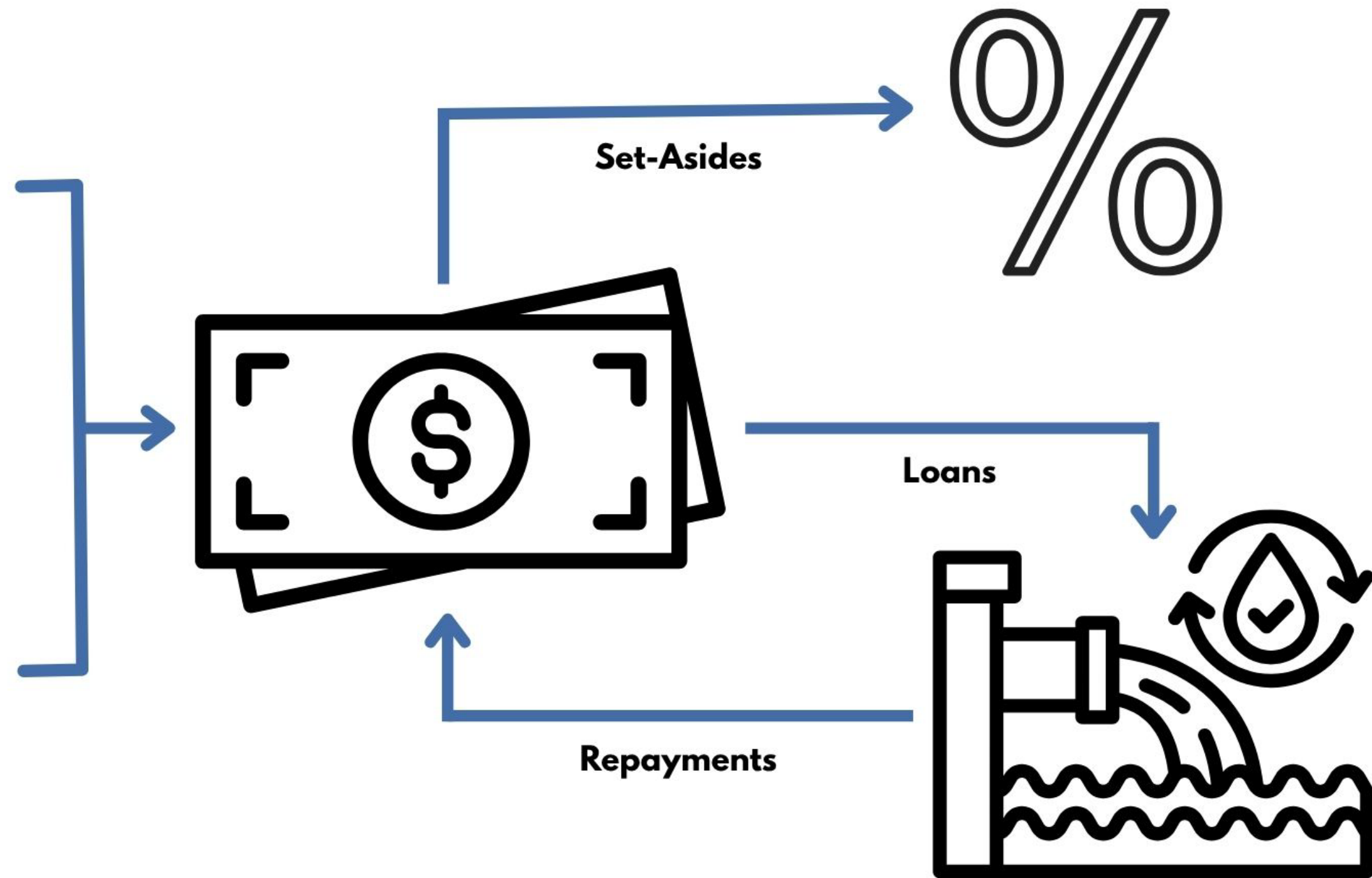
# DWRLF Assistance Provided



Annual Federal SRF Grant



Required State Match



# DWRLF Assistance Summary

## Since DWRLF began in 1999:

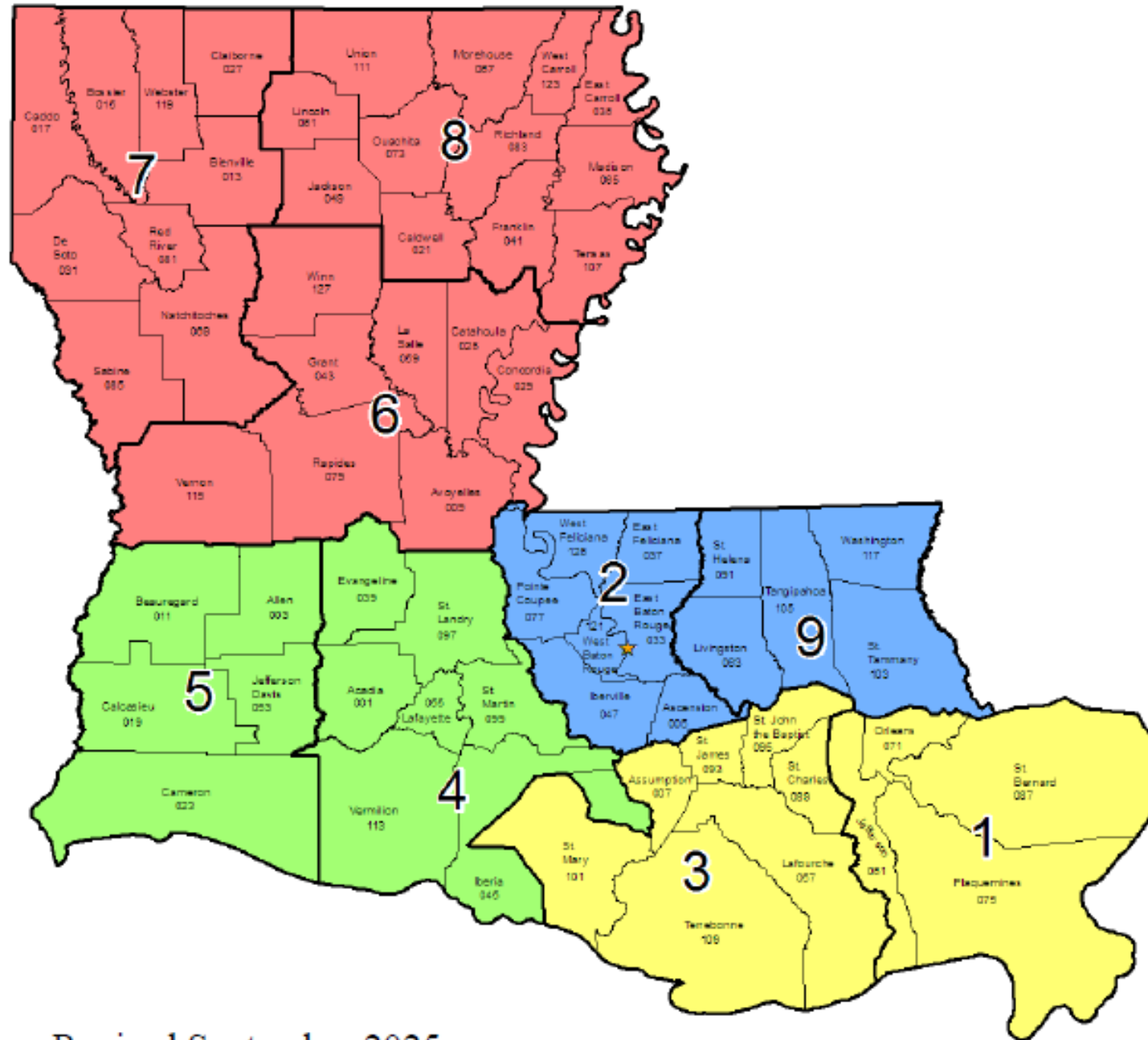
- 206 loans have been closed, totaling \$720 million awarded to Louisiana water systems.
- 123 water systems have closed loans with us.

## This past year (SFY 25):

- 15 loans were closed for a total of \$130,516,800.
- This was a record-setting year for having the largest total closed loan amount in a year, due in large part to IIJA: \$130 million is about 25% of all the funds loaned out in the 25-year history of the program — in one year.



★ Central Office	LDH-OPH-Engineering Services PO Box 4489 Baton Rouge, LA 70821-4489 PHYS: 628 N 4 <sup>th</sup> St, 1 <sup>st</sup> Floor	(225) 342-7499 (Main line) (225) 342-7303 (Fax) <a href="mailto:Safe.Water@la.gov">Safe.Water@la.gov</a> (reporting emergencies after business hours)
Steven Joubert, PE, Section Chief <a href="mailto:Steven.Joubert@la.gov">Steven.Joubert@la.gov</a>		
Caryn Benjamin, PE, Deputy Chief Engineer - Compliance/Enforcement <a href="mailto:Caryn.Benjamin@la.gov">Caryn.Benjamin@la.gov</a>		
Dan MacDonald, PE, Deputy Chief Engineer - Financial (SRF)/Infrastructure <a href="mailto:Dan.MacDonald@la.gov">Dan.MacDonald@la.gov</a>		
Johan Forsman – Program Manager <a href="mailto:Johan.Forsman@la.gov">Johan.Forsman@la.gov</a>		
Esteban Gonzalez – Operator Certification <a href="mailto:Esteban.Gonzalez@la.gov">Esteban.Gonzalez@la.gov</a>		



Revised September 2025

Deputy Chief Engineer of Field Operations District 1 and 2		Steven Davis, PE <a href="mailto:Steven.Davis2@la.gov">Steven.Davis2@la.gov</a>	
District	Region	District Engineer	District Sanitarian
1	1, 3	Chris Rogers, PE <a href="mailto:Christopher.Rogers2@la.gov">Christopher.Rogers2@la.gov</a>	Melissa Favorth <a href="mailto:Melissa.Favorth@la.gov">Melissa.Favorth@la.gov</a>
2	2, 9	Jennifer Dewitt, PE <a href="mailto:Jennifer.Dewitt@la.gov">Jennifer.Dewitt@la.gov</a>	Angela Gomez <a href="mailto:Angela.Gomez@la.gov">Angela.Gomez@la.gov</a>
Deputy Chief Engineer of Field Operations District 3 and 4		Jennifer Kihlken, PE <a href="mailto:Jennifer.Kihlken@la.gov">Jennifer.Kihlken@la.gov</a>	
3	4, 5	Vacant	Kristen Hungerford <a href="mailto:Kristen.Hungerford@la.gov">Kristen.Hungerford@la.gov</a>
4	6, 7, 8	Barbara Featherston, PE <a href="mailto:Barbara.Featherston@la.gov">Barbara.Featherston@la.gov</a>	Vacant

Region	Mailing Address	Telephone Numbers
1	Metro Region 1 935 Gravier St, Ste 1420 New Orleans, LA 70160	(504) 599-1564 (504) 599-0200 (Fax)
2	Capitol Region 2 PO Box 4489 Baton Rouge, LA 70821-4489 PHYS: 628 N 4 <sup>th</sup> St, 1 <sup>st</sup> Floor	(225) 342-7499 (225) 342-7607 (Fax)
3	Teche Region 3 1434 Tiger Dr Thibodaux, LA 70301	(985) 449-5007x345 (985) 447-0920 (Fax)
4	Acadian Region 4 825 Kaliste Saloom Rd Brandywine # 3 Suite 100 Lafayette, LA 70508	(337) 262-5316 (337) 262-5638 (Fax)
5	Southwest Region 5 2827 4 <sup>th</sup> Ave, Ste 100 Lake Charles, LA 70601	(337) 475-3200 (337) 475-3222 (Fax)
6	Central Region 6 5604-B Coliseum Blvd. Alexandria, LA 71303	(318) 487-5282 x242 (318) 487-5338 (Fax)
7	Northwest Region 7 1035 Creswell Ave, 3 <sup>rd</sup> Floor Shreveport, LA 71101	(318) 676-7477 (318) 676-7485 (Fax)
8	Northeast Region 8 PO Box 6118 Monroe, LA 71211-6118 PHYS: 1650 Desiard St, 2 <sup>nd</sup> Floor	(318) 361-7201 (318) 362-3163 (Fax)
9	Southeast Region 9 42354 Deluxe Plaza, Suite 12 Hammond, LA 70403	(985) 543-4958 (985) 543-4951 (Fax)

# Message from the Chief

**Steven R. Joubert, P.E.**  
*Section Chief*



**Steven R. Joubert, P.E.**

*Section Chief*

*Phone: 225-342-8138*

*Cell: 225-577-3564*

*Email: [Steven.Joubert@la.gov](mailto:Steven.Joubert@la.gov)*

“We are your engineers and data-driven decision makers — and we’re training operators to think the same way. As you craft legislation, we urge you to consider the full story behind the data. Understanding our process builds trust and drives progress. We look forward to partnering with you to improve water compliance across our state. Compliance begins with clear, informed, and effective communication.”

# THANK YOU

**Steven R. Joubert, P.E.**  
*Section Chief*

**Jeremy Harris, P.E.**  
*Compliance Engineer*

**Barbara Featherston, P.E.**  
*District IV Engineer*

**Dan MacDonald, P.E., M.B.A.**  
*Deputy Chief Engineer of Infrastructure and Finance*