

# Utility Department 2025 Annual Report

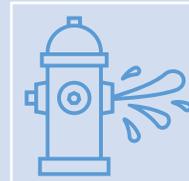


# Department Highlights



## **Lift Station Improvements**

Improving reliability, safety, and emergency readiness



## **Distribution System Maintenance and Operations**

Supporting fire protection, water quality, and system reliability



## **Equipment and Technology Upgrades**

Investing in tools and technology to strengthen field response efforts



## **Department Development**

Building a skilled, trained, and dependable workforce

# Department Highlights Continued



## **Leak Trends and Sanitary Sewer Overflows**

Monitoring system performance and reducing risk



## **Wastewater Treatment Plant Update**

Advancing upgrades to support compliance and future capacity



## **Planning Ahead**

Targeted investments to extend system life and improve service



## **Employee Achievements**

Recognizing certifications, growth, and professional excellence

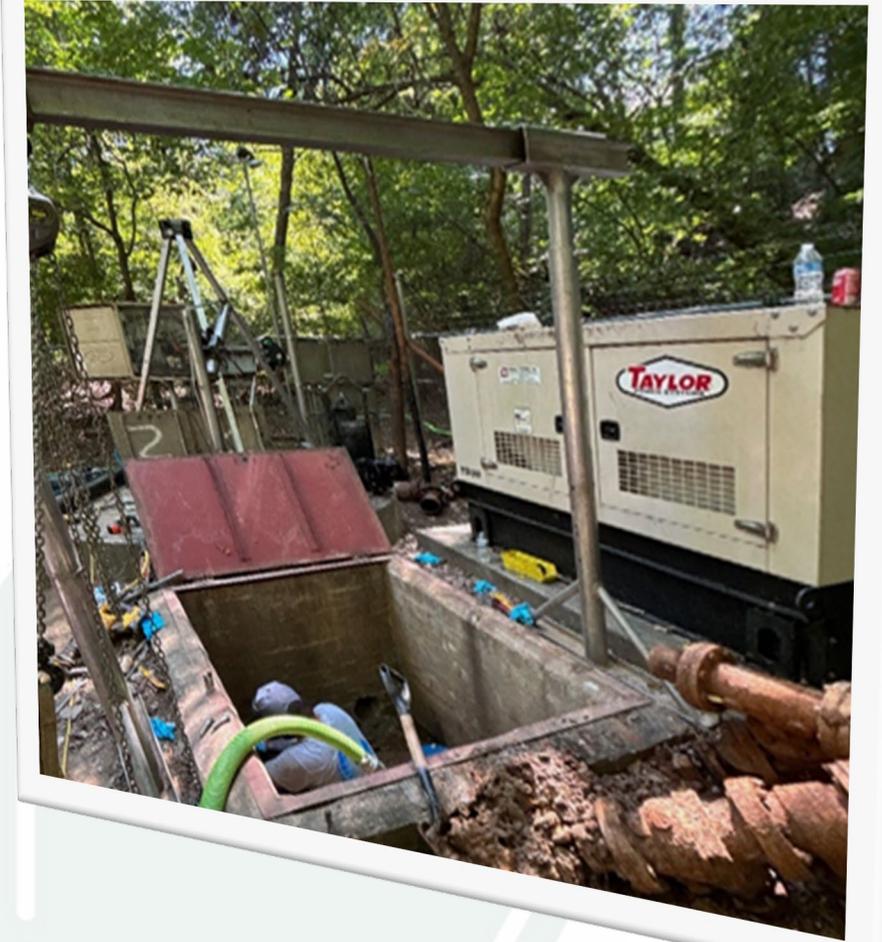
# Lift Station Improvements

## What We Did

- Installed new electrical control panels and upgraded critical components at select lift stations
- Completed targeted repairs to pumps, discharge piping, guide rails, and check valves
- Performed routine maintenance to improve operational reliability and emergency readiness

## Why These Improvements Matter

Lift stations are critical to preventing sanitary sewer overflows and maintaining uninterrupted wastewater conveyance. These improvements reduce downtime, improve safety, and strengthen system resilience during high-flow and emergency conditions.



# Electrical Control Panel Replacement – Lift Station 16 (Beaver Run)



## **Issue**

The existing electrical control panel at Lift Station 16 had become difficult to maintain and raised reliability and safety concerns due to its age and outdated components.

## **Action**

TCUD crews removed the aging panel and installed a new stainless-steel electrical control panel. All wiring, controls, and safety features were verified to ensure proper operation.

## **Outcome**

The upgrade improved operational reliability, enhanced safety for staff, and supports continued dependable operation of the lift station during normal and high-flow conditions.

# Upgrade to Lift Station 18 (Scullers Run)



## **Issue**

Lift Station 18 required targeted repairs to aging mechanical components that were impacting operational efficiency and increasing maintenance demands during high-flow conditions.

## **Action**

TCUD crews completed repairs and replacements to key lift station components, including pumps, discharge piping, guide rails, and check valves. All work was inspected and tested to confirm proper operation and system performance.

## **Outcome**

These improvements enhanced operational reliability, reduced the risk of sanitary sewer overflows, and improved the lift station's ability to perform during peak flow and wet weather events.

# Distribution System Maintenance and Operations



## What We Did

- Completed routine maintenance and repairs across the water distribution system, including valves, hydrants, service lines, and water mains
- Repaired water main breaks and service line leaks to maintain system reliability and minimize service disruptions
- Performed hydrant maintenance, repairs, and replacements to support fire protection and system performance
- Conducted system flushing and preventative maintenance to support water quality and asset longevity
- Completed development of a system-wide water model to evaluate pressure, flow, and capacity, supporting fire protection, maintenance planning, and future growth

## Why This Work Matters

Proactive distribution system maintenance is essential to protecting water quality, supporting fire protection, and ensuring reliable service for residents. These ongoing efforts help reduce leaks, extend infrastructure life, and maintain consistent system performance across the city.

# Collection and Distribution System Performance

## System Performance Overview

TCUD tracks system performance data to evaluate the effectiveness of maintenance efforts and identify areas requiring additional attention.

## Key Observations

- Water leaks and main breaks are actively monitored and addressed throughout the system
- Preventative maintenance and rapid response continue to reduce risk and limit service disruptions
- Sanitary sewer overflows remain infrequent and are primarily associated with extreme rainfall events

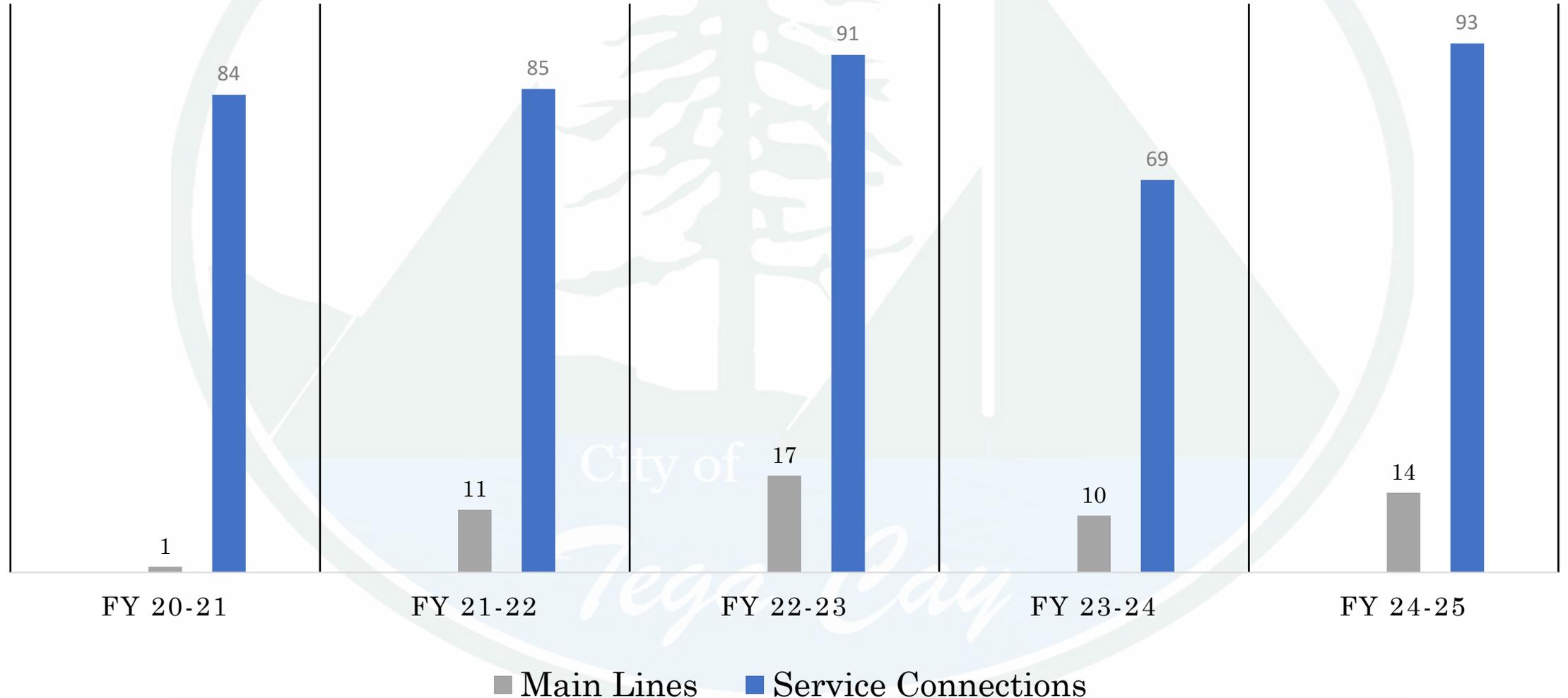
## Key Takeaway

Ongoing collection and distribution system maintenance and proactive monitoring continue to strengthen system reliability, reduce operational risk, and support consistent service for the community.



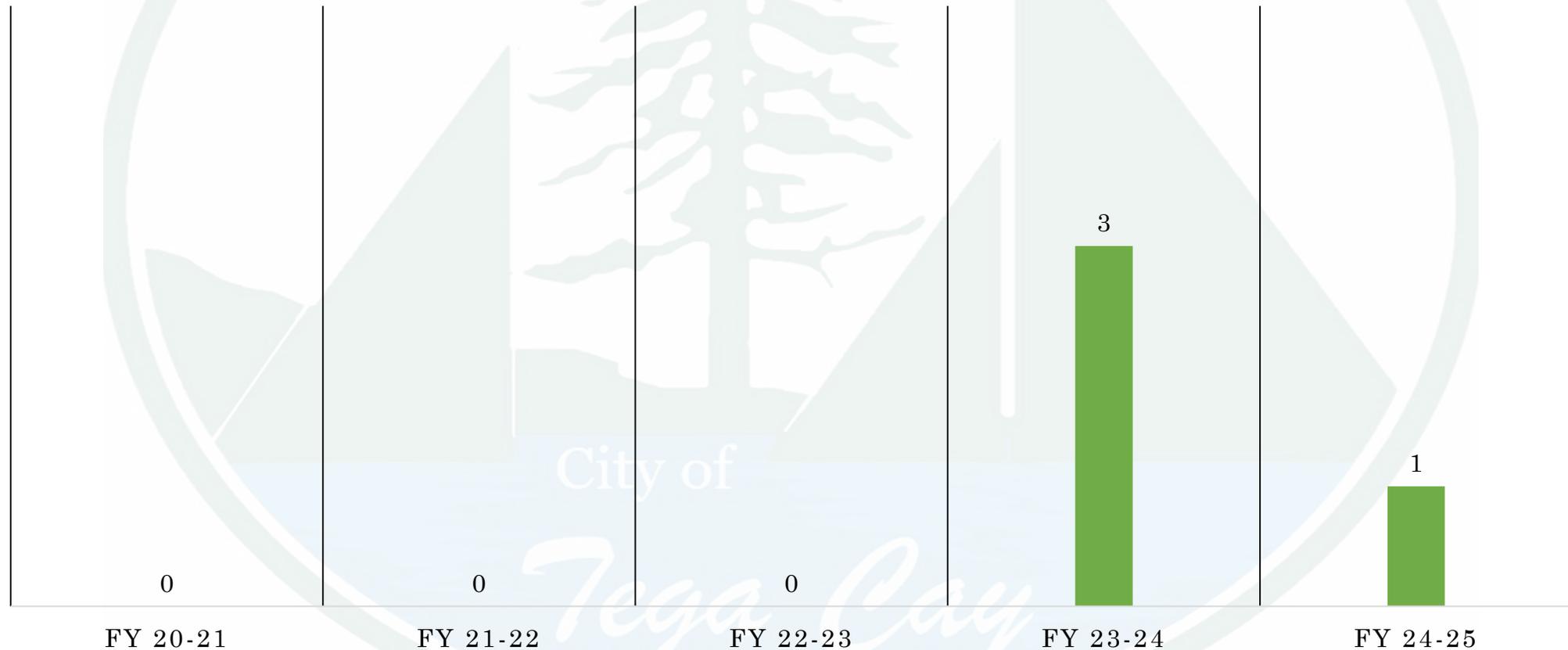
# Distribution System Leak Repair Trends

This chart reflects unplanned distribution system leaks that required response and repair by utility crews.



# Sanitary Sewer Overflow Trends

This chart reflects sanitary sewer overflows that occurred during significant rainfall events and required response and mitigation by utility crews.



# Wastewater Treatment Plant Upgrade Update

## Project Status

The wastewater treatment plant upgrade project has completed pre-construction coordination and planning activities.

## Next Milestone

Construction mobilization is expected to begin **January 19**.

## What This Means

Once mobilization begins, site work and construction activities will proceed in accordance with the approved project schedule and regulatory requirements.



# Equipment and Technology Investments

TCUD invested in targeted equipment and technology to improve system monitoring and proactive maintenance across the wastewater collection system.

**Smart Covers** provide real-time data on sewer conditions, allowing staff to identify abnormal trends early and respond before issues escalate.

**The SL-RAT** enhances the department's ability to proactively inspect sewer lines, identify developing blockages, and prioritize maintenance efforts.

Together, these tools reduce operational risk, support early intervention, and strengthen overall system reliability during both normal and high-flow conditions.

Sewer Smart Cover



SL-RAT





# Employee Achievements

TCUD recognizes the following employees for achieving professional certifications that strengthen department expertise and support reliable utility operations.

**Dominick Noviello**

Level C Collection and Distribution

**David Ashton**

Level B Biological Wastewater

**Christopher Aleshire**

Level D Collection and Distribution

These certifications reflect the department's continued investment in training, professional growth, and operational excellence.

# Planning Ahead

- Ongoing Vehicle Depreciation and Replacement
- Targeted Manhole Lining Improvements
- Continued Wastewater Treatment Plant Upgrades
- Permanent Bypass Pump Installation at Gray Rock Lift Station
- Sewer Main Rehabilitation Using CIPP