

PROJECT PROFILE / SHREVEPORT, LOUISIANA, CLEAN WATER PROGRAM

MEETING LOCAL AND FEDERAL NEEDS WITH PROGRAM FOCUS, EFFICIENCY

Facing many challenges in meeting a 2026 federal consent decree, Shreveport, Louisiana, needed a holistic approach to deliver its capital program and meet regulatory obligations, under tight budget considerations.



FEDERAL CONSENT DECREE REQUIRES CITY TO RETHINK ITS APPROACH

Like many other cities, Shreveport, Louisiana, has a legacy network of sanitary sewer infrastructure that, due to its poor condition, has the potential to overflow and spill untreated waste into area waterways during periods of heavy precipitation.

PROJECT STATS

CLIENT

City of Shreveport

LOCATION

Shreveport, Louisiana

ANTICIPATED COMPLETION

May 2026

2026

CONSENT DECREE DEADLINE

\$1B+

IN PROJECTED
CAPITAL SPENDING

5

TOTAL PHASES OF THE
CONSENT DECREE

A federal consent decree was issued in 2014 for the City to comply with Clean Water Act standards by 2026. At the time, the City expected that total costs associated with the consent decree would be approximately \$350 million. The consent decree established five phases, each involving a geographical area of the city with its own deadline for completion of rehabilitation work. The consent decree mandated that the City find and fix all defects in the sanitary sewer system with the goal of reducing sanitary sewer overflows.

In 2019, the City was nearly complete with the first two phases but had spent approximately \$415 million, primarily because investigation of the sewer system over the same period had revealed substantially more defects and costs associated with repairs than originally imagined. The City then selected Burns & McDonnell to oversee the program. After completing a program review, it became apparent that projects being proposed would need to be prioritized to fit budgetary limitations.

PRIORITIZING CAPITAL INVESTMENTS

Our team was brought in to implement significant changes.

These changes reduced inefficiencies and redundancies, improved financial transparency and better leveraged technology, yielding a substantial amount of progress for the program. The long-term viability of the utility and the needs of the community are the main focus for work to be completed for the City moving forward.

A key element of the program will include a shifted focus in 2020 for capital delivery. To include City staff in key decision-making elements of design projects, the program team established a structured stage/gate review process for design delivery. The stage/gate process utilizes best practices from private sector capital programs, following a defined protocol for design development and City approval at various stages of design completion.

Another shift involved the type of projects being completed. Rather than continuing forward with another massive investment to repair all underground infrastructure, high-priority projects were selected to support the City's obligations to provide reliable utility service. Eighteen critical infrastructure projects were identified that affect key aspects of the water and sewer utility



operations but are also projected to meet the City's budgetary restrictions. These investments will allow the City to focus on issues affecting the long-term viability of its water and wastewater systems.

AN ADAPTABLE APPROACH

Moving forward, the program will focus on reinvestment in community assets, application of smart sewer technologies and optimized utility operations and capital delivery processes. This approach will remain focused on generating ongoing efficiencies to help meet many aspects of the City's overall obligation.

Our program team also evaluated the City's hydraulic model, which can be used as a tool to guide engineers to problem areas of the collection system that need to be improved and plan for future projects. The review indicated that the model was not accurately representing actual flows measured

in the sewer system. The program team then recommended the hydraulic model be updated and recalibrated to provide the City with an effective tool for future design projects. Data continues to be collected to further update and expand the model into other areas of the collection system, which will continue to support capital project development through the life cycle of the program.

Furthermore, our program team is supporting the City with regulatory engagement and coordination. These efforts are focused on planning for the long-term viability of the water and wastewater systems and discussing opportunities for revisions to the City's consent decree obligations.

PUTTING THE COMMUNITY FIRST

A constituent resolution strategy was also implemented to proactively

respond to inquiries or issues reported as a result of construction activities occurring in the community. A customized dashboard is being used as a technological solution to actively track, document and resolve outstanding complaints in an effort to improve stakeholder management throughout the program.

Burns & McDonnell and its local partners, Bonton Associates, Sustainable Design Solutions and Envision Media & Marketing, will continue to draw from proven program management processes and technology with a community-first approach. Moving forward, the team will continue to focus on implementing capital projects to support reliable water and wastewater services for the City, through a targeted capital program, constituent resolution strategy, regulatory engagement and a recalibrated hydraulic model.



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