

CLAYTON COUNTY WATER AUTHORITY CLEANING OPTIMIZATION PROGRAM



CLIENT
Clayton County Water Authority

LOCATION
Morrow, GA

DURATION
4 months

ROLE
Utility Management Consultant

BUDGET
\$199,760

COMPLETED
December 2019



Blue Cypress designed and implemented a structured cleaning program for the Clayton County Water Authority sewer collection system. This included a data management tool to optimize the sewer cleaning frequency for each pipe in the CCWA sewerage system so as to not clean it too often, and not clean it too little, with the ultimate goal of reducing Sanitary Sewer Overflows (SSOs).

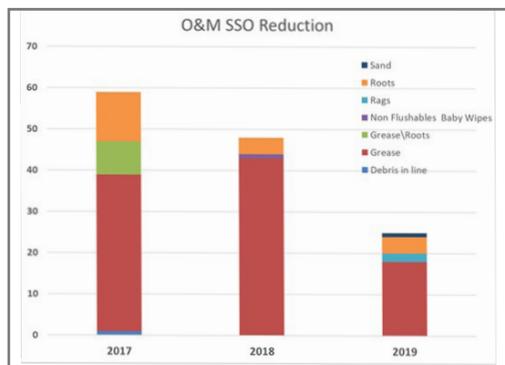
First, Blue Cypress performed a detailed assessment of the current cleaning program, which included reviewing and documenting the current strategies, policies, processes, scheduling and work assignment approach, data collection, resources, software, and performance. This assessment resulted in a presentation of the findings regarding sewer system performance; current planning/scheduling and work order management for sewer cleaning; current cleaning, CCTV, and planning/scheduling staff resources; and current software systems, usage, and data structures for sewer cleaning, CCTV, and SSOs. Additionally, a recommendations table was delivered.

Next, Blue Cypress next worked with CCWA staff to create both as-is and to-be business process diagrams to document the workflow and data management practices. Blue Cypress also created or updated documentation regarding updated policies and business practices necessary to support the structured cleaning program, including a policy document, workflows, and standard operating procedures.

Next, Blue Cypress developed documentation for the

Information management system requirements and configuration, which was used to detail how the tool was configured, customized as necessary, and used. The deliverables included a requirements document for the decision support tool, report templates, and Cityworks configuration updates requirements.

Finally, the decision support tool was configured, tested, and implemented per the previously identified requirements. The implementation included an asset-based hot spot cleaning schedule and system-wide cleaning schedule that was built using historical data. It also included a workload forecast relating to the number of crews necessary to perform the scheduled cleaning and planner/scheduler time to perform work order management and decision support tool related tasks.



SSO Inspections by Causes

Project Goals

Reduce	Reduce SSOs
Build	Build a structured cleaning program
Collect	Collect the right data
Optimize	Optimize cleaning frequencies
Minimize	Minimize impact on crews for data entry and drive time
Provide	Provide appropriate planning/scheduling support to supervisors and management