SMARTCOVER®

WE'VE GOT IT COVERED™

SEWER AND RAIN DATA FUSION LEADS TO IMMEDIATE ROI

BACKGROUND

The City of Arlington, Texas is home to over 360,000 residents, with attractions like the NFL Cowboys, MLB Rangers, Six Flags Over Texas theme park and a vibrant business community.

THE CHALLENGE

Heavy rain events can contribute to sewer overflows in Arlington that impact property, the environment and public health. From a sewer and water perspective, it is vital to maximize the useful life of critical underground assets, efficiently spend capital replacement dollars, avoid major unplanned repairs, and plan ahead with better designs for new mains.

THE SOLUTION

Arlington deployed SmartCover to gather real-time water and rain level information for pattern analysis that's delivered to a central software dashboard.

The satellite-based communications used by SmartCover are reliable in all conditions – a particular benefit in places like Texas where weather events can often disrupt terrestrial communications.

As part of a collaboration with the University of Texas at Arlington, the city initiated a large diameter sewer condition assessment program to examine 17,000 feet of 66" reinforced concrete pipe (RCP) and

3,400 feet of 60" pipe in their sanitary sewer system, installed in 1983. In 2018, the city installed SmartCover remote field units on 10 manhole covers to measure flow and water surges during rainfall in typical sewer trouble spots.

This data-driven system allows staff to respond to patterns that indicate a blockage or other potential overflow conditions before sewage backs up into homes, business or overflows into the community.

THE RESULTS

Within 3 hours of initial installation, SmartCover signaled an alarm and prevented the first sewage spill.

Over the first 3-4 months, Arlington staff were notified of three alarms that helped avoid sanitary sewer overflows and resulted in multiple "saves" -- more than paying for the system in a short period of time.

The original deployment was expanded to over 60 SmartCover units.

> *"Within the first three hours, we had one SmartCover tell us there was a blockage on the way, and we were able to go out and clear the blockage before we had a problem."*
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> - - Walter "Buzz" Pishkur, Director, Water Utilities Department

DATA-DRIVEN DECISIONS PREVENT SPILLS AND IMPROVE CAPITAL PLANNING

SUMMARY:

Many utilities employ comprehensive capacity assurance, management, operations and maintenance (CMOM) programs to prevent sanitary sewer overflows. Such measures include backup pumps, frequent cleaning in high-risk areas, capital projects, and flow reduction to maintain the pipes at their designed capacity.

While these programs can be effective, they often do not allow utility staff to be proactive in the face of rapidly evolving events. To provide next level understanding, control and response, the City of Arlington looked to advanced data-driven solutions to provide a real-time view into the operation of their collection system.

The City of Arlington deployed SmartCover to gather real-time water and rain level information for both spill protection and improved capital planning processes. The wireless, satellite-based communication used by the SmartCover system is highly reliable in all conditions, with purpose-built sensors that withstand harsh conditions within sewer systems.

SmartCover provides an advanced collection system visibility and notification platform with integrated weather and flooding data, giving wastewater operators advance lead time for responding to potential issues before they become environmental, public health and financial hazards.

SmartCover units can be deployed easily with no confined space entry

SmartCoverSystems.com