



North American Society for Trenchless Technology
2007 No-Dig Conference & Exhibition



San Diego, California
April 15-20, 2007

Paper B-2-04

INNOVATIVE TECHNOLOGY PROVIDES REAL TIME SEWER FLOW DATA MANAGEMENT

Larry Sherry¹, and Patrick Stevens²

¹ Project Officer II, City of San Diego, CA

² VP of Engineering ADS Environmental Services, Huntsville, AL

ABSTRACT: Combined sewer overflows (CSOs), sanitary sewer overflows (SSOs) and deteriorating system performance are issues that drive the need for a unified approach to collecting flow data and making it available to decision makers in the city. San Diego and Indianapolis are two cities that have been collecting and using flow data for nearly 20 years, however, the flow data were not being used effectively for any day-to-day operations and real-time solutions. Weeks would transpire between the moment data were collected and when they were in a form that people in the department could get their hands around.

IntelliServe, combined with intelligent flow meters and rain gauges, provides real time information. In the combined sewers of Indianapolis the system uses rain gauge data to distinguish between dry and wet weather overflows. A recent dry weather overflow alarm allowed crews to prevent a dry weather overflow by removing a hubcap that was causing depth to reach the CSO weir.

In San Diego the IntelliServe system is used for dry and wet weather overflow alarming for sewers in their remote canyons. Recently a dry weather flow pattern change alerted the City to a build up of debris caused by rock in the sewer downstream from an aggregate plant. Flow data from IntelliServe is also used to compile billing information for 15 surrounding communities and to calibrate hydraulic models.

IntelliServe won the 2006 WEF Innovative Technology award and this paper will describe how the system is used by these cities in day-to-day operations.