ADVANCEDTECHNOLOGY

DDS PROVES TO BE Simple Reliable

hen simplicity and reliability were required for a flow-monitoring project in Carmel, Ind., the solution was Marsh-McBirney's data delivery services (DDS) program. This article describes how the program eliminated day-to-day flow monitoring and provided city personnel accurate flow data directly to their desktops.

By Marcia Kinley

A two-year inflow and infiltration (I&I) study to be performed in the city of Carmel, Ind., led its wastewater department operations personnel on a search for a cost-effective approach to accurate flow data collection. The operations division is responsible for daily operations, distribution and field services. The city of Carmel owns and operates a wastewater treatment facility that processes and treats sanitary waste from Carmel Clay Waste District and Westfield Utilities. The plant has the capacity to treat 12 million gal of wastewater per day.

According to Ed Wolfe, operations manager for Carmel's Wastewater Department, "We were looking for simplicity for this project. In the past we had tried installing and maintaining flowmeters with our own staff, and we had some problems with data downloading and so forth. This time we thought it would be much simpler and more reliable to have an outside firm perform the work."

Turnkey approach

One alternative to meter ownership is the turnkey approach provided by some manufacturers and instrumentation service firms. In many cases, this approach had the customer paying very high prices for flow data. This high price was associated with regular maintenance and repairs that needed to be performed on the permanently installed sewer flowmeters during the entire monitoring project, as well as the high cost of confined space entry to gain access to the site a repeated number of times.

Another reason for the downward trend of this turnkey practice is the fact that the flow data is received by the

customer via a third party. In some cases, this type of "edited"

or manipulated data had customers skeptical of its authenticity. Additionally, flowmeter rentals or lease/purchase fees can quickly add up and are not cost-effective in a long-term monitoring situation.

"There seemed to be some complexity to most pricing structures for a turnkey solution. In some instances, if you rented the meters for so long they became yours, or you could lease the meter and pay for the service," Wolfe said. When discussing the city's equipment requirements for the project, Marsh-McBirney sales representative Malcolm Robertson of Chesley Associates felt that the DDS offering would be ideal for this application.

A better approach

DDS is a new, innovative approach to sewer flow metering without the capital expense of purchasing a flowmeter. Customers receive accurate, reliable, unedited and repeatable data at the lowest cost possible through a hands-off service. It is also an ideal approach for consulting engineering firms and flow service providers that want to give their customers a better solution.

With DDS, customers only pay for sewer flow data and do not have to leave their office to get it. DDS customers enjoy the added benefit of no unforeseen or hidden flow monitoring costs.

A new approach to flow monitoring in Carmel, Ind. \$300.00



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The Web-enabled Flo-Dar sewer flowmeter has all of the following benefits:

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Flow data

The Flo-Dar above-the-flow radar velocity/area flowmeter received the Water Environment Federation's Innovative Technology Award, the first sewer flowmeter to ever receive this prestigious award.

According to Wolfe, "The plan that Marsh-McBirney offered with a fixed price per meter per month was more attractive." The consulting firm of Jones & Henry was involved in the project, and Severn Trent factory-certified installers performed the installation. Five Flo-Dar meters have been installed in Carmel under their DDS contract.

"Basically we're trying to use the information from the Flo-Dar meters to see where the limited amount of rehab money we have would be most effectively used," Wolfe said. "We have done some short-term studies in the past in various areas in the collection system. We had collected some basic information on these four to five critical areas, and we thought it was a good idea for us to look at dry weather flows versus wet weather flows."

Wolfe noted that the city's engineering group is responsible for analyzing the

flow data from the meters. Carmel's flow data is easily accessed via a Web browser, providing data direct to desktops 24 hours a day. Additionally, DDS provides event notifications via cell phone, pagers, PDAs, e-mail and mobile phone on any parameters that the Flo-Dar monitors.

Dave Baker, business development manager for DDS, considers himself lucky to have been able to work with Ed Wolfe.

"Ed's forward thinking helped make our DDS option a real success for the city of Carmel. It was a pleasure to work with Ed and his associates. The sites were perfect for Flo-Dar, and the installations went very smoothly," Baker said. "Guys like Ed realize that his associates will no longer have to contend with the safety risks involved in entering manholes to clean sensors or contending with traffic control while trying to download flow data at a monitoring site. Instead, they can concentrate on other tasks, and everyone can feel good about the decision they made in purchasing this easy solution to gathering flow data."

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