

# REDUCING THE COST OF DATA IN DUBLIN, OHIO

If you ask Bill Grubaugh, Operations Administrator with the City of Dublin (OH) Streets and Utilities Operations, about the most efficient way to collect good flow data, he'll give you a solid answer based on 27 years of collection system experience. Set to begin a well-deserved retirement in the middle of March, 2016, Grubaugh will tell you that he saved the best approach for last.

Grubaugh, who joined Dublin's Sewer Water Program way back in 1989, has tried a lot of instruments and approaches to collecting reliable and dependable flow data. They all proved difficult to manage, less-than efficient and fairly unreliable. "The cost for flow data was very expensive," Grubaugh noted. Until, that is, he started a **Data Delivery Service (DDS)** program in June of 2015.

Dublin is a suburb of Columbus, Ohio, right in the center of Ohio and has approximately 42,000 residents. Their collection system includes around 1.1 million feet of pipe ranging in size from small 8" lines to a large 80" deep tunnel gravity fed system.

To support their drinking and wastewater needs, Dublin contracts with Columbus to provide both. In the early 1990s, Dublin found that they were buying 2-3 million gallons/day from Columbus, yet when it rained they were pumping over 10 million gallons/day. This massive increase would create overflows at their pump station, resulting in significant property damage. As such, eliminating clear water infiltration became a huge priority for Grubaugh and his team.

"In particular, we have two sensitive areas where we were continually experiencing backups that led to significant property damage in homes," Grubaugh explained. "We had level-alarms to warn us of potential overflows, but they were unreliable and the repair/maintenance that the manufacturer offered was poor."

"We wanted," Grubaugh continued, "a product that would assure us that we get the accurate info we need in a timely manner so that we could ensure no property damage."

As a result, the City of Dublin turned to Hach Flow Sales representative and problem-solving partner, Chesley and Associates ([www.chesleyassociates.com](http://www.chesleyassociates.com)). Chesley recommended Hach Data Delivery Services, or DDS, as the solution. DDS is a highly efficient flow monitoring service where, for a fixed monthly fee, Hach Flow provides



Figure 1: Flow Meter Staff (L-R): Joey Snyder, John Jenkins, Gary Browning (Supervisor), Brent Ager & Dan Hunt

all the equipment, resources and support the City of Dublin needs to acquire timely and accurate flow data. Utilizing non-contact sensors like the FLO-DAR to dramatically reduce required maintenance visits, and wirelessly-enabled loggers to transmit data directly to any internet-receiving device, DDS delivers Grubaugh's team flow data while eliminating the hassles and unnecessary expenses of collecting it. "Previously our crew spent a lot of labor hours maintaining the meters, ensuring they were collecting data," Grubaugh said. "Now we get reliable, dependable and real-time data - either on our computer or as text messages on my phone. DDS took the man-hours side away. I can use my crew for other things."

And those sensitive areas that were such a problem before using DDS? With the instant alerts letting them know if there's an issue, "We have responded in every instance before sustaining any property damage," Grubaugh says. "The elimination of clean-up costs alone, not to mention the bad publicity, is worth every penny."

"With DDS I have instant access to data and alerts. I know immediately when something goes awry," said Grubaugh. "It is very clear to me that this is the way to go. I have nothing but praise for this system."

To find out more about Data Delivery Services, please visit: [www.hachflow.com/data-delivery](http://www.hachflow.com/data-delivery)

## DDS Saves the Day: In Their Own Words

With moderate rain in the early morning of Feb 25, 2016 our sanitary sewer began to show an immediate increase of clear water into the sewer. By 8 AM, we had to bypass pump the sewer to ensure that surcharging sewer would not negatively affect our residents. Total rainfall for the day was approximately 1.5 inches. We stopped bypass pumping around 8 PM.

With Hach DDS, we are able to see how rainfall affects our sanitary sewers as well as be more proactive with our current bypass pumping plan. The flow level notification alarms within the DDS plan have provided us with real-time text messaging, letting us know when the sewer is being affected by the rainfall. Having the ability to check the flow levels using the web has saved us time and expenses.

- Bill Grubaugh, Operations Administrator,  
City of Dublin (OH)

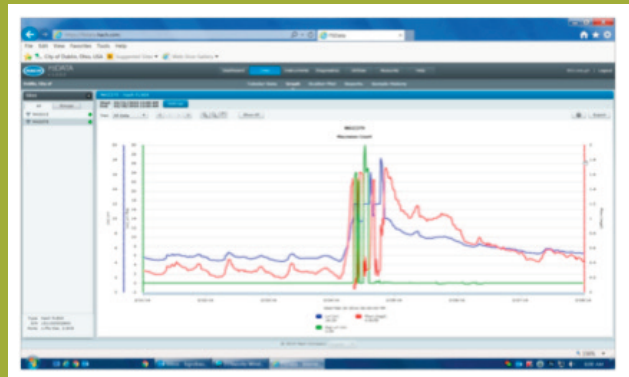


Figure 2: Graph illustrates normal sanitary sewer flows prior to Feb. 24.



Figure 3: Bypass pump site