

# Water Management Profile

Baltimore City Department of Public Works, Baltimore, Md.



The Baltimore City Department of Public Works (DPW) provides potable water to 1.8 million residential and business consumers in the City of Baltimore and the surrounding counties of Baltimore, Howard, Harford, Carrol and Anne Arundel. This water is sourced from three reservoirs and processed at three water treatment plants that produce up to 360 million gallons of drinking water per day.

In 2015, the DPW and Itron Inc. partnered with Water Management Services on a \$3.5 million water meter upgrade project. Due to the age, variety and complexity of the existing water infrastructure, the commercial portion of this project required extensive expertise in large meter installation and retrofits.

Itron manufacturers automated metering infrastructure (AMI) products that integrate with utility billing systems. This AMI solution can remotely retrieve data from individual water meters on-demand or at scheduled intervals over secure radio frequencies, thereby enabling the utility to improve its water flow and consumption monitoring, billing accuracy and maintenance service.

WMS surveyed commercial water meter locations in the City and County of Baltimore, replaced 750 large (3" to 10") direct-read meters with new fixed-network smart meters and retrofitted 2,200 large meters of various sizes, types and brands. This process included replacing over 2,900 cast-iron manhole covers with polymer covers and wiring and mounting a remote reading device (Itron encoder receiver transmitter unit) to the bottom of each manhole cover. WMS also trained field support staff, manually collected critical water infrastructure data at each location and fixed or reported any issues to the DPW, which included digging up an entire meter vault and replacing the water main and piping.

## THE NEED

- More accurate water flow and consumption data monitoring
- Greater utility operational efficiency
- EBetter conservation of water resources

## THE SOLUTION

- WMS' large water-meter installation resources and expertise
- Survey commercial meter locations to identify installation vs. retrofit
- Replace/retrofit direct-read meters with fixed-network smart meters
- Collect critical water infrastructure data at each location

## THE OUTCOME

- Minimal disruption of customers' daily operations during upgrade
- Decreased non-revenue water and improved billing accuracy
- Lower utility operating and maintenance costs
- Millions of gallons of water saved

## About Water Management Services:

A leader in the water meter industry, Water Management Services delivers innovative, cost-effective solutions to utilities' and commercial property owners' water resource management challenges. Our 20-year track record includes data collection and analysis, installation, testing, recalibration and repair of more than one million residential and commercial water meters of all brands and sizes throughout the United States.

*For more information, call us at (401) 467-6454  
or email [ContactWMS@thielsch.com](mailto:ContactWMS@thielsch.com).*

**Water Management Services**  
A division of Thielsch Engineering, Inc.  
195 Francis Avenue, Cranston, R.I. 02910