

Severn Trent exceeds leak reduction targets with innovative Itron water solutions

Water scarcity and climate change are impacting water supplies in many parts of the world. As one of the U.K.'s largest water suppliers, providing service to over 8 million people, Severn Trent Water is meeting these challenges head on with its Green Recovery Program. A key part of the program is implementing innovative technologies, like smart metering, to improve consumer engagement, decrease water consumption and proactively reduce and manage leaks.

Severn Trent is investing over half a billion pounds to address the impacts of climate disruption, invest in and upgrade infrastructure, and support economic vitality across the region.

"The need to ensure there is enough water now and in the future has never been more important. We are committed to protecting every drop of water by using affordable and environmentally sustainable technologies like Itron's Cyble™ 5 communication module and its Temetra™ solution to address water scarcity in our region," commented Anthony Hickinbottom, program manager, Severn Trent Water.

The smart metering rollout includes the initial installation of 400,000 ltron water meters equipped with Cyble 5 radio

frequency (RF) modules and Temetra for cloud-based mobile meter data collection and management. Cyble modules help collect and transmit detailed water information-including consumption and potential leak data—to Temetra for analysis and action by Severn Trent. Altogether, the Itron solution will help the utility better understand usage, identify excessive consumption and potential leak events, and then communicate and educate customers, helping them conserve water and potentially save money. Alongside the Itron solution, other components of the Green Recovery Program include replacing aging leadbased customer supply pipes, improving the quality of water and enhancing planning to meet future demand.

CUSTOMER

Severn Trent

SERVICE TERRITORY

Midland and Wales, United Kingdom

GOALS

- » Improve consumer engagement
- » Decrease water consumption
- » Reduce leaks

SOLUTION

- » Aquadis+
- » Cyble 5
- » Temetra

BENEFITS

- » Reduced water loss by 6-million litres
- » Lowered operating costs
- » Reduced customer leak notification timing by 182 days

RELATED PRODUCTS

- » Aquadis+
- » Temetra
- » Cyble 5
- » Temetra Analysis





Reduce Demand & Leaks

While some customers may be skeptical, Severn Trent is committed to helping consumers use—and lose—less water. By reducing customer demand and reducing household leaks, the utility will take less water from reservoirs, rivers and other water sources. In addition, Severn Trent can keep customers happy with more accurate and often lower bills.

To reduce demand, the utility is leveraging Itron's smart metering solution to know when and where water is used and to identify potential leaks. To provide more accurate leak detection, Cyble 5 offers enhanced 15-minute night flow data from 1-4 a.m. In addition, Severn Trent provides customers with hourly consumption information and personalized reports showing how their water is used, along with tips on how to reduce consumption.

Great Value & Exceptional Durability

In addition to protecting the environment, Severn Trent is committed to finding cost-effective solutions so they can continue to provide affordable water service to customers. The Cyble 5 module has already proven to be great value. It is easy to install, which lowers labor costs, and is extremely durable in all conditions—meters are mostly installed in boundary boxes along the public highway and exposed to harsh conditions—but these meters are designed to thrive in such conditions and remain accurate and effective for their useful lifespan.

But the best part is the data. The Cyble 5 module provides granular data that is critical to helping Severn Trent manage the water network to meet their demand reduction goals. This data is then leveraged by Itron's Temetra solution, featuring an intuitive web-based interface and powerful mapping feature, data analysis and management functionality to help utilities improve operations—all from a secure, cloud-based system.

Data to Drive the Business

Hourly consumption data from the Cyble 5 module is fed to Temetra to help Severn Trent understand usage trends and identify continuous flow at a customer property, indicating there might be a leak. As a result, Severn Trent notifies customers about potential issues up to 182 days faster than traditional methods about potential leaks—saving precious water resources and providing a valuable, proactive service for customers. In the future, Severn Trent plans to use data to further diagnose the problem by identifying the exact source of the issue, like a dripping tap. Customers will be able to fix leaks faster and for less money.

Impressive Results

Severn Trent is already seeing results and making considerable progress toward their Green Recovery Program goals.

"We have significantly exceeded our targets for reducing customer consumption and household leaks. Since we installed the Cyble 5 modules and implemented Temetra, we have seen more than a 2-million-litre reduction in water loss from identifying and repairing supply-side leakages and a 4-million-litre reduction from identifying and repairing leaks at customer homes," said Stuart Dobson, Workstream Lead, Smart Metering at Severn Trent Water. "Other benefits include not having to visit customer properties to read meters, which allows us to focus resource on more value-add activities, such as educating and assisting customers to reduce consumption out in the field, all whilst improving the accuracy of bills."



With climate change and the increasingly drier summers it brings, Severn Trent is committed to reducing water loss and is well on our way to meeting Green Recovery program goals that will deliver benefits and improve the environment and our communities.

Severn Trent





