



Water, water everywhere... and not a drop to spare

Some might say we can live without food, and we can definitely live without cell phones, cable and even Twitter, Facebook and Snapchat, but we cannot live without water. Yet, despite this fact, many people in our society treat water as if there is an endless supply. They let the faucet run while brushing their teeth, let the hose empty onto the driveway while washing the car, and will not give a second thought to that leaky toilet down the hall. For something that is essential to the sustainability of all living things, it is de-valued and wasted, as a half-eaten dinner roll at an all-you-can-eat buffet.

With that said, decreasing the access to water is not the answer, but rather increasing the efficiency with which our most precious resource is used. Itron's "creating a more resourceful world" is not just a tag line, but rather our mission of empowering both our customers and the industry to become more "resourceful".

The Merriam-Webster Dictionary defines resourceful as being "able to deal well with new or difficult situations and to find solutions to problems." The situations utilities face today and the problems that need to be solved vary greatly based on utility size, region, technologies available and processes implemented. However, for the most part, they are all faced with the common challenge to be more efficient in the production, transmission, distribution and use of water. Doing more with less; in other words, being more resourceful.

BUT HOW? HOW DO WE BE RESOURCEFUL?

Becoming more resourceful starts with information. Information that can enable utilities to make decisions, which lead to actions and ultimately result in change. Gathering that information is a task in itself as the calculations, measurements and results need to be based on accurate, reliable data. That is where water efficiency comes into play. According to the Environmental Protection Agency (EPA), Water Efficiency is "the use of improved technologies and practices to deliver equal or better service with less water." Itron offers a number of products, solutions, and services that deliver on that need, equipping utilities to minimize spending, increase operational efficiencies, and uncover new revenue streams.

Before making the move to upgrade technology and change processes, there needs to be a baseline established—a starting point from which goals can be created, progress can be measured, and success can be validated. Then, by employing new technologies, such as an Itron AMI solution, a utility will have the tools in hand to actuate change, pinpointing the areas that can have an immediate, and more important, a lasting impact on the availability, management and use of water.

Supporting smart city initiatives around the globe is just one example of Itron's continued commitment to water efficiency. For example, Envision Charlotte has programs in place to encourage the reduction of energy and water consumption in downtown Charlotte (NC), also known as "Uptown". By bringing awareness to consumption levels, through the deployment of advanced technologies capable of collecting hourly interval data, Envision Charlotte is encouraging change—a change in the way energy and water are used, and as a result, showing that businesses can lower the expense of "keeping the lights on." A key benefit to this program is that more businesses are coming to the Charlotte area, and as a result, more people. This is just one "end" justified by the "means," demonstrating the power and flexibility of technology capable of satisfying utility challenges around the world.

Through the technologies we provide, and as part of the solutions we implement, utilities are better prepared to:

- » Understand the demands of its service territory; ensuring sufficient supply is available.
- » More efficiently identify contributors to Non-Revenue Water (NRW), such as system leaks, aging assets, and unauthorized usage; reducing operational expenses and uncovering new opportunities for increased revenue.
- » Provide their customers with access to that same set of information, making it possible for them to understand, and manage, their consumption; to also be "resourceful".



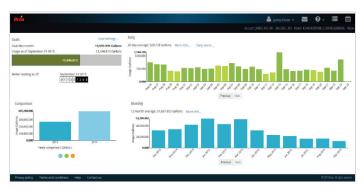
Itron's water Advanced Metering Infrastructure (AMI) solutions, in addition to optimizing the billing process, transform data collected through the system into valuable and actionable intelligence for users across the utility. This benefits the entire organization from billing and customer service to operations, engineering and distribution, empowering them all to address conservation and revenue protection. Our solutions deliver the information necessary to make decisions, enabling a utility to effect change, and ultimately create a more resourceful world.



Consumption Compare system

Itron solutions allow utilities to analyze usage at the customer, district, and total system levels. With the ability to easily create user-defined groups, to which time-synchronized consumption data can be applied, utilities can develop demand profiles and baseline consumption levels to create programs to influence more responsible water consumption. Furthermore, the interval consumption data, coupled with the metered data from district meters, enables utilities to identify potential system losses through District Metering. System losses could be a result of leaks, aging meters, incorrectly sized meters and/or unauthorized consumption. Having the ability to identify these potential losses prior to rolling a truck results is an immediate, positive impact to the bottom line. Additionally, for utilities that are challenged with drought conditions, they can monitor customer consumption to report on, and enforce, compliance during periods of water restrictions. Knowing when customers are using water, again without having to roll a truck, further decreases operational costs. In other words, being more resourceful.

In addition to identifying system losses via the collection of time-synchronized data, with the installation of acoustical leak sensors, a utility can continuously audit the integrity of their distribution system. Knowing when leaks occur, before they damage public or private property, further decreases operational expenses and increases revenue opportunities. With proactive leak detection, a utility is able to reduce the amount of water lost, reduce the cost of repair and as a result, reduce their NRW percentage. Again, say it with me, resourceful.



Customer Web Portal

CONNECTING WITH YOUR CUSTOMERS

With the ability to broadcast messages such as boil alerts, rate changes and conservation initiatives, Itron's Customer Web Portal provides a utility with a direct line of communication to its customers. Additionally, through this same web portal, end-customers gain access to their hourly, daily, weekly and annual consumption data, enabling them to set monthly targets with progress alerts to help them manage their own water usage. Utility customers may also see their consumption compared with peer groups, such as similar houses in their subdivision or similar-sized businesses. Having a more thorough awareness of their consumption patterns enables customers to: better understand their billing statements, eventually reducing the need to call the utility; reprioritize household activities reliant upon water, increasing the potential for monthly savings; and ultimately play an active role in the community's efforts to be more resourceful.



MANAGED SERVICES

Itron understands that it is not just water that is limited in supply, but also the resource of people. As the importance of IT systems and analytics grows within utility operations, utilities find themselves competing for highly sought after IT professionals. Only some of the largest utilities have the in-house personnel and resources that are required to effectively manage the operations of a utility, while keeping up with the rapidly changing world of technology. But these challenges should not stop a utility of any size from enjoying the full benefits that advanced technologies yield. With a sound understanding of the pressing challenges, needs and operational processes affecting water utilities today, Itron helps utilities be more resourceful by delivering outcomes based on utility needs, ranging from simple hosting to full infrastructure and operations outsourcing.

With a persistent focus on customer satisfaction, Itron's technology experience, coupled with a skilled workforce knowledgeable in running the proven AMI solutions, enables utilities to solve problems, while improving operational efficiency, driving profitability and consistently working on identifying new revenue streams. Taking this approach reduces the drain on utility resources, enabling them to focus on core responsibilities, while still recognizing the benefits of implementing new technologies and processes.

CONCLUSION

Water efficiency is "the use of improved technologies and practices to deliver equal or better service with less water." Utilities and consumers, collectively, need to be respectful of what water means to our existence and, more importantly, we all need to be held responsible for ensuring the resource is available for generations to come.

Itron is taking an active role in this responsibility. We have stood up and said "yes".

- Yes, we have the solutions and services that support the continuing goal of managing, delivering and using water in the most efficient manner possible.
- Yes, we will continue supporting smart city initiatives to increase the awareness of the natural, valuable and limited resource we have in water; continuing to help communities become resourceful, and...
- Yes, we are committed to tomorrow. A tomorrow that, through the support of organizations such as "Water for People", strives to provide access to clean drinking water for people around the world.

As a world-leading technology and services company, Itron is dedicated to the resourceful use of energy and water. We believe that by applying knowledge and technology, and being water efficient, together we can create a more resourceful world.



Join us in creating a more **resourceful world**.

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