

# Strengthen your utility's water loss control efforts to increase revenue and conserve resources

By Kate Gasner, Kris Williams

February 8, 2023

As part of efficient water distribution operations, utilities want to better detect, remedy, and prevent <u>water</u> <u>loss</u>. But many utilities struggle with knowing where to begin and what resources are available to them to get a handle on the volume and costs of their water loss.

# Take control of your region's water loss

Fill out this short form to start a conversation about your needs and how we can help.

Our water loss consultants are pioneers when it comes to water loss control efforts. They have years of experience and access to new tools to analyze a utility's data to identify and reduce water loss. Here are a few ways our team can support your utility's water loss control efforts.

# Water loss analysis and management

Our team designs water loss control programs to guide cost-effective loss recovery. We provide effective water loss management recommendations and report improvements to utilities and water agencies every day. A few examples of our efforts are water audit validation, loss component analysis, and regional program development.

American Water Works Association (AWWA) water audit compilation and validation. The AWWA water audit is our bread and butter, and we wrote the book on water audit validation. We can work with you to compile a water audit and then validate the data and results. Our validation work meets the regulatory standards in California, Georgia, and Hawaii. Read more in our case study Making informed decisions about water loss management.

# Case study: Validating water audits to meet annual water loss reporting requirements in California

California requires water agencies and utilities in the state to report water losses annually with a completed Level 1 validation. E Source has completed more than a thousand water loss audit validations in California and all over the US.

E Source provides a thorough review of the utility's or agency's water audit and associated documentation, hosts a discussion of practices around data management and review, and delivers guidance on the next steps and leak mitigation strategies.

## Read the case study

Loss component analysis. A component analysis breaks down your volume of water loss into meaningful categories that help you make smart decisions about how to recover it. How frequently should you complete a leak-detection survey? How do the leaks you already repair fit into your total leakage profile? Answering these questions through component analysis work is is the next step after a water audit, and we know it through and through because we built the industry-standard tool for the job. California agencies can use the findings from a real loss component analysis to customize the California State Water Resources Control Board real loss performance target model to make sure the target is realistic.

**Regional program development.** Water loss control is a vital element of infrastructure maintenance and supply stewardship programs. We've learned that convening utilities in the same region to tackle water loss work as a group is especially rewarding and effective. A regional group of utilities can face similar challenges and learn from each other's success. We're pioneers when it comes to leading regional water loss control efforts. Our regional programs focus on shared services, learning opportunities, and cooperative research. We've also used external funding and grant opportunities for some regional programs, getting participating agencies the resources they need to make progress on water loss improvements. Read more about the benefits of developing regional programs and how we've helped in our blog post The benefits of tackling water loss at a regional level.

### Field services

We've surveyed thousands of miles of mains in dozens of systems, using state-of-the-art acoustic leak-detection equipment. Our expert team finds hidden leaks so you can deliver water to customers instead of losing it to leakage.

Our field services team is made up of experts in leak detection, pressure management, source meter testing, and more. They make it possible for us to tackle leakage from the ground up while keeping an eye on critical instruments.

**Leak detection.** We've surveyed thousands of miles of mains in dozens of systems, using state-of-the-art acoustic leak-detection equipment. Our expert team finds hidden leaks so you can deliver water to customers instead of losing it to leakage. We'll also help you estimate savings and understand your leak-detection results using your repair data, water audit, and infrastructure characteristics.

**Pressure management.** Excessive pressures cause more main breaks, more leakage, and more-frequent pipe replacement. Fortunately, we can help you balance service and infrastructure pressure needs. We start by surveying pressures in the field to collect real data on the state of your pressures. We can then identify regulating infrastructure that isn't working as intended, areas that are overpressurized or have immense pressure transients, and your average system pressure for use in the water audit.

**Source meter testing.** Source meters are essential assets when it comes to understanding distribution system efficiency, so their accuracy is critical. To study source meter accuracy, where feasible, we can design and conduct a volumetric meter test with you that accommodates your operational and infrastructure constraints. We always aim to produce a replicable test procedure so that future testing is easier.