



Making informed decisions about water loss management

Consulting case study

August 10, 2022

Key takeaways

- A water utility in California partnered with E Source to get technical assistance with system leakage reporting and management.
- E Source assessed the utility's current practices, the quality of its data sources, and its water loss control efforts to date.
- E Source provided an actionable plan and recommended methods to increase reporting accuracy, improve leakage performance, and follow state guidelines.

The challenge

A water utility in California wanted to better detect, remedy, and prevent water leaks. But it hadn't investigated the accuracy and completeness of the data sources informing its leakage reporting. The utility realized it needed to track and increase its understanding of its water system's performance to follow state reporting requirements.

California requires utilities use the American Water Works Association (AWWA) Free Water Audit Software to report annual water leakage. Often called the AWWA water audit, this approach compares the volume and value of real losses and apparent losses in a water distribution system for a given year. When utilities use this approach to calculate water loss, it's important to have accurate information about supply and consumption.

Do you need help with water loss management?

Contact our team to learn more about our expertise and how we can help.

The solution

In need of guidance and technical assistance, the utility turned to E Source. During the partnership, E Source used its resources to analyze data and evaluate the utility's:

- *Source metering accuracy.* E Source developed testing protocols and reviewed each meter responsible for registering volume supplied to distribution.
- *Billing data analysis.* E Source completed a detailed analysis of all billing records, highlighting gaps and inconsistencies affecting summary data.
- *Customer meter accuracy.* E Source designed a customer meter testing plan to help the utility better understand typical meter performance.

Finally, E Source reviewed the utility's current practices, assessed the quality of its data sources, and evaluated the water loss control efforts to date.

The results

E Source provided a final report identifying issues and recommending effective water loss reporting improvements. The report included source meter maintenance assessment and recommendations, billing data analysis findings, customer meter accuracy assessments, and real loss management recommendations.

At the end of the project, the utility chose to continue working with E Source to conduct a leak detection survey and identify hidden water leakage. The utility and E Source are also developing a water loss program that uses data and insights from the audit.