



Water Loss and Leak Detection Services

The Texas Water Development Board (TWDB) offers services to help utilities detect and manage water loss. Reducing the amount of water loss can be a significant conservation measure for utilities. By minimizing water loss, utilities can increase their efficiency, improve their financial status, reduce the need to search for additional water sources, and help sustain long-term water supplies. A consistent approach to auditing water loss gives utilities a reliable means to measure water loss and implement changes to reduce loss.

The Texas Legislature requires that all retail public utilities in Texas file a water loss audit with the TWDB once every five years. The next scheduled audit is for the year 2020 and is due May 1, 2021. In addition to this requirement, any retail public water utility that has an active financial obligation with the TWDB or has more than 3,300 connections is required to file a water loss audit annually.

TWDB staff is available to assist utility personnel with current water loss accountability methods and procedures. The TWDB also has an online water loss audit worksheet for utilities, which can be accessed at www.twdb.texas.gov/conservation/municipal/waterloss/.

Data

In 2013, the 83rd Texas Legislature appropriated funds to the TWDB to streamline online data collection for the agency's water planning and conservation programs. The Loss, Use, and Conservation online reporting application eliminates redundant data entry for the Water Use Survey, the Water Loss Audit, the Conservation Annual Report, and the Utility Profile. The application also provides the opportunity for entities to upload their water conservation plans digitally. Use of this reporting application improves the data collection process and the quality and consistency of that data.

The Loss, Use, and Conservation application removes the frustration associated with duplication of effort in fulfilling annual reporting requirements and provides a resource for reporting entities and water planning, outreach, and assistance considerations. More information can be found at www.twdb.texas.gov/conservation/municipal/waterloss/index.asp.

Water Loss Thresholds

House Bill 3605, passed by the 83rd Texas Legislature in 2013, required the TWDB to establish water loss thresholds to be used

in consideration of applications for drinking water projects. Now, a utility requesting assistance whose water loss is at or above its threshold is required to use some of its funding award to mitigate its water loss. Additionally, House Bill 949, passed by the 84th Texas Legislature in 2015, allows the TWDB to waive that requirement at the request of the retail public utility if the TWDB finds that the utility is satisfactorily addressing its water loss.

The TWDB has established thresholds for both apparent loss (unauthorized consumption, meter inaccuracy, billing adjustments, and waivers) and real loss (main breaks and leaks, storage tank overflows, customer service line breaks, and line leaks). The thresholds are unique for each utility and are based on its most current water loss audit.

Water Loss Auditor Training

House Bill 1573 by the 85th Legislature requires water loss audits to be completed by a person trained to conduct water loss auditing. This training is associated with the individual, not the utility, and is only required once, unless there are subsequent legislative requirement changes. An online training video is available through the TWDB website at <https://vimeo.com/texasawwa/twdblossaudit>.

Individuals are responsible for maintaining the training acknowledgment in their personal records and uploading it when submitting the water loss audit. The TWDB does not maintain the training records but does verify that the individual received training by viewing the acknowledgment attached to the water loss audit. The name on the acknowledgment should match the name of the individual completing the water loss audit.

Water Loss Assistance

TWDB staff is available to work with utility managers in providing onsite water loss audit assistance. Staff can perform consultant-type work and review the water loss audit worksheet with utility managers so that they understand the benefits to the utility.

The TWDB offers water loss audit and leak detection workshops. The workshops provide utilities the opportunity to learn how water loss audits can help them implement effective water loss control programs, how to use the TWDB's online data collection system

where audits are submitted, and how to successfully account for water use and loss. The workshops are approved for four hours of continuing education units for licensed water operators through the Texas Commission on Environmental Quality. More information can be found at www.twdb.texas.gov/conservation/municipal/waterloss/auditor_training.asp.

The TWDB Water Loss Audit Manual provides information on conducting a water loss audit and implementing a water loss program. It can be accessed at www.twdb.texas.gov/publications/brochures/conservation/doc/WaterLossManual_2008.pdf.

Additional information on water loss services can be found at www.twdb.texas.gov/conservation/resources/waterloss-resources.asp.

Leak Detection and Flow Meter Equipment

The TWDB lends acoustical leak detection equipment to utilities for 30 days. The only expense for utilities is the return shipping. The device has headphones and a ground microphone that can pinpoint leaks on a variety of pipe sizes and materials. The TWDB also lends ultrasonic flow meters to utilities for 30 days. Again, the only cost is the return shipping. More information about this equipment can be accessed at www.twdb.texas.gov/conservation/municipal/waterloss/leak-detection.asp.

To obtain more information regarding water loss audits or available leak detection equipment, contact conservation staff at (512) 463-7988 or WLAGroup@twdb.texas.gov.