WATER LOSS THRESHOLDS & APPLICATIONS FOR FINANCIAL ASSSITANCE

HB 3605 passed by the 83rd Legislature required the Texas Water Development Board to establish water loss thresholds, to be used in consideration of applications for drinking water projects. A utility requesting assistance, and whose water loss is at, or above their threshold, is required to use some of the funding to mitigate their water loss. Mitigation, for this purpose, is defined as "An action or actions taken by a retail public utility to reduce the amount of total water loss in a system. It may include a detailed water loss assessment, pipe or meter replacement, or addition or improvement of monitoring devices to detect water loss". Additionally, House Bill 949 passed by the Legislature in 2015 allows the TWDB to waive that requirement at the request of the retail public utility, if TWDB finds that the utility is satisfactorily addressing their water loss.

Thresholds were established for both Apparent Loss (unauthorized consumption, meter inaccuracy, billing data errors) and Real Loss (distribution mains leakage, storage tank overflows and leakage, and leakage at service connections).

The TWDB approved the initial water loss thresholds in 2014. Those thresholds were based on statewide data from 2010 water loss audits and water loss metrics that were industry standard at the time. Since those initial thresholds were approved, new performance indicators for water loss have been developed by the American Water Works Association Water Loss Control Committee, a group of water industry leaders in water loss. The thresholds were reexamined using quality-controlled statewide data from 2015 to 2020 water loss audits and these new performance indicators. The new indicators and methods, which primarily affect real loss (water loss due to leaks and breaks, including unknown loss), were accounted for when developing the revised rules and threshold changes.

Whereas the thresholds established in 2014 used population, the new thresholds use density of service connections to categorize water loss thresholds. After extensive testing of different scenarios for the application and calculation of real loss thresholds, it was concluded that separating utilities by low-density and high-density was the most equitable and simplified approach to developing real water loss thresholds. These thresholds were developed using the more current quality-controlled water loss data to derive the median real loss per connection per day for each density group.

The following thresholds were approved by TWDB in February 2023, and apply only to retail public utilities requesting financial assistance for a water supply project after July 1, 2023:

1) For all water utilities, the apparent loss threshold is a system-specific calculation. The calculation includes a customer meter accuracy limit of 94.7 percent and unauthorized consumption and data handling error volumes at the default value.
2) For water utilities with a service connection density of 32 or more connections per mile, the real loss threshold is 30 gallons per connection per day.
3) For water utilities with a service connection density of less than 32 connections per mile, the real loss threshold is 57 gallons per connection per day.

These thresholds simplify the application of real loss thresholds and address concerns with utilities with a very high volume of real loss who were not affected by the thresholds previously. In addition, large wholesale water volumes that a utility sells to another retail provider continue to be considered when calculating that utility's real loss threshold.