

Pilot Water Loss TAP: Building Momentum Towards Statewide Water Loss Control

Managing water loss does not have to wait for a regulatory requirement.

Initiating a pilot water loss program is an important step to understanding what a state-wide program might look like. Let our experience developing successful programs in 10 states show how your state can be next.

A pilot program is best fit for a state seeking to demonstrate water loss management best-practices in for a small test group, with limited funding. The pilot program learning model provides a combination of group learning and one-to-one utility training on the AWWA M36 Water Audit methodology, data validation, and identification of next steps for water loss control.

The pilot program typically involves between 3 to 10 utilities and takes 6 to 9 months, including program introduction via webcast, a data gathering/analysis phase, and an in-person classroom event that delivers group training on technical fundamentals and utility specific technical assistance on auditing & validation. A final report includes specific actions for each utility, as well as insights gleaned from pilot program that inform statewide implementation.



Water Audit Reporting Year:	Calendar Year 2015
Data Validity Score:	46
Service Connections:	13,770
Miles of Main:	171.2
Average Operating Pressure:	79.0 psi
Apparent Losses per service connection per day	16.99
Real Losses per service connection per day	44.83
Infrastructure Leakage Index	2.61

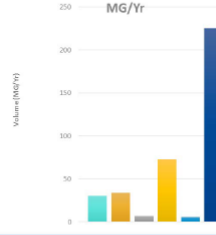
Validity

Level 1 validated DVS score of 46/100 for Water Audit Reporting Calendar Year 2015. The Data Validity Score suggests that priorities should be made to improve the validity before moving to targeted water loss control efforts. Priority areas for attention are:

- Water Imported
- Unbilled metered
- Customer metering inaccuracies

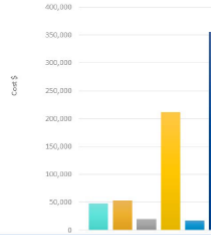
Volume

Total Volume of NRW = 375



Value

Total Cost of NRW = \$705,304



Water Loss Control Planning Guide

Water Audit Data Validity Level / Score

Functional Focus Area	Level I (0-25)	Level II (26-50)	Level III (51-70)	Level IV (71-90)	Level V (91-100)
Audit Data Collection	Launch auditing and loss control team; address production; metering deficiencies	Analyze business process for customer metering and billing functions and water supply operations; identify data gaps.	Establish/review policies and procedures for data collection	Refine data collection practices and establish as routine business process	Annual water audit is a reliable gauge of year-to-year water efficiency standing
Short-term loss control	Research information on leak detection programs. Begin benchmarking analysis of customer billing system	Conduct loss assessment investigations on a sample portion of the system: customer meter testing, leak survey, unauthorized consumption, etc.	Establish ongoing mechanisms for customer meter accuracy testing, active leakage control and infrastructure monitoring	Refine, enhance or expand ongoing programs based upon economic justification	Stay abreast of improvements in metering, meter reading, billing, leakage management and infrastructure rehabilitation
Long-term loss control		Begin to assess long-term needs requiring large expenditure: customer meter replacement, water main replacement program, new customer billing system or Automatic Meter Reading (AMR) system.	Begin to assemble economic business case for long-term needs based upon improved data becoming available through the water audit process.	Conduct detailed planning, budgeting and launch of comprehensive improvements for metering, billing or infrastructure management	Continue incremental improvements in short-term and long-term loss control interventions

Essential Outcomes:

- Technical, financial, and managerial capacity development in water systems through improved business practices.
- Build a higher confidence in data reliability to identify water losses and revenue recovery.
- Identify actionable, cost-effective steps to increase water efficiency.
- Provide guidance and standardized methodology for water audit validation.
- Roadmap to take pilot scale program to statewide scale.

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Contact us today to learn more.

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