

KNOW YOUR WATER

FOR MUNICIPAL WATER UTILITIES



CHALLENGES

- ◆ Don't know if water use data is valid (balanced)
- ◆ Utility required to report accurate consumption estimates
- ◆ Cannot accurately measure water use improvements
- ◆ Need cost effective water saving practices
- ◆ Need to optimize your water system operations to save money



SOLUTION

AWWA's M36 Methodology and FREE Water Audit Software

- ◆ Nationally Recognized Methodology
- ◆ The industry standard tool for water system accounting
- ◆ Water Balance model where all water is accounted for
- ◆ Contains a data validation component
- ◆ Provides guidance on when and how to implement water loss control measures



BENEFITS

- ◆ Easy process to develop Reliable and Accurate Water Use Data
- ◆ Saves Water by Reducing losses
- ◆ May Increase Revenue
- ◆ Saves money by targeting the Economic Optimum loss and intervention
- ◆ Can create a water use improvement plan and track actual improvements
- ◆ Utilities that complete AWWA Water Audit may see improved Bond Ratings



Water Efficiency & Water Loss Control Program

A Program that Works! Pilot Program - 12 Utilities = 12 Unique Outcomes - 2 Examples



Demonstrated the effectiveness of the water system audit process to collect reliable water supply and use data. The program is also designed to provide the Utilities with:

- ◆ A demonstration of a nationally recognized process to collect Reliable Water Use Data
- ◆ A Data Validation Process to assess the credibility of the water audit data inputs.
- ◆ Consumption Estimates to provide data for Source Sizing & Infrastructure Capacity
- ◆ A mechanism to measure actual water use improvements over time.
- ◆ A tool to identify ways to reduce water losses to help stretch existing supplies
- ◆ A cost / benefit tool to assess the financial impacts from the implementation of water loss control measures

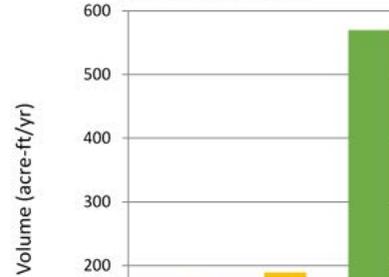
Taylorsville-Bennion I.D.



67,000
POPULATION
15,871
CONNECTIONS

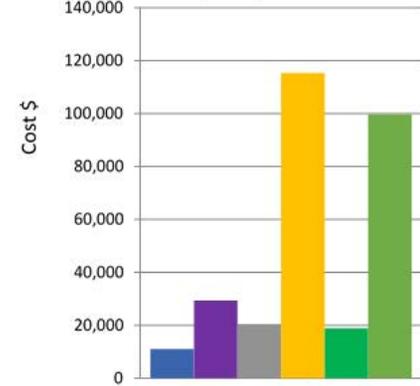
Volume

Total Volume of NRW =
1,055 Acre-ft/Yr



Value

Total Cost of NRW
=\$294,963



2016 Pilot Program—3 Utilities

Granger Hunter Improvement District
Kearns Improvement District
Orem City



2018 Pilot Program—9 Utilities

Jordan Valley Water Conservancy District
Lehi City Water Department
Murray City
Nibley City
Provo City Water Resources Department
Riverton City
Taylorsville Bennion Improvement District
WaterPro / Draper Irrigation
Weber Basin Water Conservancy District



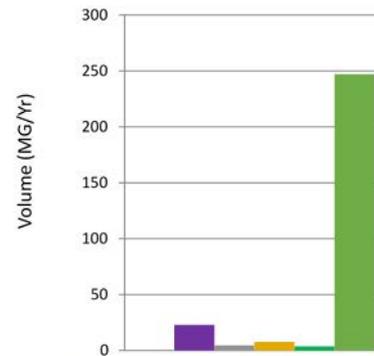
Lehi City



47,400
POPULATION
13,015
CONNECTIONS

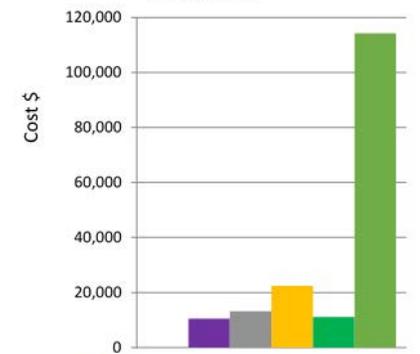
Volume

Total Volume of NRW =
878 Acre-feet/Yr



Value

Total Cost of NRW
=\$171,540



What Utilities are Saying...

Utilities agree that the Free AWWA Water Audit Software is a great tool to thoroughly review their system and processes. Overall the process helped water systems identify priority areas to increase the reliability of their data and identify cost effective supply side conservation measures.

Orem City - One of the greatest short-term benefits from performing the water loss audit is that it has initiated staff to think differently in many ways. Staff now has a greater focus toward the importance of identifying and accurately recording non-revenue water, namely city-owned facilities and green spaces.

Jordan Valley Water Conservancy District - Implementing the actions and recommendations identified with the audit will benefit Jordan Valley Water from an overall efficiency and cost standpoint, which in turn directly benefits the customers we serve. We advocate for conservation and water-wise practices by our customers, and as a water district we need to be practicing those same principles in our operations.

Taylorsville-Bennion Improvement District - The benefits of the water audit really impact our organization and the community we serve. Having accurate data and specific areas to work on recovering non-revenue water the District will make more accurate and informed decisions.

- Unbilled Metered
- Unbilled Unmetered
- Unauthorized Consumption

- Customer Metering Inaccuracies
- System Data Handling Errors
- Real Losses

