



American Water Works Association

### Water Accountability & Efficiency Improvements for PA State Water Plan Consideration

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Presented at the meeting of the Delaware Regional Committee – PA State Water Plan Development  
May 11, 2006

### Drinking Water Supply in Pennsylvania

- ◆ Over 2,000 drinking water utilities
  - Vast majority are small, municipally owned systems
  - These utilities serve 82% of PA's population
- ◆ Withdrawals (USGS, 2000 data)
  - Drinking water supply 11% of all withdrawals
  - 1.462 billion gals/day for drinking water supply
  - Per capita withdrawal down: 144 gpcd in 2000 vs. 171 gpcd in 1995

### Delaware Regional Committee Water Resources Plan Template

#### ◆ Task #4, bullet 3

- A process for identifying projects and practices that are being or have been implemented by water users that reduce the amount of water withdrawal or consumptive use, improve efficiency in water, provide for reuse and recycling of water, increase the supply or storage of water or preserve or increase groundwater recharge and a recommended process for providing appropriate positive recognition of such projects or practices in actions, programs, policies, projects or management activities

### Traditional Shortcomings in Water Accountability

- ◆ Terminology; Historically a Lack of standardized definitions of water and revenue losses
- ◆ Technical; Not all water supplied by a water utility reaches the customer
- ◆ Financial; Not all of the water that reaches the customer is properly measured or paid for
- ◆ Water rates frequently don't cover the cost of service

### Some Pennsylvania Successes

- ◆ State College Beneficial Water Reuse Project – University Area Joint Authority
  - Balances growth with environmental protection by conservation and enhanced wastewater treatment to supply recycled water for non-potable use and groundwater recharge
- ◆ Philadelphia Water Department – reduced non-revenue water by +50 MGD in 10 years
- ◆ AWWA – Water Audit Method and Software
  - Active DRBC/Delaware Basin participation

### A Report: *Waste Not, Want Not: The Potential for Urban Water Conservation in California*

- ◆ Standardize water-use terms:
 

*Confusion over terms such as water use, consumption, withdrawal, new water, real water, conservation, productivity, efficiency, and so on can hinder policy analysis. Some efforts should be made to standardize terms related to water use and conservation*

- Pacific Institute, 2003



## The Software's Potential

- ◆ Promote standard assessment of water loss standing: definitions and performance indicators
- ◆ Establish a reliable means to collect data
- ◆ State of Texas Legislation: collecting 2005 water audit data in IWA/AWWA format – first state to do so
- ◆ PA DEP 2005 Annual Primary Facility Report – includes IWA/AWWA water balance
- ◆ DRBC WMAC – will draft a position statement on the potential of the new method to improve several existing DRBC resolutions on water accountability

## Water Loss Control in Drinking Water Utilities

- ◆ Leakage Management – can reduce withdrawals
  - Improved leakage detection & measurement
  - Pressure management
- ◆ Apparent Loss control – recover revenue
- ◆ Full Cost Pricing
- ◆ Customer Education

## Summary

- ◆ Pennsylvania played a lead role in a number of water efficiency successes
- ◆ PA's drinking water industry has opportunity to make further efficiency improvements to benefit water resources and the economical sustainability of water utilities & communities
- ◆ The developing PA State Water Plan can consider the methods behind these improvements as important components of the new state water plan

