



# Updating our Water Infrastructure The Institute for Regulatory Policy Studies Springfield, Illinois October 20, 2011

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*MOVING WATER FORWARD*

# Presentation Overview

- Private water operations in the U.S.
- Role of NAWC
- Capital challenges we face together
- Implications from increased conservation
- Solutions for meeting our challenges

# Private Water Service Providers

2,000 Public-Private Partnership facilities

Own 20 % of nation's community wastewater systems



A \$6 billion industry, annually

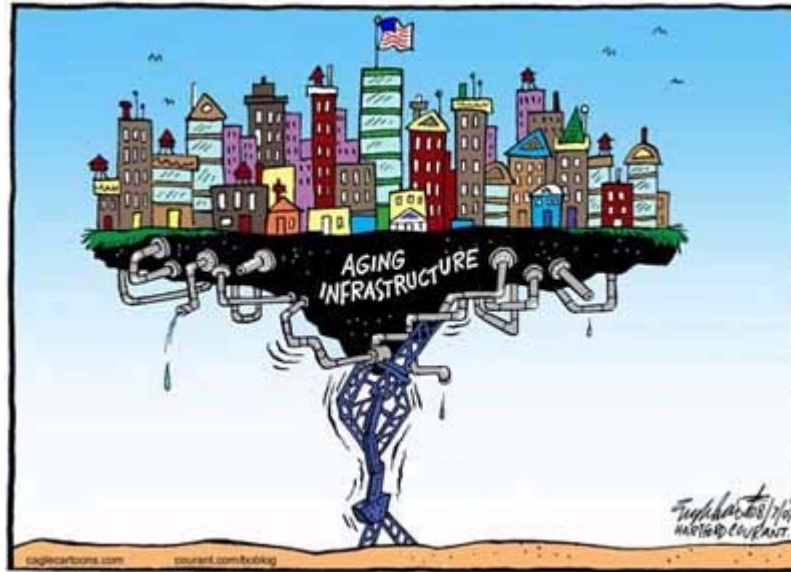
16% of Americans get water from privately owned utilities

# NAWC History and Background

- Founded in 1895 in Pennsylvania by small group of private water companies
- Only investor-owned utilities until 2009
- Integrated PPP-company Water Partnership Council on June 1, 2009
- Today has members in every region of U.S. ranging from large companies owning, operating or partnering in hundreds of communities to small utilities with a few hundred customers

## Role of NAWC

- Promote the value of the private sector as a provider of quality, sustainable water services and innovative solutions
- Historically has worked primarily with state Public Utility Commissions and Congress and US EPA
- With new members and broadening mission, are “rebranding” and reaching out to other state and local officials



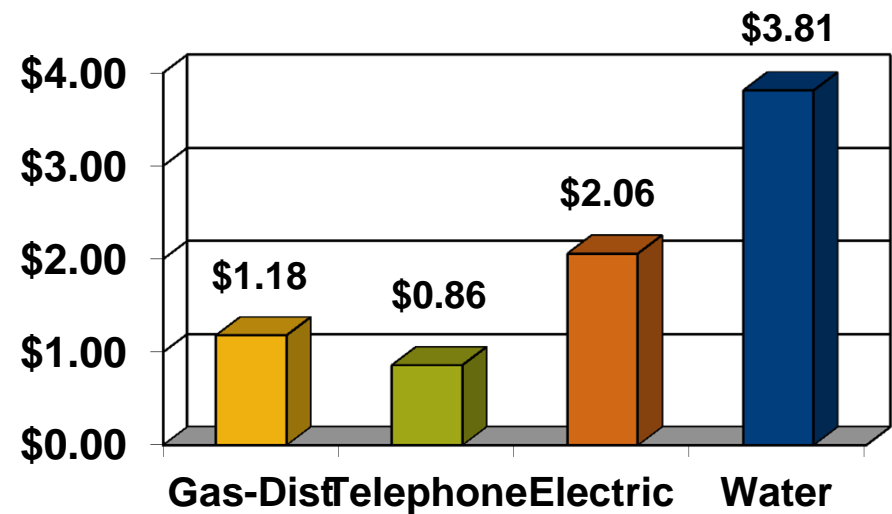
# Capital Needs for DW Systems

- Nationally, the U.S. EPA reports in its 2007 Drinking Water Infrastructure Needs Survey and Assessment:
  - \$334.8 billion over 20 years
  - 60% for pipes – transmission and distribution
  - 22% for treatment plants
  - Rest of source, storage, miscellaneous
- Illinois' portion is \$15 billion

# Water Industry is the Most Capital Intensive Industry

## Capital Invested per \$1 of Revenue

- EPA Rules require large investment in filtration plants
- Immense investment needed for distribution system and road repair
- More capital per revenue than all other utilities

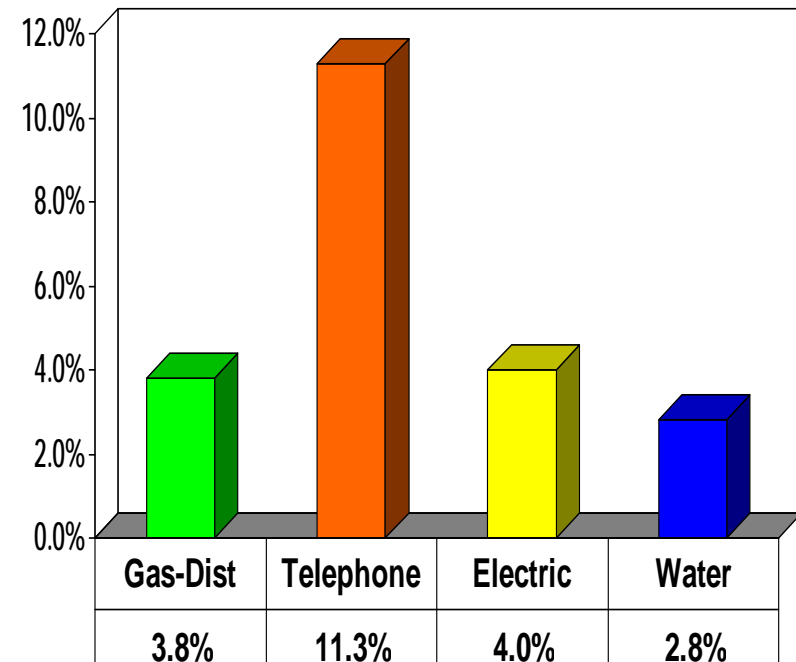


*Source: 2009 AUS Utility Reports*



# Water Industry has the Lowest Depreciation Rate in the Utility Sector

- **Historic cost recorded is lower than replacement cost**
- **Water industry has longest capital recover period, which is viewed negatively by Wall Street**



*Source: 2009 AUS Utility Reports*

# Declining Consumption

- Consistently declining consumption
- American Water from 2000-2009 in its 10 largest state companies:
  - Average annual decline of 1.28%
  - Illinois annual decline of 1.35%
- Aqua America from 2008 to 2010:
  - Northeast region total decline of 2%
  - Midwest region total decline of 4%
  - South region total decline of 6%
  - South region w/ inclining block rates: -25%

## Conservation . . . and Efficiency

- Customer conservation education programs are effective
- But even without utility company efforts and consumer behavior changes . . .
- Water use efficiency is happening
  - New showerheads: 28 percent reduction
  - New faucets: 34 percent reduction
  - New toilets: 68 percent reduction
  - New washing machines: 47 percent reduction
- Outdoor irrigation similar reductions

## There are Solutions

- Educate consumers on the value of safe and reliable water service to their health and economic well-being – *and the need to pay what it costs to deliver that value*
- Increase utility operational efficiencies and deliver business transformation
- Promote good public policy and effective, up-to-date rate regulation



# Value of Water Campaign

Water plays a part in every aspect of our lives, benefiting health, safety and economic development in communities across the country. To provide this critical resource, many communities rely on local private water companies and trust them to treat and deliver water that meets or exceeds all state and federal drinking water regulations. For quenching a thirst, supporting public health, extinguishing a fire or irrigating crops, nothing compares to tap water from your local private water company.

This message brought to you by:

Member Logo Here

A Proud Member of



**Tap water is essential to life.**  
Making sure you always have it is our job.



# Value of Infrastructure Investment Campaign



Investment in water infrastructure will create jobs

**\$1 billion**  
in water infrastructure investment can support

▶ 28,500 jobs

**\$190 billion**  
in private capital for infrastructure is available

Every \$1 billion invested in water infrastructure results in up to \$3.46 billion of total national output.

**20 Year**  
job potential

▶ 926,820 jobs

**1 Year**  
job potential

▶ 46,341 jobs

Illinois' 20 Year Water Investment Needs

Wastewater Needs  
according to EPA

▶ \$17.5 billion

Drinking Water Needs  
according to EPA

▶ \$15.02 billion

Combined Needs  
according to EPA

▶ \$32.52 billion

# Business Transformation

- Utility capital investment is not just pipes and plants
- Investments in technology and business infrastructure to allow companies to manage water for the 21<sup>st</sup> century
  - Business processes
  - IT systems integration – CRM, GIS, SCADA
  - Energy efficiency
  - Customer service improvements
  - Attract, train and retain a more productive work force

# Effective Regulatory Practices

- “Decoupling”/conservation revenue adjustment mechanisms
- Tariff design v/v fixed and variable costs and revenues
- Rates based on rational forecasting of future consumption rather than historical averages – test year and trends
- Distribution system improvement charges (Qualifying Infrastructure Plant Charge)
- Provide for appropriate consolidation



# Illinois State Policies

- Support: Water Systems Viability Act. HB 1955
- Illinois is facing severe water infrastructure investment issues
  - \$32.52 Billion – Illinois' 20 year water & wastewater infrastructure needs
  - 28,500 – the average amount of jobs created for every \$1 Billion invested in water infrastructure (Illinois unemployment is hovering around 9.1%)
  - 912,000 jobs that can be created in Illinois over the next 20 years by investing in water infrastructure
- Increase small system consolidation
  - Over 1,300 water and 600 wastewater systems that serve fewer than 3,300 Illinois residents. Illinois has a highly fragmented water delivery system which leads to possible safety issues as well as economic development concerns. Many of these systems lack the expertise in operations and engineering. In addition, many lack the financial capabilities to adequately maintain their systems to provide clean, reliable water today and into the future.
  - Proposed legislation removes existing disincentives for both sellers and buyers as they work toward the consolidation and improvement of Illinois' water and wastewater systems.
  - Illinois must seek new innovative ways of doing business. The current approach to addressing water and wastewater infrastructure needs is not working. Illinois must release the power of the private sector to help in addressing these issues.
  - The infrastructure deficit in Illinois is too large for any one approach to solve. It needs as many "tools" in the tool box to address this. HB 1955 is but one more tool that Illinois can utilize to address this issue.

## Federal Policies

- Maintain dividend rates at 15%
  - Utilities must continue to attract capital
- Remove federal restrictions on private activity bonds for water and wastewater
  - Utilities can reduce cost of debt
- Private utility access to Clean Water SRF
  - Private utilities must be made eligible for low-interest Clean Water State Revolving Loans



*Thank you!*

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