

Building Awareness

Generating Support for Infrastructure Sustainability: National, State & Utility Initiatives

IWA Regional Workshop
Yokohama, Japan
2 February 2012

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Lehigh County Authority



American Water Works
Association



Water Infrastructure

Out of site, out of mind...



...most of the time

Water Service Stakeholders

- 💧 Utility Management
- 💧 Utility Boards
- 💧 Utility Employees
- 💧 Public Officials
- 💧 Legislators
- 💧 Customers
- 💧 Businesses
- 💧 Media



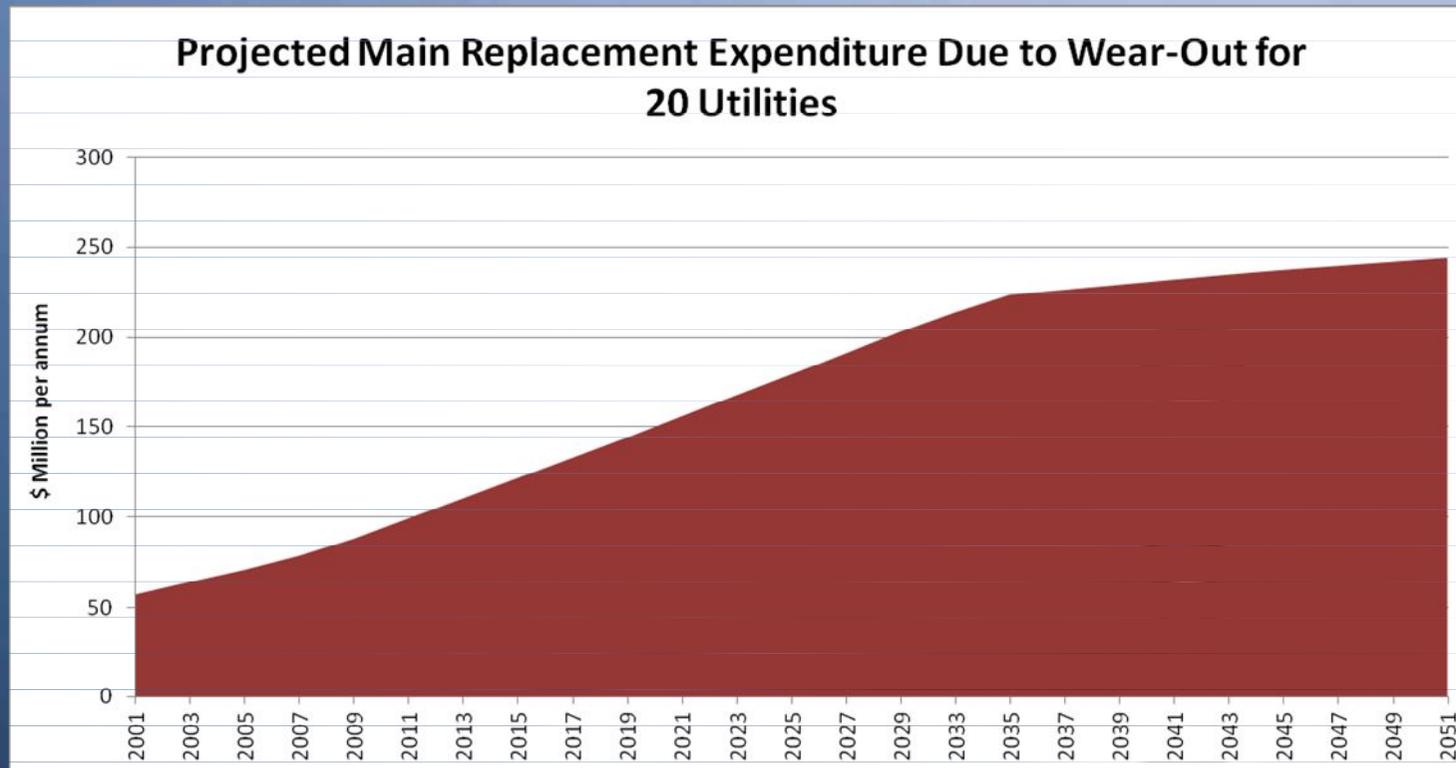
Longstanding AWWA focus on Infrastructure Finance



- Reinvesting in Drinking Water Infrastructure, May 2001
 - Avoiding Rate Shock, April 2004
 - Thinking Outside the Bill, November 2004
- Water Infrastructure at a Turning Point, May 2006

Nessie Curve

Reinvesting in Drinking Water Infrastructure, May 2001





Only Tap Water Delivers[®]



American Water Works
Association

The Authoritative Resource on Safe Water[™]

What do we value?



A closer look at what our tap water delivers
and a call to reinvest in our infrastructure

Only Tap Water Delivers

- 💧 Public Health Protection
- 💧 Fire Protection
- 💧 Support for the Economy
- 💧 Quality of Life



I'm not
so easily
replaced.



If only our water infrastructure could talk to us. The pipes running below our streets might remind us that they carry the very lifeblood of our community. Tap water keeps us healthy, fights fires, supports our economy and provides us with the high quality of life we enjoy.

We are all stewards of the water infrastructure generations before handed down to us, and our water bills keep that system strong and reliable. For more information about what your tap water delivers, visit *[insert utility web address here]*.

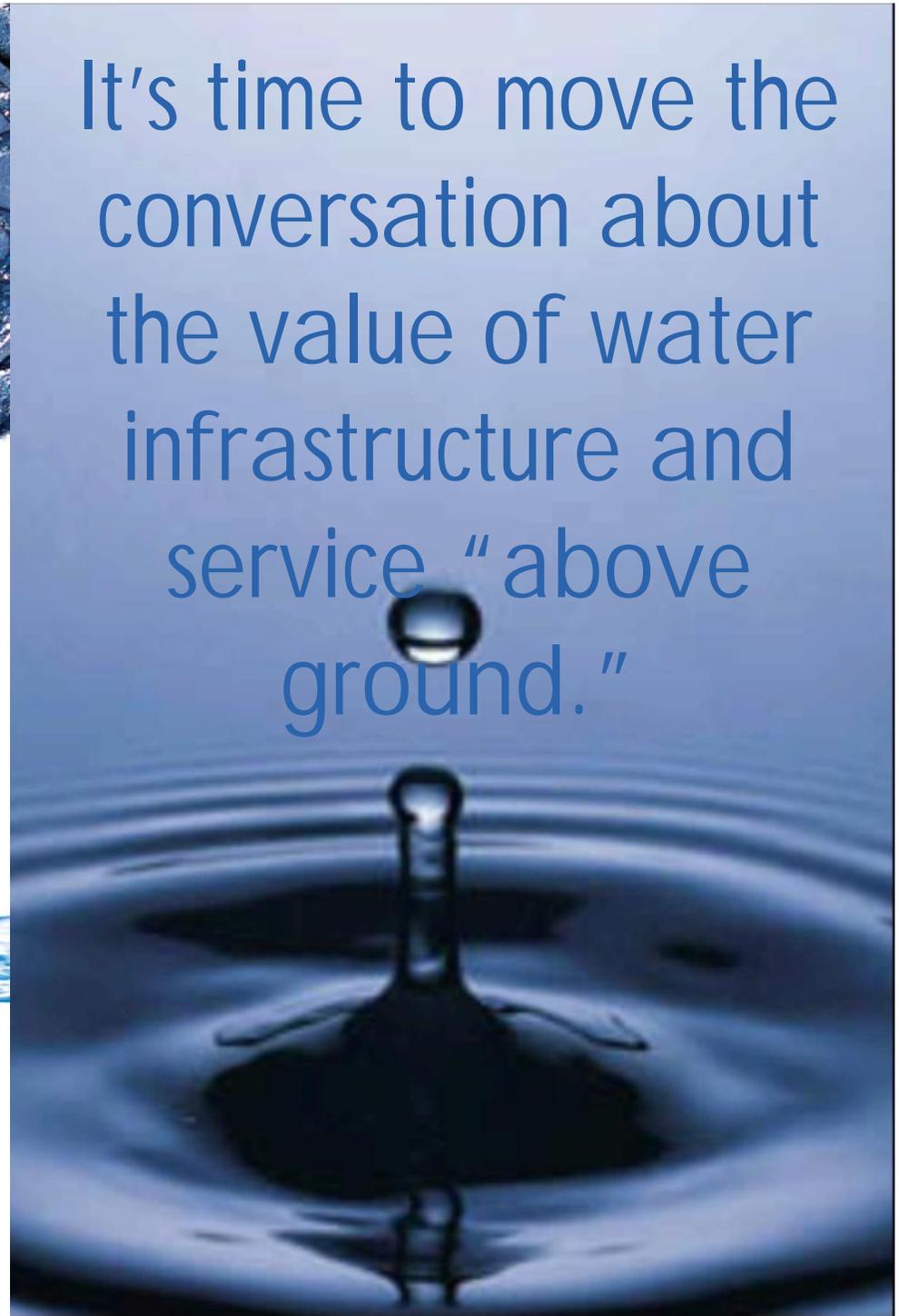
Only Tap Water **Delivers**

(Place Utility
Logo Here)

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It's time to move the
conversation about
the value of water
infrastructure and
service "above
ground."



We need to act now
to prevent today's
concerns from
becoming
tomorrow's crisis.

I want to be here for you.

If only our water infrastructure could talk to us. The corner hydrant might remind us that only tap water protects us against the threat of fire, and that the pipes below our streets need constant attention to keep life-saving water flowing at the right pressure, 24/7, without fail.

We are all stewards of the water infrastructure generations before handed down to us, and our water bills keep that system strong and reliable. For more information about what your tap water delivers, visit *[insert utility web address here]*.

Only Tap Water **Delivers**[™]

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Do you know how often you turn me on?

If only the water faucet could talk to us. It might remind us how often we turn to it for safe water to drink, to wash our clothes, to prepare our food, to provide us with the everyday quality of life we enjoy. It might remind us that the water pipes below our streets make so many everyday conveniences possible.

Our water bills pay to keep our community tap water safe, reliable and there for us — 24/7 without fail. For more information about what your tap water delivers, visit *[insert utility web address here]*.



Only Tap Water
DeliversSM

(Place Utility
Logo Here)

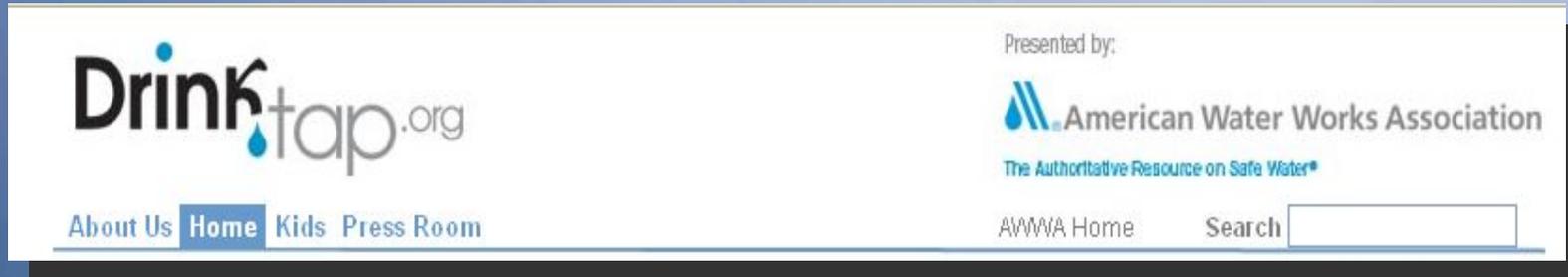
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Together,
we can make
sure tap water
continues to deliver
for generations to
come.

DrinkTap.org

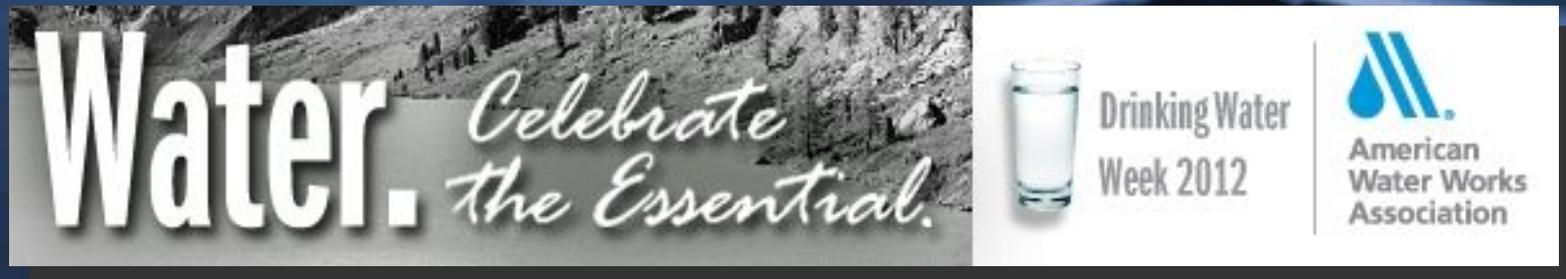


The screenshot shows the top navigation bar of the DrinkTap.org website. On the left is the logo for DrinkTap.org, where 'Drink' is in a bold, black, sans-serif font and 'tap.org' is in a lighter, lowercase, sans-serif font with a blue water drop icon above the 'a'. Below the logo are navigation links: 'About Us', 'Home' (highlighted with a blue background), 'Kids', and 'Press Room'. On the right side, it says 'Presented by:' followed by the American Water Works Association logo (three blue slanted lines) and the text 'American Water Works Association' and 'The Authoritative Resource on Safe Water®'. Below this is a search bar with the text 'AWWA Home' and 'Search' followed by an empty input field.

- Consumer website
- Explain complex drinking water issues
- Third party resource
- DrinkTap blog added in 2008

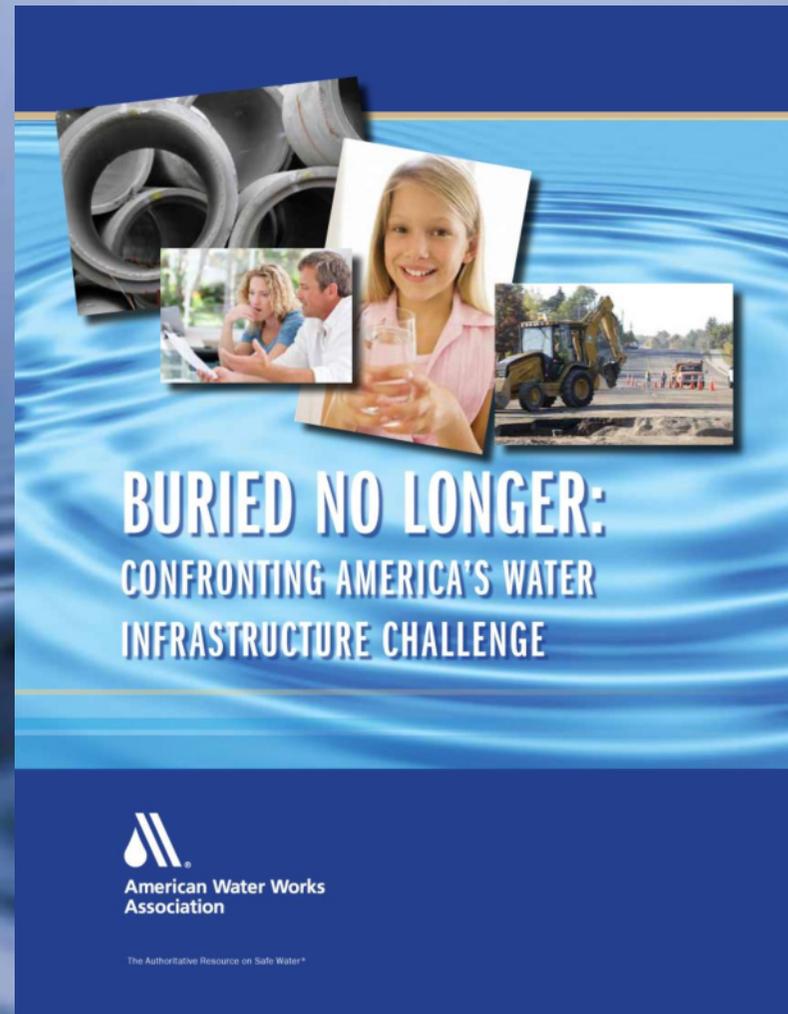
Drinking Water Week

- Opportunity for water utilities' communities to celebrate the work they do
- Free materials available on the AWWA website
- Develop new materials every few years in an effort to remain topical and fresh

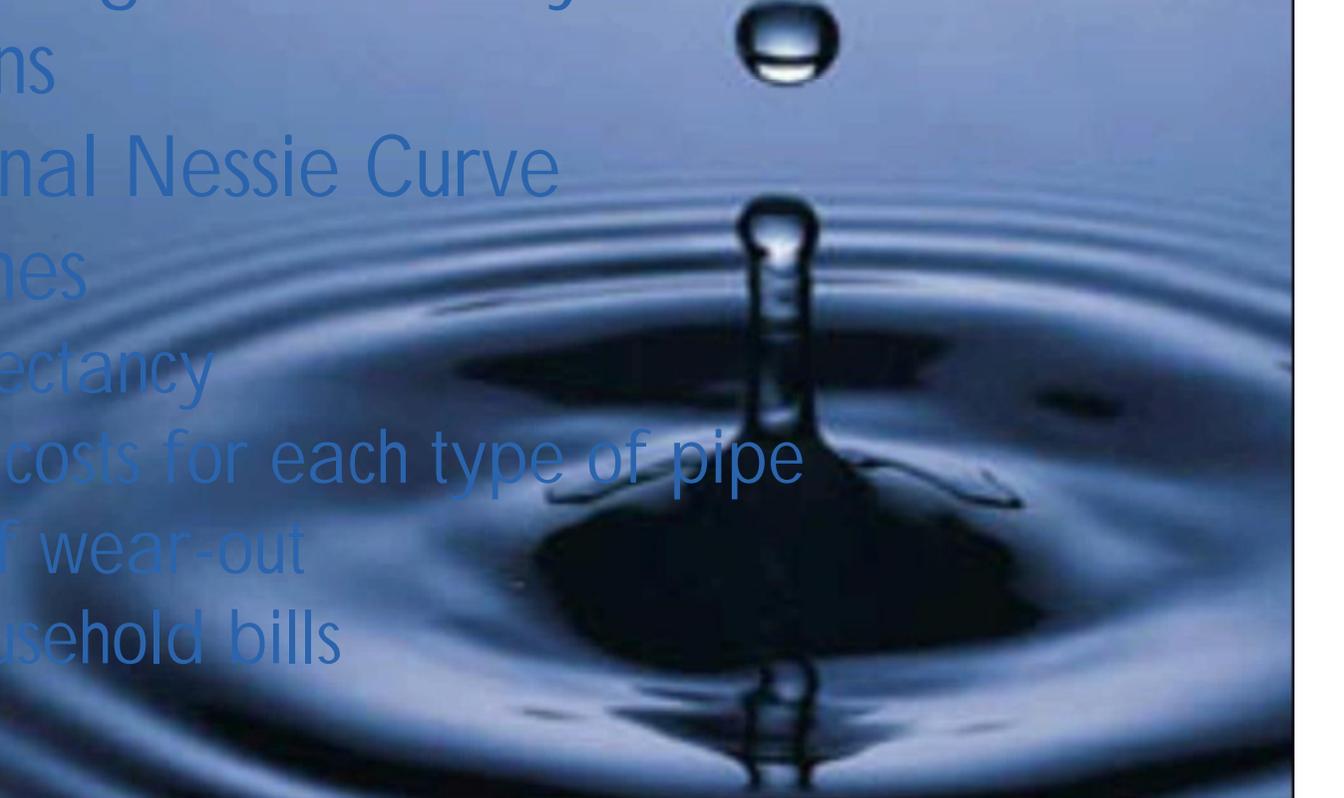


AWWA Infrastructure Report

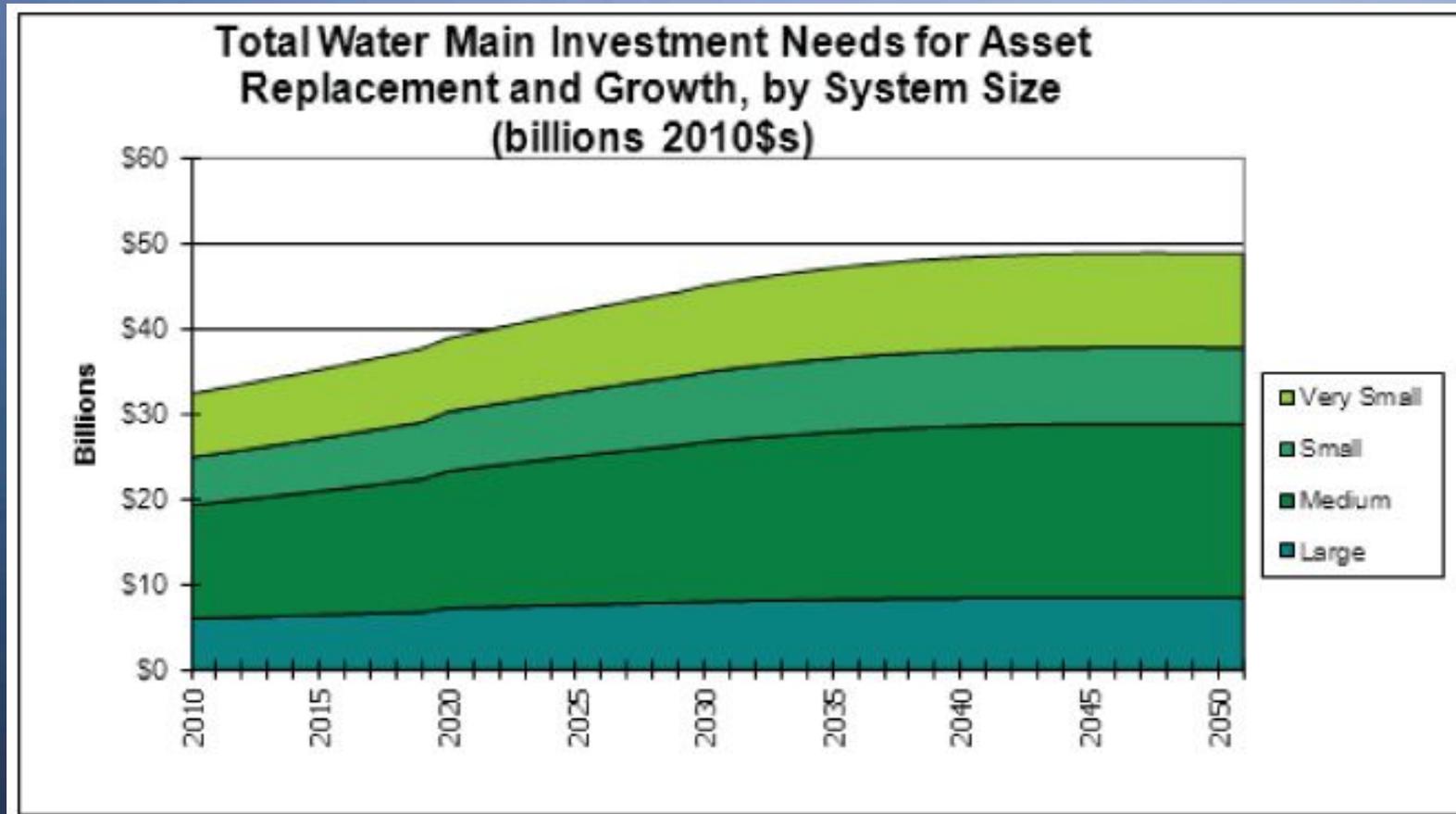
- AWWA will publish new water infrastructure cost assessment in March 2012
- Report examines
 - Pipe life expectancy
 - Replacement costs for each type of pipe
 - Probability of wear-out
 - Impact on household bills



Buried No Longer...

- ◆ Addresses buried water infrastructure, largely pipelines
 - ◆ Examined 4 regions and 4 system size classifications
 - ◆ Creates National Nessie Curve
 - ◆ Report examines
 - ◆ Pipe life expectancy
 - ◆ Replacement costs for each type of pipe
 - ◆ Probability of wear-out
 - ◆ Impact on household bills
- 
- A close-up photograph of a single water droplet falling into a pool of water. The droplet is captured mid-fall, just above the surface, creating a small splash and concentric ripples that spread outwards. The background is a soft, out-of-focus blue, matching the overall theme of the slide.

Buried No Longer... Large National Nessie Curve



Buried No Longer...

Findings

- ◆ Needs are large
 - ◆ \$1 Trillion (¥77 Trillion) over next 25 years
 - ◆ \$1.7 Trillion (¥131 Trillion) over next 40 years
- ◆ Household costs are high – in some cases, bills triple
- ◆ Significant Regional Difference
 - ◆ \$75 per household, up to \$600 per household
 - ◆ ¥5,769 to ¥46,154 per household
- ◆ Significant difference based on System Size
 - ◆ Small system: \$300 to \$600 increase per household per year (¥23,078 to ¥46,154)
 - ◆ Large system: \$75 to \$100 increase per household per year (¥5,769 to ¥7,692)
- ◆ Significant difference in timing

Buried No Longer... Findings

- ◆ Good news:
 - ◆ Need doesn't arise immediately
- ◆ Bad News:
 - ◆ It grows as time passes and is continuous



Pennsylvania Water Infrastructure Task Force Report

Creating a Sustainable Solution *for Pennsylvania*



November 1, 2008

Edward G. Rendell, Governor

Governor's Sustainable Infrastructure Task Force Report

The Governor's Sustainable Infrastructure Task Force was supported by the Pennsylvania Department of Environmental Protection.

This report was drafted by the Task Force and is comprised of input collected at eight public meetings conducted throughout Pennsylvania and the independent research and analysis performed by each of the five Work Groups.

Pennsylvania Water Infrastructure Task Force Report

💧 Public Education

💧 Audiences:

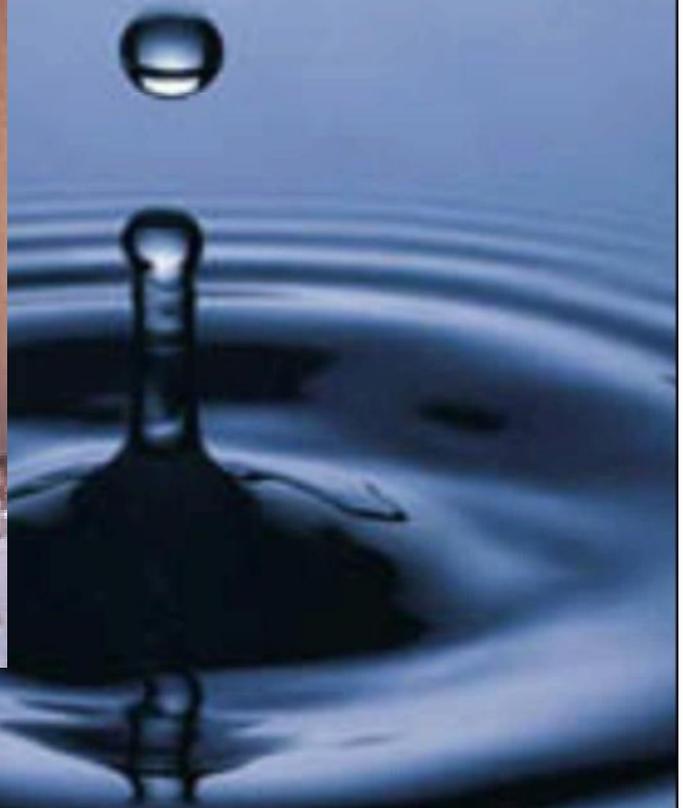
- 💧 Adults
- 💧 School-age Children

💧 Messages

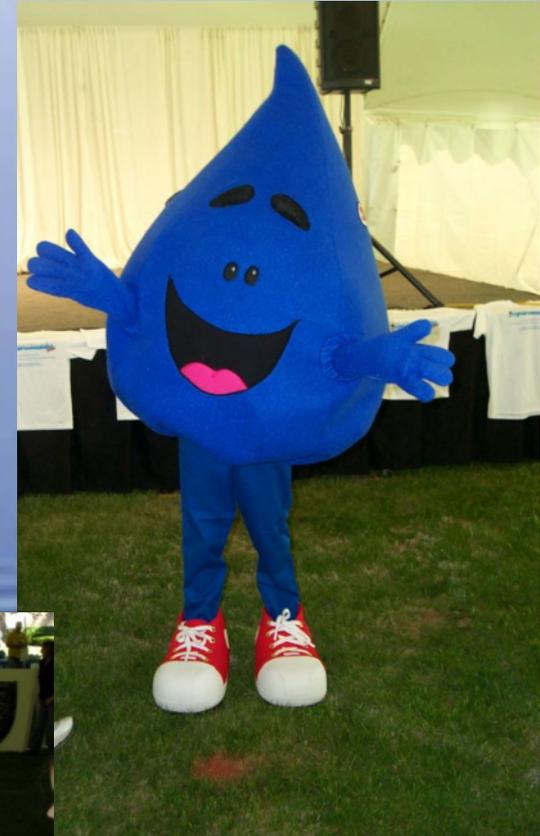
- 💧 True value of water
- 💧 Criticality of water infrastructure to economic vitality
- 💧 Water resource protection
- 💧 Need to preserve/rehabilitate water infrastructure



LCA Drinking Water Week – Water Taste Testing Competition



LCA Drinking Water Week – HydroMania!



LCA Drinking Water Week – Operator's Day

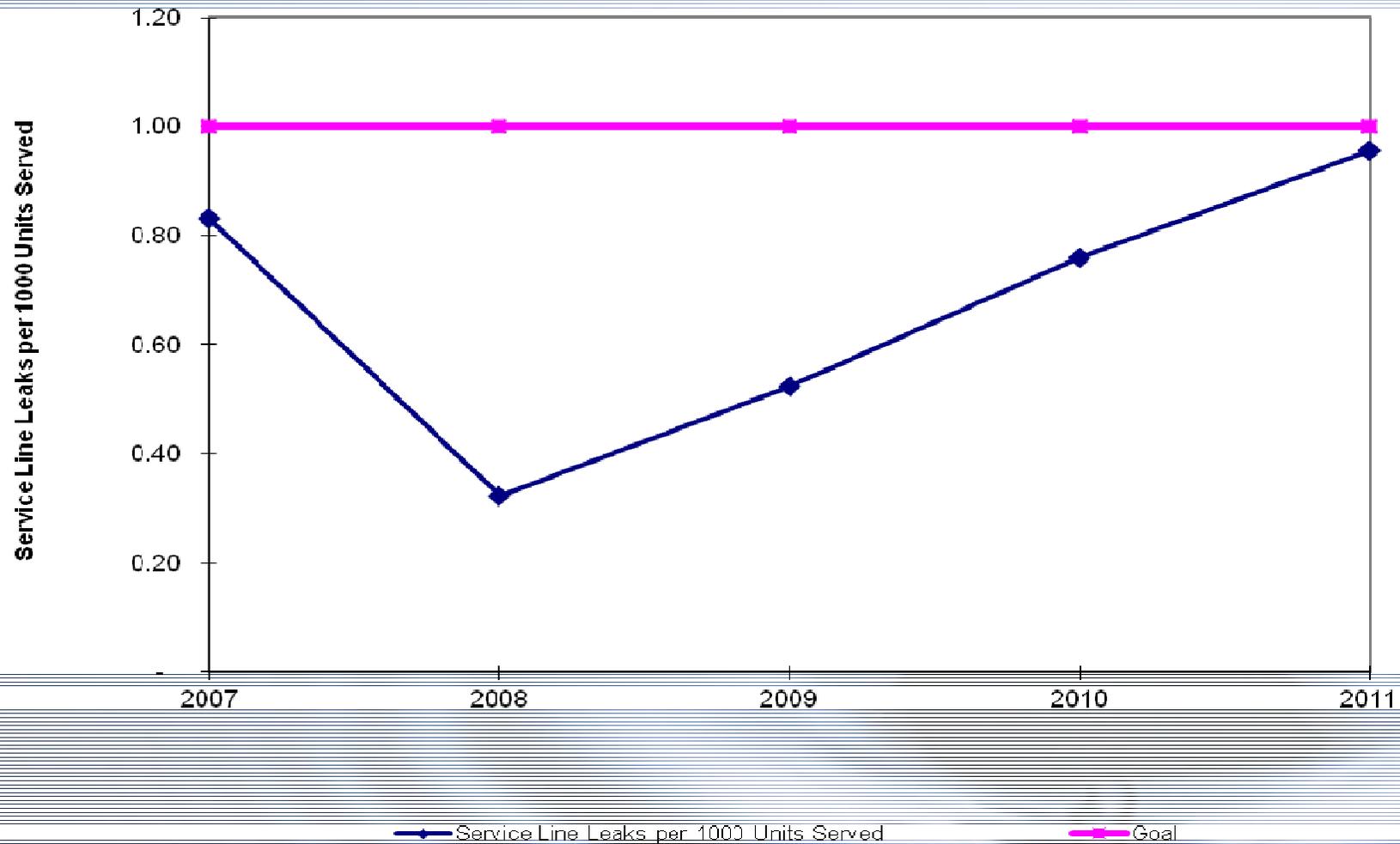


LCA Infrastructure Benchmarks

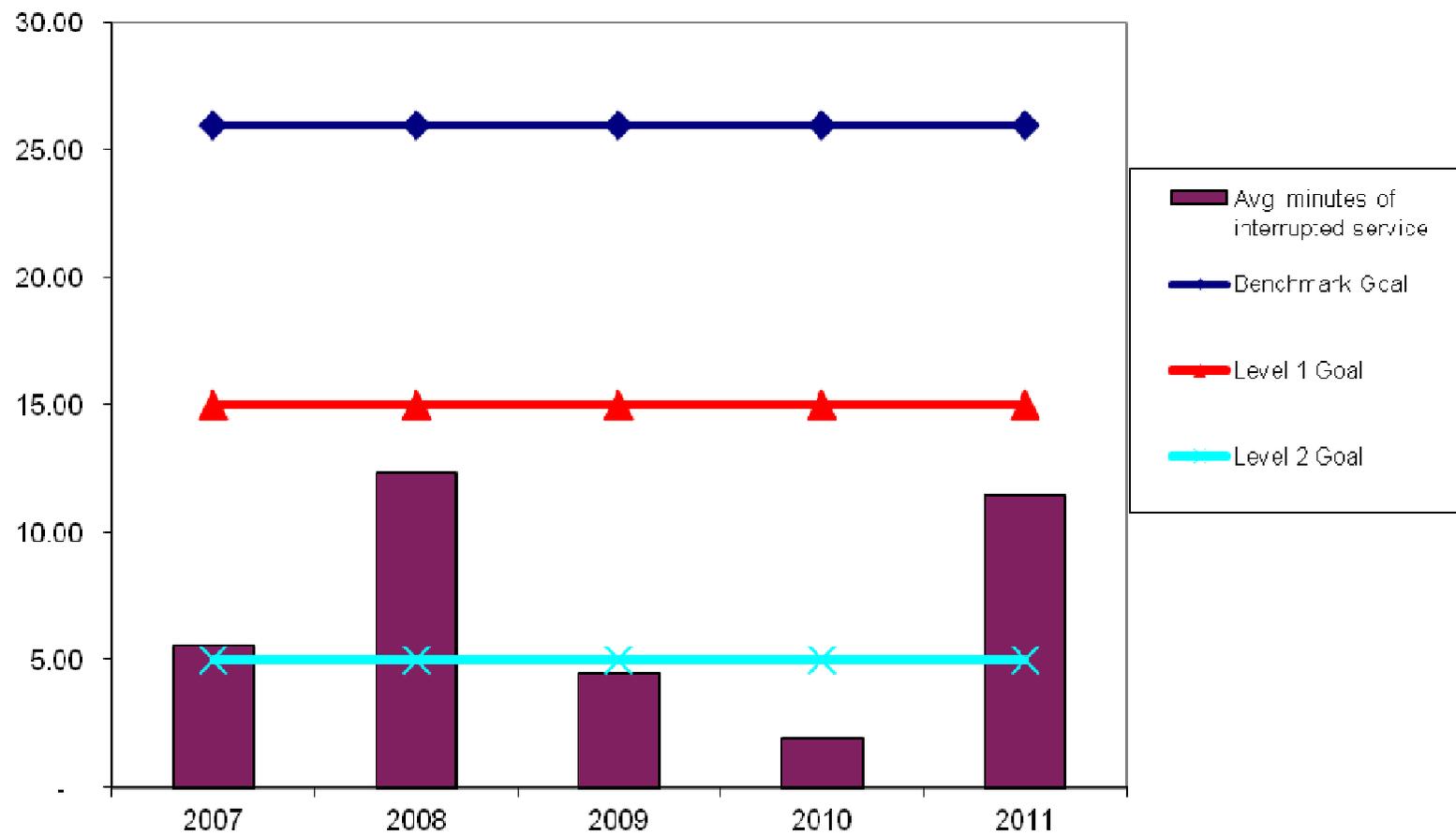
- ◆ Service Line Leaks
- ◆ Water Service Outages
- ◆ Water Main Breaks
- ◆ Planned vs. Unplanned Maintenance (Water)
- ◆ Unaccounted for Water (Leaks)



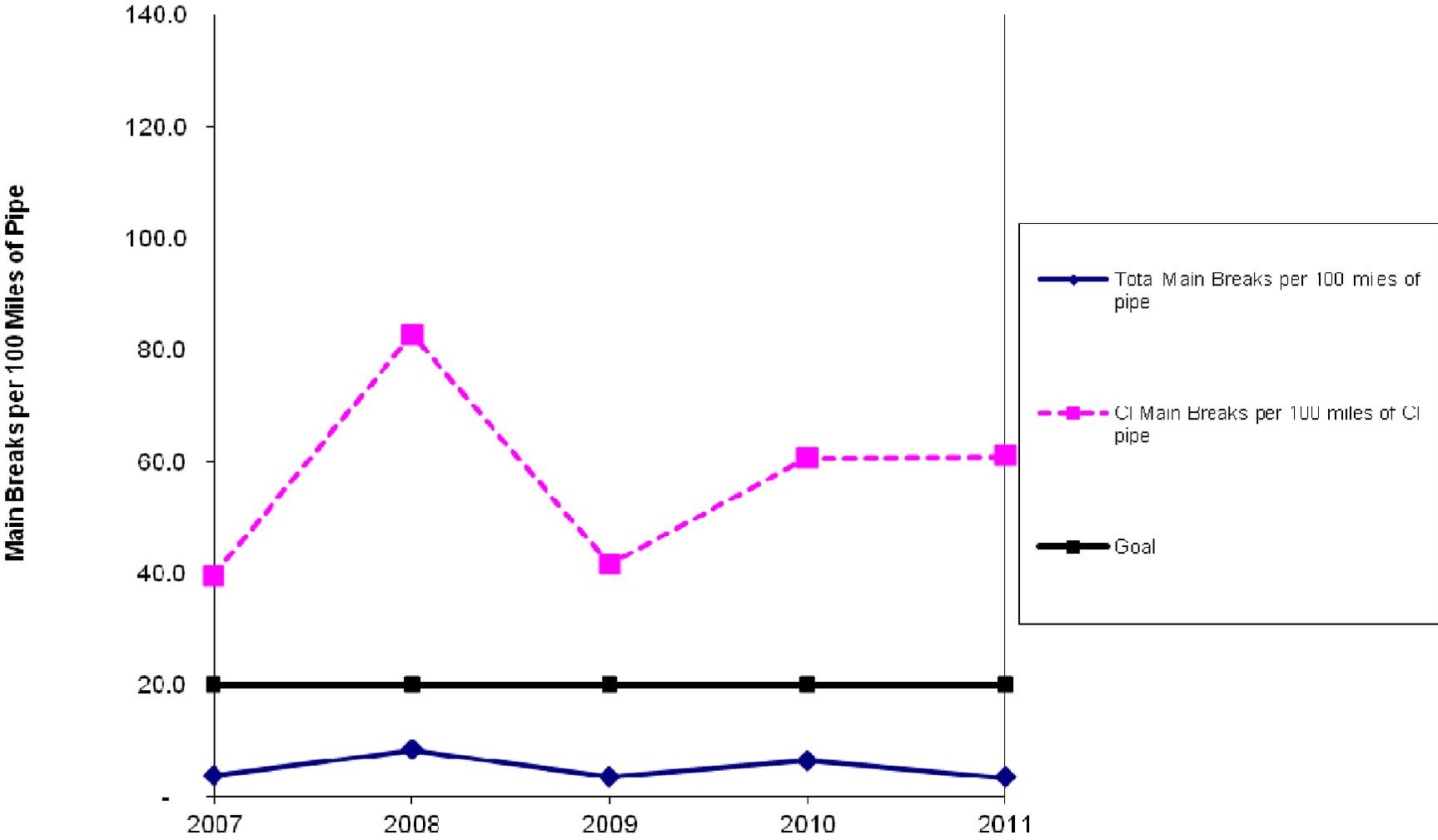
Benchmarking – Service Line Leaks



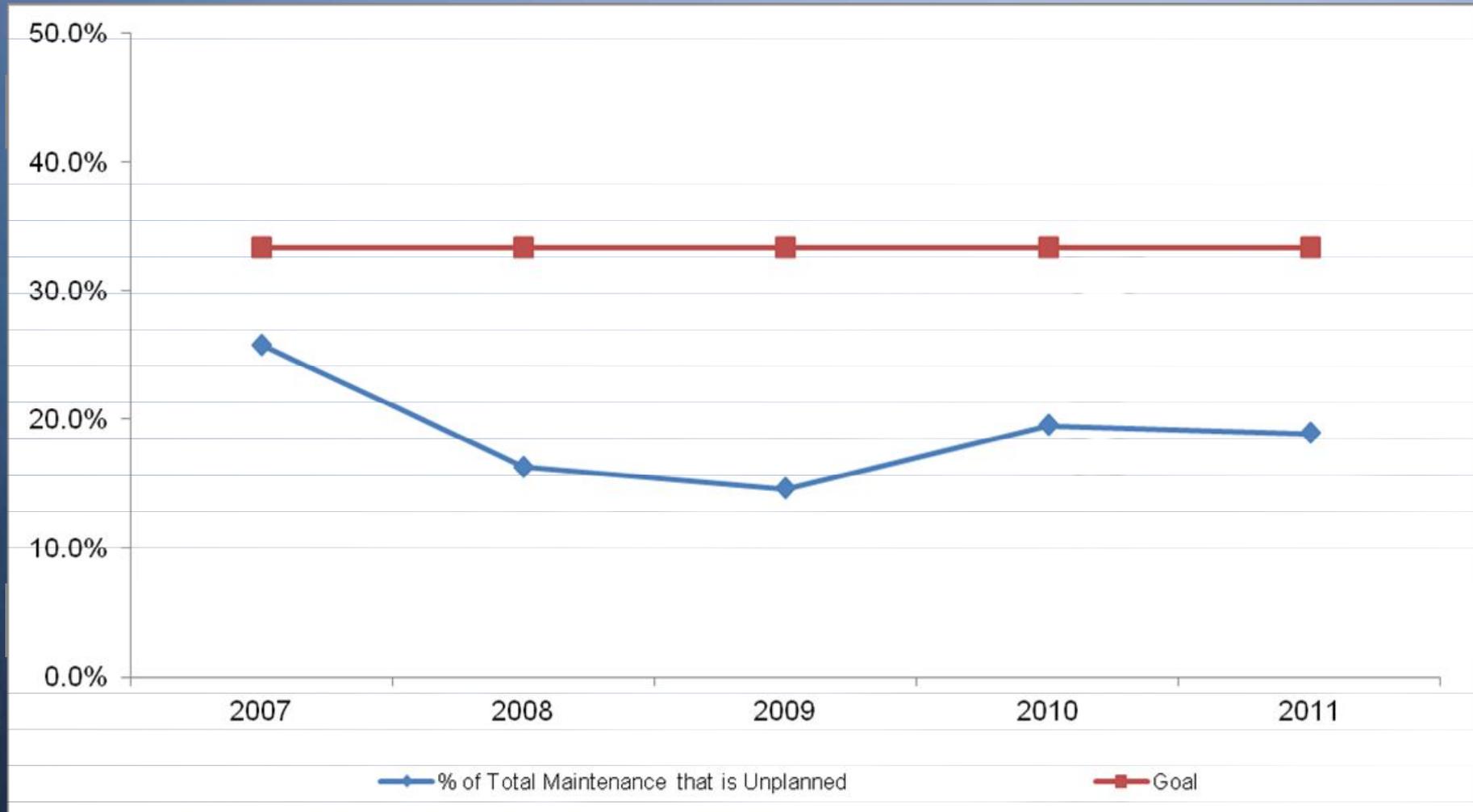
Benchmarking – Water Service Outages



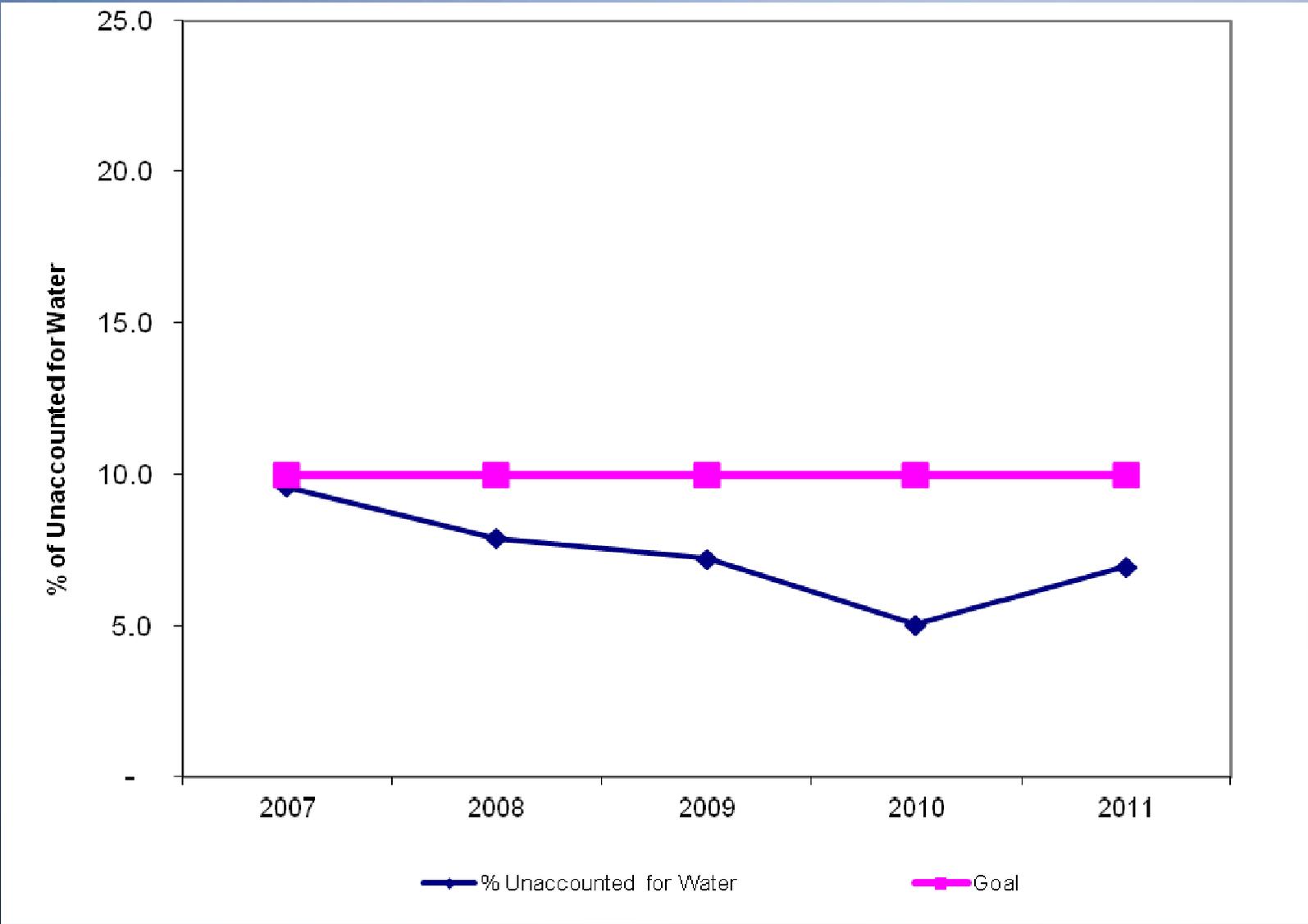
Benchmarking – Water Main Breaks



Benchmarking – Planned vs. Unplanned Maintenance (Water)



Benchmarking – Unaccounted for Water (Leaks)



Awareness...

...Paves the way for sustainable infrastructure



American Water Works
Association

