NCSL 2018 Panel
America’s Water: Is It Safe?

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AMERICAN WATER
We are the largest and most geographically diverse publicly traded water and wastewater service provider in the United States.

- We serve a broad national footprint and a strong local presence.
- We provide services to approximately 15 million people in 46 states and Ontario, Canada.
- We employ 6,900 dedicated and active employees and support ongoing community support and corporate responsibility.
- We treat and deliver more than one billion gallons of water daily.
90% of these utilities serve less than 10,000 people (~3,000 homes)
Partnerships Are Needed to Address Many of the Water Community’s Greatest Challenges

- Water Supply
- Water Quality
- Infrastructure
- Customer Expectations
Contamination of Water: One of the Greatest Risks to the Water Community
A Shifting Landscape of Regulation, Threats, and Perception Challenge All Water Utilities

A New Chemical Every 2.5 Seconds

Water Resources

Urbanization and Aging Infrastructure

Politics, Advocacy

Access to Capital

American Water’s Technology and Innovation Division Develops and Implements Solutions to Mitigate Risks
The Complexity of Regulatory and Operational Response Challenge Water and Wastewater Utilities

• 1/3 of all water systems in 2016 had at least one notice of violation
• The majority of these were small systems
• Flip side: 2/3 of all water systems did not have any violations
• But, for those that did, partnerships can help
  • Partnership language would amend the Safe Drinking Water Act
  • Encourage and financially incentivize systems in significant noncompliance (SNC) to pursue partnerships in order to improve
  • Voluntary option and allows for co-op, partnership, or acquisition
We Worry about Pharmaceuticals & Other Chemicals in Our Water Supply—But Who Evaluates the Risk?

Pharmaceuticals and Endocrine Disrupting Compounds in U.S. Drinking Water

MARK J. BENOTTI, REBECCA A. TRENHOLM, BRETT J. VANDERFORD, JANIE C. HOLLARD, BENJAMIN D. STANFORD, AND SHANE A. SNYDER

Example: The Power of Networking and Partnerships to Detect and Respond to Contamination Events

Product 1: Validated (and Updated) Sensor Panel to Detect Contaminants

Product 2: AI-Driven Alert System and Operational Response Procedures

Aspiration: Build Watershed- and National-Scale Monitoring Networks
So What’s Needed?

• States can create a legislative and regulatory landscape that promotes partnerships
  • Fair Market Value legislation- (California, Illinois, Indiana, Iowa, Maryland, Missouri, New Jersey, New York, Pennsylvania)
  • Water Accountability legislation (New Jersey and Indiana)
  • Makes expertise available to the entire community
  • Brings strong teams to evaluate and deliver solutions

• Data consolidation—we need more accessible (on-line) information on chemicals in our watersheds
THANK YOU

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We’re Seeing Increases in Wastewater Loading into Our Water Supplies

Figure 4. De facto reuse under average flow and low-flow conditions (modeled by 7Q10). Cities marked with an asterisk are calculated on the basis of 7Q10 streamflow values from the EPA 1980 study. (The x-axis gives same site IDs as in Figure 2.)

Figure 2. Cities with changes in upstream municipal flow between 1980 and 2008. Sites with decreases are annotated with the change in flow.

Assessment of De Facto Wastewater Reuse across the U.S.: Trends between 1980 and 2008

Jacelyn Rice,7,9 Amber Wetcher,5 and Paul Westerhoff9