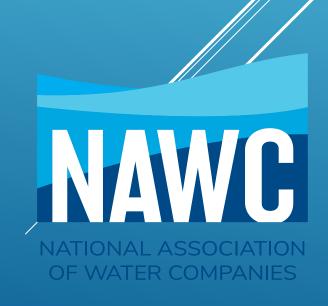
STAFF WORKSHOP

TO EXAMINE REGULATORY POLICIES AND PRACTICES IN THE WATER AND WASTEWATER INDUSTRIES

On behalf of the NAWC Lila Jaber, President, LilaJaber Consulting April Ballou, NAWC General Counsel and VP of State Regulatory Affairs



NAVC

NATIONAL ASSOCIATION

OF WATER COMPANIES







WHO IS NAWC?



Robert Powelson President & CEO, NAWC

- Former FERC Commissioner
- Former PA PUC Chair
- Former NARUC President
- Former Chair, NARUC Water Committee
- Former President, local county Chamber



April Ballou General Counsel & VP State Regulatory Affairs

- Former Advisor to FERC Commissioner
- Former Advisor to PA PUC Chair
- Assisted with the implementation of Pennsylvania Act 11

Executive Committee



Donald J. Morrissey President Aquarion Company



Susan Hardwick CEO American Water



Martin Kropelnicki CEO CA Water Service Group



Karine Rougé CEO Veolia NA



Robert Nicholson President San Gabriel Valley Water Company



Andrew Gere President & COO San Jose Water Company



Chris Franklin CEO Essential Utilities

WATER: A NECESSITY OF LIFE

- Only utility service physically ingested
 - Cannot compromise on water quality
 - No room for error on safety and reliability
- Service largely taken for granted BUT customers expect high level of reliability
- Heavy environmental regulation
- Key role in society: health, sanitation, fire protection
- 85% of clean water and 99% of wastewater controlled by municipal systems
 - Public water systems have inconsistent regulation as those systems are not Commission-regulated





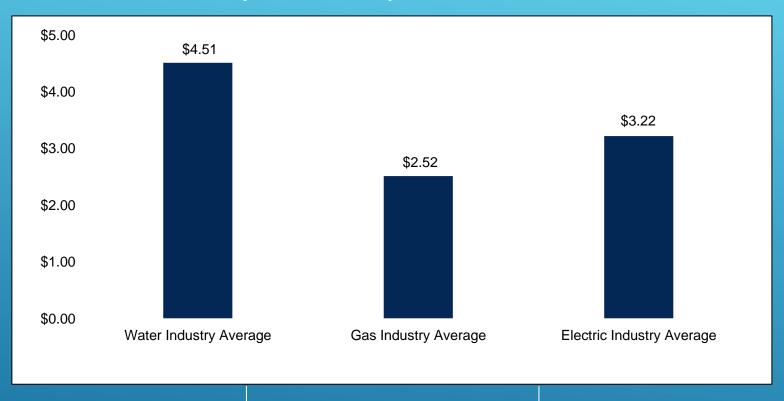
CHALLENGES FACING WATER INDUSTRY

- Increasing cyber and physical security threats
- Aging infrastructure
- Increasingly stringent quality standards
- Emerging contaminants/lead service lines
- Affordability concerns
- Threats to supply / extreme weather
- Aging Workforce
- Rising Customer Expectations
- Most Capital-Intensive Industry
- Industry fragmentation



Water Industry: Most Capital-Intensive Utility

Capital Invested per \$1 of Revenue



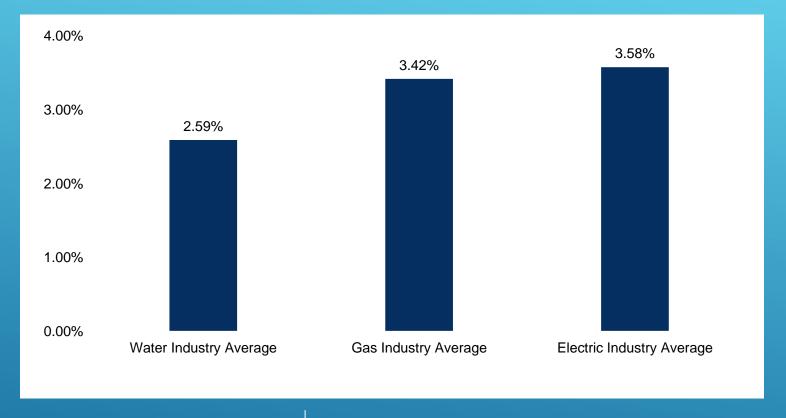
EPA Rules require large investment in treatment plants

Substantial investment needed for supply and distribution system

More capital per revenue than all other utilities



Water Industry: Lowest Utility Depreciation Rates





High capital needs + long capital recovery= negative cash flow, not attractive to many investors



NAWC MEMBER PRIORITIES



Water Equity



Focus on the Customer



Never Compromise on Providing Safe and Reliable Water

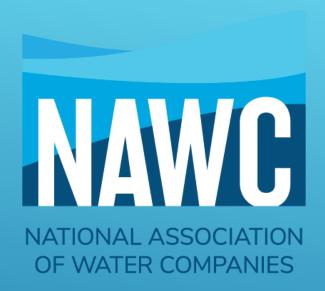


Invest in Communities



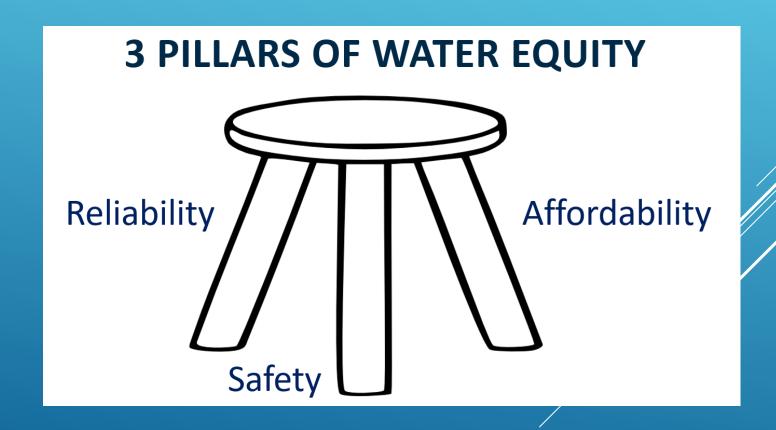


Develop Partnerships and Encourage Water System Consolidation



It is important to price water service at a level that is affordable, but that also accurately represents the cost of treating and delivering the water, so that utilities have access to capital to maintain high-quality service.

Water equity means that everyone should have access to water that is safe, reliable and affordable.



NEVER COMPROMISE ON SAFETY



- 45 million Americans drink water that violates health standards
- Water quality violations disproportionately impact communities of color and rural Americans
- Source water faces new threats from emerging contaminants like PFAS

HOW WATER COMPANIES CAN HELP Systems run by water companies are significantly less likely to violate federal drinking water standards compared to systems run by local governments.

REGULATED WATER UTILITIES

Deliver Cleaner and Safer Drinking Water

- **Greater compliance** with federal drinking water standards¹
- Fewer EPA enforcement actions than all other water system operators³

EPA records show that investorowned utilities have a near-perfect record when it comes to avoiding health-related violations of the federal Safe Drinking Water Act.

 "Data Shows IOUs Are Cut Above in SDWA Compliance," American Water Intelligence



- Allaire, Wu, and Lall, "National trends in drinking water quality violations," PNAS, Feb. 2018
- Konisky and Teodoro, "When Governments Regulate Governments," Nov. 2014
- 8. American Water Intelligence, "Investor-Owned Water Firms Boast Sterling SDWA Record," Oct. 2011

NEVER COMPROMISE ON RELIABILITY

To ensure reliable service, NAWC members focus on:

- Advance utility planning
 - Long-term infrastructure replacement plans
 - Develop security plans for cyber and physical attacks
 - Engage in physical hardening to withstand extreme weather events
 - Plan for short- or long-term supply issues
- Investing in infrastructure

Encouraging incremental and consistent investment in water infrastructure increases <u>system reliability</u>, and keeps <u>rates stable</u> by allowing necessary costs to be incurred gradually.



4. Based on data from annual reports and 10-K filings from 10 largest NAWC members.

FOCUS ON THE CUSTOMER

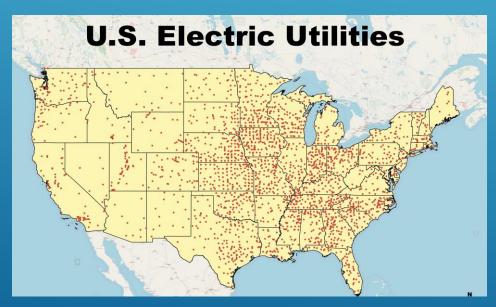
Address affordability concerns by implementing proven programs that include:

- Promote sensible water use habits
 - Conservation, sensible irrigation practices, etc.
- Support a permanent federal low-income water assistance program (like LIHWAP)
- Encourage utility customer assistance programs
 - Budget billing, voluntary funding assistance
- Permit consolidated rates and consolidated revenue requirements
 - Keeps rates affordable while still maintaining the fiscal sustainability of utilities

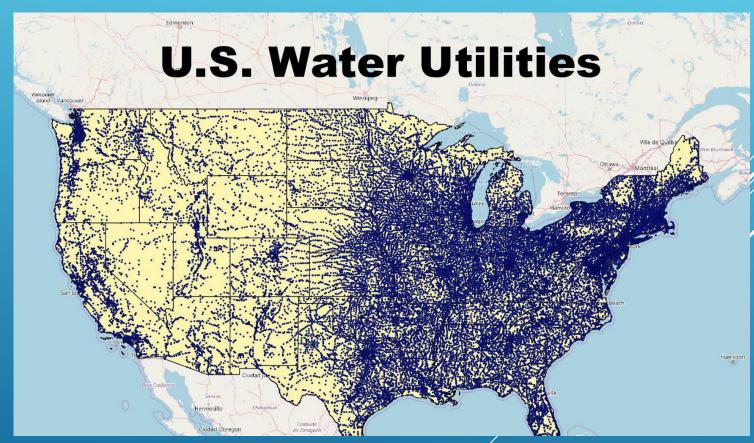




U.S. Natural Gas Utilities



WATER SYSTEM FRAGMENTATION





SMALL SYSTEMS: BY THE NUMBERS

- More than 45,000 water systems in the country
- More than 90 percent are small, serving fewer than 10,000 people
- Annual Health Violations
 - > **26 percent** of systems with a service population under 500 have violations
 - In 2018, small and very small water systems made up **85 percent** of all systems that the EPA labels as serious violators
- According to EPA data, small systems account for a disproportionate percentage of capital improvement needs in relation to the population served
- ► Cost per connection
 - For a system of less than 100 residential connections, the cost per connection for outstanding capital needs can top \$19,000
 - For systems of 3,300 to 10,000 residential connections the cost per connection can be over \$4,000

► Annual Revenue

> The median annual revenue of systems serving fewer than 500 people is about \$25,000



BENEFITS OF WATER SYSTEM CONSOLIDATION

- Economies of scale
 - Buy commodities, equipment, and other goods at lower average prices
 - Borrow money at lower interest rates
 - Set more progressive rates for greater affordability
 - Attract and promote higher quality employees than small systems
- Higher quality employees
- Better water quality and compliance rates
- Improved operating efficiencies
 - Average annual O&M per customer connection
 - ▶ 34 customer connections = ~ \$250 per customer
 - ▶ 20,000 customer connections = ~\$70 per customer
- Greater capacity to offer customer assistance programs

"Consolidating the American drinking water sector to about 6,000 utilities with a minimum sustainable size of about 20,000 connections

would deliver better health, greater efficiency, lower prices, and long-term sustainability."

CONSOLIDATION POLICIES BY STATE: LEGISLATIVE

14 STATES have passed legislation to incentivize water system acquisitions

Date	State
1997	California
2013	Illinois
2013	Missouri
2015	New Jersey
2015	Indiana
2016	Pennsylvania
2018	North Carolina
2018	Maryland
2018	lowa
2019	Ohio
2019	Texas
2020	Virginia
2020	West Virginia
2021	Kentucky

Number of private water utilities in PA:

- 333 in 1983
- 55 in 2022



REGULATORY APPROACHES TO INCENTIVIZE CONSOLIDATION

- Expand focus beyond distressed systems
 - ▶ Focusing consolidation efforts only on troubled systems is problematic
 - Once systems are distressed customers suffer and it is harder to find a willing buyer
- Create regulatory certainty
 - Establishing clear rules around acquisitions provides the certainty needed to incentivize these sales
- Streamline acquisition process
 - Creating an efficient regulatory process incentivizes consolidation and keeps transactional costs lower
 - Developing mandatory timelines for Commission action can help
- Expand the toolbox of incentives
 - Acquisition Adjustments, Acquisition Surcharges, ROE Bumps
- Lower/no enforcement penalties for acquiring systems
 - Creating safe harbors for utilities that acquire troubled systems is important



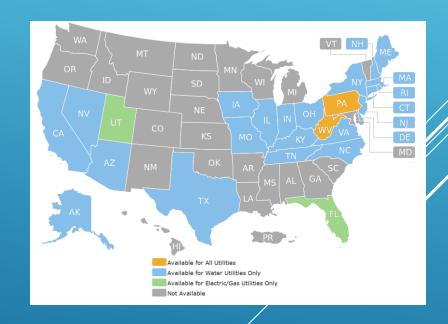
States like PA, CT, AZ have policy statements that set forth regulatory mechanisms to encourage water system consolidation

Constructive Regulatory Mechanisms

Important tools used by regulators to address the unique needs of the water industry

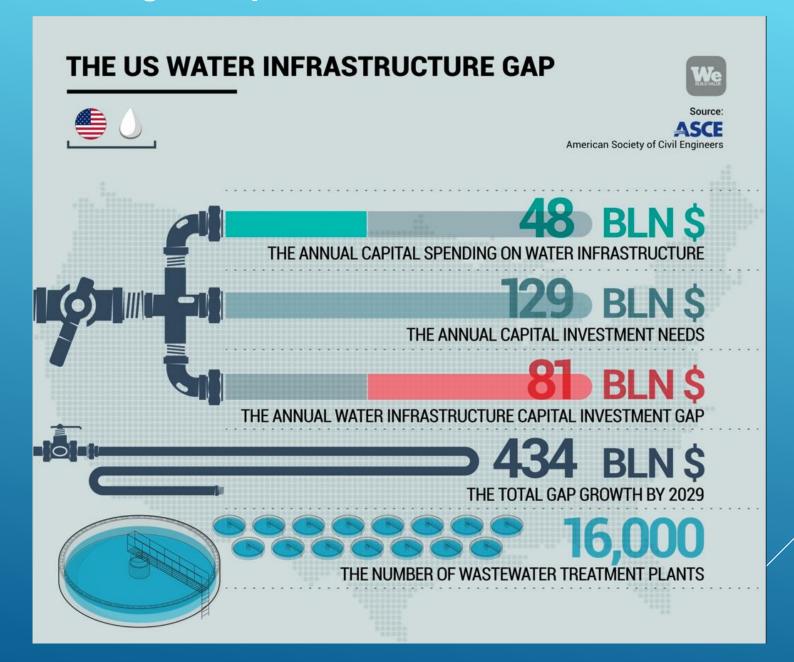
NARUC Best Practices Resolutions:

- Infrastructure Surcharge Mechanisms
- Future test years
- Consolidated tariffs
- Revenue adjustment mechanisms
- Streamlined rate case process
- Mediation and settlement
- Fair rate of return
- Policy to encourage consolidation of small systems
- Support for a federal low-income assistance program



Availability of Infrastructure Surcharge Mechanisms

Constructive Regulatory Environment = Drives Economic Growth





The Regulatory Compact







THANK YOU