Corporate consolidation of water utilities: is fair market value fair?

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Watch for updates
Overview and key themes

- Demographics of the U.S. water industry
- Rationale and reality of fair market value
- Historical and legal perspectives and critique
- Inflationary effects and sustainability
- Windfalls and wealth transfer
- Distorted incentives and behaviors
- Policy conflicts and mitigation
- Regulatory authority and discretion
Water systems in the United States (n=49,678)
Water industry strata and structure

- U.S. water industry consists of nearly 50,000 systems – declining over time
  - Many are small: 40,000 serve <3,300 pop. and 12,000 serve <100 pop.
  - Fragmented but bifurcated, with most of the population served by large urban systems
  - Investor-owned holding company segment is oligopolistic

- Industry has long been considered “ripe” for consolidation and privatization
  - Trade press, which conflates these issues
  - More consolidated than realized structurally (holding companies, bilateral wholesale agreements) as well as other means (mutual aid, shared operators, partnerships)
  - Systems can be isolated and many of the smallest are ancillary and non-public
  - Preference for local control and concerns about profits and regulation persist

- Regionalization vs. consolidation
  - Regionalization and consolidation can be beneficial to ratepayers and society in terms of lowering some costs and expanding and diversifying the customer base
  - Regionalization is a form of consolidation, but consolidation may not be regional
  - Regionalization provides opportunities holistic watershed management

- Corporate consolidation should not be confused with system consolidation
  - Only full physical absorption of proximate systems reduces total EPA regulatory units and and achieves “regulatory economies”
  - Some forms of corporate consolidation could thwart regionalization (such as regional districts or authorities)
Water systems in the United States (SDWIS, EPA, 2019)*

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>% of Total</th>
<th>Pop. (mil.)</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total community water systems</strong></td>
<td></td>
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<tr>
<td>Governmental systems</td>
<td>49,678</td>
<td>100.0%</td>
<td>309.2</td>
<td>100.0%</td>
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<tr>
<td>Local governments</td>
<td>25,780</td>
<td>51.9%</td>
<td>267.7</td>
<td>86.6%</td>
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<tr>
<td>Tribal (Native American)</td>
<td>714</td>
<td>1.4%</td>
<td>1.1</td>
<td>0.3%</td>
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<tr>
<td>State correctional facilities and hospitals</td>
<td>453</td>
<td>0.9%</td>
<td>4.7</td>
<td>1.5%</td>
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<td>Federal correctional, hospitals, military bases</td>
<td>367</td>
<td>0.7%</td>
<td>2.5</td>
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<td>Nongovernmental systems</td>
<td>22,661</td>
<td>45.6%</td>
<td>36.9</td>
<td>11.9%</td>
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<td>For-profit entities</td>
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<tr>
<td>Not-for-profit entities</td>
<td></td>
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<tr>
<td>Ancillary</td>
<td></td>
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<tr>
<td>Not classified (recorded as “public-private”)</td>
<td>1,327</td>
<td>2.5%</td>
<td>4.5</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

| **Wholesale water sales** |        |            |             |            |
| Wholesale own water      | 917    | 1.8%       | 27.1        | 8.8%       |
| Wholesale purchased water| 261    | 0.5%       | 4.8         | 1.5%       |
| Do not wholesale         | 48,500 | 97.6%      | 277.3       | 89.7%      |

| **Production or purchase** |        |            |             |            |
| Produce own water         | 40,279 | 81.1%      | 237.0       | 76.6%      |
| Purchase water            | 9,372  | 18.9%      | 72.2        | 23.4%      |
| Not reported              | 27     | 0.1%       | 11.2        | 0.0%       |

| **Community water systems by size** |        |            |             |            |
| <=100 (included in <500) | 11,788 | 23.7%      | 0.7         | 0.2%       |
| <=500                     | 26,995 | 54.3%      | 4.6         | 1.5%       |
| 501-3,300                 | 13,341 | 26.9%      | 19.2        | 6.2%       |
| 3,301-10,000              | 4,994  | 10.1%      | 29.4        | 9.5%       |
| 10,001-100,000            | 3,901  | 7.9%       | 112.5       | 36.4%      |
| >100,000                  | 438    | 0.9%       | 143.6       | 46.6%      |
| Top 50 systems (included in >100,000) | 50 | 0.1% | 65.3 | 21.1% |

*Known errors
A few companies own more than 2,000 systems (2018 data)

<table>
<thead>
<tr>
<th>Company (subsidiaries)</th>
<th>HQ</th>
<th>Publicly traded</th>
<th>Operating revenues</th>
<th>Shareholder equity</th>
<th>Total assets</th>
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<tbody>
<tr>
<td>American Water (15)</td>
<td>NJ</td>
<td>AWK</td>
<td>$3,440</td>
<td>$5,864</td>
<td>$21,233</td>
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<tr>
<td>Aqua America (8)</td>
<td>PA</td>
<td>WTR</td>
<td>$838</td>
<td>$2,009</td>
<td>$6,964</td>
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<td>California Water Service Group (6)</td>
<td>CA</td>
<td>CWT</td>
<td>$698</td>
<td>$730</td>
<td>$2,837</td>
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<td>San Jose Water Co.</td>
<td>CA</td>
<td>SJW</td>
<td>$397</td>
<td>$889</td>
<td>$1,956</td>
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<tr>
<td>American States (Golden) Water (8)</td>
<td>CA</td>
<td>AWR</td>
<td>$436</td>
<td>$558</td>
<td>$1,501</td>
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<td>Connecticut Water Co.</td>
<td>CT</td>
<td>CTWS</td>
<td>$117</td>
<td>$294</td>
<td>$952</td>
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<td>Middlesex Water Co. (2)</td>
<td>NJ</td>
<td>MSEX</td>
<td>$138</td>
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<td>$767</td>
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<td>Artesian Water Co. (2)</td>
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<td>ARTNA</td>
<td>$80</td>
<td>$153</td>
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<td>York Water Co.</td>
<td>PA</td>
<td>YORW</td>
<td>$48</td>
<td>$126</td>
<td>$345</td>
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<td>Aquarion Water Co./Eversource (3)</td>
<td>MA</td>
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<tr>
<td>Baton Rouge Water Co.</td>
<td>LA</td>
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<tr>
<td>Consolidated Water Co. (6)</td>
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<td>EPCOR Water (2)</td>
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<tr>
<td>Inframark (was Severn-Trent) (19)</td>
<td>PA</td>
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<td>San Gabriel Valley Water Co.</td>
<td>CA</td>
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<td>Southwest Water Co. (6)</td>
<td>CA</td>
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<tr>
<td>SUEZ (10)</td>
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<tr>
<td>Utilities, Inc./Corix (14)</td>
<td>IL</td>
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<tr>
<td>Valencia Water Co.</td>
<td>CA</td>
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<tr>
<td>Veolia North America (5)</td>
<td>MA</td>
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<tr>
<td>Liberty Utilities (6)</td>
<td>MO</td>
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</tr>
<tr>
<td>Central States Water Resources</td>
<td>MO</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Carolina Water Service</td>
<td>NC</td>
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Regionalization and privatization of water systems in the U.K.

- Local systems were aggregated and regionalized by watersheds in 1973
- In a separate historical event, the regional systems were privatized in 1989
- Corporatization has re-introduced some fragmentation
Large regional public authorities in the U.S.: Met and Detroit

- Calleguas MWD
- Las Virgenes MWD
- Los Angeles
- West Basin MWD
- Beverly Hills
- Glendale WD
- Burbank WD
- Foothill MWD
- Upper San Gabriel Valley MWD
- Central Basin MWD
- Torrance WD
- Long Beach WD
- Fullerton WD
- Anaheim WD

Compton WD
San Marino WD
Pasadena WD
MWD of Orange County
Three Valleys WD
Chino Basin WD
Western MWD of Riverside Co.
Eastern MWD
San Diego County Water Authority
Regionalization vs. consolidation
Corporate consolidation

**STANDARD MULTI-STATE PRESENCE WITH INCREASED SCALE, HIGH-QUALITY, WELL-RUN OPERATIONS AND CONSTRUCTIVE REGULATORY RELATIONSHIPS**

INCREASED DIVERSITY

- SJW
- CTWS

1 Based on 2017 net income
Meaning of fair market value

- **Methods used in utility asset valuation**
  - Original cost less depreciation – prevailing regulatory standard (not a “barrier”)
  - Reconstruction or replacement cost (practical)
  - Present or fair market value based on “comparables” (theoretical)

- **Fair market value defined**
  - Price paid for utility assets following appraisal and negotiation processes, which may diverge from book value – original cost of the assets net of depreciation
  - Focus on “independent appraisal methods” (used in real estate) may deflect attention and obscure larger regulatory policy issues
  - Sounds like a “good deal” and seems like just an arcane accounting technicality

- **Purchase prices above book value**
  - Originally considered a form of “goodwill” for accounting purposes (GAAP)
  - Evolved into “acquisition adjustments,” generally at the discretion of the regulator
  - Fair market value goes further in terms of both valuation and ratemaking treatment
Fair market value state legislation (as of mid-2019)

Various sources as of mid-2019.
“Access to fair market value” (AWK Annual Report 2018)

- “Our regulated subsidiaries in California, Illinois, Indiana, Iowa, Maryland, Missouri, New Jersey and Pennsylvania have access to fair market value legislation for private sector investment in public sector systems.

- We support full optionality for municipalities, including state legislation that enables the consolidation of the largely fragmented water and wastewater industries through third-party fair market valuations of purchased property.

- Fair market value assessment of water and wastewater systems is an alternative to the traditional depreciated original cost method of valuation, providing municipalities with a purchase price that is reflective of the assets’ value, while the utility has increased assurance of recovering the purchase price over the life of the assets, subject to state regulatory commission approval.”
The market for fair market value

- Fair market value rests on market theory
  - “Mark-to-market” accounting is based on fair market value theory (e.g., Enron, hedging)
  - Deregulation also results in market valuation of assets, including stranded costs
  - Valuation of assets according to market forces introduces market-related risks
  - Regulators must be aware of all forms of “creative accounting”

- Public utilities are monopolistic – water utilities in particular
  - Economic regulation is needed in the context of “market failure”
  - Asset transfers are from one utility monopoly to another
  - High offers come from ratepayers, not shareholders

- Concept of a “market” is a façade given the specificity of utility assets
  - Utilities are affected with a public interest and assets are devoted to public use
  - Combines monopsony (single seller) and oligopoly (buyers) at best
  - Reflects political negotiations (“fair political value”) and sanctioned “enticement”
  - Subjective and potentially arbitrary even when independent appraisal is used
  - Overcapitalization and collusive behavior are possible

- Both buyers and sellers benefit from higher not lower purchase prices
  - Distorts incentives – contrast to the healthy tension in competitive markets
  - Buyers benefit when a premium is reflected in rate base plus the additional opportunity
  - Sellers stand to reap a financial windfall from the divestiture proceeds
“Financially incentivized” (CT PURA & OCC, 2/19/19)

- “The approach contained in the proposed bill, often deemed a “Fair Value Legislation”, is contrary to long-standing and well-established regulatory precedents in Connecticut and most states nationally…

- Importantly, both the water utility and the municipality are financially incentivized towards a higher valuation and purchase price.

- Under this legislation, PURA would not be allowed to consider other relevant evidence or to adjust the purchase price if it finds that the purchase price or valuation is unreasonable.

- Additionally, the evaluation methodology prescribed in the proposed bill is flawed as it fails to adjust the system valuation for necessary future capital improvements or other problems and liabilities identified in the municipal system.

- While ten states have recently adopted some form of fair value methodology, the limited results of municipal system acquisitions in those states to date illustrate that this type of legislation results in inflated purchase prices and higher utility rates for state residents.

- PURA and OCC cannot support the valuation methodology and ratemaking approaches proposed in this bill.”

Utility appraisal business

"WHAT'S IT WORTH TO YOU? VALUATION OF WATER SYSTEMS"

BY: ANTHONY FESTA, ASA
FEBRUARY 16, 2016

HRCG
HRG
HARRIS ROBBINS GALLAGHER ENGINEERING & RELATED SERVICES

EXHIBIT U
FAIR MARKET VALUE APPRAISAL – GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

HRG Named a Utility Valuation Expert by the PA Public Utility Commission
January 12, 2017 /

Many municipalities are considering selling their water and wastewater systems in order to address long-term budget and debt obligations. As one of PA's first Utility Valuation Experts, HRG is ready to help municipalities attain fair market value for these assets.
"Whatever price they want" (PA attorney, 2018)

- "An attorney representing municipalities in Pennsylvania told us that his clients are being told by publicly-traded utilities that under Act 12 they can pay them “whatever price they want” for their water and wastewater systems, a striking indicator of how Act 12 is predictably putting sharp upward pressure on deal values…

- Given the structural incentives inherent in Act 12 (as well as the competitive dynamics between acquirers), **prices are likely to continue spiraling higher**, creating a source of growth for Aqua America and American Water, for whom Pennsylvania represents 60% and 20% of total assets, respectively. Importantly, under Act 12, higher valuations enhance the growth opportunity.”

- **Impotence of OCA should allow utilities to sustain Act 12 growth.** While other states have also adopted Fair Market Value acquisition laws, Pennsylvania’s is by far the most aggressively written, due in large part to the PUC brushing aside Office of the Consumer Advocate concerns that rising valuations would lead to significant rate increases for both acquired customers and existing IOU ratepayers.

- This affirms Pennsylvania’s status as one of the premiere places for investor-owned water utilities to do business, as the OCA’s limited resources and clout are no match for the coordinated lobbying and regulatory relations infrastructure that the major IOUs are able to bring to bear in Harrisburg. Rate cases are the one forum where the OCA (in theory) has real teeth, but recent settlements suggest that the utilities continue to have their way.”

- Source: Boenning and Scattergood Equity Research (6/6/18).
Scale economies

- Scale economies are relevant *but not unlimited*
  - Opportunities to capture scale are system-specific and contingent on several factors
  - Scale economies are tangible and relevant in production and treatment – but these are offset by diseconomies in transmission and distribution
  - Following acquisition, local facilities, operations, and employment may be retained (i.e., no interconnection or workforce reductions)

- Other potential economies from scale or scope are limited
  - Bulk purchasing, shared operators, planning, design, and management
  - Improved managerial and financial capacity may improve regulatory compliance
  - All gains must be considered net of added overhead

- Scale economies and capacity can be achieved by other means
  - Bilateral wholesale purchasing, regional collaboration, sharing and mutual aid

- Savings attributable to scale are measurable in terms of unit costs
  - Should translate into lower costs and lower prices for ratepayers
  - Other benefits are also measurable and options should be compared accordingly

- Policy should not presume that scale will always enhance capacity
Scale economies

- Is failure assumed?
  - Not all smaller systems lack technical, managerial, and financial capacity
  - Not all public systems under-invest, are noncompliant, or are fiscally nonviable
  - Not all water systems and their ratepayers will benefit from consolidation
  - Not all larger or consolidated systems are effective or efficient

- Key water system viability thresholds – useful for screening
  - 1,000 connections (3,300 population) and 3,000 connections (10,000 population)
  - Conditions vary across water systems

- Michigan American Water (unregulated)
  - Total population served: 9,200
    - Calumet area (5,535)
    - Village of Laurium (1,947)
    - Torch Lake Township (946)
    - Calumet (726)
    - Calumet Township (50)
Scale economies and limits: Wisconsin
Scale economies and limits: Indiana

Figure 12. Average customer retail unit cost by utility size and region.
Acquisitions focus on distribution investments

- “American Water's Pennsylvania operation said it's investing $8 million into upgrading 15 municipalities' water storage tanks this year.”
Rationale and reality: possible disconnect

- **Rationale**
  - To address the problem of small, noncompliant, and nonviable water systems
  - To achieve scale economies and reduce total systems through regionalization
  - To build system TMF capacity to ensure compliance, quality, reliability, and security

- **Reality**
  - To alleviate general fiscal distress and provide specific obligation and debt relief
  - To realize a cash windfall and use proceeds to fund nonutility needs and projects
  - To remove a “regulatory barrier” to privatization and strategic business growth
Financial market perspective

- Investor ownership of water utilities is limited globally
  - U.S. market share has remained relatively flat – estimated at 8-10%

- Fair market value may give the private sector a long-sought advantage
  - Consistent with current emphasis of holding companies on ownership vs. contract operations or public-private partnerships
  - “[IOUs] alter municipal water landscape – The role of private companies in water is changing with some large M&A activity, new market entrants, outsiders looking in for opportunities, and more states adopting Fair Market Value policies (Bluefield, 2019)

- “Equity positive” for shareholders – creates value
  - “[IOUS] benefit as fair value legislation incentivises system sales” (Cozen, 2016)
  - “Private water firms tap profit from struggling public utilities” (BNA, 2017)
  - “Water utility valuation appears rich” (S&P Global MI, 1/17/19)

- “Credit positive” for bondholders – reduces risk
  - “What is most important from a credit perspective is clarity surrounding the recoverability of the investment, and this legislation definitely helps provide that” (Moody’s, 2016)
“Growth strategy”

- **Bluefield Research President**
  - "The types of deals and breadth of companies building out positions by acquisition are positive signals for water sector growth. Broader market forces, including poor water quality in Flint, growing population demands, and increasing risks to industrial company bottom-lines underpin deal flow among companies angling to be at the forefront of this change." (https://www.bluefieldresearch.com/t/mergers-and-acquisitions/)

- **Aqua (2017)**
  - “Our work to continue building shareholder value manifests itself in our three-pronged growth strategy… The first prong of the strategy is our work to become the solution chosen by middle-market municipal water and wastewater utilities as they face the financial, compliance and operational challenges of running utility systems…
  - Since we’ve applied our three-pronged strategy two years ago, we’ve acquired more customers from municipal systems than we had in the previous eight years, and our pipeline of opportunities is stronger than ever before.
  - The second prong of our strategy focuses on the acquisition of regulated utilities… While market premiums for mergers and acquisitions remain elevated, our work in this area remains active and the team is attentive to potential opportunities…
  - Our third prong in the growth strategy considers market-based opportunities. These are acquisition opportunities that are outside the regulated business but would complement the regulated business and capitalize on our core strengths.”
  - Source: http://ir.aquaamerica.com/static-files/0a1e3735-941d-43bb-9c4c-71083f0dbcb2
American Water Works Company Inc. (AWK)

- CEO Susan Story on Q2 2019 Results - Earnings Call Transcript 1:13 pm, Thu, Aug. 1, 2019, by SA Transcripts
- Investor analyst: Can you talk about your strategy in states you don't currently operate in as more and more states adopt fair market value legislation? What states are most appealing for you and how big can potential opportunities be?
- Susan Story: "So currently our growth model is to continue to do tuck-ins and acquisitions in the states where we're present. We do have a model, however, where we have a corporate business development group, and we look across the country. And we actually rate each day pretty much on a couple of factors. One is the regulatory environment.
- The second is the business environment, how open are they to private water.
- And the third one is, is there a way within five years we could have at least 50,000 customer connections, because if not, we don't think that it is a benefit, because it could hurt our brand as being efficient, and making sure that we're providing the best economic value for all of our customers.
- So we don't disclose our ranking of those states. But we are very much aware of what's going on in all the states across the country. And we do those evaluations on a frequent basis."
Political priority

- Fair market value is a political priority for the investor-owned subsector
  - To alter playing field for privatization and build policy acceptance and legitimacy via “constructive regulatory environments”
  - Messaging emphasizes consolidation over merits of the private model
  - Rising visibility in trade press, conferences, forums, reports, and outreach (“buzz”)
  - Aggressive targeting and tactics by the larger players and their national association (NAWC)
  - Linked to closed and exclusive meetings with key influencers and targeted awards, political lobbying, and campaign contributions

- Objective research and analysis should inform policymaking for
  - Mergers and acquisitions
  - Holding company structures
  - Privatization options
NAWC’s strategic role

- **Lexington Herald Leader (2/21/2019)**
  - “So fair market value is truly a win-win-win for all involved.
  - Residents get high-quality water service from a company whose professional workforce is solely focused on delivering those services. The water and wastewater systems benefit from operational expertise and infrastructure investment.
  - And municipalities get a better deal for their assets and are able to put capital toward other local priorities” (Robert Powelson, NAWC President and CEO).

- **S&P Global-RRA (4/19/19)**
  - “National Association of Water Companies President and CEO Robert Powelson discussed the organization’s current strategy to enable the consolidation of the sector’s highly fragmented network of water and wastewater system.
  - Under Powelson, NAWC has focused on expanding its presence with state house and government officials to implement constructive legislative changes.
  - Previously, the NAWC had focused its efforts on expanding the use of regulatory mechanisms to minimize regulatory lag…
  - As conveyed by Powelson, the sector is at the precipice of meaningful consolidation fueled by recent fair market valuation legislation…”
“Unfortunately, the old model of small, municipally owned water systems is often failing customers as too many of these utilities do not have the expertise, funding, or scale to make the investments in infrastructure that are needed to optimize, repair, and operate today’s water systems.

To enable struggling water utilities to continue to provide safe and reliable service to the communities they serve, regulators need to create a new path forward. Fair market value legislation provides just such a path.

These laws define the process for a municipal system to voluntarily sell water system assets to a water company. The municipality gets a better deal for its assets and gains the ability to focus on other priority services for residents. When small water systems are combined with a larger system, the cost burden of infrastructure upgrades can be shared across a larger customer base, and customers benefit from the operational expertise of water company professionals.”

Bypassing voters (NJ SB3870, 2019)

- "This legislation would provide municipalities with an additional procedural option to address future liabilities associated with deficient underground sewer and wastewater infrastructure.

- Rather than facing the prospect of immediatelyshouldering all of the costs associated with addressing decades of underfunding, or continuing to operate deteriorating wastewater systems without properly maintaining, repairing, and replacing failing infrastructure, this bill would permit a municipality to sell a sewerage system to a qualified public utility operator, which is subject to the oversight of the state Board of Public Utilities.

- By allowing an alternate method to determine the fair market value of a sewerage system, the bill would enhance the ability of a municipality to sell a sewerage system, thereby allowing municipalities to turn a future liability into a current asset.

- Current law authorizes a municipality to sell a municipal-owned sewerage facility to an investor-owned public utility if the sale is approved by voter referendum. This bill would allow a municipality to authorize the sale of a municipal-owned sewerage facility by adoption of an ordinance, subject to the review and approval of the Board of Public Utilities."

- Source: https://www.njleg.state.nj.us/2018/Bills/S4000/3870_I1.PDF
“Streamline the regulatory approval process” (Jager, 2016)

- “An increasingly common and effective method of investing in, repairing, and maintaining the nation’s water infrastructure is through utility acquisitions. Under this model, large investor-owned utilities acquire and invest in small municipal or privately-held utilities that tend to lack the expertise and capabilities to effectively and efficiently provide safe drinking water and related services.

- Subsequent to such acquisitions, the large acquiring utilities typically invest in these systems to enhance the adequacy, reliability, efficiency, and safety of service provided to the customers of the acquired utility.

- Historically, however, uncertainty over the valuation of the acquired utility and the timing of the regulatory approval process has influenced whether the larger utility would pursue an acquisition.

- In 2013, the Illinois legislature approved Public Act 98-213 and established Section 9-210.5 of the Illinois Public Utilities Act (220 ILCS 5/9-210.5), “Valuation of Water and Sewer Utilities,” which incentivizes larger utilities to acquire such troubled systems and to streamline the regulatory approval process.

- Both utilities and customers enjoy the benefits of this provision, and the success of this approach may act as a model for other states.”

- Source: https://www.wcee.org/page/WaterAcquisition?
“A regulatory barrier” (Business Wire, 2017)

- “The new law allows companies like Aqua to pay a fair market amount for municipal water and wastewater systems, benefitting local governments, customers, and the environment. Prior to FMV legislation, utilities were often limited to including only the original depreciated cost into their rate base, which became a regulatory barrier to a sale.

- Now, Aqua and other regulated utilities can leverage compliance expertise, purchasing power and operational efficiencies to benefit local systems’ infrastructure and service.

- ‘This purchase is all part of Aqua’s efforts to do our part to strengthen wastewater infrastructure for communities in the states we serve, which means improved service and environmental stewardship for generations to come,’ Franklin said.

- With the new legislation, Aqua is focused on balancing fair price for systems, making important infrastructure improvements and ensuring reasonable rates for its service. Aqua paid $29.5 million for the New Garden system.

- ‘We’re thrilled to welcome New Garden Township residential and business customers to the Aqua family, and look forward to providing them the highest level of service and value,’ Franklin said. ‘We hope more communities take advantage of the benefits this new legislation can bring.’

- According to Franklin, Aqua expects to grow its customer base 1.5 to 2 percent in 2017.”

“A more accurate picture” (HRG, 2017)

- “The program is voluntary, but it benefits both the municipality and the potential buyer by presenting a **more accurate picture of a utility’s value than the traditional method**.

- In Pennsylvania, the purchase of water and wastewater systems by a regulated utility must be approved by the Public Utility Commission. Traditionally, the commission has considered the value of a system to be equal to its depreciated original cost (construction cost minus grants and depreciation). This approach did not consider the potential income that could be generated from the assets and frequently resulted in valuations so low that municipalities couldn’t benefit from a sale.

- At the same time, with no consideration to the market or revenue, potential buyers could not be sure whether they would achieve an adequate return on their investment with the purchase.

- To remedy these problems, Act 12 of 2016 created a new, voluntary approach to utility valuation based on fair market value. Under this system, the buyer and the seller each retain a registered Utility Valuation Expert to conduct independent appraisals of the utility using industry standards: cost, market, and income approaches. These appraisals use data on the physical system assets that was assessed by a professional engineer retained by both parties.

- After both appraisals are submitted, an average of the fair market value calculated in each one is used as the final valuation.”

“An industry-friendly environment” (Inquirer, 2018)

- “The merger frenzy was set off by a 2016 state law that encourages the consolidation of smaller water and wastewater systems under private ownership.

- Act 12 allows investor-owned utilities to charge ratepayers for the appraised fair-market value of an acquired system, rather than its lower depreciated cost...

- The new law, combined with a 2012 act that allows a utility to spread the acquisition costs to all its ratepayers across the state, creates an industry-friendly environment for private water utilities to expand their reach...

- The high prices being offered for municipal utilities — mostly sewer systems — provide a convenient way for a town to monetize an asset, and redirect the proceeds into more popular projects: streets, parks, police, and fire protection. It's also a way for a town to get professional help for a distressed system.”

“Constructive jurisdictions” and ‘supportive regulations” (EY, 2018)

- “Supportive regulations to increase industry attractiveness –

- The need for substantial new water infrastructure investments is continuing to capture the attention of many state regulators… water utilities are seeing more constructive frameworks emerge to enable investments.

- In constructive jurisdictions, state commissions are encouraging investments in aging infrastructure through regulatory policies such as the implementation of streamlined infrastructure surcharges, ROE-adders for certain types of investments and consolidation of rates…

- Consolidation in the sector is also enabled by recent fair market value laws…

- Allowed ROEs for water utilities are only modestly below those of gas and electric utilities, though we believe the risks are much lower…”

Low risk industry (AWK, June 2019)

Low Risk, Regulated Water Utility

- Multi-decade infrastructure investment; with a fragmented market acquisitions adding to capital needs
- Hundreds of water projects per year reducing risk of large scale single projects
- Multiple state regulatory jurisdictions reduce both weather and regulatory risks
- Industry specific fair market value legislation
- Water Quality legislation becoming a focus
- Regulatory mechanisms support infrastructure investment
- Predominantly Regulated risk profile representing 85% by 2023
“Benefit to Customers” (Business Wire, 2018 and 2019)

Aqua America Says Amended Illinois Fair Market Value Legislation a Continued Benefit to Utility Customers

August 13, 2018 05:02 PM Eastern Daylight Time

BRYN MAWR, Pa.--(BUSINESS WIRE)--Aqua America Inc. (NYSE: WTR) today stated that amended legislation signed into law by Governor Bruce Rauner will continue to allow companies like Aqua to pay a fair market value for water and wastewater systems, benefitting local governments, customers, and the environment.

Aqua America stated that amended legislation signed into law by Governor Bruce Rauner will continue to allow companies like Aqua to pay a fair market value for water and wastewater systems, benefitting local governments, customers, and the environment.

“Municipal officials in Illinois, like their peers throughout the country, understand the important benefits of regionalizing water and wastewater systems. They also understand that the proceeds, from the sale of a water system, could allow them to pursue meaningful and needed local projects and initiatives,” said Aqua America Chairman and CEO Christopher Franklin. “With similar legislation recently enacted in North Carolina, and our recently completed Village of Manteno wastewater system acquisition in Illinois, we are seeing continued momentum in reaching agreements with municipal systems. The fair market value legislation is allowing us to offer important solutions to municipalities.”

Aqua America Says Ohio’s New Municipal Fair Market Value Legislation is a Benefit to Communities and Utility Customers Alike

January 14, 2019 12:19 PM Eastern Standard Time

BRYN MAWR, Pa.--(BUSINESS WIRE)--Aqua America Inc. (NYSE: WTR) today said legislation signed into law this month by Ohio Gov. John Kasich will allow companies like Aqua to pay a fair market value for the purchase of water and wastewater systems, benefitting local governments, customers and the environment. Before these changes, system values were determined by their depreciated original cost, which generally did not reflect a reasonable market value for those assets and became a barrier to a sale. Ohio has become Aqua’s sixth state to pass legislation providing the opportunity for municipal utilities to receive a fair market value for their systems.

Pursuit of viable systems

- Legislative and regulatory intent
  - Policy is ostensibly meant for smaller systems that are noncompliant and distressed
  - Some legislation specifies size thresholds – Pennsylvania does not, New Jersey is very high
  - Evolving from “distressed” to “offered” (IN SB 472)

- Many small and nonviable systems are not attractive to investors
  - Even with acquisition incentives
  - No long-term opportunity

- Viable systems are also pursued (cherry picking)
  - Sufficient scale (customer base)
  - Reliable clean water source
  - Compliant with standards
  - Fiscally sound (credit)
  - Reasonable rates

- Decision-making calls for due process
  - Receptive local officials are pursued
  - Acquisition proposals may be unwelcome and even regarded as predatory
  - Openness, transparency, inclusiveness, and representation of affected ratepayers
Chester Water Authority (PA)

- Chester Water Authority is fiscally sound
- City of Chester, PA has experienced fiscal distress
- City accounts for only 22% of the Authority’s customer base
Chester Water Authority (PA)

Chester Water Authority
Serving Western Delaware County, Southern Chester County, and Lancaster County

Commonwealth of Pennsylvania

Chester Water Authority

Chester Water Authority vs. Aqua PA, Inc.
11-Year Historical Rate Comparison
Residential Customer Using 18,000 Gallons per Quarter

CWA vs. Aqua PA, Inc.

Regional Monthly Water Rates

- Pennsylvania - American Water Company
- Aqua Pennsylvania, Inc.
- American Water Company, Inc. (Delaware)
- Chester Water Authority WEST
- Chester Water Authority EAST

Rates data used based on public information posted online.
Based on 2 1/2 inch meter and 18,000 gallons.
Different water usage will result in higher or lower charges.

*The West area is defined as the area located west of the Village Green storage tanks in Aston Township, Delaware County, Pennsylvania.
**The East area is defined as the area served by gravity from the Village Green storage tanks located in Aston Township, Delaware County, Pennsylvania.
“The rule of Smyth v. Ames sets the laborious and baffling task of finding the present value of the utility. It is impossible to find an exchange value for a utility, since utilities, unlike merchandise or land, are not commonly bought and sold in the market.

“Nor can the present value of the utility be determined by capitalizing its net earnings, since the earnings are determined, in large measure, by the rate which the company will be permitted to charge, and thus the vicious circle would be encountered…”

“The adoption of present value of the utility's property, as the rate base, was urged in 1893, on behalf of the community; and it was adopted by the courts, largely, as a protection against inflated claims based on what were then deemed inflated prices of the past [citing authority]....”

“Those were the days before state legislation prohibited the issue of public utility securities without authorization from state officials; before accounting was prescribed and supervised; when outstanding bonds and stocks were hardly an indication of the amount of capital embarked in the enterprise; when depreciation accounts were unknown; and when book values, or property accounts, furnished no trustworthy evidence either of cost or of real value.”

“Estimates of reproduction cost were then offered, largely as a means, either of supplying lacks in the proofs of actual cost and investment, or of testing the credibility of evidence adduced, or of showing that the cost of installation had been wasteful.”

Source: https://supreme.justia.com/cases/federal/us/262/276/

See bibliography for reviews.
James Bonbright (Valuation of Property, 1937)

- “When one reads the conventional value definitions critically, one finds, in the first place, that they themselves contain serious ambiguities, and in the second place, that they invoke concepts of value acceptable only for certain purposes and quite unacceptable for other purposes.” (p. 11)

- “[The] problem of defining value, for the many practical purposes for which the term is used, is an exceedingly difficult one, deserving quite as much attention as does the technique in proof…” (pp. 11-12)

- “The contrast between ‘value’ and ‘cost’ as fundamental concepts is that the former term refers to the advantage that is expected to result from the ownership of a given object of wealth (or to the market price that this advantage will command), whereas the latter term refers to the sacrifice involved in acquiring this object…” (p. 19)

- “Cost, then, is the price that must be paid for value.” (p. 19)
FPC v. Hope Natural Gas Company (1944)

- "The fixing of prices, like other applications of the police power, may reduce the value of the property which is being regulated. But the fact that the value is reduced does not mean that the regulation is invalid.

- It does, however, indicate that 'fair value' is the end product of the process of rate-making not the starting point as the Circuit Court of Appeals held.

- The heart of the matter is that rates cannot be made to depend upon 'fair value' when the value of the going enterprise depends on earnings under whatever rates may be anticipated…

- Rates which enable the company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed certainly cannot be condemned as invalid, even though they might produce only a meager return on the so-called "fair value" rate base."
James Bottomly (Montana Law Review, 1960)

- "The concept of ‘fair value’ as a rate base was unsound even at the time of its inception."
- "The original need for a ‘fair value’ rate base no longer exists” (see Southwestern Bell, 1923)
- "Fair value as a rate base is wholly indefinite and uncertain."
- "Consideration of reproduction cost (which is the primary basis of ‘fair value’) renders the ‘fair value’ rate base unworkable."
- “A rate base dependent upon reproduction cost estimates lacks stability and certainty because of the continually fluctuating nature of those costs."
- "The ‘fair value’ rate base lacks any real significance in fixing just and reasonable rates."
“It was not only its lack of precision that made *Smyth v. Ames* the bane of public utility regulation for the next 50 years, embroiling commissions and courts in endless controversies about the definition and measurement of fair value.

It was also its specific insistence that stockholders were entitled to a return not on the dollars they had actually invested – a quantity easily recorded in the company accounts, hence readily ascertainable – or ‘prudently invested,’ but on the current value of their investment.

The first thing wrong with such a standard is its possible circularity. As the Supreme Court pointed out 46 years later, in overturning *Smyth v. Ames*, ‘fair value’ cannot serve as the basis for rate regulation if it is taken to mean market value, since the market value of any enterprise or of its common stock depends on its earnings or anticipated earnings, which in turn depend on the rates that are allowed it: ‘fair value’ is the end product of the process of rate-making not the starting point…

This objection is sound, however, only if ‘fair value’ is to be measured in terms of the market value of the enterprise. It is incorrect if applied to the customary interpretation that measured fair value (at least in part) with reference to the cost of reproducing the company’s assets, as *Smyth v. Ames* likewise instructed commissions to do. Whatever the problems of applying the reproduction cost standard, and they were great, circularity was not one of them.”
“In comparison with original cost rate base methods, fair value methods would allow higher nominal return amounts to the utility and consequently higher nominal prices.

In actual practice, a firm may be overcompensated, undercompensated, or just compensated by the utility commission as it attempts to make adjustments, through time, to offset the adverse effects of inflation.

If regulation is efficient in a fair value jurisdiction experiencing no inflation, the utility will earn a constant real return amount...

Since a larger consumer's surplus would result from original cost pricing [due to lower prices], consumer welfare would be enhanced by that valuation method...

[A] change from original cost to fair value rate making will not necessarily mean higher accounting profits. The higher rate base value seems to be offset by lower allowed rates of return whenever that valuation method is used...

From the commission perspective, the method of rate base valuation is only one key variable in the rate-making process. The rate of return allowed on the rate base is also of crucial importance.”

Source: https://www.jstor.org/stable/41321682?seq=1#page_scan_tab_contents
“[T]here have been many definitions of the term fair value. Indeed, this was responsible for much of the problem of implementing the standard.

The fair value standard emerged from the Supreme Court's decision in Smyth v. Ames, 169 U.S. 466 (1898), where the Court listed a number of factors which could be used to ascertain that value.

[Alfred Kahn] states the consensus opinion that ‘Smyth v. Ames [was] the bane of public utility regulation for the next 50 years, embroiling commissions and courts in endless controversies about the measurement of fair value.’

The Court in Duquesne states that the fair value standard ‘suffered from practical difficulties which ultimately led to its abandonment as a constitutional requirement.’ 488 U.S. at 310.

The Hope test effectively replaced the fair value rate base with prudent original cost, and the debate among the interested parties thereafter focused on the rate of return to be applied to that rate base.

Under the net original cost system that came into wide use in the years following Hope, the rate base until recently was subject to much less controversy than under Smyth v. Ames” (Note 36).

Source: https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1171&context=yjreg
“Some state regulatory commissions use a "fair value rate base" for determining allowable return on invested capital. Normally, those commissions do not permit recovery of the fair value of the enterprise’s assets by including depreciation of the fair value in allowable cost; rather, depreciation is based on historical cost. The Discussion Memorandum asked whether that procedure provides a basis for accounting for utility plant at its "fair value" in financial statements prepared in accordance with generally accepted accounting principles.” [109]

“Virtually all respondents opposed the use of fair value in financial statements. Respondents indicated that fair value would present the enterprise's assets at an amount in excess of the recoverable amount of those assets. The use of depreciation based on historical cost for rate-making purposes limits recovery to that historical cost. Respondents also noted that the realized rate of return based on historical cost is not proportionately greater in jurisdictions that base rates on a fair value rate base than in other jurisdictions; thus, they question whether there is substance to that special treatment.” [110]

“The Board concluded that if the return on investment permitted in a jurisdiction is based on fair value but recovery of cost is based on historical cost, the fair value of the assets should not be recognized in general-purpose financial statements. The Board did not need to address the accounting implications if a commission were to use fair value to determine both recovery of cost and return on capital invested because that practice currently is not used by regulators.” [111]

Governmental Accounting Standards Board (GASB, 1999)

- According to GASB
  - “Fair value refers to the measurement of assets and liabilities—primarily investments—at the expected price they would bring in the current market.
  - When determining fair value, preparers of financial reports must establish how much an asset is expected to sell for—or how much it would cost to dispose of a liability as of the measurement date (generally, the date of the financial statements).”
  - “GASB Statement No. 72, Fair Value Measurement and Application, defines fair value as the price that would be received from the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.”
  - In 2015, GASB harmonized its formal definition with FASB
    - Source: https://www.gasb.org/cs/ContentServer?c=Page&cid=1176164950915&d=&pagename=GASB%2FPage%2FGASBSectionPage

- Valuation of Capital Assets (GASB 34, 1999)
  - **Capital assets should be reported at historical cost.** The cost of a capital asset should include capitalized interest and ancillary charges necessary to place the asset into its intended location and condition for use. Donated capital assets should be reported at their estimated fair value at the time of acquisition plus ancillary charges, if any. [Sec. 18]
  - Capital assets that are being or have been depreciated (paragraph 22) should be reported net of accumulated depreciation in the statement of net assets. [Sec. 20]
NARUC Uniform System of Accounts (1996)

- **Utility Plant - Classification of Utility Plant [17]**
  - C. The detailed utility plant accounts (301 to 348, inclusive) shall be stated on the basis of cost to the utility of plant constructed by it and the original cost, estimated if not known, of plant acquired as an operating unit or system. The difference between the original cost, as above, and the cost to the utility of utility plant… shall be recorded in account 114 - Utility Plant Acquisition Adjustments.

- **Utility Plant - Purchased or Sold [21]**
  - A. When utility plant constituting an operating unit or system is acquired by purchase, merger, consolidation, liquidation, or otherwise, the costs of acquisition, including expenses incidental thereto properly includible in utility plant, shall be charged to account 104 - Utility Plant Purchased or Sold…
  - Note… In the event original cost has not been determined, the resulting utility shall proceed to determine such cost as outlined herein.

- **Utility Plant - Transfers of Property [29]**
  - When property is transferred from one utility plant account to another… the transfer shall be recorded by transferring the original cost thereof from the one account, department, or location to the other. Any related amounts carried in the accounts for accumulated depreciation or amortization shall be transferred in accordance with the segregation of such accounts.

- **Utility Plant Acquisition Adjustments [114]**
  - C. The amounts recorded in this account with respect to each property acquisition shall be amortized, or otherwise disposed of, as the Commission may approve or direct.
Rate Base Items – General Principles

- “Many jurisdictions have adopted the concept of using the original cost of the plant or equipment to determine the value for the purposes of computing rate base.
- Under the original cost concept, the cost of the item at the time that it was first put into utility service is the cost that remains with that item throughout its life. If the asset is purchased during its life from another utility, the original cost carries with it, and any difference between it and the purchased price is booked as an acquisition adjustment (known as goodwill in non-utility industries).
- However, some jurisdictions have adopted other valuation methods, such as fair value, reconstruction costs, or replacement costs.
- The audit guidelines listed below presume the use of original cost and do not specifically address auditing based on other valuation methods.”


Notable exceptions

- Arizona averages adjusted original cost and adjusted reconstruction cost and lowers the authorized return
- Indiana can adjust either rate base or returns but outcomes vary, and appraised or fair value is being used for water acquisitions
Acquisition Adjustments

“Under the concept of booking all plant-in-service at original cost, any difference between the price paid for the utility plant and the original cost of that plant is booked as an acquisition adjustment.

It is at the discretion of each jurisdiction as to whether or not the acquisition adjustment is included in rate base, and often, that decision is made by the jurisdiction on a case-by-case basis.

The auditor should look at each acquisition adjustment transaction and determine the circumstances for its existence.
- Why did the utility pay above book for the property, and is there some benefit to ratepayers as a result of that transaction?
- Will customers have better service as a result of the purchase by the utility, even if the utility did pay above book value for the property?

As another option, some jurisdictions have allowed the amortization of the acquisition adjustment above the line, but have not allowed the unamortized balance to be included in rate base – thus splitting the risk of that transaction between ratepayers and the utility’s shareholders.”

"As a practical matter, the fair-value concept has been abandoned, and original-cost concepts dictate the results of the ratemaking process…

- Fair value does not have the advantage of using a recorded plant amount…
- It is expansive to determine, it leads to considerable controversy, and when used it is generally modified by offsetting limitations on its theoretical goals.
- The fair value allowed by commissions is generally closer to an original cost than the value suggested by studies presented to them…”

“Rates of return allowed on a fair-value basis are consistently lower than those allowed on original cost, primarily because capital structure, expressed at historical level, must be related to an increased base at fair value.

- This is not necessarily inequitable to the utility, because a lower rate (e.g., 7 percent) on the fair-value base may result in the same return as a higher rate (e.g., 9.5 percent) on the original-cost base.
- If the higher rate were used on the fair value base, it could result in an unjustifiably high return on equity capital…
- [E]xcess flow to equity is often avoided by applying fair value only to the plant portion support by common equity and limiting the debt and preferred-supported portion to original cost.”

“For utility plant subject to traditional cost-of-service regulation and [FASB] Statement No. 71, depreciated original cost is typically equal to its fair value…

- “If the excess payment is not included in future rates, the amount typically represents goodwill.”
American Water White Paper (2009 est.)

- **“Return on Equity:”**
  - The PUC determines rate of return the utility will be allowed the opportunity to earn on rate base.
  - Allowed equity return should be comparable to returns earned by companies with similar risk and sufficient to attract capital at reasonable rates.”

- **“Rate Base:”**
  - Usually, the allowed return is applied to depreciated original cost rate base, which does not include contributed plant or capital.
  - Some states apply the allowed return to “fair value” rate base, but in practice, adjustments are usually made that result in the depreciated original cost revenue requirement being not substantially different from a “fair value” revenue requirement.”
  - **Source:** [https://amwater.com/Portals/9/RateApprovalProcess012609.pdf](https://amwater.com/Portals/9/RateApprovalProcess012609.pdf)
Inflationary effects on acquisition prices

- Fair market value may be inflationary by definition – an “inflation adjustment”
  - Inflates rate base to “value” instead of cost (including contributed capital)
  - Inflationary effect may more than offset any savings from scale or scope

- Resultant revenue requirements and rates exceed the actual cost of service
  - Suggests inefficient (over)pricing of essential services
  - Ironically, this is a criticism of municipalities that divert revenues rates

- Appraisal methods and assumptions may add to inflation
  - Questionable adoption of real-estate market model to utilities
  - Self-fulfilling and perpetual based on “comparables”
  - Pumping prices fuels buyer expectations for premiums
  - Substantial appraisal fees may be included (see Texas legislation)

- Impacts on cities
  - Windfall may provide a short-term “sugar high”
  - Still need leadership and responsible fiscal management
  - Raising local taxes cannot be avoided indefinitely
  - Infrastructure and compliance costs are not avoided and may be higher
  - Reversal (repurchasing assets) will be too expensive
Inflationary effects (Gannett Fleming, 2016)

- **Appraiser’s perspective**
  - “Fair market value is defined as ‘the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm’s length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.’
  - “The fact that the market is valuing publicly traded water utility companies at 1.5-times higher than their original cost new less depreciation… is a clear indication the original cost new less depreciation does not currently denote fair market value”
  - In this case, a sewer system was appraised at between $18.6 to $36.3 million and “assigned weightings” indicate a fair market value of $33.7 million
  - Source: Exhibit by Gannett Fleming (http://www.puc.state.pa.us/pcdocs/1496050.pdf). Graph is indexed to 100.
Pennsylvania cases (data from OCA)
California cases (data from PAO)
Indiana cases (OUCC)
Inflationary effects on revenue requirements

- Fair market value compounds the effects of privatization and full-cost pricing
  - Offsetting efficiency gains and avoided costs may be marginal
  - Empirical evidence on the effect of ownership on performance is mixed

- **Original cost less depreciation**
  + More depreciable rate base (return of capital)
  + Higher cost of private debt financing
  + Cost of equity capital (risk/return premia on capital)
    + Capital infusion (new rate base investment)
      + Spending propensity (RBROR incentives)
        + Income and other taxes on private corporations (vs. equivalents)
        + Overhead (holding company administrative & general expense)
“The bigger the return” (Kentucky AG, 2/14/19)

- “The greater the FMV, the bigger the return to shareholders.” The bigger the return to shareholders, the higher the rates customers pay.

- This bill ignores long-standing regulatory practice of valuing the assets acquired at the depreciated book value. Using depreciated book value ensures customers do not pay twice for the pipes in the ground that deliver their water. An additional concern is that the acquiring investor-owned utility has no incentive to keep the purchase price down since its shareholders will earn a return on the value of the assets.

- Under SB 163, however, the buyer may recover the FMV as determined by appraisals or the purchase price, whichever is lower. Certainly, both of those amounts are going to be greater than the depreciated book value of the acquired system and will lead to higher rates for all customers...

- The new process will also require that KAW pay for the three appraisals required under the bill. If the PSC approves the acquisition, customers will pay that cost.

- SB 163 benefits only the investor-owned utility and its shareholders. Existing and newly acquired customers will see their rates increase as the utility’s rate base increases. As utility rates in Kentucky continue to rise above what Kentucky families can reasonably afford.

- I urge you to oppose the passage of SB 163. Thank you for your attention.”
Inflationary effects on water rates

- **Effect on prices is acknowledged**
  - [W]hile in the short term, recovery on fair market value may result in increased prices; the philosophy of not waiting until a system has failed to address infrastructure and other improvements makes this a worthwhile approach and policy…” (NAWC Policy Forum, 2016)

- **Higher valuation results in price inflation not based on the cost of service**
  - Rates will be further inflated due to elasticity effects (sales suppression)
  - Consolidated rates (single-tariff pricing) enables and masks rate impact by spreading costs widely

- **Rates are already under pressure**
  - Capital and operating expenditures
  - Move to full-cost pricing
  - Flat or declining usage

- **Public-private rate disparity**
  - Inflates both but widens the gap

- **May not be sustainable**
  - Rates will be less affordable
  - Higher prices will suppress sales
  - A self-induced death spiral?
Path to the “rate case process” (AWK, June 2019)

**Regulated Acquisitions Update**

- **Agreement Process**
  - 28 Signed/Pending Systems
  - CA: 6, PA: 6, MO: 1, IN: 2
  - HI: 1, WV: 2, IL: 9, NJ: 1

- **Customer Connections**
  - Signed & Pending ≈ 63,300*
  - 2019 Closed ≈ 4,740**

**2019 Highlights**
- Charlestown, IN Water
- Sadsbury Township, PA Wastewater
- North Middletown, KY Water & Wastewater
- Timber Springs, MO Wastewater

* This includes the Alton, IL acquisition, which represents 23,000 customer connections, due to bulk contracts. Connections to the system will be approximately 11,000

** As of 5/31/2019
“Like they never imagined” (Illinois)

- “Initially, it seems like a great deal for the community,” said Bolingbrook Mayor Roger Claar. “The reality is [these communities] get rate increases like they never imagined” (2016)
- Source: https://www.bettergov.org/news/private-water-companies-give-big-to-illinois-pols

![Municipal Water and Sewer Systems Recently Sold](chart)

**Public Entity**
- Ransom water system (LaSalle County)
- Grafton wastewater system (Jersey County)
- Dana/Long Point/Reading/Ancona water system (Livingston and LaSalle counties)
- Grafton water system (Jersey County)
- Glenview’s North Maine Utilities water and wastewater system (Cook County)
- Sun River Terrace wastewater system (Kankakee County)
- Bourbonnais’ Tri-Star Estates’ wastewater system (Kankakee County)

**Purchase Year and Price**
- Sale pending | $175,000
- Sale pending | $600,000
- 2016 | $1.075 million
- 2013 | $1.8 million
- 2015 | $22 million
- 2013 | $300,000
- 2012 | $455,000

**Estimated Rate Change**
- ↓ 20%*
- No change
- ↓ 49%*
- ↑ 1.4%*
- No change**
- ↑ 22%
- ↑ 68%

*Rates will rise next year if regulators approve a proposed increase.
**A 5-year rate freeze has certain exclusions.
Pennsylvania water bills (*major holding companies)
“Political risk” and “rate fatigue” (Moody’s, 8/31/18)

- “PAWC has been very active in its acquisition of larger municipal wastewater systems, of late - a trend we expect to continue due to Pennsylvania's legislative Act 12 of 2016…

- Pennsylvania law also allows for a single rate across multiple service territories and water and wastewater systems; therefore an IOU can spread full acquisition costs (including premiums paid above book value of the acquired system) across all of its customers.

- This means that all customers see a small rate increase versus a few customers seeing a very large rate increase, when an acquired system is added to rate base.

- However, this also means that legacy customer bills are increasing due to IOU capital spent on third-party acquisitions and not for capital investment in their own system.

- Longer-term, as additional acquisitions are made, we see the potential for heightened political risk if the recovery of IOU acquisition costs and premiums drives customer push-back on increasing costs or results in legacy customer rate fatigue.”
Wealth transfer (cross-subsidization)

- **“Benefits for communities”**
  - “Offers governmental providers of water and wastewater an additional option to upgrade their water and wastewater infrastructure and services.”
  - “Purchase price for system provides a tool for local government to address economic development, community revitalization or other needs with an infusion of capital infrastructure investment from private sources.”
  - “Continued delivery of safe water and wastewater services” (Aqua correspondence, 8/20/18)

- **Use of proceeds**
  - “Municipal officials… understand that the proceeds… could allow them to pursue meaningful and needed local projects and initiatives (Aqua, 2018)
  - “Proceeds [will] pay for several high-profile projects, including a new township building and two upgraded fire stations — without raising property taxes” (2018)
  - “[We’re] in a position now to use one of our assets to generate more money for the borough. This could be the salvation…” (2018)

- **Ratepayer as taxpayer – *they do not match***
  - Constitutes a regressive and unrepresentative form of taxation
  - “Harvests” revenues from captive water ratepayers for other purposes
  - Surrenders assets and transfers value to taxpayers and shareholders
  - Results in inefficient prices and consumer welfare loss
Wealth transfer within and across communities

Transfers from ratepayers

Ratepayer A in Community A

Community A

Transfers under consolidated rates

Ratepayer B in Community B

Ratepayer A

Community A
“Forced to pay” (Mayor of Lexington, KY, 2/14/19)

- “This legislation is bad for Lexington … bad for citizens; bad for our largest employer, the University of Kentucky; bad for our economy.

- Since 2007, Kentucky American has more than doubled its residential rates with five increases. Its sixth request for an increase is now pending before the Public Service Commission. These rate increases are paying for a water plant in Owenton we didn’t need.

- The company wants to sell its excess capacity from that plant to other cities, and now it wants its customers in Fayette County to fund its expansion. That’s what this legislation is about.

- Citizens in Lexington should not be forced to pay for water for citizens in other counties.

- Our legislators should say no.”
Windfall proceeds

- Proposed use
  - Municipal or utility debt
  - Storm sewers
  - Pensions and other liabilities
  - Tax relief or stabilization
  - Schools, parks, and equipment
  - Police and fire stations
  - Street repairs
  - Sports complex and golf course
  - Municipal campus and beautification
  - Other capital projects and services

- Pennsylvania law prohibits transfers
  - Universal Citation: 53 PA Cons Stat § 5612 (2016). Money of authority.
  - “(1) Money of the authority may not be used for any grant, loan or other expenditure for any purpose other than a service or project directly related to the mission or purpose of the authority as set forth in the articles of incorporation or in the resolution or ordinance establishing the authority under section 5603 (relating to method of incorporation).
  - “(2) A ratepayer to an authority shall have a cause of action in the court of common pleas where the authority is located to seek the return of money expended in violation of paragraph (1) from the recipient.”
Exeter Township, PA (2018)

**Pennsylvania American Water Service Area**
Serving 19 percent of the Commonwealth’s population.

**Summary**
- Township sells wastewater system for a cash at closing.
- Pennsylvania American Water will partner with Township to identify and direct $3 million of investment in wastewater and/or water facilities in conjunction with street and sidewalk improvements, economic development projects or other utility infrastructure needs.
- Township retains all cash, eliminates wastewater system debt and retains net proceeds from sale of system.
- After closing, township’s base rates will not increase prior to January 1, 2021. Future rates will be reviewed and approved by PUC.
- Township’s wastewater system employees offered employment.
- Township relieved of current and future wastewater treatment costs and future capital investment requirements.

**Wastewater System Sale – Golf Debt Retired**

$96 million net proceeds from sale
- All debt defeased (wastewater, general, and golf)
- Deposits into Pension Funds and Other Post Employment Benefits to cover unfunded liabilities
- Storm Sewer Improvements (project costs of $4 million)
- Equipment Replacement Fund ($5 million)
- Grant Funding, Economic Development Opportunities, and Other Capital Needs ($22.7 million)

<table>
<thead>
<tr>
<th>Source of Funds</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Assumed Net Proceeds from Sale</td>
<td>$96,000,000</td>
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</table>

<table>
<thead>
<tr>
<th>Uses of Fund - Liabilities</th>
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<tr>
<td>Defeasance Requirement for Sewer Debt</td>
<td></td>
</tr>
<tr>
<td>Myfund Status: Series 2007</td>
<td>$6,575,505</td>
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<tr>
<td>Series 2012 (Sewer Portion)</td>
<td>$5,442,649</td>
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<tr>
<td>Series 2013</td>
<td>$7,613,925</td>
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<tr>
<td><strong>TOTAL SEWER REFUNDED DEBT</strong></td>
<td>$19,332,073</td>
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| Defeasance Requirement for Additional Debt          |          |
| Myfund Status: Series 2016 - Golf                   | $7,183,752 |
| Series 2015A - Golf                                 | $7,781,120 |
| Series 2015 (Tax) - Golf                            | $1,541,908 |
| **TOTAL GOLF REFUNDED DEBT**                        | $18,512,460 |

| Series 2012 (Non-Sewer)                             | $2,210,086 |
| Series 2013 (Non-Sewer)                             | $58,243    |
| Penrose 2005 (Non-Sewer)                            | $124,892   |
| **TOTAL GENERAL REFUNDED DEBT**                     | $2,401,219 |

| Deposit to Pension Funds (Reduce Return Ass. And MMD) - Police | $900,000 |
| Deposit to Pension Funds (Reduce Return Ass. And MMD) - Employees | $900,000 |
| OPEB Deposit                                                | $9,000,000 |
| **Subtotal**                                                | $18,900,000 |
| **Balance Available**                                      | $36,852,248 |

| Storm Sewer Improvements ($4MM proj cost)              | $7,827,250 |
| Equipment Replacement ($5MM proj cost)                 | $6,262,500 |
| Grant Funding, Economic Development, and Other Capital Needs | $22,762,498 |
| **Balance Available**                                  | $36,852,248 |

Exeter Township is giving the public a better financial picture of the Reading Country Club this morning, detailing the expenses and financial history of the property. The figures presented show an amount spent on the property totaling $36 million to date and indicating less than 5% of generated golf revenue is contributing to paying off the outstanding debt.

McKeesport rising: “protecting tax dollars”

- McKeesport sold its wastewater system to PA American in 2017 for $159 million
  - Fixed deficits, avoided bankruptcy, and allowed the mayor to “protect tax dollars”

- One year later, the city considered taking over its solid waste services
  - “Mr. Cherepko said because of the rising costs of contracting garbage and recycling to an outside company that starting in 2020, “I think we have no option but to go into the garbage business for ourselves.”
  - He said that by having existing public works employees with commercial drivers’ licenses drive trucks and hiring help to empty bins into the trucks, the city could break even or end up saving money on hauling. He added that starting sometime in 2019 he plans to have the city take over the recycling.”

McKeesport approves budget with no tax increase

DEANA CARPENTER

DEC 11, 2018 2:19 PM
Potential for distorted incentives

- Regulation substitutes for market forces, as well as governmental ownership
  - Utilities respond rationally to incentives and lobby for favorable policies

- Potential system or municipality incentives
  - To defer utility plant investment and improvement
  - To forgo assets for a one-time windfall
  - To drive up the sale price for utility assets

- Potential consultant, attorney, and finance incentives
  - To inflate appraisals for clients to make more deals and more lucrative deals (fees)

- Potential utility incentives – public problems as private opportunity
  - To negotiate for higher not lower acquisition prices – contrary to markets
  - To have an interest in tough rules, stringent enforcement, and local government failure
  - To push privatization and invest heavily in infrastructure to build rate base

- Potential regulatory incentives – Chicago school critique
  - To expand the scope of jurisdiction over more customers
  - To raise fee-based revenues to the regulatory agency
  - To aid and be ingratiated with special interests
“Protect the investor” (NAWC, 2016)

- “Fair market policies generally support the notion that the price should match the appraisal value of the water system.

- With this legislation, companies will now pay the fair market value of the system **thereby incentivizing** the selling company to sell…

- A consolidation policy that fails to **effectively incentivize and protect the investor** is flawed.”

The set up and the close

- **Convenient convergence of policies - raising issues of fairness**
  - Demanding requirements and compliance challenges put stress on systems – and may be a means of setting them up for failure
  - Divestiture is then enticed by the state-sanctioned “premium” in the sell price
  - Possibly a form of “regulatory engineering” favoring private interests
  - Vilifying cities for “excesses” and “environmental crimes” (invoking state-run Flint)

- **New Jersey’s Water Infrastructure Protection Act (2015)**
  - “By enacting policies easing the way for privatization of local water utilities, [NJ Governor] Christie has made it possible for many of his allies, particularly those who lobby for private water companies, to profit… [The act] allows some local governments to sell their water utilities to private companies without public approval.” (TYT, Nov. 3, 2017)

- **New Jersey’s Water Quality Accountability Act (2017)**
  - The act establishes “new requirements for purveyors of public water to improve the safety, reliability, and administrative oversight of water infrastructure…” The act
    - “requires purveyors to create and implement an asset management plan designed to inspect, maintain, repair, and renew its infrastructure consistent with standards…
    - “specifies a methodology for routinely testing valves and fire hydrants.”
    - “supplements the [SDWA]… by requiring the submittal of a mitigation plan by purveyors that exceed a certain number of violations in a within any 12-month period."
  - Regulated purveyors “that have internet connected control systems will also need to create cybersecurity programs and join the NJ Cybersecurity and Communications Integration Cell.”
  - Source: https://www.state.nj.us/dep/watersupply/g_reg-wqaa.html
“[American Water CEO] Story didn't explicitly say the PFAS issue also provides the company with a catalyst for growth in its core regulated business -- such a comment risks coming off as somewhat predatory -- but this seems like a no-brainer. Many municipalities across the country that own and operate their own water systems are already finding it challenging to keep up with costly required maintenance and regulations.

Most are reportedly not equipped to remove PFAS from the water they treat, which means they'll need to spend big money on upgrading their systems if and when their state and/or the EPA regulates these chemicals. This should provide an impetus for more of them to put their systems up for sale, which municipalities have increasingly been doing in recent years…

So American Water is already sitting in the catbird seat when it comes to scooping up municipal-owned water utilities that go on the market in NJ -- and tough PFOA and PFOS regulations have the potential to magnify the company's competitive advantage by increasing the pool of possible acquisition targets.”

Source: https://www.fool.com/investing/2019/05/23/american-water-works-ceo-talks-pfas-contamination.aspx
“Water utility executives seem confident”

- **S&P Global (October 12, 2018)**
  - The legislation imposes testing, reporting, management and infrastructure investment requirements on all water purveyors.
  - Investor-owned utilities already meet these standards, however the expertise in managing systems on the municipal side varies.
  - What remains untested is the degree to which government entities force municipal systems to comply to these standards or alternatively compel them to sell the systems.
  - Water utility executives seem confident that holding municipalities to the same water quality and infrastructure planning standards benefits customers and could provide future acquisition opportunities.”

- **S&P Global (January 17, 2019)**
  - “Legislation passed in Indiana and New Jersey imposes testing, reporting and infrastructure investment requirements on water systems [to hold them accountable]… Legislation like this could improve municipal acquisition opportunities for the investor-owned utilities, as some systems many not be able to comply with the new legislation.”
  - “Water utility executives seem confident that the sector is at the precipice of meaningful consolidation fueled by recent [FMV] legislation.”
Policy conflicts and contraindications

- Overturns firmly embedded policy, precedent, **accepted practice (original cost)**
- Undermines **performance incentives** under the regulatory compact
- **Transfers wealth** from ratepayers to taxpayers that may not be co-located
- Directly at odds with water **affordability goals due to inflationary effects**
- Requires repayment of prior federal **grants used for infrastructure**
- Invalidates consolidated pricing (STP) based on taxpayer and ratepayer equity
- Reflects **political negotiation** ("willingness to sell") rather than market proxies
- **Presumes prudence** of pending capital investment (pre-approval)
- **Circumvents regulatory oversight** of rates and other terms of service
Potential mitigation measures by regulators (as allowed)

- Ensure representation & due process for affected public & parties (incl. settlements)
- Place burden of proof on acquiring utilities to show ratepayer and public benefits
- Conduct a comprehensive prudence review according to set evaluation criteria
- Deny acquisitions or premia that are not beneficial and in the public interest
- Limit application of fair value to only some assets as the law might allow (see CA)
- Differentiate and lower the return on common equity for the acquired plant
- Treat the excess paid as shareholder goodwill (below the line)
- Amortize the premium but exclude from rate base (see NARUC audit manual)
- Disallow transaction costs and fees associated with negotiation and litigation
- Allow depreciation only on the original cost of acquired assets
- Do not allow return of or on contributed capital in the system
- Hold utilities accountable for post-acquisition performance and impacts
- Consider a performance-based shared savings mechanism
- Place contingencies on use of funds (beneficial infrastructure or programs)
- Disapprove consolidated rates (STP) due to inter-jurisdictional wealth transfer
- Testify before the state legislature about ratepayer issues and impacts
Adjusting returns to account for rate base

- Without an adjustment, returns on common equity will be inflated
- Regulators can adjust asset-specific or overall returns accordingly, consistent with long-standing legal and financial principles

<table>
<thead>
<tr>
<th>Ratebase</th>
<th>$2,000,000</th>
<th>$2,500,000</th>
<th>$3,000,000</th>
<th>$4,000,000</th>
<th>$6,000,000</th>
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</thead>
<tbody>
<tr>
<td>Value to book</td>
<td>100%</td>
<td>125%</td>
<td>150%</td>
<td>200%</td>
<td>300%</td>
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<tr>
<td>Unadjusted return %</td>
<td>0.95%</td>
<td>0.95%</td>
<td>0.95%</td>
<td>0.95%</td>
<td>0.95%</td>
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<tr>
<td>Unadjusted return $</td>
<td>$19,000</td>
<td>$23,750</td>
<td>$28,500</td>
<td>$38,000</td>
<td>$57,000</td>
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<tr>
<td>Adjusted return %</td>
<td>9.50%</td>
<td>7.60%</td>
<td>6.33%</td>
<td>4.75%</td>
<td>3.17%</td>
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<tr>
<td>Adjusted return $</td>
<td>$190,000</td>
<td>$190,000</td>
<td>$190,000</td>
<td>$190,000</td>
<td>$190,000</td>
</tr>
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</table>

No elasticity effect
- Sales (000)
  - $10,000,000
  - $10,000,000
- Revenue required
  - $100,000,000
  - $100,000,000

Price/1000 gal.
- 10.00
- 10.00

Elasticity effect
- Sales reduced (000)
  - $10,000,000
  - $9,600,000
- Revenue required
  - $100,000,000
  - $9,216,000

Price/1000 gal.
- $10.00
- $10.42

Without an adjustment, returns on common equity will be inflated.
Regulators can adjust asset-specific or overall returns accordingly, consistent with long-standing legal and financial principles.
Other potential mitigation measures (as allowed)

- **Legislators**
  - Codify regulatory discretion to ensure a public-interest orientation
  - Make authority permissive and contingent (not mandatory)
  - Require an impact assessment and proof of public-benefit (all M&A)
  - Limit to evidence of fiscal or public health failure
  - Impose system condition and size thresholds based on viability
  - Prohibit financial transfers from water ratepayers
  - Ensure that local voter-ratepayers have proper notice and approval

- **Cities**
  - Appraise assets to “self-monetize” – refinancing as prudent with long-term debt
  - Develop performance-based contracts with private partners
  - Regionalize through public-public partnerships and mutual aid
  - If privatized, secure a seat on the governing board
  - Devote proceeds only to environmental or low-income programs
  - Ensure an open, transparent, inclusive, and deliberative decision process
  - Do not be pressured or rushed into an irreversible and impactful decision (deadlines)

- **General**
  - Consider the full range of structural, governance, and policy options to encourage capacity development and beneficial regionalization of water systems
Regulatory authority and discretion

- Public policy and economic regulation should be ownership neutral
- Fair market value has the markings of legislative ratemaking
- Statutes for the most part appear to preserve regulatory discretion
- Principles and standards for usefulness and prudence should be upheld
- Voluntary agreements should not limit regulatory purview or process
- Utilities should not make promises about regulatory or rate treatment
- Public interest standard and just and reasonable test should prevail
- Regulators should engage and collaborate with consumer advocates
“Mergers and acquisitions have come to the water industry. The targets are small companies—some private, some municipally owned, each a monopoly. Some are merging with each other; others are being acquired by large investor-owned companies.

As infrastructure ages, environmental costs rise, and population grows, economies of scale may justify larger service territories. But as with all M&A activity in monopoly markets, these transactions display tension between the parties’ strategic objectives and the public’s long-term interests…

So we have a four-part solution:

a) Create a statewide plan that identifies potential territory sizes based on true economies of scale
b) Limit the acquisition premium to savings attributable to the consolidation
c) Establish clear metrics for performance
d) Let system sellers host competitions based on savings

Competitions designed by regulators to achieve the public interest—a better solution than leaving consolidation decisions to monopolists.”
Pennsylvania valuation and approval statute

  - Valuation of acquired water and wastewater systems

- “Process to establish fair market value of selling utility.--Upon agreement by both the acquiring public utility or entity and the selling utility, the following procedure shall be used to determine the fair market value of the selling utility…

- The ratemaking rate base of the selling utility shall be the lesser of the purchase price negotiated by the acquiring public utility or entity and the selling utility or the fair market value of the selling utility…

- The commission shall issue a final order on an application submitted under this section within six months of the filing date of an application meeting the requirements of subsection (d)(1)…

- If the commission issues an order approving the application for acquisition, the order shall include,‘‘ The ratemaking rate base of the selling utility, as determined under subsection (c)(2)…”
Commissioner Place dissenting (Pennsylvania)

- Re acquisition of New Garden wastewater assets – first under the new statute

- “The available and credible evidence of record does not demonstrate the presence of such net affirmative benefits, especially for the existing Aqua ratepayers. The alleged affirmative benefits put forward by Aqua are rather speculative and will, if then, accrue over a very long time…”

- “I have serious doubts whether such conditions will provide concrete and sustainable safeguards while protecting the broader public interest and, particularly, the interests of Aqua’s existing customer base.

- Approving the overall transaction, but then potentially subjecting the relatively small customer base of New Garden with a prospectively allocated revenue requirement that would be clearly unsustainable and would largely relate to the same system is both counterintuitive and does not serve the public interest.”

- “Most likely Aqua’s shareholders will also refuse to accept any additional risk beyond the acquisition price of $29.5 million that far exceeds the original cost of the acquired system.”

- “Therefore, the long-term viability of the safeguard condition is clearly questionable.”

“Central to this appeal is the question of what factors the Commission must consider before approving an acquisition of a public system by a private utility…”

“While Section 1329 establishes the method for determining the ratemaking rate base for the acquired plant, Sections 1102 and 1103 of the Code, together with Section 1329, require an applicant not only show that no harm will come from the transaction but also to establish that substantial affirmative benefits flow to its ratepayers.”

“Simply, by approving the sale and then putting off the consideration of the impact on rates to a later rate base proceeding, the Commission cannot do the balancing test required by Section 1102 of the Code to weigh all the factors for and against the transaction, including the impact on rates, to determine if there is a substantial public benefit.”

“It is in this proceeding that the Commission is charged with deciding whether the impact on rates based on the OCA’s undisputed evidence was outweighed by the other positive factors that the acquisition served a substantial public benefit. Because it did not do so, this matter is remanded to the Commission to make that determination, including the propriety of the rate restriction on New Garden ratepayers set forth in the APA.”

Virginia State Corporation Commission (policy per staff)

- Acquisitions are typically at net book value
  - Commission has discretion to review any premium or acquisition adjustment above or below that amount
  - Premium may be recovered as an amortization expense and/or included in ratebase and eligible for a return

- A two-part test is applied
  - The purchase must be the result of an arm’s-length transaction
  - The purchase must be prudent in terms of utility and ratepayer benefits

- For the second test, the commission considers
  - Quantitative factors, such as synergistic savings
  - Qualitative factors, such as improved quality of service
Arizona Corporation Commission (proposed)

- Companies must provide evidence of meeting conditions
  - Acquired company is a class D or E.
  - Acquisition will not negatively affect the viability of the acquirer.
  - Acquired system's customers will receive improved service in a reasonable timeframe.
  - Purchase price is fair and reasonable [based on] an arm's length negotiation.
  - Recovery period for the acquisition adjustment should be for a specific minimum time.
  - *Acquisition is in the public interest.*

- Circumstances that may demonstrate that an acquisition is in the public interest
  - Small water utility is insolvent.
  - Small water utility will have access to financing that will improve SDWA compliance.
  - Short and long-term cost savings, efficiencies, scale economies can be demonstrated.
  - Any delinquent privilege tax or property taxes are satisfied.

- No incentives may be provided to entities in violation of ADEQ or ADWR rules
Missouri rulemaking for nonviable utilities

- 4 CSR 240-10.085 Incentives for **Acquisition of Nonviable Utilities**

  (A) Acquisition incentive- A rate of return premium, debt acquisition adjustment, or both designed to incentivize the acquisition of a nonviable utility;

  (B) Debit acquisition adjustment. Adjustments to a portion or all of an acquiring utility's rate base to reflect a portion or all of the excess acquisition cost over depreciated original cost of the acquired system;

  (C) **Nonviable utility**- A small water or sewer utility, serving eight thousand (8,000) or fewer customers that:

  1. Is in violation of statutory or regulatory standards that affect the safety and adequacy of the service provided, including, but not limited to, the public service commission law, the federal clean water law, the federal Safe Drinking Water Act, as amended, and the regulations adopted under these laws; 2. Has failed to comply with any order of a federal agency, the department of natural resources, or the commission concerning the safety and adequacy of service; 3. Is not reasonably expected to furnish and maintain safe and adequate service and facilities in the future; or 4. Is insolvent;

  (6) If a debit acquisition adjustment is requested, an acquiring utility shall either file a plant-in-service study to support the amount of its requested acquisition adjustment addition to its rate base in its next general rate proceeding… The acquiring utility shall reconcile and explain any discrepancies between the acquiring utility's plant-in-service study of original cost valuation and the commission’s records, to the extent reasonably known and available to the acquiring utility, at the same time the supporting documentation for the study is filed…

  (7) Nothing in the rule precludes an acquiring utility that pays less than the depreciated original cost of the acquired system from seeking in its next general rate proceeding to include in rate base an amount up to the depreciated original cost of the acquired system.
Baltimore’s backlash: preempting privatization

- “Resolution No. 18-13 is for the purpose of declaring the inalienability of the City’s sewer system and water-supply system and for excepting the sewer and water-supply systems, their operations and uses, from the Charter provisions otherwise authorizing the grant of franchises or rights relating to the operation or use of public property or places.”

- Sources: https://ballotpedia.org/Baltimore,_Maryland,_Question_E,_Inalienability_of_Sewer_and_Water_Systems_Charter_Amendment_(November_2018) and https://thewaternetwork.com/article-FfV/baltimore-votes-to-become-first-large-u-s-city-to-ban-water-privatization-i3UBPmzzt-2vUQ694e4p_g

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<tr>
<th>Baltimore Question E</th>
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<tr>
<td>Result</td>
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<td>Percentage</td>
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<td>70.48%</td>
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<tr>
<td>No</td>
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</table>

The city of Baltimore voted overwhelmingly Tuesday to ban the privatization of its water and sewerage systems, in what supporters say is the first large U.S. jurisdiction to take such a step.

By Carey L. Biron

Baltimore Skyline from the dock in Maryland. Source: GoodFreePhotos Labeled for Reuse

Around 77 percent of more than 148,000 voters backed a proposal to alter the city’s charter to declare the “inalienability” of its sewerage and water-supply systems, with most votes counted Wednesday morning.

A Baltimore official said multiple cities have expressed interest in similar provisions.
Logical fallacy?

- If there is no workable market, how can there be fair “market” value?
- If there is underinvestment, is a premium needed given rate base opportunity?
- If a system is failing or noncompliant, is acquisition the best or only option?
- If the community is fiscally distressed, will constituents be further burdened?
- If assets are depreciated based on useful life, how would markets value them?
- If these were publicly owned systems, would fair market value be used?
- If these were energy companies, would fair market value be used?
- If fair market value is acceptable, should all utility assets be priced this way?
- If scale economies are substantial, shouldn’t costs and prices fall?
- If the system is viable, what is the incremental benefit given limits to scale?
- If achieving scale is prudent, why are economic incentives needed?
- If incentives are need to buy or sell, should rate regulators provide them?
In sum: is fair market value fair?

- Water industry presents opportunities for beneficial consolidation – particularly regionalization that captures tangible economies of scale
  - All forms should be evaluated relative to the public interest as well as demonstrable and measurable public benefits
  - Fair market value policies should be more closely scrutinized in terms of whether they serve the public interest

- Fair market value seems more than fair to
  - Local fiscal officers and their budgets
  - Utilities seeking growth and returns at the expense of ratepayers
  - Taxpayers and users of subsidized projects
  - Regulators who want to expand their jurisdictional remit

- Fair market value seems less than fair to
  - Communities concerned water affordability
  - Utilities concerned about inflation and sustainability
  - Ratepayers past, present, and future
  - Regulators who want to maintain their authority and discretion
For updates and more information

- Contact beecher@msu.edu
- Visit ipu.msu.edu/research