

**West Virginia American Water Company and  
The Case for Public Ownership and Operation**

**Boston Action Research  
A Project of Civil Society Institute**

**January 7, 2015**

**Authors  
Grant Smith  
Alex Jasset**

**Editors:  
Pam Solo and Jennifer Filiault**

## Table of Contents

<b>Executive Summary .....</b>	<b>4</b>
<b>Key Findings of the Report .....</b>	<b>6</b>
<b>Introduction .....</b>	<b>8</b>
<b>History and General Business Plan of West Virginia American Water .....</b>	<b>9</b>
<b>West Virginia American Water: Strategy for and Status of Water Rates and Infrastructure Investment.....</b>	<b>13</b>
<b>WVAW Business Plan .....</b>	<b>14</b>
<b>Review of Recent Rate Cases and the Issues Involved .....</b>	<b>15</b>
2011 West Virginia Public Service Commission Employee Reduction Investigation ....	15
The 2008 Rate Case.....	16
The 2015 Rate Case.....	17
Results of Leakage and Boil Water Notice Reports Ordered in the 2011 Proceeding ...	19
<b>Discussion .....</b>	<b>21</b>
<b>The Freedom Industries Spill: WVAW Preparedness and Response .....</b>	<b>22</b>
<b>Issues Contributing to the Toxic Contamination of Kanawha Valley’s Water Systems .....</b>	<b>22</b>
<b>Severity of the Spill .....</b>	<b>24</b>
<b>Unprepared West Virginia American Water Threatens Public Safety .....</b>	<b>26</b>
Lack of Preparedness and Poor Decision-Making at WVAW .....	26
West Virginia American Water’s Response Since the January 2014 Spill .....	28
<b>Discussion .....</b>	<b>29</b>
<b>Community Experience with American Water Elsewhere in the US .....</b>	<b>30</b>
<b>Issues with American Water Company .....</b>	<b>31</b>
<b>Recent Developments .....</b>	<b>33</b>
<b>Discussion .....</b>	<b>34</b>
<b>Potential Future Course for West Virginia American Water Customers .....</b>	<b>35</b>
<b>Background .....</b>	<b>35</b>
Review of Privatization/Remunicipalization Globally.....	35
Role of the Local and Federal Government.....	40
Investment Dollar Comparisons.....	40
Federal Government Inertia in Dealing With the Growing US Water Crisis and the Underlying Water Infrastructure Challenges .....	43
<b>Discussion .....</b>	<b>46</b>
<b>Potential Course of Action .....</b>	<b>47</b>
Public-Public Partnerships .....	47
Moving Forward in West Virginia.....	49
Cincinnati: A Potential Model .....	54
<b>Discussion .....</b>	<b>57</b>
<b>Appendix A.....</b>	<b>59</b>
<b>Examples of Public-Public Partnerships in the US .....</b>	<b>59</b>

**Appendix B..... 61**  
**2009 Resolution of the US Conference of Mayors on Water and Wastewater .....61**

**Appendix C ..... 63**  
**Potential Sources of State/Local Funding for Water Infrastructure in West Virginia**  
**.....63**

**Appendix D..... 70**  
**Potential Sources of Federal Funding for Towns and Rural Area Water**  
**Infrastructure .....70**

**Appendix E ..... 72**  
**The Human Right to Water ..... 72**

## Executive Summary

What became West Virginia American Water (WVAW, a subsidiary of American Water Co., the largest private water company in the country) formed in 1886. Since then, the company has expanded to serve 40% of West Virginia's population, purchasing and entering into public-private contracts with Public Service Districts and towns across the state.

WVAW's strategy reflects that of its parent, which is to keep expanding to spread the costs of infrastructure to more ratepayers in order to control costs. WVAW attempted to do just that, purchasing and entering into contracts with smaller rural communities around its hub utilities in Huntington and Charleston. However, the strategy has not worked in West Virginia. As the infrastructure ages and deteriorates due to apparent neglect, the water system experiences high leak rates, plus frequent boil water notices when mains fail. Repairs and deferred investment require considerable infusions of cash, leading to frequent rate hike increases.

While the rate cases and interrupted customer service shine light on WVAW's inability to control customer costs, the Freedom Industries chemical spill of January 9, 2014 shows how unprepared the company is to deal with disasters. WVAW's lack of preparation exposed about 300,000 customers to a toxic chemical and left them without water for up to nine days.

Customer experience with West Virginia American Water is similar to the experience of other American Water Company customers around the country. Indeed, the inadequate and widely criticized operations of private water companies globally have fomented a movement to remunicipalize privatized water utilities. The trend was accelerated when Paris remunicipalized (took back public ownership and management of) its water system in 2010. The U.S. is experiencing a similar backlash against privatized water utilities, including more than 50 cities and towns nationwide.

WVAW serves as an example of how things can go wrong when transparency and accountability suffer in a privatized water scheme. The company pursued a strategy of underinvestment to boost support of its profit margin for some time. It chose a confrontational approach with regulators in the state, complaining of its regulatory treatment, cutting employees and unilaterally attempting to set minimal service standards. But a change in company tone toward regulators has occurred in WVAW's most recent rate case seeking a 28 percent hike in 2015. Although the company's approach is more diplomatic, its business plan is the same: easier access to ratepayer dollars. A catalyst for the difference in company demeanor is the emerging support among public utility commissions<sup>1</sup> across the country, generally,

---

<sup>1</sup> The influences on state public utility commissions with respect to rate mechanisms favoring private utilities and privatization is beyond the scope of this report. It is unclear how carefully PUCs are following the remunicipalization effort as well and if this trend may influence regulators in the future. But the evidence, we found for this report, favors or leans to public ownership and operation of water utilities.

for pay-as-you-go rate mechanisms that allow water utilities to avoid rate cases by recovering dollars as they invest in infrastructure. These mechanisms are referred to as automatic rate adjustment mechanisms, trackers or surcharges or single-issue rate making, which tend to bolster utility profits while shifting financial risk to ratepayers. Another strategy is to substantially increase the flat monthly customer charge. In addition, private water companies are lobbying Congress for easier access to taxpayer financing to support their infrastructure investments.

The problem comes down to this: Private water utilities are competing with publicly owned and operated water utilities for public dollars because public financing is cheaper than private financing. Moreover, the evidence clearly shows that private water companies are no more efficient and, at times, less efficient than public companies in delivering water services. The end result is that the promised advantages of privatization (access to new financing and better service) have not materialized. The bottom line is that there is no advantage to having a private water company over a public water company in terms of service delivery. And public water companies have a big advantage in terms of cost. Private companies have a fiduciary responsibility to stockholders to pay dividends, which ultimately results in higher water bills for customers; public water companies pay no dividends.

There is an option for West Virginia customers, should they decide to pursue it. West Virginia law provides avenues to municipalize private water systems or remunicipalize water systems formerly under public control, including the ability to finance such takeovers with bonding and to seek federal and other state support. State law also allows for the creation of regional water authorities. The legislature could also adopt legislation to allow for public ownership and operation of the Kanawha Valley water system. Legal analysis is required to determine the most appropriate approach.

This will not be an easy proposition. American Water is certain to offer strenuous resistance, as it has in other regions in the country when customers have decided to move against the company. It will require coordination and public and policymaker education. However, public ownership and management of West Virginia water systems would allow the public to adequately plan for needed investments, most likely enhance transparency in water operations, and serve as a means to better control costs by removing the short-term profit motive and the diversion of much-needed funds from the community for the purpose of paying dividends.

In the broader scheme of things, it appears that the competition for public dollars between public and private water companies will increase, as local political and private industry pressure for federal taxpayer dollars mounts. Indeed, despite historically large local government investments, infusion of federal taxpayer dollars seems almost inevitable to upgrade the country's water infrastructure. This once again begs the question of why the public should support private water utility profit margins when public ownership and management can accomplish this more efficiently and inexpensively.

## Key Findings of the Report

- WVAW was unprepared for the January 2014 Freedom Industries spill that impacted 300,000 of its customers. West Virginia Public Service Commission staff found that WVAW violated numerous regulations in the wake of the disaster, including failure to: notify the public on a timely basis, maintain their system, have adequate storage capacity, have water pollution monitoring equipment, and have a source water protection plan (see below).
- WVAW continues to be unprepared for a major spill today, two years after the 2014 accident.
- West Virginia American Water (WVAW) has been unable to control water bills through expansion of its system to include ever more ratepayers.
- Despite frequent rate cases that increase water rates, problems of high leak rates and boil water notices have been persistent for WVAW over the last 10 years.
- WVAW pays a higher percentage of its profits in dividend payments to its parent corporation, American Water Company, than its subsidiaries in other states on average, which sends precious financial resources out of West Virginia that could otherwise be invested in the water system.
- WVAW is not alone among American Water subsidiaries as far as persistent problems such as high water bills and poor service quality. More than four dozen communities across the country have either taken control back from American Water (remunicipalized their systems), are trying to do so, or have tried and failed to do so.
- Evidence demonstrates that publicly owned and operated systems are just as or even more efficient than privately owned systems and that costs are lower.
- The vast majority of water systems in the United States (94%) are publicly owned and operated, serving 86% of the population.
- The situation with WVAW reflects why privatization of water systems has failed. The failure of privatization is attributed to excessive costs, poor service quality, lack of transparency, workforce cuts, and under-investment, among other things.
- There is rising competition between private and public water companies for public dollars. The private water industry has been lobbying Congress for easier access to taxpayer dollars while it seeks easier access to ratepayer dollars through pay-as-you-go rate mechanisms and other preferential treatment.

- Despite consistent and substantial investments in water systems, local governments face challenges in upgrading and maintaining their systems due to dropping revenue and reduced federal funding over the last 30 years. Given the mounting political pressure from local governments (and from private industry for that matter), infusions of federal dollars (public dollars) appear inevitable to shore up American water infrastructure.
- The best course of action for West Virginians is to assume public ownership and operation (municipalization) of the Charleston regional water system. To reiterate the reasons behind this:
  - 1) Public water systems do not pay dividends, retaining local dollars at a lower cost.
  - 2) Public water systems are just as efficient as private ones in delivering water services.
  - 3) Public and private water systems are competing for the same public dollars because public financing is cheaper than private financing.
  - 4) A publicly run system would emphasize water service, security, and safety over profit margin.
  - 5) Transparency would be enhanced.
- There are options for local officials and the public to look into in municipalizing the Charleston regional water system:
  - 1) Generally, local government has the ability to raise funds and accept state and federal dollars for its purposes.
  - 2) A takeover could be negotiated if WVAW were willing to sell, or local government could seek to use eminent domain.
  - 3) Although legal analysis is required, West Virginia law provides for the formation of regional water authorities and public service districts.
  - 4) New legislation could be passed for the public takeover of the Charleston system.

## Introduction

While private water systems have existed in some places for over a century, water privatization efforts accelerated dramatically in the 1980s. The theory was that the private sector could provide the proper financing and efficient operations to sustain and expand local water utilities.

West Virginia American Water, whose parent corporation American Water is the largest private water utility in the U.S., serving 14 million customers in 43 states,<sup>2</sup> is in somewhat a unique position. Unlike many water systems throughout the country that began as or became public water utilities, what became WVAW began as a private utility based in Charleston, WV and has remained so. Its parent holding company American Water was purchased by RWE in 2002. But in 2005, leaked board minutes of RWE, a multinational electric and water utility based in Germany, revealed the company wanted to sell American Water, which it purchased just three years prior. The company cited low returns, public opposition to privatization of water utilities, and distribution pipeline leakage that would take “200 years” to repair - referencing the failure of the company to make the proper investments “10 years prior.”<sup>3</sup> The company had paid a premium for American Water, believing that it had purchased “blue gold.”<sup>4</sup> But, despite its financial prowess, RWE was unable to make its investment work in the U.S. Yet, West Virginia remains dominated by a private water company today.

This paper will explore:

- 1) The history of American Water in West Virginia;
- 2) The issues facing the company and the public in West Virginia;
- 3) The safety of the water system in the wake of the Freedom Industries chemical spill in January of 2014;
- 4) Community experience with American Water elsewhere in the U.S.;
- 5) Global trends in privatization/remunicipalization; and,
- 6) Options for Charleston and the surrounding region going forward.

---

<sup>2</sup> Regulatory Research Associates: Water Advisory. SNL Financial, January 14, 2014. (Subscription required)

<sup>3</sup> “Excerpt from the Supervisory Board Minutes.” RWE, September 16, 2005. (Provided by Food and Water Watch)  
[http://documents.foodandwaterwatch.org/doc/rwe-boardminutes.pdf#\\_ga=1.75205010.1683580075.1360244908](http://documents.foodandwaterwatch.org/doc/rwe-boardminutes.pdf#_ga=1.75205010.1683580075.1360244908)

<sup>4</sup> See “The Future of American Water: The Story of RWE and the Politics of Privatization.” Food & Water Watch, October 2008.  
<http://documents.foodandwaterwatch.org/doc/AmericanWater.pdf> wherein the report states, “Financial analysts were dubious of the deal because RWE paid \$4.6 billion for American Water, a 37 percent markup over the company’s stock value. RWE also took on \$3 billion of American Water’s debt.”



## History and General Business Plan of West Virginia American Water

What became West Virginia American Water, which now serves approximately 40% of the state's population,<sup>5</sup> began in late 1886 with eight miles of water pipeline in Charleston.<sup>6</sup> By 1926 West Virginia Water Service Company bought the Charleston system and began to expand. In 1965 West Virginia Water Company was purchased by American Water Works.<sup>7</sup>

The company then built the water treatment facility on the Elk River and served, at the time, 50,000 customers. The towns of Nitro and Belle were included in the system. A few years afterwards, West Virginia Water Co. bought three aging treatment plants in Eastern Kanawha County, which were eventually shut down.<sup>8</sup>

During the 1980s, the water company systematically extended services into Putnam County. The Lake Washington Public Service District (PSD) was purchased in 1987.<sup>9</sup>

The company became West Virginia American Water in 1986 with the merger of West Virginia American Co. and Huntington Water Co., which were owned by American Water.<sup>10</sup>

Expansion continued after that, including into Boone County and reaching 130,000 customers by 1994. The 2000s saw continued customer additions, including in the towns of Mifflin, Sharples, Clendenin and, in 2013, Pratt. American Water was purchased by the German utility, RWE in 2002, but by 2009, RWE had divested all American Water stock to US investors.<sup>11</sup> As of April 2015, West Virginia American Water serves about 550,000 customers.<sup>12</sup>

The company expanded through its "regionalization" strategy. This includes: 1) purchasing municipal water utilities or public service districts (rural areas); 2) operating and maintenance contracts; or 3) demand-based tariffs<sup>13</sup> where it may

---

<sup>5</sup> Case No. 08-0900-W-42T. West Virginia-American Water Company, Tariff Rule 42 Tariff Filing to Increase Water Rates. Before the West Virginia Public Service Commission. Commission Order, March 25, 2009.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=262751&NotType='WebDocket'>

<sup>6</sup> "American Water: A Corporate Profile." Food & Water Watch Face Sheet, November 2013.

<http://www.foodandwaterwatch.org/factsheet/american-water-a-corporate-profile/>

<sup>7</sup> "West Virginia American Water has a Long History in the Kanawha Valley." Charleston Daily Mail, January 27 2014.

<http://www.charlestondaily.com/News/Kanawha/201401260116>

<sup>8</sup> Charleston Daily Mail, January 2014.

<sup>9</sup> Charleston Daily Mail, January 2014.

<sup>10</sup> Charleston Daily Mail, January 2014.

<sup>11</sup> Charleston Daily Mail, January 2014.

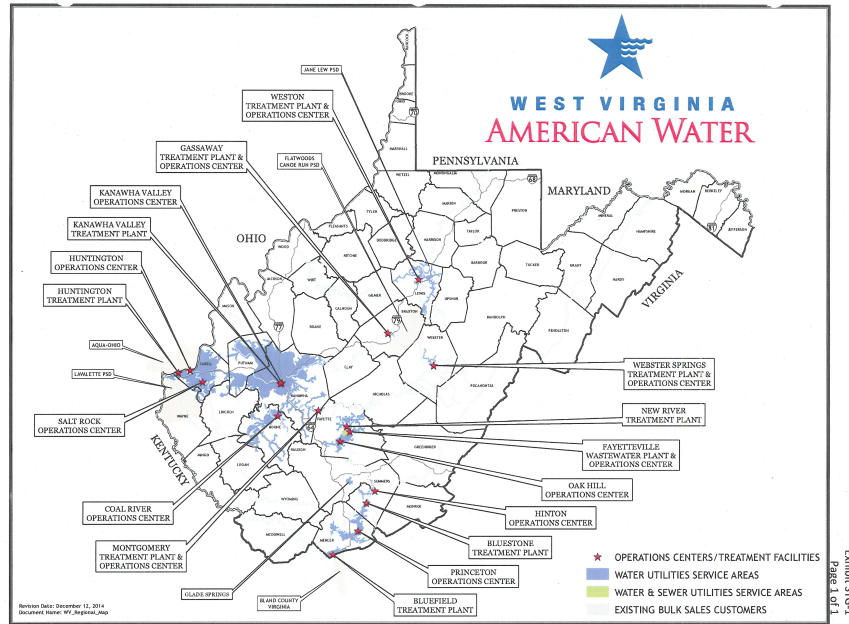
<sup>12</sup> "West Virginia American Water Seek Double-Digit Rate Increase." WVVA.com, April 30, 2015.

<http://www.wvva.com/story/28944337/2015/04/30/west-virginia-american-water-seeks-double-digit-rate-increase>

<sup>13</sup> Demand-Based Tariffs are explained in CASE NO. 12-0092-W-PC. West Virginia Water Company and Hurricane Municipal Water Board, December 6, 2012: "The demand-based tariff (first approved in 2004) requires that the Company cover its variable cost and have some contribution to its fixed cost. It must also cover any capital costs that are undertaken to serve the new demand-based

extend pipelines and possibly expand facilities to sell water to municipal utilities or public service districts requiring additional supply.<sup>14</sup>

**Figure 1. The West Virginia American Water System**



Source: West Virginia American Water Company 2015 Rate Case Filing

The parent company intends to continue this strategy where it can in West Virginia and elsewhere. The company refers to the areas and smaller communities around its main water systems that it considers ripe for purchase as “tuck-ins.” The company states in its 2014 annual report, “Historically, pursuing tuck-ins has been a fundamental part of our growth strategy. We intend to continue to expand our regulated footprint geographically by acquiring water and wastewater systems in our existing markets.... We will also selectively seek larger acquisitions that allow us to acquire multiple water and wastewater systems in our existing and new markets.”<sup>15</sup>

American Water sees many opportunities for expansion. In the same report, the company cites statistics that there are 52,000 community water systems and 15,000

tariff customer.”

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=358390&NotType='WebDocket'>

<sup>14</sup> Case No. 15-0676-W-42T. West Virginia American Water Company 2015 Rate Case Filing.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=423821&NotType='WebDocket'>

<sup>15</sup> 2014 Annual Report. American Water. <http://ir.amwater.com/GenPage.aspx?IID=4004387&GKP=1073749207>

community wastewater systems. The majority of these systems serve 500 or less people.<sup>16</sup>

A concern for the parent company that also extends to its West Virginia affiliate is quick recovery of expenditures in its regulated water utility business. Under traditional utility rate-making, if a utility makes a capital investment, it cannot begin to recover the cost of that investment in rates until its next rate case. Therefore WVAW seeks policies similar to those sought by electric utilities: recovering infrastructure expenditures on a pay-as-you-go basis (otherwise known as automatic rate adjustment mechanisms, surcharges or trackers); increasing the flat customer charge to compensate for reduced customer demand for water, thereby negatively impacting the customer incentive to conserve water and reduce their water bills; and recovering financing costs plus return (known as construction work in progress or CWIP) for large capital projects like treatment facilities.<sup>17</sup> All of these strategies shift water utility financial risk from the company to ratepayers.

**Table 1. Pursuit of “Tuck-Ins” by West Virginia American Water from 1993 to 2009**

Year	Purchased Water System	Number of Ratepayers
1993	West Fork River Public Service District	4,000
1993	Washington Public Service District	5,500
1995	Town of Winfield	1,300
1996	Town of Ansted	1,812
1996	Buffalo	1,235
1996	Pinch Public Service District	4,104
1997	Town of Bancroft	1,400
1997	Culloden Public Service District	3,305
1997	Mossy Public Service District	568
1997	Putnam Union Public Service District	2,941
1998	Lashmeet Public Service District	2,050
1999	Big Sandy Water Public Service District	1,013
1999	Coal River Public Service District, Boone County	5,040
1999	Spruce Fork Public Service District, Boone County	503
1999	Van Public Service District, Boone County	2,743
1999	Elk Two-Mile Public Service District	1,273
1999	Guthrie Public Service District	788
1999	Jumping Branch-Nimitz Public Service District	885
1999	Riverside Public Service District	132
1999	Salt Rock Public Service District	4,350
2000	Salem-Gatewood Public Service	1,935

<sup>16</sup> American Water, 2014.

<sup>17</sup> See Case No. 08-0900-W-42T. West Virginia-American Water Company, Tariff Rule 42 Tariff Filing to Increase Water Rates. Before the West Virginia Public Service Commission. West Virginia American Water Company’s Initial Brief, January 28, 2009. <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=258246&NotType='WebDocket'> and 2014 Annual Report, American Water and Case No. 15-0676-W-42T. West Virginia American Water Company 2015 Rate Case Filing. <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=423821&NotType='WebDocket'>

	District	
2001	Eleanor Town	1,345
2006	Sharples Water System, Logan County	200
2007	Town of Ceredo	520
2007	Clendenin	1,895
2008	Fayetteville	4,500
2009	Arbuckle Public Service District	500
<b>Total</b>		<b>55,837</b>

Source: Food & Water Watch (Trends in Water Privatization 2010  
<http://documents.foodandwaterwatch.org/doc/PrivatizationTrends.pdf>)

Not only does American Water seek easier access to ratepayer dollars to mitigate the burden of having to secure expensive private sector financing, it (and the industry as a whole) is also angling to gain greater access to public financing mechanisms, i.e. dollars underwritten by taxpayers that further reduces the risk to their stockholders.

Corporate Accountability International reported in 2014 that American Water and its industry cohorts are actively lobbying Congress to remove the “caps on the issuance of tax-exempt bonds that support public financing for private water projects... to subsidize corporate profits with public money....” in an effort to “weaken publicly controlled and managed water systems.” The organization asserts that such action by Congress would further restrict public water utility “access to public funds.”<sup>18</sup>

Moreover, the private water industry has sought Congressional approval of the “Water Infrastructure Finance Innovation Act” (WIFIA), a five-year pilot program, to allow American Water and other private water firms’ access to inexpensive federal (i.e. taxpayer) financing through the Department of the Treasury.<sup>19</sup> Those opposed to the concept, such as state environmental agencies, said that the initial version of WIFIA “would have a detrimental effect on federal support for established and successful State Revolving Fund (SRF) programs that provide the largest source of water infrastructure assistance today.” The Congressional Budget Office believed that the budget impacts of the measure may have been underestimated.<sup>20</sup>

The legislation as passed, however, attempted to eliminate the conflict between state revolving loan program and WIFIA by having applicants apply first to EPA’s loan program and receive WIFIA dollars only after being denied by EPA. But it does promote public-private partnerships, reasoning that public dollars alone aren’t enough. As of June, the \$350 million proposed for the program still needed to be

<sup>18</sup> “Troubled Waters: Misleading Industry PR and the Case for Public Water.” Corporate Accountability International, June 2014. [https://www.stopcorporateabuse.org/sites/default/files/resources/cai\\_troubledwaters\\_whitepaper\\_webres.pdf](https://www.stopcorporateabuse.org/sites/default/files/resources/cai_troubledwaters_whitepaper_webres.pdf)

<sup>19</sup> Corporate Accountability International, June 2014.

<sup>20</sup> “Water Infrastructure Financing: The Water Infrastructure Finance and Innovation Act.” Congressional Research Service, October 23, 2014. [https://www.legistorm.com/reports/view/crs/127756/Water\\_Infrastructure\\_Financing\\_The\\_Water\\_Infrastructure\\_Finance\\_and\\_Innovation\\_Act\\_WIFIA\\_Program.html](https://www.legistorm.com/reports/view/crs/127756/Water_Infrastructure_Financing_The_Water_Infrastructure_Finance_and_Innovation_Act_WIFIA_Program.html)

appropriated.<sup>21</sup>

Public water advocates are also concerned with other introduced legislation that favors the private sector. The Partnership to Build America Act is purported to “promote and facilitate the privatization of public water and sewer services.”<sup>22</sup> The Sustainable Water Infrastructure Investment Act would provide for “unlimited, tax-exempt private activity bonds,” a massive tax break for private companies.

Indeed, the federal government has assisted the private sector in competing with the public sector with respect to privatization of water services. President George H.W. Bush in 1992 signed Executive Order 12803, eliminating the requirement that private firms repay the federal government in full for federal investments in public infrastructure that is subsequently sold to a private firm. In 1997, the IRS issued Revenue Procedure 97-13, which maintained the tax-exempt status of municipal bonds even when water systems were under private operating and maintenance contracts.<sup>23</sup>

Finally, WVAW is in business to make money for its parent’s stockholders. As will be discussed later, American Water Company extracts a disproportionate dividend payment from its West Virginia subsidiary compared to the company as a whole.

## **West Virginia American Water: Strategy for and Status of Water Rates and Infrastructure Investment**

In 2006, German-based RWE decided to sell American Water Company, after only three years of ownership. Upon that announcement, state public utility commissions and consumer advocate agencies began reviewing the company and its subsidiaries. Among them was the West Virginia Consumer Advocate Division (CAD). West Virginia CAD did not like what it saw.

CAD, in its 2006 testimony, began with a review of the operation of American Water under RWE management. It found that American Water’s pension fund was severely underfunded. It found pipeline leak rates increasing since RWE assumed leadership – from 15% to 18% in New Jersey (American Water’s home state) and leak rates of 30% in Pennsylvania, for instance. At the same time, CAD noted to RWE’s chagrin that capital expenditures required to replace aging pipelines was...

---

<sup>21</sup> “WRRDA: Creating Interactions between the NEW WIFIA Program and the Updated Clean Water State Revolving Fund.” Environmental Finance Blog. University of North Carolina, October 14, 2014. <http://efc.web.unc.edu/2014/10/14/wrrda/>

<sup>22</sup> “How Water Privatization Threatens Our Communities.” Food and Water Watch Web Site. <http://www.foodandwaterwatch.org/campaign/public-water-all>

<sup>23</sup> “Water Privatization Trends in the United States: Human Rights, National Security, and Public Stewardship.” William and Mary Environmental Law and Policy Review, 2009. <http://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1027&context=wmelpr>

“3X that of its closest competitor... over the last three years,” citing that the “renewal rate” for American Water “was over 200 years.”<sup>24</sup>

Turning to West Virginia American Water, the Consumer Advocate Division made the following observations:

“The types of problems that RWE identified – ineffective management, inadequate ability to engage in and value unregulated activities, and inefficient and inadequate maintenance and capital replacement practices - are systemic in nature and will require a serious change of direction and focus at AWW.

“It appears that WVAWC is experiencing some of the same problems that plague AWW as a whole... The schedule shows that the level of water losses has increased since 2000. Specifically, in 2000 WVAWC did not deliver 25% of the water it produced to paying customers. In 2003 and 2004, this figure had risen to more than 30%, while it came down slightly in 2005 to 29.6%.”<sup>25</sup>

CAD concluded by asserting that it would take a very significant investment to correct this problem.<sup>26</sup>

As it happens, these problems have persisted as demonstrated in testimony from the frequent rate increases sought by the company since being sold by RWE in 2008.

### WVAW Business Plan

Not surprisingly, WVAW’s business strategy mirrors that of the parent company’s, which, as cited above, has been to expand to spread escalating costs over more ratepayers. This strategy is discussed in both the 2011 employee reduction proceeding and the 2008 rate case by the West Virginia Public Service Commission.

Unfortunately, WVAW’s strategy has backfired to a certain extent. The costs of expanding and maintaining a system that was already marred by aging infrastructure have outstripped the necessary number of ratepayers to keep water bills reasonable. This has led to frequent rate hike requests and a widely dispersed system, which regulators indicate could be a contributing factor for the high volume of water losses. Another factor in the company seeking

**The costs of expanding and maintaining a system that was already marred by aging infrastructure have outstripped the necessary number of ratepayers to keep water bills reasonable. This has led to frequent rate hike requests and a widely dispersed system, which regulators indicate could be a contributing factor for the high volume of water losses.**

<sup>24</sup> Case No. 06-0597-W-PC. West Virginia American Water Company and Thames Aqua Holdings Joint Petition for Consent of Approval of the Sale by Thames Aqua Holdings of the Outstanding Stock of American Water Company. Consumer Advocate Division, November 8, 2006.  
<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=196235&NotType='WebDocket'>

<sup>25</sup> Case No. 06-0597-W-PC, November 8, 2006.

<sup>26</sup> Case No. 06-0597-W-PC, November 8, 2006.

increased customer charges and other means to easily access ratepayer dollars on a pay-as-you-go basis (such as the distribution system improvement charge (DISC) described below) is the fact that water customers are conserving more water to the point where water usage is remaining flat despite additional customers. Moreover, as additional customers are not driving an increase in revenue as expected, investment has shifted from mainly providing service (volume sales) to distribution system (pipeline) investment.<sup>27</sup>

## Review of Recent Rate Cases and the Issues Involved

### 2011 West Virginia Public Service Commission Employee Reduction Investigation

Tensions between regulators and West Virginia American Water seemed to come to a head in 2011 when, days after a 2010 rate increase order had become “final and non-appealable,” in which state regulators granted \$5.13 million from an initial \$18.4 million request, West Virginia American Water announced the elimination of a net 31 positions at the company, reducing the number of positions from 319 to 279.<sup>28</sup> It referred to this action as its “Get Well Plan.” These were positions built into the 2010 rate increase. The company, in its testimony in the employment reduction investigation of 2011, also essentially unilaterally changed its level of service standard to “no appreciable reduction” in service. WVAW claimed it had to reduce its workforce because, as a result of the “regulatory treatment” it was receiving in the state, it could not realize its full rate of return (profit margin). The company further implied that regulators, charged with balancing the interests of ratepayers and utility companies, had no business sticking their nose in the company’s decision-making in

---

<sup>27</sup> See CASE NO. 11-0740-W-GI. General Investigation Regarding Recent Staffing Changes. Before the West Virginia PSC <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=330867&NotType='WebDocket'> wherein the PSC states: “Although WVAWC presented testimony in its rate cases that it has attempted to control costs where possible, the increased rate requirement flowing from capital investment that is not accompanied by comparable growth in sales volumes, and the impact of increasing payroll and employee benefit costs on both WVAWC and American Water Works Service Corporation costs, which likewise must be spread over relatively stagnant water sales, have overwhelmed those cost controls, angered many of its ratepayers, and brought it increasingly before this Commission to seek rate relief on a scale and frequency that most other regulated water utilities do not experience. The expansion success, however, has not been significant enough, or frequent enough, to offset the substantial additional cost to the customers as WVAWC continued to make large capital plant additions, experience increasing employee and employee benefit costs and experience stagnant water sales in spite of significant growth in the number of residential customers served.” And Case NO. 08-0900-W-42T. West Virginia American Water, Tariff Rule 42 Tariff to Increase Rates and Charges. Before the West Virginia PSC. <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=262751&NotType='WebDocket'> wherein the PSC states: “As a part of its capital commitment, WVAWC undertook the renovation or replacement of many small treatment plants that served some of the smaller customer distribution systems in south-central and southern West Virginia and upgraded its primary or flagship treatment plants in Kanawha, Cabell, Fayette, Lewis and Mercer/Summer Counties. Incident to public private partnerships entered into by the Company, frequently involving the construction or renovation of these plants, the Company extended transmission and distribution mains into areas that could be served from these larger treatment plants. As a result, WVAWC has wide-spread service areas, often marked by long transmission and distribution runs and a large number of boosters, tanks and related facilities that frequently serve pockets of customers or areas with relatively low customer density. All of these factors, and the willingness of the Company to take on unserved, poorly-served or underserved areas or to acquire troubled systems contiguous to its service areas, have caused, at least in part, the escalating rates of the Company and to some extent help to explain the Company’s relatively high unaccounted for water losses. Because of all of this, over the last fifteen years, the Company has experienced (i) an increase in the frequency and size of rate requests and allowances, and (ii) an increase (for the for lack of a better term) in the “absolute” level of the Company’s rates, both of which have drawn the negative attention of the public.”

<sup>28</sup> The PSC order in this case explains the net reduction in employees as follows: “The exhibit attached to the WVAWC answer noted that it eliminated full-time positions that resulted in a net of thirty-one terminations after taking into account existing vacancies and various employee reshuffling.” CASE NO. 11-0740-W-GI. General Investigation of Recent Staff Changes. West Virginia Public Service Commission Order, October 13, 2011. <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=330867&NotType='WebDocket'>

this matter, charging that the Commission was “not a super Board of Directors.”<sup>29</sup>

Beyond lowering its costs while enhancing revenue by eliminating positions that were already built into rates, the company’s aim was to reduce services related to leaks and to reduce capital spending to make up for the perceived “poor” regulatory treatment it had received. State witnesses noted an increasing backlog of service just in the two weeks that the layoffs were imposed.<sup>30</sup>

The company also “diverted a substantial portion of its capital spending into an AWC (American Water Company) initiative to replace its customer service and accounting software.”<sup>31</sup> The result was that the “main (pipe) line replacement cycle” increased from 600 to 950 years. The company took this action despite a decision by the Commission in the 2010 rate order to allow the company to “earn a return on certain physical plant investments between rate proceedings” called the AFFAC (Allowance for Funds After Construction).<sup>32</sup>

In addition to these concerns, state regulators also pointed out the “increased number and increased severity of leaks resulting in boil water advisories” and that WVAW had filed 12 rate cases in the previous 20 years, amounting to \$50 million in rate increases. That’s 0.6 rate cases per year (or \$2.5 million rate increase per year). Moreover, the company had already reduced union personnel from fifty-four to forty-four in the previous 10 years.<sup>33</sup>

Regulators ultimately mandated the company, among other things, to report on leaks and boil water notices, to prevent ten of the positions from being eliminated for service quality reasons, and to reduce its replacement cycle, declaring the 950-year replacement cycle as “unreasonable.” In doing so, the Commission order stressed that “[t]he timing of these (personnel) reductions and the sudden revelation of ‘operating efficiencies’ supporting the reductions is suspect...”<sup>34</sup> It is unclear whether the PSC adjusted rates to account for the positions eliminated.

### The 2008 Rate Case

The 2008 rate case is noteworthy because it was filed two months after approval of a \$14.5 million rate increase in the 2007 rate case. In the 2008 rate case, the company requested a \$14.7 million increase. The company, as in 2011, pointed to how it was being regulated. The Commission made the point that the company was

---

<sup>29</sup> CASE NO. 11-0740-W-GI. General Investigation of Recent Staff Changes. West Virginia Public Service Commission Order, October 13, 2011.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=330867&NotType='WebDocket'>

<sup>30</sup> CASE NO. 11-0740-W-GI, October 13, 2011.

<sup>31</sup> Case NO. 11-0740-W-GI, October 13, 2011.

<sup>32</sup> CASE NO. 11-0740-W-GI, October 13, 2011.

<sup>33</sup> CASE NO. 11-0740-W-GI, October 13, 2011.

<sup>34</sup> CASE NO. 11-0740-W-GI, October 13, 2011.



regulated much like other utilities. Given the timing of the rate request, the Commission thought WVAW should have looked at ways to save money including “some possible deferral of acquisitions.” In the end, the Commission granted a 3.5% increase (\$4.2 million).<sup>35</sup>

WV American Water, as in the 2011 investigation, took an aggressive stance with the PSC and CAD, maintaining that “(Commission) staff and the CAD have kept their heads in the sand.” The company argued for rate mechanisms to allow it to recover pipeline (water distribution system) expenditures on a pay-as-you-go basis. This is known as a distribution system improvement charge (DSIC). Company witnesses justified such a mechanism by citing a 2008 Water Loss Study conducted in the region. The study “concluded that the Company is experiencing a high and increasing incidence of water main failures and water loss due to high leakage.”<sup>36</sup>

The Commission was hesitant, stating that the company had received preferential rate treatment in the 1990s (such as rate increases during rate moratoria) and now expected it. The 2011 employment reduction investigation, as mentioned, highlights continued tension on these issues between the Commission and the Company and the Commission’s effort to address the pipeline replacement problem with the Allowance for Funds after Construction mechanism.<sup>37</sup>

However, the company continues to push these same issues in its most recent rate increase request, filed in April of 2015.

### The 2015 Rate Case

West Virginia American Water seems to have altered its strategy here. Rather than primarily a confrontational approach, the company attempts to relate how it is responding to state regulators with respect to additional capital investment to reduce the pipeline replacement cycle and improving service by prioritizing “efficiency” measures – such as leak detection and improved metering. (In addition, the company hired on more employees above the number approved in the 2011 investigation.) Company testimony also thanks regulators for the AFFAC (allowance for funds after construction) (see explanation above) mechanism to facilitate more investment in its pipeline infrastructure, but deemed it inadequate to recover its full rate of return. Moreover, it stresses how inexpensive water service remains in the U.S. compared to other developed countries. Finally, it intends to defer recovery of costs incurred as a result of the Freedom Industries spill. As it does this, it continues to press for more ready access to ratepayer dollars between rate cases and boosting the flat charge to compensate for reduced usage (water conservation).<sup>38</sup>

---

<sup>35</sup> Case No. 08-0900-W-42T, March 25, 2009.

<sup>36</sup> Case No. 08-0900-W-42T, January 28, 2009.

<sup>37</sup> Case No. 08-0900-W-42T, March 25, 2009.

<sup>38</sup> Case NO. 15-0676-W-42T. 2015 Rate Case Filing. West Virginia American Water, April 30, 2015.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=423821&NotType='WebDocket>

The 2015 rate increase request was filed in the wake of a 2012 rate case settlement between the company and various parties that approved an increase of 6.9% or \$8.1 million. The initial request was nearly a 20% rate increase of \$24 million. The 2015 request is for over a 28% rate increase of approximately \$35.5 million. Capital investment and depreciation since the last rate case and planned through February 2017 account for 66% of the rate increase while lower sales (water conservation by customers) accounts for 20%.<sup>39</sup>

In this rate case, the company is requesting rate relief to boost its revenue - namely, increasing the flat customer charge and prospective ratemaking. The company also cites NARUC (National Association of Regulatory Utility Commissioners) resolutions in support of DSICs, construction work in progress, fair return on capital investment, and policies that assist with consolidation, as means to justify its requests.<sup>40</sup>

The company also claimed to have reduced its pipeline replacement cycle down to 384 years<sup>41</sup> – although the CAD expressed concern with anything over 200 when RWE was in the process of selling American Water Company.

In keeping with the parent's strategy to reduce stockholder risk by means of accessing public dollars, the company also says it has tapped into public funding, accessing revenue from Industrial Revenue Bonds “for construction of additional water facilities.”<sup>42</sup>

Another way to increase sales is to sell water to communities requiring additional volumes. Regulators approved Demand-Based Tariffs for WVAW in 2006. This allows the company to sell water to public water utilities. A stipulation described in one case is that the company has to foot the bill for any investment required to expand capacity.<sup>43</sup> However, the company says in the 2015 rate case “those sales may also increase demand for facilities and result in construction and expenses which increase rate base and accelerate the need for general rate relief.”<sup>44</sup> It appears the company is requesting that captive customers pay for additional capacity investment that others benefit from. This requires additional inquiry.

The PSC Commissioners also overruled a PSC staff motion filed June 11 to dismiss the case or reset the clock with respect to the PSC's final order in the case. Staff

---

<sup>39</sup> Case NO. 15-0676-W-42T, April 30, 2015.

<sup>40</sup> Case NO. 15-0676-W-42T, April 30, 2015.

<sup>41</sup> Case NO. 15-0676-W-42T, April 30, 2015.

<sup>42</sup> Case NO. 15-0676-W-42T, April 30, 2015.

<sup>43</sup> Case NO. 12-0092-W-PC. Joint petition for consent and approval for authority to enter into a Service Agreement under WVAWC's Demand-Based Sale for Resale Service Tariff. West Virginia American Water and Hurricane Municipal Water Board, December 6, 2012. The order states, “The demand-based tariff requires that the Company cover its variable cost and have some contribution to its fixed cost. It must also cover any capital costs that are undertaken to serve the new demand-based tariff customer.” <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=358390&NotType='WebDocket'>

<sup>44</sup> Case NO. 15-0676-W-42T, April 30, 2015.

asserted that the company's methodology for justifying the rate increase violates Commission rules.<sup>45</sup>

In recent testimony, the Consumer Advocate Division suggested a \$1.8 million increase instead of the \$35.4 million increase requested by the company.<sup>46</sup> PSC staff rejected the company using a future year test for income purposes (prospective ratemaking) but supports what it refers to as an "Infrastructure Replacement Plan" that allows the company to charge customers on an incremental basis (pay-as-you-go) for water distribution system investments.<sup>47</sup> This is very similar to the distribution system improvement charge (DSIC) that the company had requested in 2008. The community group Advocates for a Safe Water System is reviewing the proposal.<sup>48</sup>

**Results of Leakage and Boil Water Notice Reports Ordered in the 2011 Proceeding**  
Water loss and boil water notices continue to plague the private utility system in West Virginia.

There are two metrics used in assessing water loss. One is for total losses called unaccounted for water. That's all water produced for the system minus consumption, whether people are billed for the consumption or not. The other is non-revenue water, which is total water produced for the system minus consumption that has been billed.<sup>49</sup>

The March 2015 PSC staff report covering water metrics ordered by the Commission in 2011 for the fourth quarter of 2014 determined that leaks remain excessive. The staff report states:

"System wide Unaccounted for Water (UFW) remains well above the Commission-acceptable figure of 15% with system-wide, rolling-12-month UFW ranging from a low of 26.72% in May 2014 to a high of 30.17% in May of 2013. The highest reported UFW for 12-month period was 36.21%, which was reported by the Kanawha Valley District<sup>50</sup> in November 2014. The lowest 12-month UFW was 6.07%

---

<sup>45</sup> Case NO. 15-0676-W-42T. Motion to Dismiss or Toll the Statutory Suspension Period. West Virginia Public Service Commission Staff, June 11, 2015.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=426896&NotType='WebDocket'>

<sup>46</sup> "Public Service Commission Staff Suggests Surcharge for American Water." Charleston Gazette-Mail, September 28, 2015. <http://www.wvgazette.com/article/20150928/GZ01/150929478/1419>

<sup>47</sup> Case No. 15-0676-W-42T. Direct Testimony of Terry Eads, Director, Utility Division (West Virginia PSC). September 25, 2015. <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=435200&NotType='WebDocket'>

<sup>48</sup> Charleston Gazette-Mail, September 28, 2015.

<sup>49</sup> "Performance Indicators of Water Losses in Distribution System." UNESCO-IHE: Institute for Water Education, April 2008. [http://www.switchurbanwater.eu/outputs/pdfs/GEN\\_PRS\\_PL\\_of\\_Water\\_Losses\\_AC\\_Apr08.pdf](http://www.switchurbanwater.eu/outputs/pdfs/GEN_PRS_PL_of_Water_Losses_AC_Apr08.pdf)

<sup>50</sup> The Kanawha Valley District is home to the system's largest city, Charleston, West Virginia.

which was reported in the Weston District in May 2014.”<sup>51</sup>

The same was true for non-revenue water:

“Non Revenue Water (NRW) remains high with the system-wide 12-month NRW peaking at 38.62% in October 2014. The highest reported NRW for the previous 12-month period was 51.97% reported by the Fayette District in October 2014. The lowest reported NRW for the previous twelve-month period was 13.49% reported by the Weston District in May 2014. NRW in the Kanawha Valley District remained quite high, peaking at 45.02% in October 2014.”<sup>52</sup>

The report goes on to document nearly 4,000 pipeline repairs in 2014, 20% above 2013, with the Kanawha Valley at nearly 2,000 in 2014.<sup>53</sup>

Boil water notices, which also reflect system failure, remain high as well. Company filings in November of 2014 and May of 2015 report 122 such notices in 2013 and 136 in 2014. 2015 has seen 45 boil water notices as of March. These incidents are concentrated in the Kanawha Valley and Huntington.<sup>54</sup>

The December 22, 2015 staff report logged a drop in UFW – to just over 20% for the system and 26% for Kanawha Valley - which staff still considers “well above” acceptable levels and NRW still very high at almost 35%, with Kanawha Valley over 41%. 2,786 leak repairs were recorded, 151 down from the first three quarters of 2014. Kanawha Valley saw 1,475 repairs, down 19 from the first three quarters of 2014.<sup>55</sup>

A major service disruption occurred in June of 2015. On June 23, a 36-inch main burst in Dunbar disrupting service for 25,000 customers in the region. Boil water notices were issued. Contributing to the catastrophic loss of service was the failure of an isolation valve that would have prevented additional water loss. The line was repaired by June 26 but water service remained initially elusive for customers in outlying areas, as time is required to build water pressure.<sup>56</sup>

---

<sup>51</sup> “Fifteenth Further Joint Staff Memorandum Closed Case Filing.” Case NO. 11-0740-W-GI. Public Service Commission for West Virginia, Engineering Division, March 27, 2015.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=420915&NotType='WebDocket'>

<sup>52</sup> PSC of West Virginia Staff Memorandum, March 27, 2015.

<sup>53</sup> PSC of West Virginia Staff Memorandum, March 27, 2015.

<sup>54</sup> “Quarterly Operations Report Third Quarter 2014.” Case NO. 11-0740-W-GI. West Virginia American Water Company, November 25, 2014.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=412431&NotType='WebDocket'> and “Quarterly Operations Report First Quarter 2015.” Case NO. 11-0740-W-GI. West Virginia American Water Company, May 29, 2015. <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=425914&NotType='WebDocket'>

<sup>55</sup> “Eighteenth Further Joint Staff Memorandum Closed Case Filing.” Case NO. 11-0740-W-GI. Public Service Commission for West Virginia, Engineering Division, December 22, 2015.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=441380&NotType='WebDocket'>

<sup>56</sup> “Water Main Repaired, Some Still Without Water.” WSAZ, June 25, 2015. <http://www.wsaz.com/home/headlines/WVAW-Reporting-Outage-Affecting-Customers-in-Kanawha-County-309390211.html> WSAZ reported loss of service for customers in:

As a comparison, from 2008 to 2013, Cleveland (a publicly owned and operated water utility and with 415,000 residential and commercial accounts) reported no citywide boil water notices and 9 “isolated advisories.”<sup>5758</sup>

These issues of a chronically leaky system and frequent boil water notices and loss of service call into question the company’s definition of “efficiency,” which emphasizes “improved metering and leak detection” as well as “improved practices and technologies,” which the company claims plays a central role in its 2015 rate case filing and business.<sup>59</sup>

**From 2008 to 2013, Cleveland (a publicly owned and operated water utility and with 415,000 residential and commercial accounts) reported no citywide boil water notices and 9 “isolated advisories.”**

## Discussion

Water utility service quality has remained consistently poor for ratepayers of West Virginia American Water prior to and after the sale of American Water Company by RWE. Although the frequency of rate increase requests by the company has increased rates substantially over the last 20 years, high leak rates and service disruptions have persisted. The company’s strategy to increase customer base to keep rates under control has not been successful. Increasing expenditures in pipeline infrastructure to sustain a broadly dispersed, aging system across western West Virginia has far outstripped the addition of customers.

WVAW, at first, assumed an aggressive posture with West Virginia regulators. Unable to move the Public Service Commission to approve easier access to ratepayer dollars and increase the customer flat charge to cover its profit margin, the company resorted to a type of blackmail – cutting personnel and declaring that it was reducing investment in infrastructure while holding a low service quality bar. Unable to move regulators fully to its position, the company has taken a more conciliatory approach in its most recent rate filing. It has responded by focusing on “efficiency,” which the company does not associate with reasonable monthly bills for its customers. However, its end game remains the same with respect to rate increases – either through formal rate proceedings, the frequency of which hasn’t abated in the last 20 years, or through pay-as-you-go recovery of pipeline

---

Dunbar, South Charleston, St. Albans, Nitro, Institute, Cross Lanes, Poca, Bancroft, Winfield, Red House, Hometown, Eleanor, Fraziers Bottom, Buffalo, Culloden and Hamlin.

<sup>57</sup> “Boil Water Advisories in New Orleans May Be Common, But the Risk is Real, Say Experts.” The Times-Picayune, March 8, 2015. [http://www.nola.com/politics/index.ssf/2013/03/boil\\_water\\_advisories\\_may\\_be\\_c.html](http://www.nola.com/politics/index.ssf/2013/03/boil_water_advisories_may_be_c.html). The article also states for the following public water systems: “St. Louis, Minneapolis, Arlington and Oakland, Calif., all with populations between 315,000 and 400,000, have had no citywide boil-water advisories in the last five years.”

<sup>58</sup> This report also cites Greater Cincinnati Water Works data on page 52. More research is required to reach a clear conclusion from comparing the frequency of boil water notices between public and private water systems

<sup>59</sup> Case NO. 15-0676-W-42T. 2015 Rate Case Filing. West Virginia American Water, April 30, 2015.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=423821&NotType='WebDocket'>

investment costs, or both. In addition, the company has benefited from public funding for its expansion plans in West Virginia.

The evidence clearly demonstrates that WVAW is having difficulty controlling rates and system integrity. The next section reviews the company's preparedness and response to the much-publicized Freedom Industries chemical spill of January 2014.

## **The Freedom Industries Spill: WVAW Preparedness and Response**

In its 2013 annual report (published in 2014), American Water hails its response to the Freedom Industries spill of January 9, 2014. It blames cold weather for bursting pipes and people letting their tap water drip to avoid freezing pipes for leading to insufficient capacity in the system and preventing the company from shutting its water intake on the Elk River in Charleston.<sup>60</sup> However, Public Service Commission staff and expert witnesses tell a different tale, putting the blame squarely on WVAW. Adding to the cascading series of errors and omissions of WVAW is the history of laissez-faire enforcement of water quality and other environmental rules by state government in West Virginia.

## **Issues Contributing to the Toxic Contamination of Kanawha Valley's Water Systems**

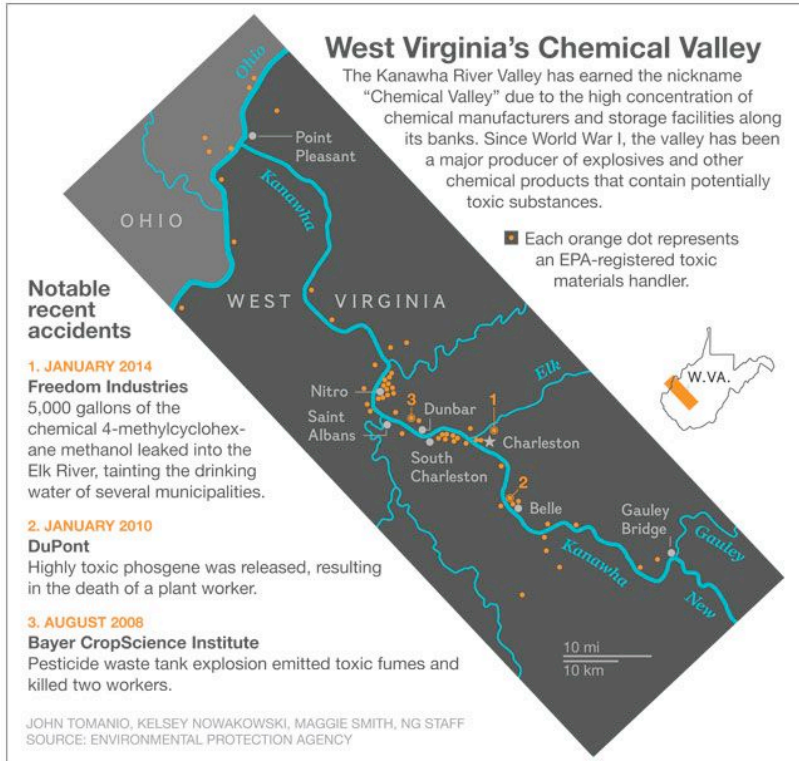
Industrial spills that result in water contamination are a frequent occurrence in West Virginia as the coal and chemical industries dominate the economic landscape. There are numerous threats to water supplies – both surface (streams and rivers) and ground water.

Here is a map of recent spills and locations of potential threats to water supplies along the Kanawha and Elk Rivers, which includes Freedom Industries:<sup>61</sup>

---

<sup>60</sup> American Water, 2014.

<sup>61</sup> Published in "A Center of Controversy, Accidents in West Virginia's Chemical Valley Lead Up to Spill." National Geographic, January 16, 2014. <http://news.nationalgeographic.com/news/2014/01/140116-chemical-valley-west-virginia-chemical-spill-coal/>



Published by National Geographic

Beyond the evident issues of having tens of thousands of gallons of chemicals stored on the river and near the company's water intake in an area referred to as the "Chemical Valley," WVAW and state officials were warned about the necessity for planning for chemical accidents in 2008 and again in 2013 by the federal Chemical Safety Board (which doesn't have enforcement powers).<sup>62</sup> In fact, the leaking tank was over 50 years old and state environmental agency staff hadn't inspected the offending tank since 1991, as such storage tanks are exempt from inspections by state environmental rules.<sup>63</sup> Moreover, "Freedom industries officials knew for a decade of the crack in secondary containment," according to FBI documents.<sup>64</sup> The lack of action on the part of the state comports with a *New York Times* report conducted in 2009, which according to *Scientific American*, concluded "that hundreds of workplaces avoided state environmental laws."<sup>65</sup>

Downstream Strategies, based in Morgantown, West Virginia, underscores this problem in its report on the disaster:

<sup>62</sup> See "How Chemical Regulation Failed in West Virginia." NPR, January 29, 2014.

<http://www.npr.org/2014/01/29/268201454/how-industrial-chemical-regulation-failed-west-virginia> and "West Virginia After the Water Spill." *The Guardian*, February 14, 2014. <http://www.theguardian.com/world/2014/feb/14/west-virginia-after-the-spill-residents-still-feeling-chemical-leaks-effects>

<sup>63</sup> "Surviving the West Virginia Water Crisis." *Scientific American*, January 15, 2014.

<http://www.scientificamerican.com/article/surviving-the-west-virginia-water-crisis/>

<sup>64</sup> "AP News Break: Chemical Company with Chemical Spill Ties Cited 8 Times." Published in the *New York Times*, January 15, 2014. [http://www.nytimes.com/aponline/2015/01/16/us/ap-us-chemical-spill-west-virginia.html?\\_r=0](http://www.nytimes.com/aponline/2015/01/16/us/ap-us-chemical-spill-west-virginia.html?_r=0)

<sup>65</sup> *Scientific American*, January 15, 2014.

“In recent years, the tone of many of our state leaders has been clear — too much regulation and too much involvement by the United States Environmental Protection Agency. Any serious recognition of the link between protecting the environment and promoting a healthy, diversified economy is often lost...

“The leak at the Freedom Industries site and contamination of the water supply for WVAW’s customers in a nine-county area demonstrates failures at multiple levels of government, and within WVAW itself. Federal, state, and local governments and agencies could have taken steps that would have significantly reduced the risk of this spill occurring or made it easier to effectively respond to the spill.”<sup>66</sup>

Similarly, an engineer who testified in the PSC investigation of the spill noted that West Virginia American Water “did nothing to develop its understanding of the threat (posed by Freedom Industries to the water supply) and develop and implement a plan to address that risk.”<sup>67</sup>

Evan Hansen, principal at Downstream Strategies, described the ubiquitous nature of the attitude of the state towards enforcement in 2014:

“In the past ten or fifteen years, they’ve [government] systematically weakened virtually all the major water-quality standards that apply to the coal industry... One by one, there’s been a steady effort to undermine the implementation of environmental laws, to the point that it’s become a part of everyday normal life here.”<sup>68</sup>

As indicated above and will be discussed further, corporate influence over government decision-making has exposed the public to undue hazards and a preventable catastrophe.

### Severity of the Spill

The Freedom Industries spill and ill-advised response by WVAW had a wide-ranging impact on people and the local economy.

In response to an odor complaint on the morning of January 9, 2014, WV Department of Environmental Protection inspectors arrived at the Freedom Industries site to find a chemical leaking from a tank into the Elk River 1.5 miles upstream of WVAW’s main water treatment plant. The chemical was later identified as crude MCHM-, a mixture of chemicals (predominantly 4-methylcyclohexane

---

<sup>66</sup> “Freedom Industries Spill: Lessons Learned and Needed Reforms.” Downstream Strategies, January 20, 2014. [http://www.downstreamstrategies.com/documents/reports\\_publication/freedom-spill-report\\_1-20-14.pdf](http://www.downstreamstrategies.com/documents/reports_publication/freedom-spill-report_1-20-14.pdf)

<sup>67</sup> “New Testimony Faults American Water Chemical Spill Planning.” The Charleston Gazette, November 11, 2014. <http://www.wvgazette.com/article/20141108/GZ01/141109363/1419>

<sup>68</sup> “Chemical Valley: The Coal Industry, the Politicians, and the Big Spill.” April 7, 2014. <http://www.newyorker.com/magazine/2014/04/07/chemical-valley>



methanol) used to wash coal of debris before it is burned<sup>69</sup> and listed on OSHA mandated Material Safety Data Sheets (MSDS) as an “immediate (acute) physical and health hazard.”<sup>70</sup> At noon, the environmental agency informed WVAW of the leak.<sup>71</sup> The company did not close the intake. Instead it made a failed attempt to treat and filter the chemical, and issued a Do Not Use order to the public near 6:00 pm.<sup>72</sup>

All 300,000 of WVAW’s customers in the Kanawha Valley were impacted.<sup>73</sup> About 1,500 people were taken to the hospital,<sup>74</sup> although the CDC estimates that just over 20% of “households reported one or more symptoms.”<sup>75</sup> One estimate calculated that businesses were losing 19 million dollars per day.<sup>76</sup> Local officials warned of symptoms that began showing up in the population. These included stomach pain, violent and uncontrollable vomiting and diarrhea as well as skin and eye irritations.<sup>77</sup>

After nine days, the all clear was sounded.<sup>78</sup> However, schools were impacted into February, with similar complaints.<sup>79</sup> Freedom Industries initially disclosed a 2,500-gallon spill, which was corrected to 10,000.<sup>80</sup> The company also reported two weeks after the January 9 event that another chemical similar to MCHM, but apparently not as toxic, had been mixed with the MCHM, leaked from the same tank, and found its way to the river and WVAW’s water intake.<sup>81</sup>

As of September 2014, 70 lawsuits had been filed against Freedom Industries or WVAW as a result of the spill. “[A]ll of the complaints have similar claims such as bodily injury, emotional distress, annoyance, loss of enjoyment, nuisance, inconvenience, requests for medical monitoring, lost income and loss of business

---

<sup>69</sup> New Yorker, April 7, 2014.

<sup>70</sup> Downstream Strategies, January 20, 2014.

<sup>71</sup> CASE NO. 14-0872-W-GI. Prepared Testimony of David W. Dove, PE. West Virginia Public Service Commission, November 6, 2014.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=411163&NotType='WebDocket'>

<sup>72</sup> “Toxic Warning: Recent Spill Underscores Lack of Water Oversight.” Appalachian Voices, April 9, 2014.

<http://appvoices.org/2014/04/09/toxic-warnings-recent-spills-underscore-lack-of-water-oversight/>

<sup>73</sup> “West Virginia Just the Beginning of Chemical Spill Disasters.” The Daily Beast, January 13, 2014.

<http://www.thedailybeast.com/articles/2014/01/13/west-virginia-is-just-the-beginning-for-chemical-spill-disasters.html>

<sup>74</sup> The Guardian, February 14, 2014.

<sup>75</sup> “Disaster Response and Needs of Communities Affected by the Elk River Chemical Spill.” Centers for Disease Control, April 2014. <http://www.dhhr.wv.gov/News/2014/Documents/WVCASPERReport.pdf>

<sup>76</sup> New Yorker, April 7, 2014.

<sup>77</sup> New Yorker, April 7, 2014.

<sup>78</sup> WV PSC, November 6, 2014.

<sup>79</sup> New Yorker, April 7, 2014.

<sup>80</sup> “Crisis and Emergency Risk Communication: Lessons from the Elk River Spill.” Environmental Health Perspectives, August 2014. <http://ehp.niehs.nih.gov/122-a214/>

<sup>81</sup> “Second Chemical Was Part of West Virginia Chemical Spill, Company Reveals.” New York Times, January 23, 2014. <http://www.nytimes.com/2014/01/23/us/a-second-chemical-was-part-of-west-virginia-chemical-spill-company-reveals.html>

revenue.”<sup>82</sup>

A suit filed by a dentist office sought damages for cleaning equipment as well as financial loss. The complaint mirrors the criticisms leveled by state and other witnesses in the investigation launched by the Public Service Commission in the wake of the accident:

“The complaint states that WVAW had the duty to provide safe drinking water, to inspect the watershed for potential sources of contamination, to provide for monitoring of its intake to detect contamination, to provide a treatment facility to treat chemical spills, to close the intake to prevent the contamination of water, to have plans to continue to supply safe water after a chemical leak is detected, to closely monitor its water and supply, to notify its customers and the public of dangers when contamination does occur, to have contingency plans, and to provide the public with alternative sources of water when necessary.”<sup>83</sup>

Ultimately, Freedom Industries filed bankruptcy and a judge accepted a \$3 million settlement on behalf of thousands of impacted citizens. A portion of the award will go toward health studies.<sup>84,85</sup>

### **Unprepared West Virginia American Water Threatens Public Safety**

In the aftermath of the Freedom Industries debacle, the West Virginia Public Service Commission began an investigation of the incident. PSC staff and other expert witnesses provided testimony.

### **Lack of Preparedness and Poor Decision-Making at WVAW**

The Safe Drinking Water Act establishes a process by which potential hazards to water supplies are identified (Source Water Assessment Report (SWAR)). The Clean Water Act establishes protocols to prevent/respond to catastrophes (a Stormwater Protection Plan and a Groundwater Protection Plan) such as the contamination of the WVAW pipeline infrastructure, which are then enforceable under a general permit.<sup>86</sup>

---

<sup>82</sup> “Federal Judge OKs Freedom Spill Settlement.” The West Virginia Record, September 18, 2014.

<http://wvrecord.com/news/269434-federal-judge-oks-3m-freedom-spill-settlement>

<sup>83</sup> “W. Va. American Water Lone Defendant in Three New Suits.” The West Virginia Record, January 30, 2014.

<http://wvrecord.com/news/265735-w-va-american-water-the-lone-defendant-in-three-new-suits>

<sup>84</sup> West Virginia Record, September 18, 2014.

<sup>85</sup> According to Bloomberg, the companies that comprised Freedom Industries “had revenue of \$25.7 million (in 2012).... In 2013, Freedom’s sales increased, but only to \$30.7 million. Freedom told the bankruptcy court that it has assets of worth from \$1 million to \$10 million. The (Chapter 11 Bankruptcy) filings show that Freedom’s top 20 unsecured creditors—apart from lawsuit plaintiffs, of course—are owed a total of \$3.6 million. (“Freedom Industries Chapter 11 Filing Reveals Owners’ Strategy.” Bloomberg, January 19, 2014. <http://www.bloomberg.com/bw/articles/2014-01-19/freedom-industries-chapter-11-filing-reveals-owners-strategy>)

<sup>86</sup> Downstream Strategies, January 20, 2014.

The last SWAR for WVAW was completed by the state Bureau of Public Health in 2002, with no updates prior to the spill. Fifty potential hazards were identified, including the Freedom Industries site. In fact, the stretch of the Elk River where Freedom Industries and the water intake are located was designated a Zone of Critical Concern.<sup>87</sup>

However, Downstream Strategies in their report and the PSC witness note that no protection plans were developed by WVAW.<sup>88</sup> The WV PSC also notes that the company had no Source Water Protection Plan and found no evidence of an Emergency Response Plan that anticipated accidental spills.<sup>89</sup>

PSC staff made a particularly pointed comment with respect to WVAW's failure to plan for spills in a region dominated by chemical storage and manufacturing:

“The Company states in its responses to data requests that it did not have a source water protection plan as of January 9, 2014 because state funding ran out. Staff believes this to be absurd in light of the fact that Freedom Industries site is in plain eyesight of the Company's office...”<sup>90</sup>

Another problem was that the private water utility had no means to monitor pollution in the water. RWE had removed a monitoring device in 2004. It was never replaced.<sup>91</sup>

The PSC staff witness testimony questioned why the company took six hours to notify the public after the company was notified by the state environmental agency. Instead, the company should have issued an immediate notice.<sup>92</sup>

The company's enormous water main leak rates contributed as well. The company argued that it decided to continue to treat water rather than to shut down the intake because there wasn't enough water in the system. The PSC Staff witness, in response, criticized the leak rates that had been an issue for years.<sup>93</sup> Witnesses on behalf of Advocates for a Safe Water System (a local citizens group) and the PSC Staff also highlighted the fact that the treatment facility was not running at full capacity and there were no other backup sources of water.<sup>94</sup>

---

<sup>87</sup> Downstream Strategies, January 20, 2014.

<sup>88</sup> See Downstream Strategies, January 20, 2014 and WV PSC, November 6, 2014.

<sup>89</sup> WV PSC, November 6, 2014.

<sup>90</sup> WV PSC, November 6, 2014.

<sup>91</sup> The Charleston Gazette, November 8, 2014.

<sup>92</sup> WV PSC, November 6, 2014.

<sup>93</sup> WV PSC, November 6, 2014.

<sup>94</sup> 14-0872-W-G. Testimony of Fred Stottlemeyer on behalf of Advocates for a Safe Water System, November 6, 2014.

<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=411164&NotType='WebDocket'> and WV PSC, November 6, 2014.

In terms of the decision by the company to continue pumping contaminated water into its treatment facility, the PSC staff argued that the company should have shut the intake, as the system (although not having two full days of backup water supply as stipulated by normal utility operation) still had about three hours of backup water available, which would have been enough time to allow most of the chemical to pass.<sup>95</sup>

In its analysis the PSC staff concluded that the company should have told the truth to the public at the beginning about the toxicity of MCHM. It finds that West Virginia American Water violated numerous provisions of the Commission's water rules and also that the company's actions were unreasonable. The staff noted failure to: notify the public immediately, maintain their system, have adequate storage capacity, have monitoring equipment, and have a protection plan that contained "real executable strategies for protecting the water source," and secure backup water supplies.<sup>96</sup>

### **West Virginia American Water's Response Since the January 2014 Spill**

In January 2015, WVAW issued a press release describing the measures it is taking to address the problems that led to its inadequate response to the Freedom Industries spill exactly one year earlier. On the surface, the company appears to be addressing the major issues raised by witnesses in the PSC investigation of the spill. These include some progress on water monitoring and lab capability, additional water supplies, attempting to reduce leakage (although it remains high – see previous section of this report), emergency notification of customers, and source water protection planning.<sup>97</sup> However, according to members of the local citizens group, Advocates for a Safe Water System<sup>98</sup>, who are experts in analytical chemistry and chemical engineering, the newly installed monitoring equipment cannot detect the offending chemical spilled in January of 2014 (MCHM) and there is no source water protection plan or alternative water source available as of September 2015.<sup>99</sup>

The company response was driven perhaps by a number of factors, including lawsuits, media and public scrutiny, the scrutiny of the PSC investigation, and SB 373<sup>100</sup> passed in the West Virginia legislature in 2014 to address chemical storage tank issues. However, it remains to be seen if the cycle of non-enforcement and negligent attitude toward public health and protection of water resources can be overcome, an attitude of neglect that seems to permeate state and most local

---

<sup>95</sup> WV PSC, November 6, 2014.

<sup>96</sup> WV PSC, November 6, 2014.

<sup>97</sup> West Virginia American Water Reflects on Year Following Freedom Industries Spill." WVAW, January 9, 2015. <http://finance.yahoo.com/news/west-virginia-american-water-reflects-142600725.html>

<sup>98</sup> A citizens group based in Charleston, West Virginia.

<sup>99</sup> "Philip Price and Jim Hatfield: A Better Way to Monitor Water." Op-ed in the Charleston Gazette-Mail, April 19, 2015. <http://www.wvgazette.com/article/20150429/GZ04/150429167/1103>

<sup>100</sup> For a discussion of SB 423 see "WV House Unanimously Passes Chemical Storage Tank Bill Requiring Inspections, Long Term Health Study." Daily Kos, March 6, 2014. <http://www.dailykos.com/story/2014/03/06/1282666/-WV-House-unanimously-passes-chemical-storage-tank-bill-requiring-inspections-long-term-health-study#>

governments.

### Discussion

It appears that WVAW took full advantage of the state's lax enforcement culture to the point of being completely unprepared for chemical accidents in a region characterized by an intense chemical industry presence. Its apparent changing attitude, post Freedom Industries, was generated by public scrutiny, outrage and lawsuits, followed by state legislative action. It remains to be seen whether this is a near-term shift in perspective or if public and water safety will become institutionalized at the company. However, as noted, the response seems inadequate at this point. What appears to be systematically watered-down legislation (see footnote 92) may be an indication of the future uncertainty of water safety in the region. Below is an example of how a publicly owned and operated water utility swiftly took action to avert an imminent threat to public health.

### ***Comparison of the Toledo Water Utility Response to a Water Emergency in 2014***

*Lake Erie is home to increasingly frequent toxic algae blooms due to climate change and agricultural fertilizer runoff. In 2014, a severe outbreak threatened Toledo's water supply. The city responded early, shutting down water intakes in the lake and issuing a Do Not Drink order to the public. Water was shut off to 500,000 customers. The mayor's office informed the Governor, who declared a state of emergency, and water stations were setup in cooperation with the National Guard. City officials remained in communication as to the status of water tests. Within a few days emergency status was lifted without public health consequences.*

*This is not surprising as the City of Toledo implemented the Toledo Waterways Initiative in 2002 in conjunction with the Safe Drinking Water Act mandate for a Source Water Assessment Report. The City water utility also links to water quality updates on its web site and has deployed sensors to monitor for microcystin, the toxin found in red algae. The City is also involved in the development of a sustainability plan for Toledo and Lucas Counties where protection of water resources is prominently featured.*

*For a discussion of these issues see:*

*Toledo Crisis: A Timeline of What's Happened So Far*

<http://apmobile.worldnow.com/story/26185546/toledo-water-crisis-a-timeline-of-whats-happened-so-far>

*Toxin Leaves 500,000 in Northwest Ohio Without Drinking Water*

<http://www.reuters.com/article/2014/08/02/us-usa-water-ohio-idUSKBN0G20L120140802>

*Great Lakes Drinking Water Fouled by Toxic Algae*

<http://www.circleofblue.org/waternews/2014/world/choke-point-index-great-lakes-drinking-water-fouled-by-toxic-algae/>

*5-Point Plan Unveiled for Sustainable Area Growth* <http://www.toledoblade.com/Energy/2014/04/23/5-point-plan-unveiled-for-sustainable-area-growth.html>

*Sonde Water Quality Sensors* <http://toledo.oh.gov/services/public-utilities/water-treatment/sonde-water-quality-sensors/>

*Toledo-Lucas County Sustainability Plan 2014*

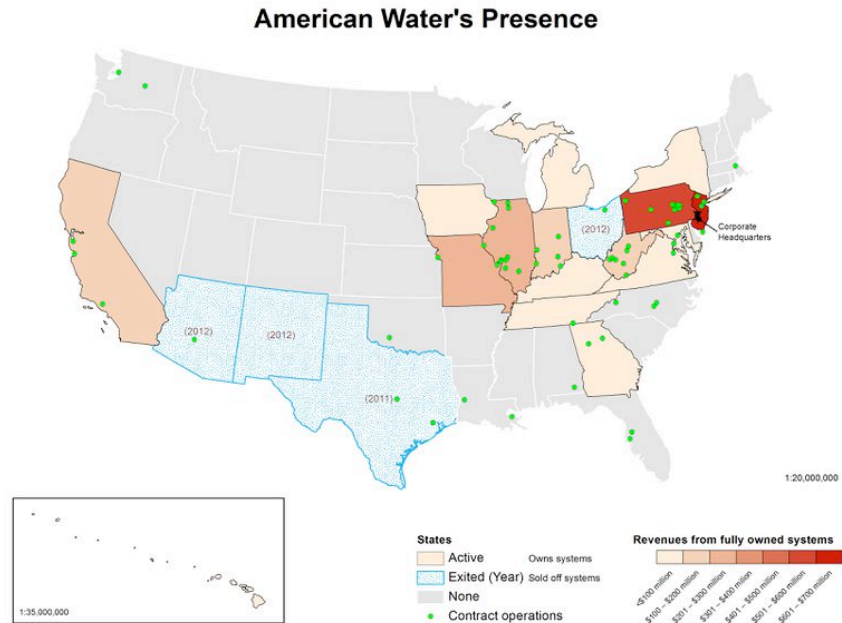
[http://icma.org/en/icma/knowledge\\_network/documents/kn/Document/306525/ToledoLucas\\_County\\_Sustainability\\_Plan](http://icma.org/en/icma/knowledge_network/documents/kn/Document/306525/ToledoLucas_County_Sustainability_Plan)

## **Community Experience with American Water Elsewhere in the US**

American Water subsidiary behavior is similar across the United States. Communities criticize high rates, inadequate workforce, and poor service. This

reflects the situation described above in West Virginia. The company also has faced and faces efforts to remunicipalize its private water systems, whether they are owned or are the result of public-private-partnership (PPP) contracts, and is resistant to the public will in these situations. Other issues mar its reputation as well, such as exerting political influence to smooth or sustain its privatization efforts.

Below is a 2013 map of American Water holdings in the US. The various shades of color represent revenue generated from each state, the darker the shade the higher the revenue. The company has sold off its water utilities in Ohio, Arizona, New Mexico, and Texas. However, the subsidiary may still contract with local government for services (PPPs) in these states. (The map below does not reflect the relative profitability of each subsidiary.)



Published by Source Watch<sup>101</sup>

### Issues with American Water Company

There have been a number of successful and unsuccessful (re)municipalization (communities assuming public ownership and operation of local utilities) efforts against American Water ownership or operating contracts that the company usually opposes through legal and/or PR means. These efforts involved both water systems and wastewater systems. The reason is generally high rates from frequent rate increases or requests for large rate increases. Also, in some cases, poor service has

<sup>101</sup> <http://www.sourcewatch.org/index.php/File:2013-03-AmericanWaterMap.jpg>

been noted, either in terms of leak rates, boil water notices, low water pressure, unresponsive remote call centers, or inadequate staffing.<sup>102</sup>

In most instances, those localities successful in putting their water utilities back in public hands have seen near term utility bill reductions. In a survey of remunicipalizations, Food & Water Watch, a DC-based consumer organization, found average cost reductions of 21% for ratepayers. In six such instances, Food and Water Watch found cost reductions ranging from 13% to 29%.<sup>103</sup>

### **Examples of Remunicipalization of Water and Wastewater Utilities under AWW Control**

<b>Municipal</b>	<b>Type of Service</b>	<b>Year of Remunicipalization</b>
Montara, CA	Water	2002
Houston, TX	Water Treatment Plant	2007
Cave Creek, AZ	Water	2008
Stockton, CA	Water	2008
Surprise, AZ	Water	2009
Evansville, IN	Water/Wastewater	2010
Sioux City, IA	Water	2010
Felton, CA	Water	2010
New Albany, IN	Water/Wastewater	2012

Sources: Food & Water Watch and Public Services International Research Unit<sup>104</sup>

Others have attempted and failed due to concerted company opposition. Mooresville and Gary, IN looked into taking back their water systems from American Water but found the costs too high.<sup>105</sup> In Monterey, CA citizens failed in a ballot initiative last year to municipalize the water system after a decades-old battle with the company.<sup>106</sup> The same goes for Lexington, Kentucky.<sup>107</sup> In each case, American Water waged a serious PR campaign against the efforts.<sup>108</sup> The City of Charleston, West Virginia thought about municipalizing in 2005 but the Public Service Commission balked. Local officials, after meetings with regulators, believed

<sup>102</sup> See “The Future of American Water: The Story of RWE and the Politics of Privatization.” Food & Water Watch, 2008. <http://documents.foodandwaterwatch.org/doc/AmericanWater.pdf> and “American Water: A Corporate Profile.” Food & Water Watch Fact Sheet, 2013. [http://documents.foodandwaterwatch.org/doc/American\\_Water\\_Profile\\_2013.pdf#\\_ga=1.23119290.1683580075.1360244908](http://documents.foodandwaterwatch.org/doc/American_Water_Profile_2013.pdf#_ga=1.23119290.1683580075.1360244908)

<sup>103</sup> “The Public Works: How the Remunicipalization of Water Services Saves Money.” Food & Water Watch Fact Sheet, 2010. <http://documents.foodandwaterwatch.org/doc/Remunicipalization.pdf>

<sup>104</sup> “Here To Stay: Water Remunicipalization as a Global Trend.” Public Services International Research Unit, November 2014. <https://www.tni.org/files/download/heretostay-en.pdf>

<sup>105</sup> See 2013 Annual Report, American Water <http://ir.amwater.com/Cache/1001186109.PDF?Y=&O=PDF&D=&FID=1001186109&T=&IID=4004387> and Food & Water Watch, 2008.

<sup>106</sup> Monterey Peninsula Water Management District “Water System Local Ownership and Cost Saving Initiative,” Measure O (June 2015). Ballotpedia. [http://ballotpedia.org/Monterey\\_Peninsula\\_Water\\_Management\\_District\\_%22Water\\_System\\_Local\\_Ownership\\_and\\_Cost\\_Saving\\_Initiative,%22\\_Measure\\_O\\_\(June\\_2014\)](http://ballotpedia.org/Monterey_Peninsula_Water_Management_District_%22Water_System_Local_Ownership_and_Cost_Saving_Initiative,%22_Measure_O_(June_2014))

<sup>107</sup> Food & Water Watch, 2008.

<sup>108</sup> Food & Water Watch, 2008.



that state regulators felt it would be inappropriate for Charleston to own the water treatment facility, given that it serves a region larger than the city.<sup>109</sup> Other communities, such as Trenton, New Jersey, have blocked efforts of takeover.<sup>110</sup> The towns of Bolingbrook and Homer Glen near Chicago have commissioned a study to assess the costs of taking their water systems from American Water. Five other municipalities in the region are looking into eminent domain action on an American Water pipeline that serves them.<sup>111</sup>

## Recent Developments

In its May 2015, first quarter earnings call, American Water reviewed its progress. The CEO, Susan Story, told analysts about legislative victories in Indiana to expand the DSIC (Distribution System Improvement/Investment Charge) statute and success in California in being able to recover costs for future investments.<sup>112</sup> The CEO also reported on the company’s board of directors’ approval of increasing the dividend payment by 10%, striving for 7 to 10% earnings per share growth through 2019, and its \$6 billion investment plan for infrastructure over the next five years, with about \$100 million this year earmarked for “strategic and regulatory” acquisitions.<sup>113</sup> Story mentioned American Water’s conservation programs in drought-stricken California, stressing that “[a]ll of these efforts are supported by constructive regulation,”<sup>114</sup> which generally means that bills are adjusted somehow (such as with increasing the flat customer charge) to cover the company’s margin.

American Water Company extracts disproportionate dividend payments from its subsidiary, West Virginia American Water. The “Dividend Payout Ratio” since 2009 is over 70% (see table below), as compared to 50% for the company overall.<sup>115</sup>

### Net Income and Dividends of West Virginia American Water 2009 - 2014 (Millions of Dollars) (mention in first part of report)

	2009	2010	2011	2012	2013	2014
Net Income	9.751	8.921	8.9	9.468	9.033	8.12
Return on Equity	5.52%	4.72%	4.41%	4.65%	4.36%	3.87%
Dividends	7.563	7.528	6.456	7.491	5.549	5.692
Dividend Payout Ratio	77.56%	84.39%	72.54%	79.12%	61.43%	70.10%

Sources: West Virginia American Water Annual Reports to the West Virginia Public Service Commission

<sup>109</sup> “Water Customers Question the Possibility of Rising Utility Costs.” Pittsburgh Tribune-Review, June 17, 2007.  
[http://triblive.com/x/pittsburghtrib/business/s\\_513035.html#axzz3hl6oAowC](http://triblive.com/x/pittsburghtrib/business/s_513035.html#axzz3hl6oAowC)

<sup>110</sup> Food & Water Watch, 2013.

<sup>111</sup> American Water, 2013.

<sup>112</sup> “First Quarter 2015 Earnings Call Transcript.” Seeking Alpha, May 7, 2015.

<http://seekingalpha.com/article/3156816-american-water-works-awk-ceo-susan-story-on-q1-2015-results-earnings-call-transcript?page=5>

<sup>113</sup> Seeking Alpha, May 7, 2015.

<sup>114</sup> Seeking Alpha, May 7, 2015.

<sup>115</sup> Case Nos. 15-0674-WS-D, 15-0675-8-42T, arid 15-0676-W-427. 2015 Consolidated Water and Wastewater Rate and Depreciation Filings. American Water Company Response to Data Requests.  
<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=430015&NotType=%27WebDocket%27>

American Water has also filed pending rate increase requests in New Jersey and West Virginia and another in Kentucky totaling almost \$102 million. Rate cases awaiting final order, as of April, amounted to nearly one billion dollars. The company is also spending \$300 million on a water desalinization plant on the Monterey Peninsula, where, as mentioned, citizens have been fighting for a publicly owned and run water system.<sup>116</sup>

During the call, the company reported on its water sales to fracking companies, noting that it has been cautious.<sup>117</sup> However, American Water sold 430 million gallons to fracking companies, at steep discounts relative to residential customers, for a profit of about \$3 million in 2012,<sup>118</sup> and purchased a company that sells water to fracking companies, Keystone Clear Water Solutions based in Hershey, PA, in June of 2015.<sup>119</sup>

In terms of its labor practices, the company has been cited a number of times for violating labor laws, “including interfering with protected union organizing activities and unilaterally and improperly slashing employee benefits.”<sup>120</sup>

American Water also continues to go after public dollars to reduce its financial risks while bolstering its profit margin. As Food and Water Watch reports, “During 2012 and the first half of 2013, it spent \$270,000 to lobby Congress, the White House and the Treasury Department about water financing legislation and tax policy.”<sup>121</sup> These requests consisted of special tax breaks and other assistance that could facilitate privatization and shareholder earnings.

## Discussion

Communities that have sought to regain control of their local water utilities from American Water face similar issues that communities in WVAW territory are facing. These issues are recurrent themes throughout the recent history of American Water operations in the US.

The burgeoning costs of sustaining aging water infrastructure under private control have exacted a heavy toll on ratepayer wallets. The indications are that public control is less expensive. For example, a city (Evansville, IN) went forward with its remunicipalization effort because “a government doesn't have to bother with turning a profit and satisfying shareholders, as does a large public company like

---

<sup>116</sup> Seeking Alpha, May 7, 2015.

<sup>117</sup> Seeking Alpha, May 7, 2015.

<sup>118</sup> Food & Water Watch, 2013.

<sup>119</sup> “American Water Announces Acquisition of Keystone Clear Water Solutions.” American Water Company Press Release, June 18, 2015. <http://ir.amwater.com/file.aspx?iid=4004387&fid=30022748>

<sup>120</sup> Food & Water Watch, 2013.

<sup>121</sup> Food & Water Watch, 2013.

American Water.”<sup>122</sup>

Moreover, the company’s ongoing efforts to seek pay-as-you-go rate recovery mechanisms and inexpensive taxpayer financing are nothing more than subsidies. They are subsidies because these mechanisms shift financial risk to the ratepayer from company stockholders while improving the company’s credit ratings and margins.

In the next sections, the paper explores further the implications of private vs. public control of local water utilities. First, the paper will review global trends in water privatization/remunicipalization, followed by the role of the federal government and ending with a suggested future course for the citizens of West Virginia.

## Potential Future Course for West Virginia American Water Customers

### Background

#### Review of Privatization/Remunicipalization Globally

Privatization takes many forms. The industry asserts that privatization consists of only the sale of a public asset, like a municipal water utility, to a private company. But privatization also includes public-private partnerships (PPP). The private sector uses the term public-private-partnership instead of privatization in an apparent attempt to stem public opposition to private involvement in local water utility operations.<sup>123</sup>

PPPs are a form of privatization because, under contract with a public governmental unit, a private company takes operational control/assumes responsibility over parts or all of a public asset and expects, in return, a profit. Researchers identify four types of public water utility privatization:

“(1) Private provision of various services and supplies such as laboratory work, meter reading, and supplying chemicals; (2) private contracting for water utility plant operation and maintenance (both 1 and 2 are often referred to as ‘outsourcing’); (3) negotiating a contract with a private firm for the design,

---

<sup>122</sup> “City Ending Privatization Sewer, Water Systems.” Evansville Courier Press, January 8, 2010. <http://www.courierpress.com/news/local-news/city-ending-privatization-sewer-water-systems>

<sup>123</sup> Mary Grant, “Water Privatization Overview: A Public Interest Perspective on For-Profit, Private Sector Provision of Water and Sewer Services in the United States.” Journal of Law in Society, 2013. [http://law.wayne.edu/journal-of-law-society/pdf/grant\\_article.pdf](http://law.wayne.edu/journal-of-law-society/pdf/grant_article.pdf)

construction, and operation of new facilities (this option is referred to as design, build, and operate, or DBO) – such as a water or wastewater treatment plant; and (4) outright sale of water utility assets to a private company.”<sup>124</sup>

As it happens, the experience with privatization across the globe is similar to that of West Virginia in terms of costs and service. (West Virginia American Water territory, as explained, is a mix of outright private ownership, of the two largest cities for instance, and contractual relationships (PPPs) with towns and Public Service Districts.)

Moreover, a wave of remunicipalizations of privatized water companies (when government regains control of water utilities) began recently and continues in the U.S. and abroad in response to the efforts to privatize water services that began in the 1980s.

**The vast majority of local water utilities in the U.S., 94%, are publicly owned and managed, serving 86% of the population.**

The vast majority of local water utilities in the U.S., 94%, are publicly owned and managed<sup>125</sup>, serving 86% of the population.<sup>126</sup> Almost all U.S. wastewater systems are public.<sup>127</sup> This trend holds also true globally where, in 2010, 90% of the water systems in the largest 400 cities globally were public entities,<sup>128</sup> with “only about 12% of global population receiving privatized water or sewer services.” No privatized water system existed in South Asia at that time. All water systems in Japan were public.<sup>129</sup> In Europe, the Netherlands banned privatization contracts in 2004, followed by Italy in 2011. In 2003, “an effort to make privatization compulsory” failed in the European Parliament. The United Kingdom, France and the Czech Republic are the only E.U. countries where privatized water systems dominate.<sup>130</sup>

The trend driving privatization efforts began in the 1980s with the Reagan and Thatcher administrations pushing privatization on an international level. This reached a pinnacle in 1989 with the so-called Washington Consensus. D.C.-based

---

<sup>124</sup> Mary Grant, 2013.

<sup>125</sup> “Troubled Waters: Misleading Industry PR and the Case for Public Water.” Corporate Accountability International, November 2014. [https://www.stopcorporateabuse.org/sites/default/files/resources/troubledwaters\\_webres.pdf](https://www.stopcorporateabuse.org/sites/default/files/resources/troubledwaters_webres.pdf)

<sup>126</sup> Mary Grant, “Water in Public Hands: Remunicipalization in the United States.” Published in “Our Public Water Future: The Global Experience With Remunicipalization.” Transnational Institute (TNI), Public Services International Research Unit (PSIRU), Multinationals Observatory, Municipal Services Project (MSP) and the European Federation of Public Service Unions (EPSU), April 2015. <https://www.tni.org/files/download/ourpublicwaterfuture-1.pdf>

<sup>127</sup> Mary Grant, April 2015.

<sup>128</sup> Troubled Waters, November 2014.

<sup>129</sup> Sharmila L. Murthy JD, MPA, “The Human Right(s) to Water and Sanitation: History, Meaning, and the Controversy Over Privatization.” Berkeley Journal of International Law, 2013.

<http://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=1434&context=bjil>

<sup>130</sup> Craig Arnold, “Water Privatization Trends in the United States: Human Rights, Public Stewardship, and Human Rights.” William and Mary Environmental Law and Policy Review, 2009.

<http://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1027&context=wmelpr>

institutions such as the International Monetary Fund, World Bank, and U.S. Treasury Department laid out economic policies that hailed private administration over public administration of services in general. This trend promoted the principles of “deregulation, market liberalization, and privatization of state assets...”<sup>131</sup>

The so-called “French Model”, which emphasizes public-private partnerships, became the model for international development advocates and international finance institutions. As an extension of such philosophy, the Dublin Statement of the International Conference on Water and the Environment in 1992 dubbed water a “commodity” that has “economic value” and therefore “should be recognized as an economic good.”<sup>132</sup>

As a result of these actions, the World Bank conditioned about one-third of its water-related loans on the privatization of water utilities between 1996 and 2002.<sup>133</sup>

However, there is a shift occurring away from water utility privatization. A remunicipalization trend is taking hold globally. And the pace appears to be accelerating. There were two cases of remunicipalization in 2000. That increased to 235 in 37 countries by spring of 2015, involving over 100 million people. Most of these, 184, have occurred in developed countries, 51 in “middle- and low-income countries.” France and the U.S. have witnessed the greatest number, reaching 94 and 58<sup>134</sup> instances respectively by March 2015. The majority of these occurred in the last five years. The movement to public water systems in France began with the remunicipalization of Paris, formerly the industry’s flagship example of private water. There have also been high-profile cases in other countries such as Jakarta (Indonesia), Budapest (Hungary), Buenos Aires (Argentina), Johannesburg (South Africa), La Paz (Bolivia), Bogotá (Colombia), Antalya (Turkey), and Berlin (Germany)<sup>135</sup>. However, the population served by public takeover of water utilities was far greater in “middle- and low-income countries” than in “high-income countries.” The former returned 81 million people to public service, the latter 25 million.<sup>136</sup>

Why is this happening?

---

<sup>131</sup> Sharmila Murthy, 2013.

<sup>132</sup> “Public Public Partnerships: An Alternative Model to Leverage Capacity of Municipal Water Utilities.” Food & Water Watch and Cornell University (IRL School – Global Labor Institute), January 2012. [http://documents.foodandwaterwatch.org/doc/PublicPublicPartnerships.pdf#\\_ga=1.3850800.1683580075.1360244908](http://documents.foodandwaterwatch.org/doc/PublicPublicPartnerships.pdf#_ga=1.3850800.1683580075.1360244908)

<sup>133</sup> Sharmila Murthy, 2013.

<sup>134</sup> From 2007 to 2013 in the United States, “the population served by local governments grew by 17 million” ... whereas... those served by privatized systems “fell by 7 million.” (Mary Grant, April 2015.)

<sup>135</sup> Six German cities have decided to remunicipalize since 2012. (Christa Hecht, “German Municipalities Take Back Control of Water.” Published in “Our Public Water Future”, April 2015.)

<sup>136</sup> “Our Public Water Future: The Global Experience With Remunicipalization.” Transnational Institute (TNI), Public Services International Research Unit (PSIRU), Multinationals Observatory, Municipal Services Project (MSP) and the European Federation of Public Service Unions (EPSU), April 2015. <https://www.tni.org/files/download/ourpublicwaterfuture-1.pdf>

The reasons for looking into water privatization have been cost of upgrades, promises of cost savings,<sup>137</sup> improved efficiencies,<sup>138</sup> bringing new sources of private finance, financial stress of smaller communities, and, additionally in the US, the cost of compliance with EPA water regulations.

But the results for privatized water services have been characterized by escalating costs, reductions in investment, avoiding use of private finance, and poor service.

A big argument for privatization has failed to meet the test. Studies show that the private sector is no more and, at times, less efficient than the public sector in delivering service and that the private sector is more costly.<sup>139</sup> Many remunicipalizations occur for service reasons.<sup>140</sup> Indeed, service is the leading reason why municipalities take control of their water systems, followed by “lack of cost savings.”<sup>141</sup> Moreover, privatized water utilities historically tend to invest less in water systems and continue, as pointed out earlier in the paper, to seek less expensive public dollars to expand and maintain water systems.<sup>142</sup> The advent of automatic rate adjustment and other rate mechanisms (see above) is simply an extension of that strategy, as the ratepayer and taxpayer represent the same wallet.

Another enticement used by private companies to lure local officials into a Public-Private-Partnership is a one-time fee paid by the private company to the local government entity. However, this is nothing more than a loan that has to be repaid by ratepayers over time. This practice was outlawed in France twenty years ago “by anti-corruption legislation because upfront payments distorted the decision-making

---

<sup>137</sup> Troubled Waters, November 2014.

<sup>138</sup> This is how West Virginia American Water defines “efficiency”: “Water efficiency means using improved practices and technologies to deliver water service more efficiently. For example, improved metering results in more accurate usage information and increases employee efficiency, and leak detection programs can reduce the amount of water, pressure, and energy required to deliver the same amount of water to consumers’ taps.” (CaseNo. 15-Ok7L-W-42T, April 30, 2015.)

<sup>139</sup> See Mary Grant, 2013. The report states: “Research has found no significant difference in efficiency between public and private operation of water systems.”<sup>23</sup> A 2008 review of every econometric study about water privatization and costs found, ‘While some studies found public production more efficient, most found no significant difference in costs or efficiency between public and private production.’ A 2010 analysis of a subset of those studies similarly found, ‘Our meta-regression analysis does not reveal a systematic relationship between cost savings and private production.’ Cost savings were less likely to be found in more recent studies, including those from the United States.” Also see “Why Water is a Public Service: Exposing the Myths of Privatization.” Public Services International Research Unit, April 2012 where the report describes that Water prices in Britain rose more than 40% above other prices in 17 years of privatization. In France, private water system prices are 16% higher than public water systems. The costs were the result of higher profits. Operating costs had remained the same. <http://www.right2water.eu/sites/water/files/u/4/20022012-epsuwater.pdf>

<sup>140</sup> See Mary Grant, 2013. The report states: “...[T]here is ample evidence that maintenance backlogs, wasted water, sewage spills, and service problems often follow privatization. In fact, poor performance is the primary reason that local governments reverse the decision to privatize and resume public operation of previously contracted services.”

<sup>141</sup> “Water Privatization Does Not Yield Cost Savings.” Transnational Institute, March 21, 2011. <https://www.tni.org/files/Water%20privatization%20does%20not%20yield%20cost%20savings.pdf>

<sup>142</sup> See “Troubled Waters.” 2014. The report states: “As observed in France, Italy, China, and the U.S., among other countries, private water corporations contribute negligible amounts of private finance and seek opportunities to use public investment finance. In France, major infrastructure upgrades are typically financed by local governments. Similarly, United Water ‘avoids paying for expensive underground pipes’ in many of its contracts throughout New Jersey.” Also see Mary Grant, 2013. The report states: “Because of the public sector’s lower cost of capital, privatization has been called the ‘financing of last resort.’ Indeed, a 2012 survey by Black & Veatch found that U.S. water and sewer utilities had ‘little interest in pursuing private financing’ and ‘very limited interest in any form of public-private partnerships.’”

process.”<sup>143</sup>

Transaction costs in setting up the contract may be excessive and the cost of contracts low-balled. As an article recently published in the Berkeley Journal of International Law pointed out, “...[T]ransaction costs (bargaining and oversight) are quite high for longer-term contracts, which reduces the public benefit of the privatization even further. Private companies, here and abroad, may also underbid projects and find out later that upgrades are more costly than previously imagined, leading to renegotiations or termination of contracts. They may also overestimate savings.”<sup>144</sup>

In addition to delivering service just as well or better than the private sector and enjoying lower rates, the public sector demonstrates evidence of lower leak rates.<sup>145</sup>

A 2015 study sums up the experience with water system privatization here and abroad: “The false promises of water privatisation in developed and developing countries include: poor performance, under-investment, disputes over operational costs and price increases, soaring water bills, monitoring difficulties, lack of financial transparency, workforce cuts and poor service quality.”<sup>146</sup>

The circumstances that drive municipalities to take control of their water systems today are similar to those in the late 19<sup>th</sup> and early 20<sup>th</sup> century. An additional issue at that time was the necessity to stem disease, cholera in particular.<sup>147</sup>

Researchers have raised numerous problems with the privatization of drinking water and wastewater systems. In addition to water privatization’s less than stellar performance, there is one immutable fact when private companies run community or regional water systems:

“Private water corporations have a fiduciary obligation to maximize returns to shareholders... The private sector’s profit-maximization imperative systematically results in precious financial resources being diverted (from communities) to

---

<sup>143</sup> Troubled Waters 2014

<sup>144</sup> Sharmila Murthy, 2013.

<sup>145</sup> Troubled Waters 2014.

<sup>146</sup> Transnational Institute (TNI), Public Services International Research Unit (PSIRU), Multinationals Observatory, Municipal Services Project (MSP) and the European Federation of Public Service Unions (EPSU), April 2015.

<sup>147</sup> The 19<sup>th</sup> Century reaction to private operation of water systems reflects the concerns today. Officials and others expressed concern in 19<sup>th</sup> Century Britain that private companies were not expanding into lower income neighborhoods, thus increasing disease, and refused to invest in wastewater systems due to low returns. The result in most communities was municipal government taking over the distribution of water and investment in sewers. The situation was similar in the rest of Europe. (Naran Prasad, “Privatization of Water: A Historical Perspective.” Law Environment and Development Journal (LEAD), 2007. <http://www.lead-journal.org/content/07217.pdf>) And Similarly, LA, at around the same time, municipalized its water systems after private operation resulted in poor service, claims of excessive profits, and legal disputes arising from the company’s water diversions from the LA River. In San Francisco, public outcry of poor service, high rates, and insufficient supply. The California legislature responded by passing legislation requiring municipal ownership of utilities. (Craig Arnold, “Privatization of Public Water Services: The State’s Role in Ensuring Public Accountability, Pepperdine Law Review, 2005. <http://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1247&context=plr>)

shareholders in the form of dividends.”<sup>148</sup>

## Role of the Local and Federal Government

### Investment Dollar Comparisons

Recently, the Congressional Research Service wrote, “While some analysts and stakeholders debate these estimates [EPA’s calculations (\$676 billion) for required water infrastructure investment over the next 20 years], most agree that communities face formidable challenges in providing adequate and reliable water infrastructure services.”<sup>149</sup>

Indeed, local (and state) government faces a difficult task. The water utility system in the U.S. consists of 1.8 million miles of pipelines. The wastewater system is also sprawling, with “16,000 publicly owned wastewater treatment plants, 100,000 major pumping stations, 600,000 miles of sanitary sewers, and 200,000 miles of storm sewers.”<sup>150</sup>

The challenge of maintaining the drinking water system was highlighted in a 2005 report. In it, the American Society of Civil Engineers gave the U.S. water utility and wastewater systems a grade of D minus. It cited an annual pipeline leakage rate of seven billion gallons and a funding shortfall of \$11 billion per year on the utility side and billions of gallons of untreated sewage being dumped into waterways annually.<sup>151</sup>

Going forward, the U.S. Conference of Mayors estimated in 2010 that \$3 to \$4.8 trillion (which includes an EPA-calculated, current shortfall of \$25 billion per year) would be needed in water system investment over the next 20 years to maintain and expand service to a growing population. The expenditures for 1956 to 2008 were \$3.1 trillion (in 2008 dollars adjusted for inflation).<sup>152</sup>

On the other hand, local government has worked to sustain investment in its water systems over the last 50 years. Investment dollars for capital improvements (for both water and transportation infrastructure), however, dropped 25% since 2003 as materials costs have climbed. Operating and maintenance expenditures have climbed 6%. In fact, with respect to water infrastructure, local and state governments have spent more on operating and maintenance than capital expenditures (systematic investment to shore up the leaking system, for instance

---

<sup>148</sup> “Troubled Waters,” November 2014.

<sup>149</sup> “Water Infrastructure Financing: The Water Infrastructure Finance and Innovation Act (WIFIA) Program.” Congressional Research Service, October 23, 2014. <http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R43315.pdf>

<sup>150</sup> EPA cited in “Trends in Local Government Expenditures on Public Water and Wastewater Services and Infrastructure: Past, Present and Future.” The US Conference of Mayors – Mayors Water Council, February 2010. <http://www.usmayors.org/publications/201002-mwc-trends.pdf>

<sup>151</sup> American Society of Civil Engineers cited in US Conference of Mayors, February 2010.

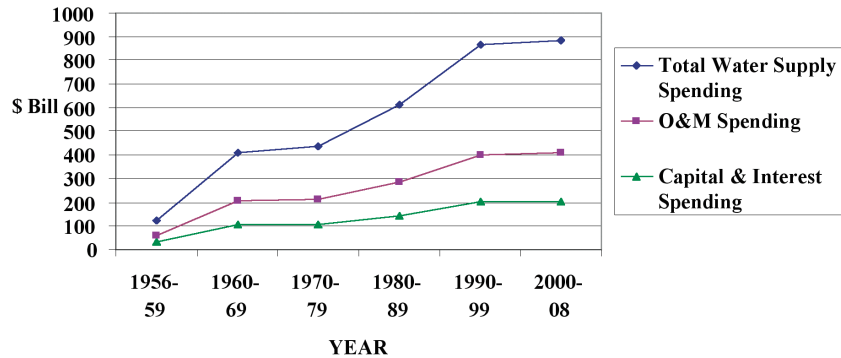
<sup>152</sup> US Conference of Mayors, February 2010.



rather than fixing breaks) since 1973.<sup>153</sup>

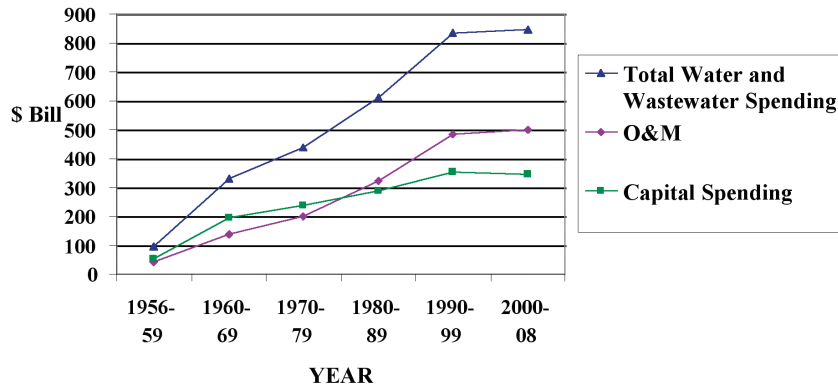
Although spending increased on a dollar basis, local government spending remained flat from 1990 to 2008 in constant dollars.

**Figure 4: Local Government Spending on Public Water Supply, 1956 – 2008, Constant Dollars, (2008 = 100%)**



Source: US Conference of Mayors

**Figure 2: Local Government Spending on Public Water and Wastewater, 1956 –2008, Constant Dollars (2008=100%)**



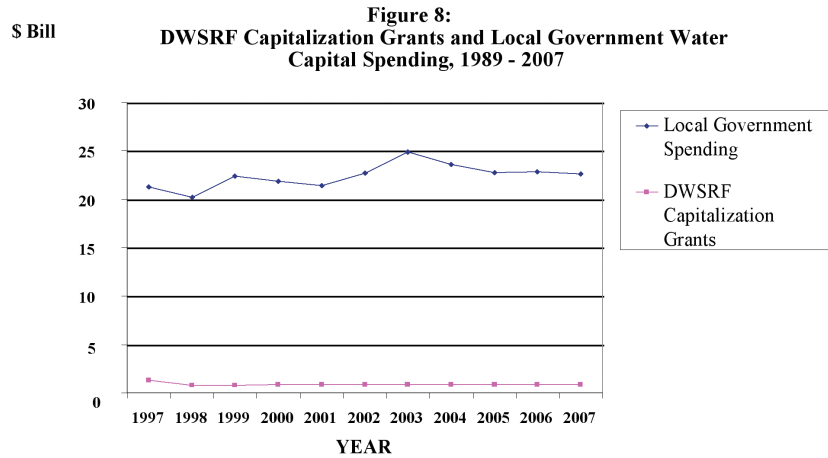
Source: US Conference of Mayors

Whereas the ratio for O&M (operating and maintenance) vs. capital expenditures for local and state government was 65 to 35, the same ratio for federal dollars was reversed - 71 to 29 - in 2014. However, local government spending has far overshadowed the level of federal government assistance. Also in 2014, local and state government water utility expenditures represented 96% of all funding, the federal government only 4% and for water resources the local and state government

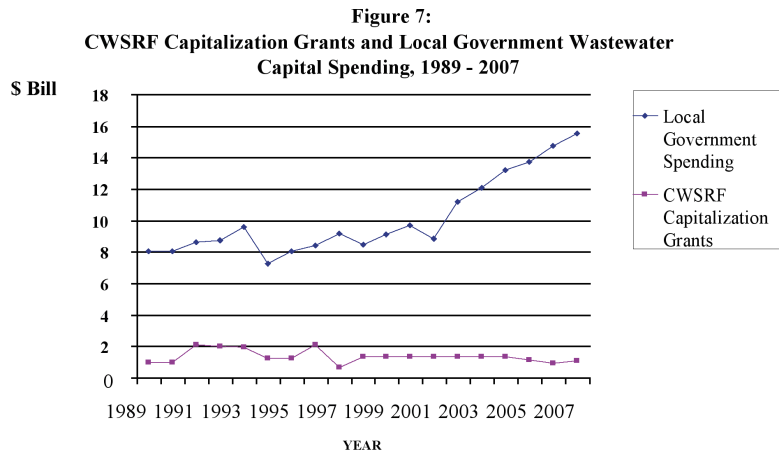
<sup>153</sup> "Public Spending on Transportation and Water Infrastructure 1956 to 20014." Congressional Budget Office, March 2015. <http://www.cbo.gov/sites/default/files/cbofiles/attachments/49910-Infrastructure.pdf>

contribution was 65% of all funding whereas the federal contribution was only 35%.<sup>154155</sup>

In fact, local government spending has far exceeded that of the EPA programs for drinking water and wastewater infrastructure from 1997 to 2008 and 1989 to 2008 respectively.



DWSRF = EPA's Drinking Water State Revolving Fund  
Source: US Conference of Mayors



CWSRF = EPA's Clean Water State Revolving Fund  
Source: US Conference of Mayors

However, there are other sources of federal support. These include portions of the Department of Housing and Urban Development's Community Block Grant and dollars administered by the Departments of Commerce, Agriculture and Interior.

<sup>154</sup> CBO defined water utilities and water resources in the following manner: Water Utilities means supply systems for distributing potable water as well as wastewater and sewage treatment systems and plants. Water resources means water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).

<sup>155</sup> CBO, March 2015.

These funds come in the forms of “grants, loans, and other subsidies.” For example, the Economic Development Administration, under the auspices of the Department of Commerce, gave \$1.1 billion in grants for water and wastewater systems in “economically distressed areas” from 1991 to 2000.<sup>156</sup>

The US Conference of Mayors emphasizes the U.S. Treasury Department as the critical source of federal funding due to “revenues foregone” by tax-exempt municipal bonding,<sup>157</sup> as “70% of US water utilities rely on municipal bonds and other debt to some degree to finance capital investments.”<sup>158</sup>

Given the scale of the water utility issues facing state and local government, the U.S. Conference of Mayors appears correct in its assessment that a national strategy is required to address U.S. water infrastructure financing needs over the next 20 years.<sup>159</sup>

The Government Accountability Office reinforces this perspective in a 2012 report:

“The fiscal challenges confronting the state and local sector add to the nation’s overall fiscal challenges. The fiscal situation of the state and local government sector has improved in the past year as the sector’s tax receipts have slowly increased in conjunction with the economic recovery. Nonetheless, total tax receipts have only recently returned to the prerecession levels of 2007 and the sector still faces a gap between revenue and spending. The (GAO) model’s base case simulations show that the fiscal position of the sector will steadily decline through 2060 absent any policy changes.”<sup>160</sup>

In other words, it seems all but inevitable that if the United States is going to adequately address its water infrastructure needs, the U.S. taxpayer (the federal public dollar) has to step in to spread costs, sustain or improve efficiencies, and to ensure affordability and sustainability of the system.

### **Federal Government Inertia in Dealing With the Growing US Water Crisis and the Underlying Water Infrastructure Challenges**

In late 2011, Civil Society Institute (CSI) conducted an analysis of two drafts of a report mandated by Congress, which demonstrates the uneasy attitude the federal government has in divulging just how severe the water crisis in the US is and can become and what to do about it.<sup>161</sup>

---

<sup>156</sup> US Conference of Mayors, February 2010.

<sup>157</sup> US Conference of Mayors, February 2010.

<sup>158</sup> Mary Grant, 2013.

<sup>159</sup> US Conference of Mayors, February 2010.

<sup>160</sup> “State and Local Governments’ Fiscal Outlook.” US Government Accountability Office (GAO-12-523-SP), April 2012.

<sup>161</sup> Seth Sheldon, “State of the Energy-Water Nexus Roadmap.” Civil Society Institute, December 9, 2011.

As part of the U.S. Energy Policy Act of 2005, the 109<sup>th</sup> Congress requested that “the Secretary [of Energy]” submit a report that assesses the state of “planning, analysis, and modeling of energy and water supply and demand”<sup>162</sup> and “recommendations for future actions.”<sup>163</sup>

As the second report never materialized, the Civil Society Institute filed Freedom of Information Act requests to Sandia Labs (the authors of the report) and the US Department of Energy (the reviewers of the report). CSI received drafts of the second report – as written by Sandia Labs in 2007 and as massaged by DOE in 2011 – and thousands of e-mails. The second report has never been released.

Both documents arrive at many of the same conclusions: water and energy have historically been managed separately, both energy and water consumption are increasing, better data are needed, there are a variety of research options available to reduce water use by the energy industry, and environmental impacts should be avoided.

The September 2007 Draft does an excellent job at summarizing the collective insight of hundreds of water and energy experts and offers research objectives based on the notion that a business-as-usual approach to energy production will ultimately impact and be impacted by water resources. As an unfinished document, it contains typos, unclear sentences, and the writing could be tightened.

The January 2011 Draft is concise and well-organized, presenting the research recommendations in a clear way, but it fails to take a clear stance on the significance of energy and water challenges within the context of national priorities. In many ways, it is a sterilized version of the original document. The re-introduction of the energy-water nexus (or “Energy-Water Connection” as the second report renames it) as well as the profuse qualifiers that are a feature of the introductory chapters, serve only to undermine the relevance of the research recommendations. Further, it is generally unclear who or what is supposed to be supporting, guiding, and doing the necessary research. A question left unanswered by the January 2011 Draft is whether water and energy saving technology will evolve naturally out of scarcity-driven markets or if the policymakers need to intervene to ensure avoid crises.

A glaring omission from the second version is the use of stakeholder input, which is often invaluable for planning purposes in many other management and policy areas. The regional needs workshops concluded that “most regions of the country are facing... water-related issues, needs, and challenges,” which is left out of the January 2011 draft.

Two divergent ideologies appear to have guided the production of the two documents. The first asserts that government (e.g. Congress) is uniquely positioned

---

<sup>162</sup> §979(b)(3)

<sup>163</sup> §979(f)

to affect positive change and to guide the nation into our preferred future through a *proactive* approach. The second appears to view government's role as largely *reactive*, seeking only to "ease [society's] transition to...new operating environment[s]."164

The e-mails revealed a combination of inconsistent legislative language, institutional inertia, personal animosity between staffs in the DOE and Sandia Labs, and a flawed review process. The later, more sanitized draft completely removed any sense of urgency from the document, opting instead to describe "challenges." Furthermore, the authors of the later draft added ambiguity about the likely course of events, changing the framing from a need to address increased competition of water resources to one that suggests water availability may "grow or shrink...depending on many hard-to-predict factors that interact, trends that may be affected by events, and data that are not always up to date."

These documents, along with the fact that the report was never released, demonstrate another serious deficiency on the part of the federal government. Without a comprehensive assessment of the water needs and availability in the country, the federal government is unable to fully address the water challenges of today, and due to the political and personal meddling witnessed in these drafts, is flying blind with respect to what will happen in the future.

The Sandia Labs draft points to climate change as an urgent issue facing water system managers. Its report states that climate trends have "many water managers worried" about potential impacts on surface and groundwater resource availability."165

Water system resilience against climate change impacts has been an emerging issue for the last 4 to 5 years. In December, the Paris Pact on Water and Climate Adaptation was announced. The Pact is a broad coalition of nations, river basin organizations, business and civil society... to make water systems – the very foundation of sustainable human development - more resilient to climate impacts."166

Similarly, the Association of Metropolitan Water Agencies, the largest organization of publicly owned water systems in the country based in Washington, DC, counts "ability to adapt to climate change" in its definition of a "sustainable, resilient (water) utility."167

---

164 January 2011 Draft, p. 6

165 Civil Society Institute, December 9, 2011.

166 "Paris Pact on Water and Adaptation." UN Framework Convention on Climate Change Press Release, December 2015. <http://newsroom.unfccc.int/lpaa/resilience/paris-pact-on-water-and-adaptation-strengthening-adaptation-to-climate-change-in-the-basins-of-rivers-lakes-and-aquifers/>

167 Association of Metropolitan Water Agencies web site, <http://www.amwa.net/resilience-climate-adaptation>.

## Discussion

The reaction against private ownership or management of public water utilities stretches across the globe. Equally evident is that the rationale for and failure of privatization of public water systems are similar no matter the country. Escalating costs, poor service, lack of investment, and the public making the outlays anyway to sustain water systems are all prevalent reasons for remunicipalization.

Privatization, particularly in the context of PPPs, also fails with respect to the need to ramp up capital spending in the U.S. water sector. This issue was raised in a recent Congressional Research Service report:

“Public-private partnerships, or P3s, which are long-term contractual arrangements between a public utility and a private company, provide limited capital financing in the water sector. While they are increasingly used in transportation and some other infrastructure sectors, especially P3s that involve private sector debt or equity investment in a project, most P3s for water infrastructure involve contract operations for operation and maintenance.”<sup>168</sup>

The other trend is that the private water sector, as demonstrated above, is on the prowl for more public dollars, particularly through the Department of the Treasury, because private financing is more/too expensive. If a water utility is owned outright by a private company, the strategy is greater and easier access to ratepayer dollars in addition to more federal taxpayer largesse. These strategies reduce stockholder risk while enhancing stockholder returns (dividends). Both strategies seek remuneration from the same taxpayer/ratepayer wallet and, since they do shift financial risk, are nothing more than subsidies. Moreover, the experience has been that privatization will lead to higher costs than publicly run water utilities due to private fiduciary responsibility to stockholders.

The necessity of water is unequivocal. The question then is: Since the solution is greater amounts of public dollars (federal taxpayer dollars primarily), why should ratepayers and taxpayers subsidize the profit margins of private companies whose operations are no better and, at times, worse from an efficiency standpoint, than publicly owned and operated water utilities?

The answer is ratepayers and taxpayers shouldn't subsidize private returns. Those dollars should stay in communities to maximize water system affordability, efficiencies, and sustainability. Given the evidence, the nation's and West Virginia's water utilities should be publicly owned and operated, individually or in cooperation with one another.

The following section of the report explores Public-Public Partnerships (PUPs) as a possible course of action for West Virginia's water utility ratepayers.

---

<sup>168</sup> Congressional Research Service, October 23, 2014.

## Potential Course of Action

As demonstrated and for reasons provided in this report, communities in West Virginia American Water's service territory have the option to municipalize (in the case of Charleston and Huntington) or remunicipalize (in the case of outlying public service districts and mid-size and smaller towns) their water systems. This option appears to be open despite an apparent WV PSC assertion<sup>169</sup> ten years ago that WVAW's multi-jurisdictional service territory prohibited the City of Charleston alone from municipalizing.

Communities in the U.S. and abroad have embraced the idea of Public-Public Partnerships (rather than the aforementioned Public-Private Partnerships) to improve system efficiencies, exchange and gain knowledge, consolidate municipal or county systems to contain or reduce costs, and/or to pursue sustainability and equity goals.

The mechanisms for such an arrangement in West Virginia law include the ability of local government entities to impose eminent domain to take control of private water companies, options for cooperation and coordination between local government jurisdictions, and the option of forming a regional water authority (discussed below).

However, (re)municipalization of the West Virginia American Water territory is not an easy proposition. First, WVAW is sure to mount stiff opposition against such a proposal.<sup>170</sup> Also, coordination between multiple local government entities<sup>171</sup> may prove difficult and knowledge of the legal procedures a must. Moreover, there is the cost issue to address, although state and federal funding sources may be of assistance. Finally, the public (ratepayers) and local elected officials must be supportive.

## Public-Public Partnerships

A PUP is generally considered cooperation between one or more municipal water utilities. They can be formed between municipalities located in proximity to one another or through traditional "twinning" agreements nationally or internationally. Cooperation between public water utilities and their unions or NGOs are also considered public-public partnerships. They are formed for a number of reasons based on local priorities. These can include:

- Reforming (and democratising) decision making and planning
- Institutional and human capacity building (including training of managers and

---

<sup>169</sup> There was no formal docketed decision.

<sup>170</sup> For instance, American Water hired a PR firm in efforts to stop remunicipalization efforts in Lexington, KY and Felton, CA. In the latter instance, the company hired an organizer. In 1999 and 2011 respectively, the company spent \$5.6 million and then \$7.6 million in successful efforts to stop municipalization of the Chattanooga, TN and Peoria, IL water systems. It spent hundreds of thousands in Felton, but lost. (Municipalization Guide)

<sup>171</sup> Initially limiting the effort to the area served by the Charleston and Huntington treatment plants may be appropriate.

workers to boost capacity and public sector ethos: including integrity, equity, clarity, accountability<sup>172</sup>, transparency, openness, cooperation, and evaluation)

- Managerial consulting, training and capacity building
- Administrative support (including working conditions, salaries, benefits, and supervision of any outside contracting)
- Financial planning, social tariff setting (differential for domestic, industrial, commercial, institutional, and agricultural uses), billing, and customer service and collection & assistance in locating available finance
- Maintenance (including repair and replacement of equipment)
- Leakage control and other sustainability measures
- Advice and other assistance in operational infrastructure and/or project design assistance in service delivery
- Construction
- Operation
- Financial assistance in obtaining finance for investment/expansion needs (including reducing “operating and capital costs”<sup>173</sup>).<sup>174</sup>

In terms of local public water utility cooperation, public-public partnerships are formed, among other things, to enter into agreements for “bulk purchasing or purchasing cooperatives” and “shared service agreements or joint capital projects.”<sup>175</sup>

By some estimates, public-public partnerships were conceived in response to “aggressive promotion (globally) of... public-private partnerships...”<sup>176</sup>

A 2009 report identified 170 PUPs of various forms in 70 countries outside the US.<sup>177</sup> Another 2009 report identified four times as many PUPs as public-private partnerships in the US, demonstrating that “since the early 2000s, the prevalence of PUPs has grown while for-profit private contracting has waned.”<sup>178</sup>

New Jersey, the headquarters of both American Water and United Water Company,

---

<sup>172</sup> Corruption has also been a problem. The National Academy of Sciences conducted a review of media coverage in competitive bid processes in the US (for cities such as Birmingham, Atlanta, and New Orleans) that revealed charges of political favors. Courts in France, Italy and the US have convicted executives and public officials for bribes paid by Suez and Veolia subsidiaries. Officials at a private water company in England were convicted due to providing false information to regulators, allowing them to overcharge customers by 42 million pounds. (Craig Arnold, “Privatization of Public Water Services: The State’s Role in Ensuring Public Accountability, Pepperdine Law Review, 2005. <http://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1247&context=plr>)

<sup>173</sup> “Public Public Partnerships.” Food & Water Watch and ILR School (Global Labor Institute), Cornell University, 2012. <http://documents.foodandwaterwatch.org/doc/PublicPublicPartnerships.pdf>

<sup>174</sup> “Public Partnerships in the Water Sector.” Philippine Water Sector Roadmap, December 2007. <http://www.waterdialogues.org/documents/Public-PrivatePartnershipsintheWaterSector.pdf>

<sup>175</sup> Mary Grant, 2013.

<sup>176</sup> Philippine Water Sector Roadmap, December 2007.

<sup>177</sup> “Public-Public Partnerships (PUPs) in Water.” PSIRU, March 2009. <https://www.tni.org/files/download/pupinwater.pdf>

<sup>178</sup> Food & Water Watch, 2012, referencing “Cooperative Competition: Alternative Service Delivery, 2002-2007.” Municipal Yearbook, 2009.



serves as an example, where in 2011:

“[A] survey of New Jersey municipalities found that the use of shared service agreements was the leading strategy to address budget shortfalls ..., with 82 percent of respondents participating in a shared service arrangement. In comparison, only 18 percent of respondents privatized services that year, citing citizen opposition and increased costs as the primary deterrents to privatization.”<sup>179</sup>

There are other examples throughout the country - such as in Maryland, Texas, Florida, Tennessee, Michigan, New York and Massachusetts -where public water utilities pool resources to reduce costs.<sup>180</sup> (See Appendix A for details)

On the international level, a study conducted of 46 public and private partnerships in England in 2010 found similar negative results for non-water PPPs compared to PUPs. The study found that PUPs were cheaper, enhanced service efficiency whereas PPPs did not, and were more equitable in service delivery than PPPs.<sup>181</sup>

### Moving Forward in West Virginia

As mentioned, the bid by the City of Charleston to purchase the water utility from then-owner RWE at the end of 2005 ran into state regulator opposition apparently as a result of American Water’s water treatment facility, which is located in Charleston but serving water systems on a regional basis rather than only providing potable water to the city.<sup>182</sup>

However, there appears to be ample authority to overcome this objection in West Virginia statute, which requires additional analysis. The effort to create a public-public partnership in the Charleston region may come down to the timing of local government actions and will depend on commitment of local government(s) to follow through on what could prove to be a logistically challenging but legally possible initiative.

West Virginia has three main statutes local government can draw on to create public utilities for purposes of municipalization or remunicipalizing water utilities/systems:

- **Chapter 8, article 19 (§8-19 MUNICIPAL AND COUNTY WATERWORKS AND ELECTRIC POWER SYSTEMS AUTHORIZED)** authorizes any local unit of government to exercise eminent domain (as stipulated by Chapter 54 of the West Virginia Code) in a number of contexts including, but limited to, on a “privately-

---

<sup>179</sup> Mary Grant, 2013, referencing “2011 Municipal Management Survey 7.” NJ State League of Municipalities with Rutgers Executive Leadership in Government, 2011.

<sup>180</sup> Food & Water Watch, 2012.

<sup>181</sup> Food & Water Watch, 2012, referencing “Does Cross-Sectoral Partnership Deliver? An Empirical Exploration of Public Service Effectiveness, Efficiency, and Equity.” Journal of Public Administration, Research and Theory, July 2010.

<sup>182</sup> See footnote 103.

owned waterworks system.”<sup>183</sup> However, any such purchase must be approved by the state public service commission and municipal water systems cannot expand in “competition with an existing privately or municipally or county owned waterworks or electric power system in such municipality or county or within the proposed extension of such system, unless a certificate of public convenience and necessity therefore shall have been issued by the public service commission.”<sup>184</sup>

Local government can also issue revenue bonds and adjust rates to pay under this provision. Rates must be set at a level to operate and maintain the system as well as pay for the bonds. Rates are the only source of revenue from local budgets authorized by statute to pay back the bonds. However, municipalities and counties can accept grants or loans.<sup>185</sup>

The legislature also stipulates that “[t]his article is necessary for the public health, safety and welfare and shall be liberally construed to effectuate its purposes.”<sup>186</sup> A hearing is also required. However, if “written protest is filed by thirty percent or more of the freeholders of the municipality or county, then the governing body of said municipality or county shall not take further action unless four fifths of the qualified members of said governing body assent thereto.”<sup>187</sup>

• **Chapter 8, article 20 (§ 8-20 COMBINED WATERWORKS AND SEWERAGE SYSTEMS AUTHORIZED)** allows for a unit of local government or cooperating, multiple units of local government to combine their water and wastewater services. A municipality can expand 20 miles from its border provided it has permission from other municipalities or counties in the area. Use of eminent domain to acquire such systems must be approved by the public utility commission. And similar to Article 19, an expanded municipal system cannot operate in competition with public or private water or wastewater systems. Hearing and notification provisions reflect those of Article 19.<sup>188</sup>

• **Chapter 16, Article 13D (§ 16-13D THE REGIONAL WATER AND WASTEWATER AUTHORITY ACT)** was passed in 1998 by the West Virginia legislature, the purpose of which is to:

“...[P]ermit certain public agencies to make the most efficient use of their powers

---

<sup>183</sup> A waterworks system defined under 8-19 “means a waterworks system in its entirety or any integral part thereof, including mains, hydrants, meters, valves, standpipes, storage tanks, pump tanks, pumping stations, intakes, wells, impounding reservoirs, pumps, machinery, purification plants, softening apparatus and all other facilities necessary, appropriate, useful, convenient or incidental in connection with or to a water supply system.”

<http://www.legis.state.wv.us/wvcode/Code.cfm?chap=08&art=19#19>

<sup>184</sup> Chapter 8, article 19 (§8-19 MUNICIPAL AND COUNTY WATERWORKS AND ELECTRIC POWER SYSTEMS AUTHORIZED)

<http://www.legis.state.wv.us/wvcode/Code.cfm?chap=08&art=19#19>

<sup>185</sup> Chapter 8, article 19 (§8-19 MUNICIPAL AND COUNTY WATERWORKS AND ELECTRIC POWER SYSTEMS AUTHORIZED)

<sup>186</sup> Chapter 8, article 19 (§8-19 MUNICIPAL AND COUNTY WATERWORKS AND ELECTRIC POWER SYSTEMS AUTHORIZED)

<sup>187</sup> Chapter 8, article 19 (§8-19 MUNICIPAL AND COUNTY WATERWORKS AND ELECTRIC POWER SYSTEMS AUTHORIZED)

<sup>188</sup> Chapter 8, article 20 (§ 8-20 COMBINED WATERWORKS AND SEWERAGE SYSTEMS AUTHORIZED)

<http://www.legis.state.wv.us/wvcode/Code.cfm?chap=08&art=20#20>

relating to public water supplies and the transportation and treatment of wastewater by enabling them to cooperate with other public agencies on a basis of mutual advantage and thereby to provide services and facilities to participating public agencies and to provide for the establishment for such purpose of a quasi-governmental public corporation which shall be known as a regional water authority, or where appropriate, a regional wastewater authority, or regional water and wastewater authority.”<sup>189</sup>

The statute allows units of government to form a board that has authority of eminent domain, financing, and contracting for services. It may also accept gifts (grants) and requires PSC approval. Public water utilities outside of the boundaries of an Authority may also receive services from the Authority.<sup>190</sup>

- **New Authority Created by Legislators** could establish an authority with appropriate powers to acquire, own and operate the Kanawha Valley’s water system.
- **A Citizens Water Advisory Committee** could be established by a public entity to enhance transparency and secure better service. Such a committee could review and assist with water resource protection and planning, facilities development, emergency response plans, public education, water main replacement schedules and costs, and water rates.<sup>191</sup>

The process for achieving public control of private water utilities is rigorous. Careful planning is required including cost and structure of the proposed public utility, beginning with a “feasibility analysis.”<sup>192</sup> In the case of the Kanawha Valley regional system multiple entities would be involved, depending on the best course of action determined. If negotiation fails with the private company in setting a price for the system, the issue goes to court.<sup>193</sup> (This process is governed by Chapter 54 of the West Virginia Code.<sup>194</sup>) As part of the planning process, the transition to a public utility in terms of financing and acquiring adequate expertise (water systems

---

<sup>189</sup> Chapter 16, Article 13D (§ 16-13D THE REGIONAL WATER AND WASTEWATER AUTHORITY ACT) <http://www.legis.state.wv.us/wvcode/Code.cfm?chap=16&art=13D#13D>

<sup>190</sup> Chapter 16, Article 13D (§ 16-13D THE REGIONAL WATER AND WASTEWATER AUTHORITY ACT)

<sup>191</sup> Citizen advisory committees have been created by watershed districts, by city and county governments, and other entities to deal with water rates and other water-related issues. See “Citizen Advisory Committees in Joint Powers Watershed Management Organizations.” Minnesota Board of Soil and Water Resources, March 2005. <http://www.bwsr.state.mn.us/planning/metro/CAC-wmo.pdf>; “Water Supply Citizens Advisory Committee to the MWRA (Marlborough Water Resources Authority).” Marlborough, MA. <http://www.mwra.state.ma.us/02org/html/wscac.htm>; “2014 Annual Report.” Citizens Water Advisory Committee, City of Tuscan, AZ. <https://www.tucsonaz.gov/files/clerks/uploads/bccfiles/18016.pdf>; Citizens Water Advisory Committee, City of Aurora, CO. <https://www.auroragov.org/CityHall/BoardsandCommissions/CitizensWaterAdvisoryCommittee/index.htm>; Water Advisory Committee, Yavapai County, AZ <http://www.yavapai.us/bc-wac/>;

<sup>192</sup> “Municipalization Guide: How US Can Secure Local Control of Privately Owned Water and Sewer Systems.” Food & Water Watch, 2012. F&WW describes the process thusly: There are the four basic phases involved in a public purchase of a privately owned water system: 1. Study and planning, 2. Negotiation, 3. Condemnation (if negotiation fails), 4. Sale and transition <http://documents.foodandwaterwatch.org/doc/WaterMuniReport.pdf>

<sup>193</sup> Food & Water Watch, 2012.

<sup>194</sup> Chapter 54 et. seq. (§ 54 et. seq. EMINENT DOMAIN) <http://www.legis.state.wv.us/wvcode/Code.cfm?chap=54&art=1>

require a “certified operator” on staff) and other staffing must also be taken into account, such as offering positions to current employees of the water utility.<sup>195</sup> Environmental permits must be transferred as well.<sup>196</sup>

In terms of the Charleston regional water system, the Regional Water and Wastewater Authority Act may be an appropriate legal mechanism to be considered. Legal analysis is required. Or the passage of legislation for this purpose.

In 2012, Food and Water Watch published a municipalization guide. In it, the organization states:

“When a private entity owns a water supply or wastewater treatment plant that serves multiple localities, the local governments can enter into an intergovernmental agreement that allows them to share the cost of purchasing the system. Typically, in these arrangements, a newly created agency owns and operates the system and provides wholesale service to member communities.”<sup>197</sup>

In assessing price for a utility system, net book value (or depreciated original cost) is considered the most reasonable method by public ownership advocates.<sup>198</sup> This is the current book value “less depreciation and contributed assets.”<sup>199</sup> Purchase price should be adjusted according to the state of the system as well. If significant improvements are required, a price reduction is in order.<sup>200</sup> Other assessment approaches would tend to inflate the price, such as the reproduction cost approach (which, according to the National Regulatory Research Institute, many regulators oppose<sup>201</sup>), or market value approaches that are difficult to assess due to lack of examples.<sup>202</sup>

In its 2015 rate case filing, West Virginia American Water considers the book value (“net investment in utility plant”) of its entire system in the state to be approximately \$555.5 million at the end of 2014 and estimates an amount of \$592 million by the end of February 2016<sup>203</sup>. WVAW’s testimony does not provide separate book value assessments for each individual water utility in the company’s system.

Poverty levels in West Virginia would appear to make affordability of water bills a

---

<sup>195</sup> Food & Water Watch, 2012.

<sup>196</sup> Food & Water Watch, 2012.

<sup>197</sup> Food & Water Watch, 2012.

<sup>198</sup> Food & Water Watch, 2012.

<sup>199</sup> Food & Water Watch, 2012.

<sup>200</sup> Food & Water Watch, 2012.

<sup>201</sup> “The Regulatory Implications of Water and Wastewater Privatization.” National Research Institute, July 1995. <http://www.ipu.msu.edu/library/pdfs/nrri/Beecher-Dreese-Stanford-Water-Privatization-95-09-July-95.pdf>

<sup>202</sup> Food & Water Watch, 2012.

<sup>203</sup> Case No. 15-0676-W-42T, April 30, 2015.

salient issue for state and local officials.<sup>204</sup> In pursuing a publicly owned and operated water utility system in West Virginia, it would be important to seek outside funding. West Virginia law does allow a regional water authority or public water utility to accept grants and loans. As previously highlighted, various federal programs support economically distressed areas. Rural areas of West Virginia, including counties served by West Virginia American Water, are economically distressed. These counties have been characterized by poverty rates higher than the national average and these high poverty rates appear to persist.<sup>205</sup> Moreover, in 2011, West Virginia “ranked 49<sup>th</sup> out of 50 in terms of median income...”<sup>206</sup> Indeed, the overall poverty rate in West Virginia is just under 18%<sup>207</sup> while the national average is just under 15%.<sup>208</sup> 45% of single-parent homes with children are in poverty.<sup>209</sup> Almost 39% of all jobs are considered low-wage jobs.<sup>210</sup> Kanawha County, contrary to the more rural counties, beats the national poverty level.<sup>211</sup>

### Counties Served by West Virginia American Water and Their Poverty Rates (2006 -2010)

County	Approximate Poverty Rate (%)	County	Approximate Poverty Rate (%)
Boone	19.3	Braxton	21.0
Cabell	20.6	Clay	23.7
Fayette	21.3	Jackson	18.1
Kanawha	13.7	Lewis	19.6
Lincoln	26.6	Logan	21.8
Mercer	22.8	Putnam	10.4
Roane	27.6	Summers	21.6
Wayne	20.2	Webster	22.9

Sources: West Virginia Income Maintenance Manual & Index Mundi<sup>212</sup>

A high poverty rate persists in the state. A study of 7 counties in West Virginia just released by the US Census bureau indicates that Kanawha and Cabell Counties in 2014 at poverty rates of 17.0% and 22.8% respectively. Overall the state’s poverty

<sup>204</sup> See Direct Testimony of David J. Hardy, Kanawha County Commission in the 2015 rate case filed September 25, 2015. <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=435205&NotType=%27WebDocket%27>

<sup>205</sup> “Poverty, Stagnant Incomes Still Prevalent in West Virginia, Census Report Shows.” Charleston Gazette-Mail, September 19, 2013. <http://www.wvgazette.com/News/201309190082>

<sup>206</sup> “Behind West Virginia’s Chemical Spill, A History of Poverty and Pollution.” Think Progress, January 22, 2014. <http://thinkprogress.org/climate/2014/01/22/3176161/west-virginia-poverty-pollution/>

<sup>207</sup> Think Progress, January 22, 2014.

<sup>208</sup> “Income and Poverty in the United States: 2013-Highlights.” US Census Bureau. <http://www.census.gov/hhes/www/poverty/data/incpovhlth/2013/highlights.html>

<sup>209</sup> West Virginia poverty data on Spotlight on Poverty and Opportunity web site, <http://www.spotlightonpoverty.org/map-detail.aspx?state=West-Virginia>.

<sup>210</sup> Spotlight on Poverty and Opportunity (West Virginia data).

<sup>211</sup> Spotlight on Poverty and Opportunity (West Virginia data).

<sup>212</sup> Appendix C, Chapter 19 of West Virginia Income Maintenance Manual, [http://www.wvdhhr.org/bcf/policy/imm/archivedw17/228/ch19\\_apc.pdf](http://www.wvdhhr.org/bcf/policy/imm/archivedw17/228/ch19_apc.pdf), Index Mundi <http://www.indexmundi.com/facts/united-states/quick-facts/west-virginia/percent-of-people-of-all-ages-in-poverty#table>

rate was set at 18.3 percent, the ninth highest in the nation. The federal government sets the poverty rate for a family of 4 at \$24,250 and for an individual at \$14,720. Poverty rates in West Virginia increase dramatically for Africa Americans in the state (31.6%), followed by American Indians (30.9%) and Asians (19.8%). Whites had a poverty rate of 17.4%. This data is for only 7 out of West Virginia's 55 counties which include counties with a population greater than 65,000.<sup>213</sup>

### **Cincinnati: A Potential Model**

The Greater Cincinnati Water Works (GCWW) has been a public utility since 1839.<sup>214</sup> It has provided water services outside of the Cincinnati city limits since 1940.<sup>215</sup> GCWW has been a national leader in water treatment since the turn of the last century. Unlike many other communities, officials in Cincinnati have emphasized capital budgets for the utility's distribution system. Greater Cincinnati Water Works could be an effective partner/example for West Virginia communities should they decide to form their own public-public partnership.

Greater Cincinnati Water Works (soon to be renamed Greater Cincinnati Shared Services Area Bureau) currently serves 1.1 million people with almost 3,150 miles of water mains, treating 133 million gallons daily.<sup>216</sup> (West Virginia American Water claims 3,500 miles of water mains, "treating more than 50 million gallons each day."<sup>217</sup>) The public water utility's 2010 estimated book value was \$593 million.<sup>218</sup> (As the reader recalls, WVAW's current book value is about \$555 million (see above.) The vast majority of the system's water (88%) is drawn from the Ohio River.<sup>219</sup>

GCWW services extend to "most of Hamilton County, Ohio, parts of Butler, Warren and Clermont counties in Ohio and Boone County in Northern Kentucky."<sup>220</sup>

---

<sup>213</sup> "W. VA. Continues to Rank High in Poverty," Charleston Gazette Mail, September 20, 2015. <http://www.wvgazette.com/article/20150920/GZ01/150929939/1102>

<sup>214</sup> "Acclaimed City Water Works Fueled Growth." Cincinnati Enquirer, March 18, 2012. [http://cincinnati-triplesteam.org/documents/GCWW\\_Enquirer\\_Article\\_3-18-12\\_.pdf](http://cincinnati-triplesteam.org/documents/GCWW_Enquirer_Article_3-18-12_.pdf)

<sup>215</sup> Cincinnati Enquirer, March 18, 2012.

<sup>216</sup> "Greater Cincinnati Water Works: How Has 28 Years of Water Main Replacement Affected Our System?" Presentation, Ohio Section of AWWA Conference, September 17-20, 2013. <http://oawwa.org/State%20Conference%20Presentations/2013/Distribution%20Sessions/BECKYC~1.PDF>

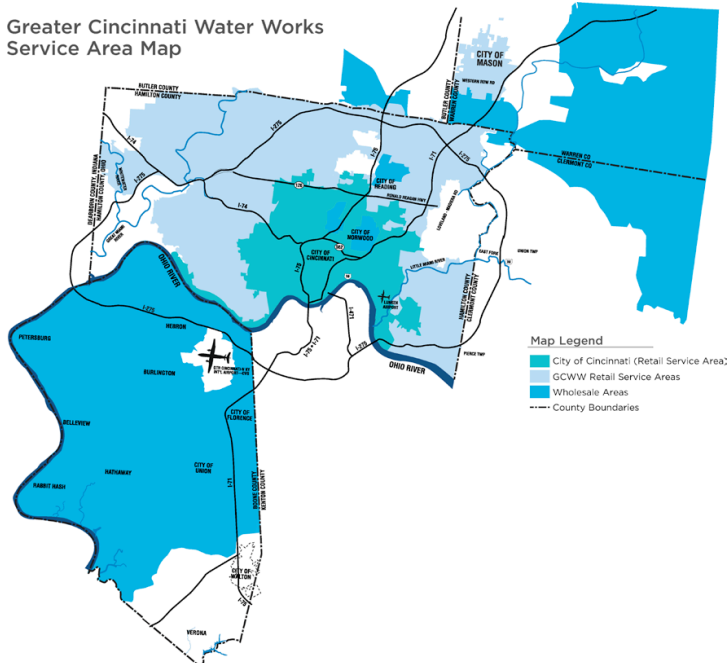
<sup>217</sup> West Virginia American Water Facebook Page [https://www.facebook.com/wvamwater/info?tab=page\\_info](https://www.facebook.com/wvamwater/info?tab=page_info)

<sup>218</sup> 2010 Annual Report. Greater Cincinnati Water Works. <http://www.cincinnati-oh.gov/water/about-greater-cincinnati-water-works/annual-report/2010-annual-report/>

<sup>219</sup> "2014 GCWW Water Quality Report is Now Available." GCWW Press Release, April 15, 2015. <http://www.cincinnati-oh.gov/water/news/2014-gcww-water-quality-report-is-now-available/>

<sup>220</sup> GCWW Press Release, April 15, 2015.

Greater Cincinnati Water Works  
Service Area Map



Source: American Water Works Association

The effort to concentrate on capital investments in an aging pipeline distribution system began in the mid-1980s. The target since that time was a 1% replacement rate, which hovers now around .95% per year. This puts the replacement cycle to just over 100 years, as compared to nearly 400 in the latest data provided by WVAW. An analysis by an outside firm recently concluded that “(pipeline) failure rates have been trending down the last ten years as a result of more aggressive main replacement spending” ... reaching “16 or less in 2012 and 2013 (breaks per 100 miles), which is in line with the top quartile of comparable large water utilities.” (Fifteen breaks per 100 miles is the American Water Works Association “goal for (a) fully-optimized distribution system.”)<sup>221</sup>

These results are reflected in GCWW 2010 annual report in which the public utility reported fixing 907 main leaks and 363 breaks.<sup>222</sup> (In 2014, WVAW reported fixing 4,000 leaks (see above).)

In the same year, GCWW developed an “all-pipes distribution system model, part of its “Distribution Master Plan,” that identifies “areas for distribution system improvement through 2030.”<sup>223</sup> The utility envisions spending 83% of its 2013-2018 budget on distribution system capital improvements – “water mains, tanks, pumps, water quality monitors, meters, etc.”<sup>224</sup> GCWW will also soon use sensors to

<sup>221</sup> “Evaluation of Water Main Replacement Program Helps Greater Cincinnati Water Works Achieve Asset Management Goals.” American Water Works Association Newsletter, Ohio Section. Spring 2015.

<http://www.oawwa.org/Newsletter%20PDFs/2015/2015%20Spring%20Newsletter.pdf>

<sup>222</sup> GCWW 2010 Annual Report.

<sup>223</sup> GCWW 2010 Annual Report.

<sup>224</sup> Presentation, September 2013.

monitor pipes using wireless technology, which will allow the utility to more readily determine the condition of underground distribution pipelines and necessity/timing for replacement.<sup>225</sup>

Cincinnati Water Works has been at the forefront of water treatment technology since the beginning of the last century, when it also began collaborating with federal officials to test such technologies.<sup>226</sup> Cincinnati began using “rapid sand filtration” in 1907 (second in the country), which significantly reduced cases of typhoid.<sup>227</sup> In 1928, it was the first utility to use activated carbon filtration.<sup>228</sup> Cincinnati Water Works (CWW), in 1992, was first nationwide to use granular activated carbon, which prompted visits from overseas and around the country.<sup>229</sup> And Greater Cincinnati Water Works (CWW became GCWW in 2002) “is the largest water utility in North America to use UV disinfection...,” which came on line in 2013.<sup>230</sup>

Unlike WVAW sitting in the middle of “Chemical Valley,” the Cincinnati public water utility was prepared for the Freedom Industries spill. It had developed “stored and supplementary sources of water” and could keep the water intakes shut until the danger passed.

Whereas the regional nature of Cincinnati’s water utility has worked and appears to continue to work well, an effort begun in 2011 to partner with adjacent Hamilton County, Ohio on storm- and wastewater issues hasn’t worked out. There are continuing disputes on whether there are cost overruns in implementing a \$3 billion consent decree with EPA regarding combined-sewer-overflow, who’s in charge of what, and disclosure issues.<sup>231</sup> However, GWCC recently announced a name change to Greater Cincinnati Area Shared Services Bureau, which will continue to provide water services. These include:

- “• Doing billing for other water districts, something the water district already does and is profitable.
- Expanding water service to more communities in Kentucky and north of Lebanon, which will ultimately ease pressure on current customers.
- Adding water treatment and distribution system service to commercial customers, which will bring in revenue.

---

<sup>225</sup> “Liquid Assets: How Cincinnati Became a World Leader.” WVXU, September 24, 2013. <http://wvxu.org/post/liquid-assets-how-cincinnati-became-world-water-leader#stream/0>

<sup>226</sup> WVXU, September 24, 2013.

<sup>227</sup> WVXU, September 24, 2013.

<sup>228</sup> Cincinnati Enquirer, March 18, 2012.

<sup>229</sup> Cincinnati Enquirer, March 18, 2012.

<sup>230</sup> GCWW Press Release, April 15, 2015.

<sup>231</sup> See “Cincinnati Separating Some Sewer District and Water Functions.” WVXU, May 12, 2015 <http://wvxu.org/post/cincinnati-separating-some-sewer-district-and-water-functions>, “Commissioners Not Bothered by Water Works-MSD Split, WVXU, May 13, 2015. <http://wvxu.org/post/commissioners-not-bothered-water-works-msd-split>, and “Sewer Boss Faces Firing Over \$87M Overrun.” Cincinnati.com, May 23, 2015 <http://www.cincinnati.com/story/news/politics/2014/05/23/sewer-boss-faces-firing-m-overruns/9493581/>



- Offering water and sewer line insurance, as other water districts do.”<sup>232</sup>

GCWW has to deal with issues similar to West Virginia. It must also face the trend that customers are using less water, which cuts in to operating budgets. To maintain its operation and distribution pipeline replacement schedule, the utility has also gone to the Cincinnati City Council for rate increases in 2014 and in 2015, and likely again in 2017. It will probably receive a 5% increase in 2015. It asked for 7% in 2014 but received a 4% increase. In 2017, it will likely request a 6% increase.<sup>233</sup>

However, this does not indicate mismanagement (the soundness of the utility’s infrastructure seems to be improving or well maintained) or, of course, the necessity to pay out dividends. It does, on the other hand, underscore the need for more federal investment in the nation’s water infrastructure.

As a comparison, the average monthly residential bill in GCWW service territory, serving 1.1 million people, was nearly \$60.00 in 2014.<sup>234</sup> The average monthly residential bill in WVAW service territory, serving 550,000, for the same year was \$54.07.<sup>235</sup> And planning and quality of service in the Cincinnati area appear to be far superior.

## Discussion

A global backlash has been underway for some time against the privatization of water utilities. The U.S. and France have seen the largest numbers of remunicipalizations. Although the vast majority of U.S. water utilities are publicly owned and operated, private companies still vie for municipal and rural water systems that are experiencing financial difficulty. Unfortunately, what may look like a good deal ends up costing ratepayers more.

The emerging counterpart to the public-private partnership (PPP) is the public-public partnership (PUP). According to recent studies, these outnumber PPPs in the U.S. and abroad. Communities that own and run their water utility can merge services and/or pursue joint investment strategies to control costs. Ultimately, public systems do not have to maximize dividends, thereby avoiding the diversion of much-needed financial resources from communities. Research also demonstrates that private systems are operated no better and, sometimes, worse than public

---

<sup>232</sup> “MSD War Prompts City to Take Back Water Works.” Cincinnati.com, May 12, 2015.

<http://www.cincinnati.com/story/news/2015/05/12/msd-war-prompts-city-take-back-water-works/27170423/>

<sup>233</sup> “Five Percent Rate Hike in Cincinnati Likely.” WVXU, June 8, 2015. <http://wvxu.org/post/five-percent-water-rate-hike-cincinnati-likely>

<sup>234</sup> “Consumer Advocates Division’s Annual Report for 2014.” West Virginia Consumer Advocates Division, January 2014. [http://www.cad.state.wv.us/2014\\_Annual\\_Report.pdf](http://www.cad.state.wv.us/2014_Annual_Report.pdf)

<sup>235</sup> “Why Your Water Bill Seems Higher than Cincinnati’s Average.” Cincinnati Business Courier, June 16, 2014. <http://www.bizjournals.com/cincinnati/blog/2014/06/why-your-water-bill-seems-higher-than-cincinnati.html>

systems. In addition, in efforts to contain costs, private utilities are seeking easier access to ratepayer dollars on a pay-as-you-go basis and federal taxpayer dollars, which begs the question as to why the public should be funding their profit margins when it could be retaining those resources for the local water infrastructure. On balance, putting community drinking water systems in control of the public appears to be the rational course of action for local and state government.

Although West Virginia has been dominated by a long-standing, private water utility (under various ownership), there is a way forward legally and financially for Kanawha Valley and the surrounding region to municipalize or remunicipalize water systems, as the case may be. The path is open to forming public-public, regional partnerships as well.

If West Virginia communities decide to pursue greater financial and policy control over their water resources, financial assistance, in various forms, can be sought from the federal government. In addition, West Virginia communities may consider seeking the assistance of publicly run, regional utilities like the Greater Cincinnati Water Works. GCWW possesses a sound investment and planning strategy to adequately maintain and expand its system and its expertise and experience in water treatment technologies and emergency response planning.

It's also clear that, given the necessity of the country's water infrastructure and the difficulty of local and state government carrying the financial burden of that infrastructure as well as the higher cost of private resources, a well-funded, complementary and coordinated federal investment strategy is required, and most likely inevitable, in shoring up and maintaining U.S. local or regional water utilities on a financially and ecologically sustainable basis.

## Appendix A

### Examples of Public-Public Partnerships in the US<sup>236</sup>

In Maryland, smaller communities around Baltimore pooled their purchases with Baltimore City to save \$1.5 million in 2010. The Baltimore Regional Cooperative Purchasing Committee sought to provide a regional approach for purchasing water treatment chemicals, among other things.

Garland, Texas, found that the use of cooperative purchasing agreements not only reduced costs but also accelerated procurement speed by four to six weeks. For example, the city uses regional cost sharing and cooperative purchasing to more effectively and efficiently meet federal and state stormwater regulations.

Garden City, Michigan, expected to save more than \$30,000 upgrading water meters by contracting with the City of Westland instead of a private company.

Canton Township, Michigan, also partnered with Westland. In a shared service agreement, Westland provided its neighbor with a qualified water system operator, which was necessary to comply with water quality regulations. “In these difficult economic times, it is very important to share services whenever and wherever we can,” Phil LaJoy, supervisor of Canton Township, told the local newspaper, calling the agreement a “win-win situation for both of our communities.”

The town of Cape Vincent, New York, teamed up with the village of Cape Vincent to purchase a single water tank to serve both municipalities. This produced \$1 million in savings and reduced the average cost per household by about \$200 a year.<sup>80</sup>

The towns of Fairhaven, Marion, Rochester and Mattapoisett, Massachusetts, saved \$4.9 million (23%) by building a shared water treatment facility.

In Nashville, Tennessee, two private water companies sought to privatize the water system in 1998. Instead, the city partnered with the water workers’ union to re-engineer water services to lower costs and pass much of the savings on to customers in the form of lower rates. By 2002, the utility-employee partnership saved a total of \$8.5 million and lowered rates.

In 1998, the Miami-Dade County Water and Sewer Department (WASD) in Florida partnered with local unions to stave off privatization attempts. Through the

---

<sup>236</sup> This Appendix consists entirely of excerpts from: “Public Public Partnerships: An Alternative Model to Leverage Capacity of Municipal Water Utilities.” Food & Water Watch and Cornell University (IRL School – Global Labor Institute), January 2012. [http://documents.foodandwaterwatch.org/doc/PublicPublicPartnerships.pdf#\\_ga=1.3850800.1683580075.1360244908](http://documents.foodandwaterwatch.org/doc/PublicPublicPartnerships.pdf#_ga=1.3850800.1683580075.1360244908) and “Municipalization Guide: How US Can Secure Local Control of Privately Owned Water and Sewer Systems.” Food & Water Watch, 2012. F&WW describes the process thusly: There are the four basic phases involved in a public purchase of a privately owned water system: 1. Study and planning, 2. Negotiation, 3. Condemnation (if negotiation fails), 4. Sale and transition <http://documents.foodandwaterwatch.org/doc/WaterMuniReport.pdf>

Partnership Optimizing WASD's Efficiency and Reengineering (POWER) program, the department empowered its employees to develop and implement a number of innovative and cost-cutting initiatives, saving a total of \$35.5 million through 2010. During fiscal year 2010 alone, workers implemented 16 additional efficiency projects that were projected to save an estimated \$1.6 million. The savings did not appear to come at the expense of service quality. Since 2006, at least one of WASD's wastewater treatment plants has won the National Association of Clean Water Agencies' Gold Peak Performance Award in recognition of WASD's outstanding compliance record with wastewater treatment standards.

Southeastern Nassau County, NY In 2010, the towns of Hempstead and Oyster Bay in New York reinstated the Water Authority of Southeast Nassau County to explore a public purchase of a water system from Aqua New York. A board with five members, all of whom are volunteers and customers of the water company, oversees the authority.

Northern Will County, IL In 2010, five communities — Bolingbrook, Homer Glen, Lemont, Romeoville and Woodridge — formed a joint action water agency to explore purchasing, possibly via eminent domain, their water supply pipeline from a subsidiary of American Water.

Washington Metro Area, MD In 2007, the Washington Suburban Sanitary Commission extended public water service to the Upper Marlboro neighborhood after purchasing the area's water and sewer system from Utilities, Inc. of Maryland. The neighborhood was the last unincorporated suburb in Prince George's and Montgomery counties with a privately owned water and sewer system. Public ownership improved water quality and lowered rates.

## Appendix B

### 2009 Resolution of the US Conference of Mayors on Water and Wastewater<sup>237</sup>

WHEREAS, more than 50 mayors and infrastructure leaders from across the nation met at The U.S. Conference of Mayors' Action Forum on Infrastructure in New York City August 13-14, 2008, to develop an action agenda for a renewed commitment to America's infrastructure; and

WHEREAS, following that meeting a working group of mayors drafted a national action agenda on infrastructure; and

WHEREAS, that national action agenda includes a series of findings and recommendations for a new stronger relationship between the nation's mayors and the federal government to ensure that we update the country's antiquated infrastructure in ways that will keep us economically competitive, and do so in ways that are climate and energy centered; and

WHEREAS, the mayors and other leaders found that:

- Local Government invests greatly in the nation's water and sewer infrastructure to keep citizens safe and the United States economically competitive. The Federal Government needs to renew its partnership with local government to protect this critical infrastructure;
- Local Government is responsible for the vast majority of investment in water and sewer infrastructure, spending over \$1.25 trillion from 1956 through 2005 (\$85 billion in 2005 alone);
- Meanwhile, the federal contribution over this period was about 7% (\$91 Billion) with \$56 billion provided to cities from 1972 through 1990 in the form of wastewater construction grants;
- These construction grants, which helped cities comply with the regulations of the Clean Water Act, were phased out by 1990 and replaced by the State Revolving Fund Loan Program, which has steadily been cut over the years;
- Despite the tremendous investment by local government, the U.S. Environmental Protection Agency estimates that there still is a \$500 billion "needs gap" to meet our water and wastewater infrastructure needs and to comply with current environmental mandates;
- A recent report by the Cadmus Group for The U.S. Conference of Mayors

---

<sup>237</sup> [http://usmayors.org/resolutions/77th\\_conference/environment10.asp](http://usmayors.org/resolutions/77th_conference/environment10.asp)

determined that Water and Wastewater Infrastructure investment stimulates the nation's economy and creates jobs;

- For every one dollar of water and sewer infrastructure investment, it is estimated that Gross Domestic Product increases by \$6.35 in the long-term. For each additional dollar spent on operating and maintaining water and sewer industry, the increase of revenue or economic output for all industries is increased by \$2.62 in that year;
- In addition, for every one job added in water and sewer creates 3.68 jobs in the national economy to support that job; and

NOW, THEREFORE, BE IT RESOLVED that The United States Conference of Mayors adopts as its policy the investments called for by the mayors in the National Action Agenda on Infrastructure to renew and strengthen the federal commitment to the nation's water and wastewater needs:

- Remove Private Activity Bonds for water/wastewater infrastructure from State Volume Caps;
- Fully fund federally-passed environmental mandates and court-ordered consent decrees applicable to water and wastewater systems (e.g., combined-sewer and wet weather overflow issues);
- Place priority on funding rehabilitation of aging infrastructure (leaking pipes are a concern for most cities who can lose anywhere from 5-40% of their water), improvements that protect water and sewer infrastructure from catastrophic events, and ensure source water availability (35% of cities in a Conference of Mayors survey do not know where their water supply will come from by 2025);
- Allocate an additional \$50 billion over 10 years in this way: \$3 billion annually in grants to cities to comply with sewer overflow infrastructure; and \$2 billion annually in additional SRF loan funding for rehabilitation of aging infrastructure, protection of water and sewer infrastructure, and promote source water availability;
- Address future infrastructure needs through a mix of funding sources;
- Increase program/policy flexibility to allow cities to undertake locally-designed strategies, emphasizing green infrastructure and other flexible and innovative solutions;
- Plan for and fund infrastructure improvements related to climate change, including adapting to events such as droughts, floods, and rising sea levels.

## Appendix C

### Potential Sources of State/Local Funding for Water Infrastructure in West Virginia<sup>238</sup>

#### **Community Enhancement Act**

The West Virginia Community Enhancement Act provides a voluntary funding mechanism by which private landowners may propose, construct and finance public improvements within a community enhancement district. The Act establishes a process by which the owners of at least 61% of the real property within a proposed community enhancement district may petition the governing body of a county or municipality for creation of such a district and construction of one or more public improvement projects. Upon approval of a petition to create a district, a district board is established that is statutorily empowered to oversee and manage the construction of any public improvements projects set forth in the petition.

Under the Act, public improvement projects include: water source of supply, treatment, transmission and distribution facilities; sewage treatment, collection and transmission facilities; storm-water systems

A project may be financed on a pay-as-you-go basis from assessments on landowners within the district, or such assessments may be used for debt service on a bond, the proceeds of which are used to finance the costs of a project.

Such assessments are a special assessment, agreed to by at least 61% of the landowners within a community enhancement district, upon the real property, and applied in the same manner as real property taxes, to pay for project costs. The imposition of these assessments by the district board constitute a lien on the applicable real property and remain with the property upon the sale of any real property within the district, just as real property taxes do. Mechanically, the petition process involves the submission of an application by the owners of at least 61% of the real property within the proposed district to a governing body, which must contain: 1) The name and boundaries of the district, including a map; 2) A list of names and addresses of all landowners in the proposed district; 3) A detailed project description; 4) The estimated project costs and preliminary plans; 5) All non-project costs and how they will be financed; 6) A consultant's study demonstrating the project's feasibility; 7) A development schedule; 8) A list of recommended board members who will oversee the district; 9) Identification of all utilities, if any, and services in the district and their availability for and interaction with the project; 10) The expected benefits from construction of the project; and 11) A certification from all landowners within the district who join in the petition that he or she is granting an assessment against his or her property in such an amount as to pay for the project's cost.

---

<sup>238</sup> This Appendix consists entirely of excerpts from: "West Virginia Economic Development Incentives: Presentation at 2010 the WV Economic Development Council Annual Meeting."  
[http://www.jacksonkelly.com/JK/pdf/Economic\\_Development\\_Incentives.pdf](http://www.jacksonkelly.com/JK/pdf/Economic_Development_Incentives.pdf)

Upon creation of the district, the governing body appoints a district board to oversee the functions of the district. The board is statutorily vested with the authority to do all things necessary to design and construct the project, including but not limited to, acquiring or leasing real property, designing, planning, financing and/or constructing the project, entering into agreements with public entities for the construction and/or operation of the project and raising funds by the issuance and sale of assessment bonds. For purposes of designing and constructing a project, all such projects are to be treated as public improvements and therefore subject to all state procurement, competitive bidding, and wage laws. The Community Enhancement Act is located in the W. Va. Code at Chapter 16, Article 13E.

### **West Virginia Infrastructure and Jobs Development Council**

The Infrastructure and Jobs Development Council (IJDC) was created as a funding clearinghouse for water and wastewater projects. The Infrastructure and Jobs Development Act was approved by voters and authorized a \$300 million general obligation bond issue to establish a revolving loan fund for development of water, wastewater and economic development projects. The Act further authorized the IJDC to issue tax-exempt revenue bonds. In 2001, the IJDC was authorized to receive up to \$40 million annually through the State Excess Lottery Revenue Fund. The Act established the Infrastructure Fund and the distribution of money from the fund in the form of grants, loans and loan guarantees for development projects. In addition, the IJDC is required to develop a comprehensive assessment of the state's water and sewage systems and to consider the current and future needs for such systems.

A number of factors are considered by the IJDC in determining whether to provide funding assistance to a development project: 1) The public health benefits of the project; 2) The economic development benefits of the project; 3) The degree to which the project will correct deficiencies in legal compliance of water supply or sewage treatment facilities; 4) The degree to which the project encourages effective and efficient consolidation of water or sewage treatment systems consistent with the IJDC's comprehensive plan; 5) The cost effectiveness of the project as compared with alternatives which achieve substantially the same public health or economic development benefits; 6) The availability of alternative sources of funding that could finance the project and the need for the IJDC's assistance to finance the project or attract other sources of funding; 7) The applicant's ability to operate and maintain the system if the project is approved; 8) The degree to which the project achieves other state or regional planning goals; 9) The estimated date upon which the project could commence if funding were available and the estimated completion date of the project; and 10) Other considerations as the IJDC may consider necessary or appropriate to accomplish its purpose.

Any community in West Virginia seeking state infrastructure funding must also go through the IJDC. Agencies are statutorily required to attend coordination meetings and work together. Engineering firms or regional planning development districts typically put together applications for communities. Applications first go to the IJDC, which then passes them to either the water or sewer technical committee. The committee sends them



to a group that has 10 days to review and return the applications to the technical committee with a summary of their findings. The technical committee submits these materials to the funding committee, which meets to identify information gaps. During the same week, the committee reconvenes and makes its determination on the application. At the IJDC meeting, the technical committee and funding committee make short presentations of their recommendations. The IJDC then makes a decision about the technical and funding feasibility of the project. The IJDC prepares a clearinghouse letter to the applicants and funders, stating which agencies are expected to fund the project. Funders apply individual prioritization criteria to assign points and rank applications. Once the IJDC approves a project, the West Virginia Public Service Commission (PSC) must approve it. The PSC has its own set of requirements, which can differ from the IJDC's objectives. Assuming the PSC approves the project, public notice is given and public comment is taken. If there is public protest, the PSC is required to hold a public hearing. The West Virginia Infrastructure and Jobs Development Act is located in the W. Va. Code at Chapter 31, Article 15A.

### **Water Development Authority**

The West Virginia Water Development Authority (WDA) is a governmental entity charged with overseeing various water development projects across the state. Covered water development projects include public water facilities, storm water systems, and wastewater facilities. The WDA is authorized to provide financial assistance to local government agencies to help them meet the requirements of state and federal water pollution control and safe drinking water laws. In doing so, the WDA helps to protect West Virginians' health through improving water quality and attracting economic development and protecting the environment through constructing and upgrading infrastructure.

As part of its responsibilities, the WDA also serves as the fiduciary for the West Virginia Infrastructure Fund (WVIF), serves as the administrative agency of the Infrastructure and Jobs Development Council, administers the West Virginia Division of Environmental Protection's Clean Water State Revolving Fund (CWSRF), serves as the financial manager for the Drinking Water Treatment Revolving Fund Act (DWTRF), and services loans funded by the CWSRF, DWTRF, WVIF and WDA.

Under the WDA's authority, local government entities can obtain loans to cover all or part of the costs of a water development project. Additionally, the WDA may, on its own, initiate water development projects in the state. To cover the costs of financing such projects and loans, the WDA is authorized to issue tax-exempt bonds, payable from revenues derived from such projects. Revenues to pay for such bonds (or to pay the loan, which payment provides revenues to pay for such bonds) may be derived from service fees implemented on those being served by a water development project. Additionally, the WDA may accept grants and aid from federal agencies to help cover costs. The WDA Act is located in the W. Va. Code at Chapter 22C, Article 1.

### **Drinking Water Treatment Revolving Fund Act**

Under the Drinking Water Treatment Revolving Fund (DWTRF) Act, the West Virginia Bureau of Public Health is authorized to enter into capitalization agreements with the EPA, to accept capitalization grant awards under the federal Safe Drinking Water Act (SDWA), and to direct the Water Development Authority (WDA) in the administration and management of the DWTRF. The DWTRF is administered in accordance with the provisions of the SDWA. Moneys held in the DWTRF are used solely to make loans or provide other allowable financial assistance to eligible projects for public water systems, as described in the SDWA. As part of its remedies for non-payment of a loan, the WDA may impose service fees upon all users of a project funded by a loan distributed under the DWTRF. The DWTRF Act is located in the W. Va. Code at Chapter 16, Article 13C.

### **Water Pollution Control Revolving Fund Act**

Under the Water Pollution Control Revolving Fund Act (WPCRF), the West Virginia Division of Environmental Protection (DEP) is empowered to enter into capitalization agreements with the EPA, to accept capitalization grant awards made under the federal Clean Water Act, the Safe Drinking Water Act and other federal laws, and to otherwise manage the fund in accordance with the requirements of federal law.

Under the DEP's direction, the Water Development Authority is to oversee the WPCRF. The moneys in the fund are to be used to make loans to local entities for the financing or refinancing of costs of projects. Projects eligible for such funding are water and wastewater treatment facilities, including: 1) Sewage and wastewater collection, treatment and disposal facilities; 2) Public water transportation, treatment and distribution facilities; 3) Drainage facilities and projects; 4) Administrative, maintenance, storage and laboratory facilities related to the aforementioned facilities; and 5) Other projects allowable by federal law. The WPCRF Act is located in the W. Va. Code at Chapter 22C, Article 2.

### **Regional Water and Wastewater Authority Act**

Under the Regional Water and Wastewater Authority Act, any municipality, county, public service district or other political subdivision of the state may enter into agreements with other political subdivisions of the state to form regional water or wastewater authorities. Prior to taking effect, any such agreement must be submitted to the West Virginia Public Service Commission (PSC) for approval. Any political subdivision entering into such an agreement may not offer to provide water or wastewater services in competition with another political subdivision that is entering into such an agreement. Whether or not a member to such an agreement creating a regional water or wastewater authority, any political subdivision and any publicly or privately owned water distribution company may enter into contracts with a regional water/wastewater authority for the purchase from or sale of water to the authority, the treatment of water by either party, the transmission of water by either party or the transportation and treatment of wastewater by either party. Any such contracts must be approved by the PSC.

For the purpose of providing a water supply, transportation facility or treatment system to a participating political subdivision, a regional water/wastewater authority may acquire,

operate or construct reservoirs, pipelines, wells, check dams, pumping stations, water purification plants and other facilities for the production, distribution and utilization of water. An authority may also acquire, operate or construct transportation facilities, pump or lift stations, treatment facilities and other facilities for the transportation or treatment of wastewater.

In order to finance such expenditures, a regional water/wastewater authority may borrow money and evidence the same by warrants, notes or bonds. As part of this authorization, a regional water/wastewater authority is permitted to issue revenue bonds to cover costs. Any revenue bonds issued are to be paid solely from the net revenues derived from the operation of the authority's system, and from no other funds. Revenue bonds under this Act must mature within 40 years of issue and are tax-exempt for state tax purposes. The Regional Water and Wastewater Authority Act is located in the W. Va. Code at Chapter 16, Article 13D.

### **Municipal Public Works; Revenue Bond Financing**

The Municipal Public Works and Revenue Bond Financing provisions are located in the W. Va. Code at Chapter 8, Article 16.

### **Lottery Revenue Bond Act**

Under the Lottery Revenue Bond Act, county commissions, municipalities and certain boards of education (those in growth counties having enacted the Local Powers Act and containing a racetrack that has participated in the West Virginia Thoroughbred Development Fund since or before January 1, 1991, and receiving lottery revenues) may issue lottery revenue bonds to finance public projects. This includes the acquiring, improvement, renovation, extension, enlargement, increasing, repairing, construction, equipping, maintaining or operation of public buildings, structures, fixtures, property, public infrastructure and appurtenant facilities of any type or types for which the applicable political subdivision is permitted by law to expend public funds. Additionally, a public project would include all roads and transportation infrastructure. As a result, the first step is to identify a project that would qualify as a public project under this broad definition.

After identifying a project, the applicable political subdivision must adopt an order/ordinance that authorizes the issuance of the lottery revenue bonds. The order/ordinance must: 1) Set forth parameters for the maturity date that is not in excess of 40 years; 2) Set forth a "not to exceed amount" for the amount of bonds to be issued; 3) Provide that the bonds will be registered and provide for the appointment of a registrar; 4) Provide the place of payment of the bonds; 5) Provide whether the bonds will be subject to redemption and authorize the redemption provisions be set by authorized officers at a later date; and 6) Create a lottery revenue fund as described below. The order should allow for the finalization of these terms by either a certificate of determination or in a trust indenture, if a trust indenture is determined necessary. The Act requires the applicable political subdivision to establish a fund to deposit all lottery revenues into, known as the lottery revenue fund. The establishment should be authorized in the order/ordinance as well. After the establishment of the fund, all table game revenues,

limited video lottery revenues (including revenues received from the Greenbrier Casino), and racetrack video lottery revenues should be deposited into the lottery revenue fund. The bonds will be secured by a pledge of the fund and a pledge of all future table game revenues, limited video lottery revenues and racetrack video lottery revenues that are received by the issuing subdivision. The pledge of the fund and the revenues will be a superior pledge to any use of the lottery revenues on a cash basis.

Following adoption of the order/ordinance, the political subdivision will begin the process of selling the bonds, whether by private placement to a particular financial institution or investor or on the public market through an underwriter. When the terms of the bonds are determined through either process, the political subdivision formally finalizes the terms of the bonds through the signing of a certificate of determination or the signing of the trust indenture if it is deemed necessary.

The proceeds of lottery revenue bonds must be used for the cost of the public project and, if not used for such costs, must be used to purchase bonds for redemption. Costs of the public project include all capital costs, financing costs, real property acquisition costs, professional service costs, imputed administrative costs, relocation costs and organizational costs. The Act allows the issuing political subdivision to set redemption terms as it sees fit and authorizes the refunding of any lottery revenue bonds. Further, the Act authorizes a political subdivision to issue bonds with one or more other political subdivision that receives lottery revenues by pooling their lottery revenues for a public project that is beneficial to all public entities involved.

The Lottery Revenue Bond Act is located in the W. Va. Code at Chapter 13, Article 2H.

### **West Virginia Community Infrastructure Authority**

The West Virginia Community Infrastructure Authority (Authority) is authorized to make loans to counties and municipalities for the acquisition, renovation, repair or construction of community infrastructure projects. Additionally, the Authority may issue tax-exempt community infrastructure revenue bonds, payable solely from revenues, to finance the cost of such projects.

A community infrastructure project may not be undertaken unless it has been determined by the Authority to be consistent with any applicable requirements of law. Any resolution of the Authority providing for a loan or bond purchase must include a finding by the Authority that such determinations have been made. A loan or bond purchase agreement must be entered into between the Authority and each county or municipality to which a loan is made or from which bonds are purchased for the acquisition, renovation, repair or construction of a community infrastructure project.

The Authority is empowered to issue community infrastructure revenue bonds and notes in such principal amounts as the Authority deems necessary to make loans to or bond purchases from counties and municipalities for one or more community infrastructure projects.

The Authority may, from time to time, issue renewal notes, issue bonds to pay such

notes, and, whenever it deems refunding expedient, refund any bonds by the issuance of community infrastructure revenue refunding bonds. Except as may otherwise be expressly provided in the authorizing Act or by the Authority, issued bonds or notes are obligations of the Authority, payable out of the revenues and reserves created for such purposes. Such pledge shall be valid and binding from the time it is made and the revenues so pledged and thereafter received by the Authority shall immediately be subject to the lien of such pledge. The bonds and notes must be authorized by resolution of the Authority and must mature at such time, in case of any such note or any renewal not exceeding five years from the date of issue, and in the case of any such bond not exceeding 50 years from the date of issue. The bonds and notes of the Authority may be sold by the Authority at public or private sale, at or not less than the price the Authority determines. The West Virginia Community Infrastructure Authority Act is located in the W. Va. Code at Chapter 31, Article 19. West Virginia Economic Infrastructure Authority Act is located in the W. Va. Code at Chapter 31, Article 19.

### **Governor's Community Participation Grants**

The Governor's Community Partnership program provides state grant funds for community and economic development projects throughout West Virginia. In true community partnerships, the program enables communities to expand, build and improve a variety of public facilities and services. The program encourages and supports meaningful public improvements in communities throughout West Virginia. Funds are provided to units of local government, generally counties and municipalities, for projects approved by the Governor.

Eligible activities include, but are not limited to, permanent public improvements related to the following: city hall and courthouse facilities; community centers; construction and renovation of public facilities; demolition; economic development; emergency services and law enforcement; flood and storm drainage; business and industrial parks; land and property acquisition; libraries; parks and recreation; parking facilities; preservation and beautification; street and sidewalk repair; technology; and water and wastewater facilities and services.

Funds are provided to units of local government, generally counties and municipalities. Eligible applicants include counties, municipalities and incorporated towns; public service districts; independent boards and authorities within counties or municipalities that are authorized to seek grant funds, such as county and city development authorities; park and recreation boards; public water and sanitary boards; and county boards of education. Counties and municipalities also must sponsor the applications of public organizations within their jurisdiction, such as library commissions and volunteer fire departments.

## Appendix D

### Potential Sources of Federal Funding for Towns and Rural Area Water Infrastructure<sup>239</sup>

#### **Economic Adjustment Assistance Program**

The Economic Adjustment Assistance Program provides a wide range of technical, planning, and infrastructure assistance in regions experiencing adverse economic changes that may occur suddenly or over time. This program is designed to respond flexibly to pressing economic recovery issues and is well suited to help address challenges faced by United States regions and communities. Economic Adjustment Assistance includes the United States Department Economic Development Administration's Revolving Loan Fund Program.

#### **Small Cities Block Grant Fund**

The Small Cities Block Grant (SCBG) program provides federal funds for community and economic development projects throughout the state. The program supports job creation and retention efforts, local government efforts to provide affordable infrastructure systems, and community efforts to improve the quality of life for low- to moderate-income citizens.

The SCBG program supports the development of viable communities by assisting in the provision of a suitable living environment and expanding economic opportunity, principally for those of low- and moderate-income (80% and below the median household income). Eligible units of local government may receive SCBG funds if they are documented to fulfill one of three national objectives: 1) Activities benefiting low- and moderate-income people; 2) Activities that aid in prevention or elimination of slums or blight; 3) Activities designed to meet community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community and where other financial resources are not available to meet such needs. Activities generally eligible for funding include, but are not limited to, permanent public improvements relate to the following: community or senior citizen centers; construction and renovation of public facilities; demolition; economic development; flood and storm drainage; acquisition; parks and recreation; preservation and beautification; technology; water and wastewater facilities and services; community facilities renovation and construction.

Funds are provided only to units of local government, generally counties and municipalities. Nonprofits, public service districts, utility boards, recreation boards and economic development authorities are only eligible to receive SCBG funds through a sub-grant agreement with the unit of local government. The local government unit must be the applicant.

---

<sup>239</sup> This Appendix consists entirely of excerpts from: "West Virginia Economic Development Incentives: Presentation at 2010 the WV Economic Development Council Annual Meeting."  
[http://www.jacksonkelly.com/JK/pdf/Economic\\_Development\\_Incentives.pdf](http://www.jacksonkelly.com/JK/pdf/Economic_Development_Incentives.pdf)

The West Virginia Development Office administers the SCBG Program.

### **USDA's Rural Utility Service Program**

Under the United States Department of Agriculture's (USDA) Rural Utility Service (RUS) program, a number of loans, grants and loan guarantees are available from the federal government to rural governments, corporations, associations and utility districts for various development projects. Many of the assistance programs require that the population of the area to be assisted be less than 10,000 persons. Projects eligible for such loans and grants include those in the areas of: water, wastewater and sewage infrastructure; telecommunications and broadband services; electric generation, distribution and transmission facilities; and other utilities development.

### **Appalachian Regional Commission**

The Appalachian Regional Commission (ARC) provides federal grant funds for the support of economic and community development in West Virginia and other states in the Appalachian Region. The goal of ARC is to create opportunities for self-sustaining economic development and improved quality of life.

Projects approved for ARC assistance must support one of the four general goals: 1) Increase job opportunities and per capita income in Appalachia to reach parity with the nation; 2) Strengthen the capacity of the people of Appalachia to compete in the global economy; 3) Develop and improve Appalachia's infrastructure to make the region economically competitive; and 4) Build the Appalachian Development Highway System to reduce Appalachia's isolation.

Activities generally eligible for funding include, but are not limited to, projects that: 1) Improve educational opportunities and workforce skills; 2) Improve infrastructure for community and economic development; 3) Increase civic and leadership capacity; 4) Increase entrepreneurial opportunities; or 5) Improve health care resources. Eligible applicants for the program include nonprofit organizations and public entities, such as cities, towns, counties, regions, and public service districts.

## Appendix E

### The Human Right to Water

Over the course of 35 years, the United Nations passed a series of resolutions supporting the human right to water and sanitation. In these the UN emphasizes affordability, clean and adequate amounts of water, and accountability for those providing water services.

As these issues are as salient in the U.S. as they are anywhere else in world and the U.S. government at all levels is bound by these terms of international law, it is important to raise this issue in the West Virginia context. Due to the elevated level of poverty rates in rural areas, West Virginians are facing affordability issues.

Moreover, the issue of access to clean and adequate supplies of water comes into play when the State of West Virginia, at times, appears to sanction destruction of local water resources in favor of mining and other industrial operations. Accountability and transparency, as to the operations of WVAV, have been raised in the context of the company's investment patterns, rates, service, and emergency response capabilities.

Beyond these more local issues, the UN right to water and sanitation has recently been applied in the United States, setting a precedent of sorts. National and local organizations raised the issue of what they considered extreme rates of water service disconnections in Detroit in the wake of the Great Recession and inability of thousands of people to pay their water bills. UN experts criticized the city government's practices with respect to due process and shutting off people who could not afford to pay. The city of Detroit has retreated from its previous practices in response to local and international criticism and is working to expand budget plans and notification rights.<sup>240</sup>

#### **UN Record on Privatization and the Human Right to Water**

Although the UN has adopted resolutions stating that water is an economic good and the body is neutral as to whether water is delivered by private or public entities, it has recognized the right to water and sanitation over the last decade. There still appears to be a controversy whether the right to water and sanitation are stand-alone human rights or part of other human rights recognized by the International

---

<sup>240</sup> See "Detroit: Disconnecting Water From People Who Cannot Pay – An Affront to Human Rights, Say UN Experts." UN Office of the High Commissioner for Human Rights, June 25, 2014. <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=14777>, "United Nations Says Turning Off Poor Detroiters' Water Violates Human Rights." Huffington Post, June 26, 2014. [http://www.huffingtonpost.com/2014/06/26/united-nations-detroit-water-shutoffs\\_n\\_5533901.html](http://www.huffingtonpost.com/2014/06/26/united-nations-detroit-water-shutoffs_n_5533901.html), and "Here's How Detroit is Trying to Make Sure Massive Water Shutoffs Don't Happen Again." Huffington Post, March 20, 2015. [http://www.huffingtonpost.com/2015/03/20/detroit-water-shutoffs-department-\\_n\\_6909730.html](http://www.huffingtonpost.com/2015/03/20/detroit-water-shutoffs-department-_n_6909730.html)



Covenant on Economic, Social and Cultural Rights (ICESCR), with NGOs and others in the UN pushing for clear and unambiguous statements. Nonetheless, these concepts appear to be clear obligations of nation states to fulfill under international law.<sup>241</sup>

Various reports track the evolution of thinking in the UN with respect to the human right to water and sanitation. That history is described in the following:

**1977:** Mar del Plata conference in Argentina. The conference issued an Action Plan on “Community Water Supply.” It declared: “All peoples... have the right to have access to drinking water in quantities and of a quality equal to their basic needs.” It also said that water should be “justly and equitably distributed” and that water is essential for life and human development. The attendees voted to declare 1981 to 1990 the “International Drinking Water Supply and Sanitation Decade.”<sup>242</sup>

**1992:** The Dublin conference has been mentioned. Although its principle on water as an “economic good” sparked controversy, it also found that “water is a finite and vulnerable resource essential to life, development and environment.” It also called for public participation in determining its management and distribution and making water affordable to everyone.<sup>243</sup>

**1998:** The UN Economic and Social Council’s Sub-Committee on Prevention of Discrimination and Protection of Minorities issued a paper “outlining the basis for ‘the right to access of everyone to drinking water supply and sanitation services.’”<sup>244</sup>

**1999:** The UN General Assembly issued a resolution on “The Right to Development.” It affirmed that “in full realization of the right to development, the rights to food and clean water are fundamental human rights and their promotion constitutes a moral imperative for national Governments and for the international community.”<sup>245</sup>

**2002:** The UN Committee on Economic, Social and Cultural Rights adopted “General Comment 15 on the Right to Water.” General Comment 15 “entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses.” It also emphasizes nondiscrimination and “information accessibility.” The UN Special Rapporteur (SR) developed two sets of criteria as to

---

<sup>241</sup> Sharmila L Murthy, “The Human Right(s) to Water and Sanitation: History, Meaning, and Controversy Over Privatization.” *Berkeley Journal of International Law*, 2013.

<http://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=1434&context=bjil>

<sup>242</sup> Murthy, 2013.

<sup>243</sup> “Privatization of Water: A Historical Perspective.” *Law, Environment and Development Journal (LEAD)*, 2007.

<http://www.lead-journal.org/content/07217.pdf>

<sup>244</sup> Murthy, 2013.

<sup>245</sup> Craig Arnold, “Water Privatization Trends in the United States: Human Rights, National Security, and Public Stewardship.” *William & Mary Environmental Law and Policy Review*, 2009.

<http://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1027&context=wmelpr>

whether the human right to water and sanitation was being realized. The UN SR defined “normative content” as: 1) availability, 2) quality/safety, 3) acceptability, 4) accessibility, and 5) affordability. The second set was described as “cross-cutting” criteria (because they apply to all human rights): 6) nondiscrimination, 7) participation, 8) accountability, 9) impact, and 10) sustainability. One report asserts that these are “consistent with the human rights-based approach to development.” General Comment 15 also references water for agricultural purposes. It states, “[W]ater is necessary to produce food (right to adequate food).” But “the priority is right to water for personal and domestic use.”<sup>246</sup>

**2007:** A report by the UN Office of High Commission on Human Rights clarified the UN’s position by saying: “While remaining neutral as to the way in which water and sanitation services are provided, and therefore not prohibiting the private provision of water and sanitation services, human rights obligations nonetheless require States to regulate and monitor private water and sanitation providers.”<sup>247</sup>

**July 2010:** 122 countries (with 41 abstentions (including the U.S.) and no opposition) supported the UN’s General Assembly Resolution 64/292 drafted by Bolivia “that recognizes the right to safe and clean drinking water and sanitation that is essential for the full enjoyment of life and all human rights.” The official U.S. position was that there was a breach in procedure in terms of process. But it appears more likely that the U.S. wanted a reference to the potential for private companies to manage water assets, as was the case in August 2010.<sup>248</sup>

**August 2010:** The UN Human Rights Council adopted Resolution 15/9 on human rights and access to safe drinking water and sanitation. It reaffirmed States’ obligation to realize human rights but that states could delegate “delivery of safe drinking water or sanitation services to a third party...” But the 2002 and 2010 resolutions taken together, an analyst argues “have arguably brought the right to water and sanitation within the scope of rights recognized under the ICESCR.”<sup>249</sup>

**2011:** The UN Human Rights Council issued the Guiding Principles for Business and Human Rights. The guide for business is divided into three main themes: “protect, respect, and remedy.” The concept of protect dovetails with the state’s “duty to guard against human rights abuses.” Respect refers to society’s expectation that business should uphold human rights. Remedy means business should address human rights violations that they are involved in or created.<sup>250</sup>

---

<sup>246</sup> See LEAD, 2007, Murthy, 2013 and Arnold 2009.

<sup>247</sup> Murthy, 2013.

<sup>248</sup> “Public Public Partnerships: An Alternative Model to Leverage Capacity of Municipal Water Utilities.” Food & Water Watch and Cornell University (IRL School – Global Labor Institute), January 2012.  
[http://documents.foodandwaterwatch.org/doc/PublicPublicPartnerships.pdf#\\_ga=1.3850800.1683580075.1360244908](http://documents.foodandwaterwatch.org/doc/PublicPublicPartnerships.pdf#_ga=1.3850800.1683580075.1360244908)

<sup>249</sup> Murthy, 2013.

<sup>250</sup> Murthy, 2013.

**2012:** The UN, at its summit in Rio, declared, “We recognize our commitments regarding the human right to safe drinking water and sanitation as inextricably related to the right to the highest attainable standard of physical and mental health as well as the right to human life and dignity...” This was the first time the right to safe drinking water and sanitation was recognized at a major UN summit. (NGOs like Amnesty International criticized the declaration as not carving out water and sanitation as individual human rights separate and distinct from all others.)<sup>251</sup>

---

<sup>251</sup> Murthy, 2013.