

Case Study:

West Virginia–American Water

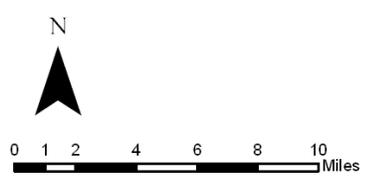
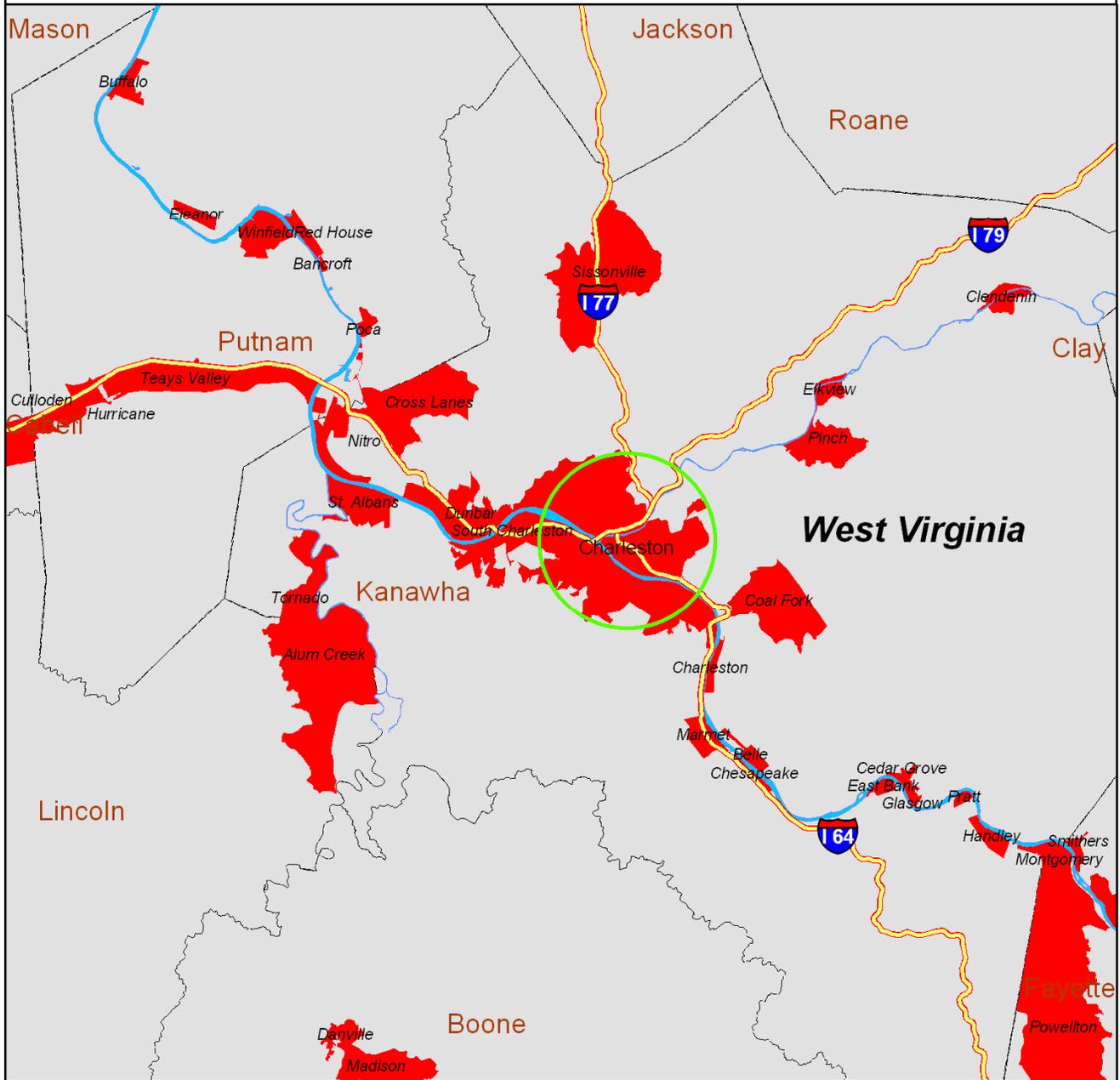
West Virginia–American Water (WVAW) follows many of the core strategies of financial sustainability promoted by the Environmental Protection Agency (EPA) and others.¹⁰¹ It is a large, consolidated regional system that takes pride in its asset management and operational innovations. It practices meticulous cost accounting and has developed a pricing structure that it thinks accurately covers the full cost of providing water to its customers. WVAW also is a successful business that strives for efficiency and profits. This last point is an advantage or a detriment, depending on one's view about the privatization of water services.

West Virginia's largest drinking-water provider goes by different names depending on who is describing it. The official name, West Virginia–American Water Works, used by company officials and investors, reveals the company's relationship to one of the largest for-profit water companies operating in the United States, American Water Works.¹⁰² State officials charged with regulating WVAW often refer to it simply as "the Company," a nickname that reflects its size and profile relative to other, smaller companies. (Refer to Figure E-7.)

¹⁰¹ Environmental Protection Agency, "Sustainable Water Infrastructure for the 21st Century" (last updated 18 December 2003), available at www.epa.gov/water/infrastructure/.

¹⁰² American Water Works itself is part of a larger, international water company, Thames Water, and Thames Water, in turn, is part of an even larger company, RWE, based in Germany.

**Figure E-7. Location of Charleston, WV, in Kanawha County
(West Virginia-American Water Headquarters Office)**



Data Source: ESRI

The provision of drinking water by for-profit companies remains controversial, especially among government drinking-water providers, and WVAW has not escaped this controversy. So local officials will occasionally refer to WVAW simply as “the Spider,” a water system that depends on pulling in other systems to survive and thrive. Gilbert Cross uses yet another image, “Dynasty of Water,” to describe American Water Works and its affiliates in his 1991 company-commissioned corporate history.¹⁰³ Regardless of how the water provider is described, like its parent company, WVAW clearly is an ambitious and aggressively growth-oriented drinking-water provider that has a major influence in the areas where it operates.

WVAW provides drinking water to about 165,000 customers in eighteen counties in West Virginia and in several communities in Ohio and Virginia.¹⁰⁴ In terms of population served, approximately 500,000 West Virginians rely on WVAW water, more than 27 percent of the state’s population and more than 35 percent of the state’s population served by community water systems.¹⁰⁵ As of 2000, WVAW operated thirteen water treatment facilities and treated about 53.3 million gallons of water per day.¹⁰⁶

Access to Capital

¹⁰³ Gilbert Cross, *A Dynasty of Water: The Story of American Water Works* (Voorhees, N.J.: American Water Works, 1991).

¹⁰⁴ Data from WVAW website (last visited 3 June 2005), at www.amwater.com/awpr/wvaw/start/index.html.

¹⁰⁵ Dan Bickerton and Chris Jarret, WVAW, interviews with author, June 2004.

¹⁰⁶ “Meeting Infrastructure Challenges” (compilation of WVAW presentations and reports, provided to author).

For-profit water and sewer providers often have difficulty gaining access to public capital funds. The two largest national programs providing infrastructure funding, the U.S. Department of Agriculture's Water and Waste Disposal Loans and Grants Program and the EPA's Clean Water State Revolving Fund, are prohibited by law from providing grants or loans directly to for-profit companies. EPA allows states to provide Drinking Water State Revolving Fund assistance to for-profit providers. However, the practice is fairly uncommon, and many states have imposed rules that make for-profit providers ineligible. Many state-specific programs have similar constraints.

WVAW has tapped a variety of capital sources and used some sophisticated financing strategies to maintain and expand its capital infrastructure. Despite the limitations and the difficulty in accessing public funds, it has developed a series of structured partnerships with local governments, with the result that millions of dollars in lower-cost public capital has helped develop the infrastructure that provides WVAW customers with their water.

WVAW's first large-scale partnership involved Mercer and Summers counties, state and federal government agencies, and the Oakvale Road Public Service District (PSD), a government-owned water utility. The project replaced two aging treatment facilities with a larger, regional facility capable of treating five million gallons of water per day. It also added 64 miles of pipeline that connected several communities and provided an additional 5,000 residents with public drinking water.¹⁰⁷

The partnership behind the project was structured to provide a combination of private and public sources of capital. WVAW invested \$23 million for the

¹⁰⁷ "Mercer/Summers Water Project Overview" (November 1999) (summary report compiled by Oakvale Road PSD and West Virginia Region 1 Planning and Development Council, provided to author).

construction of a water treatment plant, a raw-water intake, and a water storage facility, all of which it now owns and operates. The Oakvale Road PSD took out approximately \$15 million in low-interest loans from the West Virginia Infrastructure and Jobs Development Council to cover much of the cost of the line extensions. The lines are technically owned by the Oakvale Road PSD. However, they are operated and maintained by WVAW under an agreement that requires WVAW to pay the Oakvale Road PSD \$670,000 per year. The PSD uses the payments to service its debt.

Grant financing also played a major role in the project. No single program was able to cover all the costs, so local officials sought assistance from a variety of funders, including the U.S. Economic Development Administration, the Appalachian Regional Commission, the U.S. Department of Housing and Urban Development's Community Development Block Grant program, and the U.S. Army Corps of Engineers.

Finally, local governments contributed about \$1.3 million in capital funds.

Completing all the arrangements necessary to put this project together required considerable planning and political support from local, regional, state, and federal officials.¹⁰⁸ Preliminary planning meetings for the effort began in 1991. The water treatment facility was completed in 1996, and the main transmission mains were put into service in 1997.

Since perfecting the partnership model that led to the Mercer/Summers project, WVAW has completed a number of similar projects in the state. For example, the Fayette Plateau Regional Project, which included a new water treatment plant and 64 miles of pipeline, led to the consolidation of five smaller regional systems and the retirement of five obsolete treatment facilities. As with

¹⁰⁸ Dave Coles, West Virginia Region 1 Planning and Development Council, and Lyle Huntington, Oakvale Road PSD, interviews with author, July 2004.

the Mercer/Summers project, the Fayette Plateau project relied heavily on public funds, with about \$18 million of the \$47 million cost paid for from low-interest loans and grants. Assets paid for from grant and loan funds are essential parts of WVAW's system infrastructure, but they are not the property of WVAW and are not included in the company's capital rate base.

The primary difference between the financing of the Mercer/Summers project and the financing of the Fayette Plateau project was the use in the latter project of a capital-lease arrangement allowed under West Virginia's Industrial Development Bonds (IDBs) Act.¹⁰⁹ WVAW used an IDB capital-lease arrangement for its own capital contribution toward the project. It financed its share of the project with a blend of commercial debt and equity. After the facilities were constructed and put into service, WVAW transferred legal title to them to the *Fayette* County Commission, and the commission then leased the facilities back to WVAW. The facilities thus are considered to be public property and exempt from certain property taxes. Under the IDB statutes, the commission has no debt service or operational liability for the leased assets. WVAW uses the funds that it would have paid in taxes to pay a "use fee" to the county. The county uses the revenue to pay off its portion of the public loans for the project.

WVAW now depends on structured partnerships and creative financing as a tool for providing capital finance for many of its major facilities. Between 1994 and 2005, the company estimates, \$492,322,803 went toward construction of new and expanded water facilities, \$364,555,000 of which came from WVAW and \$127,767,803 of which came from public-sector sources.¹¹⁰ Much of this money went toward replacing thirty-five smaller facilities with nine regional facilities.

¹⁰⁹ W.VA. CODE art. 2C, ch. 13 (1931).

¹¹⁰ "West Virginia-American Water Analysis of Construction Expenditures, 1994 through 2004" (analysis included in "Meeting Infrastructure Challenges").

WVAW maintains a detailed database of potential service areas and line extensions to prioritize and plan its line investments. In some cases it uses 100 percent of its capital to reach unserved customers. In other cases it partners or shares costs with local governments and other utilities such as the Oakvale Road PSD.

The gap in funding capital takes on a new meaning in the context of small projects extending services into rural areas. In some instances a line extension from WVAW may be the only opportunity for a rural resident or community with failed wells, yet the costs per household may approach or exceed the value of the property to be served.¹¹¹ Some critics of for-profit utilities suggest that a concern for profit cannot help but impede the utilities' reaching these pockets, and that private systems are more likely to choose more profitable areas to serve, leaving less desirable areas to other providers.¹¹² WVAW's response is that it can invest only to a limit but is normally open to serving customers if a public body steps in. Asked about the financial incentives for expanding into high-cost, impoverished rural areas like McDowell County, company officials responded that those areas make a case for public systems.¹¹³

Completing projects with high per-unit costs is not alone a problem for private systems. Many public systems do not have the capital resources to carry out expensive extensions, even if they are not scared by the poor return on investment.

¹¹¹ Bickerton and Jarret, interviews.

¹¹² Fred Stottlemeyer, Putnam PSD, interview with author, July 2004.

¹¹³ Jarret, interview.

Rates and Charges

Are customers who are served by private for-profit water providers better off? Answering the question is particularly difficult for multiple reasons. “Better off” means different things to different people and communities. To the director of the Oakvale Road PSD, one of WVAW’s partners, the expanded service area, the economic development potential, and the modern facilities provided by WVAW far outweigh the added monthly cost to his customers.¹¹⁴ However, a customer used to the intimacy of the customer service department of a local utility office might view having to address billing concerns to a regional call center representative in a different city (or state) as a major sacrifice.

In many states, North Carolina among them, for-profit providers tend to own very small systems that may not be appealing to public systems. Comparing a major urban drinking-water provider that serves 100,000 people from one major facility, with a for-profit provider that serves 20 small, isolated systems averaging 75 customers each is difficult. WVAW’s average system size is quite large in comparison with many for-profit providers. In fact, WVAW operates many of the largest facilities in West Virginia.

Until last year, WVAW customers in downtown Charleston, the state’s largest urban area, paid the same for water as customers in the most rural and remote WVAW service areas.¹¹⁵ This “single tariff” strategy is one of the most important financial aspects of the WVAW system. Local governments and customers have mixed feelings about it, depending on their perception of the actual cost necessary to serve their community. For example, officials with the Putnam PSD have resisted becoming incorporated into the WVAW system, partially because

¹¹⁴ Huntington, interview.

¹¹⁵ Under WVAW’s newly approved tariff structure, all customers pay the same charge by volume, but several areas pay surcharges.

they think that the cost of serving the relatively dense (by West Virginia standards) Putnam service area is significantly below the price that WVAW would charge.¹¹⁶ On the other hand, people in very rural service areas think that the economy of scale inherent in WVAW's system brings them lower costs and prices than they would otherwise have. WVAW officials stress that some of their most expensive investment projects have occurred to serve the needs of urban customers and that all the different communities in their service area benefit to some degree from their ability to spread costs across large geographic areas.¹¹⁷

WVAW rates are reviewed and approved by the West Virginia Public Service Commission. WVAW is permitted to recover various costs through its rate structure. For many in the public sector, the most controversial cost components relate to the rate of return that WVAW is allowed, to recover its capital investment and its taxes. Advocates of public provision of service often argue that allowance for return on capital and taxes makes private-sector provision inherently more expensive. WVAW recently reached an agreement regarding a rate increase, after it began a lawsuit based on an earlier ruling by the West Virginia Public Service Commission.¹¹⁸ One of the key elements of the case involved the rate of return that WVAW was allowed on its capital.

The ability of for-profit companies to receive a return on the funds that they have invested in capital provides a clear financial incentive for capital investment that does not exist for many of their public counterparts. According to regulatory

¹¹⁶ Stottlemyer, interview.

¹¹⁷ Bickerton and Jarrett, interviews.

¹¹⁸ "West Virginia American Water Rate Case Settlement Reached" (27 December 2004), available at www.amwater.com/awpr1/wvaw/newsroom/press_releases/page5763.html.

officials, WVAW has invested more heavily than many government-owned public systems in the state.¹¹⁹ In most cases the investment brings a higher level of service, but it also brings additional cost to customers. According to the annual report of the West Virginia Public Service Commission's Consumer Advocate Division, "West Virginia-American continues to be among the highest-cost suppliers of water in the state and nation."¹²⁰ The division's analysis of thirteen large water systems in West Virginia shows WVAW as having the most expensive water, with an average cost of just under \$40 (see Table E-13 below).

Table E-13: Monthly Cost of Water Service for Residential Customers in West Virginia, Winter

Water Company or Municipality	2003-2004 vs. 2004-2005		Percent Change
	Average Cost for 4,500 Gallons of Water	Average Cost for 4,500 Gallons of Water	
Morgantown	\$ 5.92	\$ 7.65	29.2
Elkins	11.57	12.60	8.9
Wheeling	12.97	12.97	0.0
Weirton	17.37	17.87	2.9
Fairmont	17.96	17.96	0.0
Logan	20.20	20.20	0.0
Grafton	21.74	21.74	0.0
Clarksburg	22.50	23.72	5.4
Parkersburg	18.98	23.80	25.4
Beckley Water Co.	24.53	24.53	0.0
Martinsburg	28.33	28.33	0.0

¹¹⁹ Amy Swan, West Virginia Public Service Commission, interview with author, July 2004.

¹²⁰ "Consumer Advocate Division's Annual Report for 2005 and Comparative Residential Rate Study" (last visited 6 June 2005), available at www.cad.state.wv.us/2005report.htm.

Water Company or Municipality	2003-2004 Average Cost for 4,500 Gallons of Water	2004-2005 Average Cost for 4,500 Gallons of Water	Percent Change
Lewisburg	32.45	32.45	0.0
WV-American Water	36.23	39.36	8.6

Source: Reprinted from West Virginia Public Service Commission, Consumer Advocate Division, www.cad.state.wv.us/2005Table1A.pdf.

Conclusion

WVAW officials and operators clearly are proud of their system and the service they provide to their customers. They argue that the level of service they provide and the assets they manage, and the management expertise they are able to provide system customers far exceed what other smaller systems can.

In summary, WVAW has put into place many of the financial strategies and policies cited as being essential for sustainable infrastructure. The company has found innovative ways to access public funds and reduce its tax burden, measures that reduce what it has to pass on to its customers. The inclusion of a rate of return and adherence to a “profit motive” continue to separate it from its public counterparts. The company has clearly gone a long way in meeting the infrastructure gap in many communities while illustrating that many of the strategies cited for bridging the capital gap ultimately carry a significant cost to the customer.