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# Annual Privatization Report 2010: Water and Wastewater

By Leonard Gilroy and Harris Kenny  
Edited by Leonard Gilroy



# Reason Foundation



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Note: The discussion of Novato, California on page 6 was revised in May 2011 to reflect that Measure F ultimately passed and was not defeated at the ballot box, as reported in the original version of this report.

## Part 1

# Public Works Financing Issues 14th Annual Water Partnerships Report

The year 2009 saw moderate growth in the municipal water public-private partnership (PPP) market, but the market may be entering a period substantial growth, according to the 14<sup>th</sup> annual water partnerships report from *Public Works Financing (PWF)*. The *PWF* report found that in 2009 the U.S. water/wastewater outsourcing market—as measured by fees paid to the six major private water firms (American Water, CH2M Hill, Severn Trent, SouthWest Water, United Water and Veolia)—totaled \$1.6 billion, up 5.3% from 2008. These figures include revenues generated through the operations, maintenance and/or management of 1,757 water and wastewater facilities for 1,372 municipal clients, and 202 facilities for 177 industrial clients.

New business was hard to come by in 2009, however, as only 14 new municipal water and wastewater contracts worth over \$56.5 million in lifetime value were signed in 2009, while ten privately operated plants reverted to municipal control.

Government clients appear to remain largely satisfied with their current outsourcing contracts, as the water industry's contract renewal rate remained high at 85% in 2009 (see Table 1), though this represents a dip from the higher levels seen in previous years. Of the 127 contested contracts in 2009, 96 contracts (76%) were retained by the incumbent provider and 12 contracts (9%) were granted to a competing firm, according to *PWF*. Of the remainder, 10 contracts (8%) reverted back to municipal control, while nine others (7%) were not renewed for other reasons.

**Table 1: Contract Renewals and Lost Government Contracts, 1999–2009**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Industry Renewal Rate (%)	88	95	87	97	96	97	93	92	98	95	85
Renewed by Incumbent (%)	83	91	81	94	94	95	92	89	94	90	76
Reverted to Competitor (%)	4	4	7	3	2	2	1	3	3	5	9
Reverted to Muni (%)	11	5	13	3	4	3	7	2	2	5	8

Source: Author calculations using data published in *Public Works Financing*, March 2010.

Ongoing municipal fiscal challenges, the end of federal stimulus funding and other market developments are prompting municipal policymakers to explore PPPs, according to the companies surveyed in the *PWF* report. The companies noted that inquiries into private investment and long-term asset management contracts were “coming at a record pace.” The potential passage of federal legislation that would lift the volume cap on Private Activity Bonds (PABs)—tax-exempt bond financing made available to private developers of certain types of public infrastructure—and the expiration of stimulus funding and federally subsidized Build America Bonds are likely to be key factors driving increasing interest in PPPs among municipalities, according to industry experts.

## Part 2

# Water and Wastewater PPP Update

Highlights from the water and wastewater PPP sector in 2010 include:

- In July 2010, the city of **Buffalo, New York** selected Veolia Water North America in a competitive procurement for a 10-year, \$53 million PPP contract for the operations and management of the city's water system, which serves approximately 280,000 people. Under the contract, the city will continue to retain ownership of system assets and will retain rate-setting authority, and Veolia Water will manage approximately 117 staff who will remain city employees. In a press release, Buffalo Sewer Authority Chief Financial Officer Oluwole McFoy said, "We expect Veolia Water to move us forward through the next decade with marked efficiency improvements and technological advances while maintaining our exceptional water quality."
- In September 2010, the city of **Hialeah, Florida** awarded a 20-year, \$141.2 million PPP concession to a consortium led by Inima USA for the design, construction and operation of a desalinization plant that will produce 40,000 cubic meters of drinking water per day, enough to serve 150,000 residents. Inima's best and final offer in the competitive procurement included a design-build price of \$55.7 million and an operations and maintenance price of \$85.5 million for the 20-year service contract, according to *Public Works Financing*. Inima's project team includes engineering firm AECOM, general contractor MCM Corp. and operator Severn Trent.
- In August 2010, **Puerto Rico's** Public Private Partnership Authority (PPPA) and the Puerto Rico Aqueduct and Sewer Authority (PRASA) announced that they had received 13 statements of qualifications from consortia interested in bidding on a PPP to automate water meter reading. The project involves the design, development, financing and operation of advanced technology for automated water meter reading, the implementation of a geographic information registry of PRASA customers and the reduction of non-revenue water. According to *Public Works Financing*, the concessionaire would finance the upgrades by retaining a share of revenues recaptured from theft and leakage.
- In March 2010, **Georgia's** State Senate passed a bill authorizing the use of PPPs to build, finance and operate water reservoirs across the state, but the bill later stalled in the House. Senate Bill 381, sponsored by former State Sen. Chip Pearson, would have granted

statutory authority for public entities (including municipalities and the Georgia Environmental Facilities Authority) to partner with private firms to build new water reservoirs or expand existing ones, as well as outlining an evaluation process and other procurement-related rules. "In such difficult economic times, it's imperative to incentivize the private sector to help expand Georgia's water supply," noted Pearson in a press release.

- In October 2010, the **Tulsa (Oklahoma)** Metropolitan Utility Authority approved the hiring of independent financial and legal advisors to examine the potential privatization of the city's water and wastewater systems, according to the *Tulsa World*. The move came after international auditing and management consulting firm KPMG recommended privatizing the systems as part of a larger report outlining over 1,000 city government restructuring and cost savings initiatives released in July 2010. According to the KPMG report, "Much of the City's water and wastewater utility systems are approaching 100 years in age, requiring on-going emergency maintenance activities to maintain operations. [...] Given the age of the City's infrastructure and levels of deferred maintenance, a key opportunity lies in generating revenue through leasing the City's water and wastewater infrastructure to a private partner who would be responsible for financing severely needed capital improvements, as well as adherence to tightening regulatory standards."
- A resolution offered by **Kansas City, Missouri** Mayor Mark Funkhouser that would have allowed the city to explore privatization of parts of its water and wastewater system was held up in City Council during the fall of 2010. According to the *Kansas City Business Journal*, the impetus for the resolution was the need to finance a \$2.5 billion sewer system overhaul, but it was directed to the council's Transportation and Infrastructure Committee, where Councilman Ed Ford told the *Business Journal* that it "was sent there to die, at least for the time being." Mayor Funkhouser told the council in September 2010 that, "[i]t is the private market that is the most creative with how to make money and how to save money," according to NBCActionNews.com.
- **Trenton, New Jersey's** attempt to privatize the suburban portions of the Trenton Water Works utility came to an end after a state Supreme Court decision authorized a public referendum on the proposed PPP, in which voters rejected the plan by a nearly 4–1 margin in June 2010. A coalition of labor unions, environmentalists and other community activists spent over \$225,000 in a public campaign against the PPP, which involved a proposed 20-year, \$80 million sale of Water Works assets outside the city to the private operator American Water. For several years, former Mayor Douglas Palmer has advocated the sale of Trenton Water Works' infrastructure in Ewing, Hamilton, Hopewell and Lawrence townships to generate revenue and transfer the responsibilities for maintaining aging infrastructure outside the city limits, according to the *New Jersey Times*. Mayor Palmer had also included proceeds from the transaction in his budget proposals in 2009 and 2010, but with the failure of the PPP to proceed, policymakers have raised local property taxes each year to compensate for the lost revenue, per the *Times*.

- In December 2010, **Pima County, Arizona** issued a notice to proceed to CH2M Hill on a PPP contract to design, build and operate a new, \$172 million water reclamation plant to serve the city of Tucson. The new plant will replace an existing water reclamation facility and will be co-located with a laboratory complex and a solar energy facility, according to Global Water Intelligence. CH2M Hill provided a 20-year fixed-price performance guarantee, according to *Public Works Financing*, which includes an optional five-year extension of the operating period.
- In November 2010, the city council in **San Jose, California** rejected a proposal to sell or lease its public water utility to the San Jose Water Company, which offered to lease the system or pay the city \$54 million in an outright sale. City officials had explored the possibility of privatizing the utility to help close the city's \$70 million budget deficit, but instead opted to pursue an alternate plan to redirect water system revenues to the city's general fund, according to *The Bay Citizen*.
- In October 2010, **Fulton County, Georgia** selected Veolia Water North America for a five-year, \$58 million public-private partnership agreement to manage and operate the county's four wastewater treatment facilities and 30 pump stations that serve more than 300,000 people, according to a company press release. The Fulton County Department of Public Works also received proposals from Severn Trent and CH2M Hill OMI. Under the partnership, Fulton County will continue to own all system assets and maintain rate-setting authority, while Veolia will be responsible for operations and maintenance of the county's assets using an asset management-based approach that maximizes system life-cycle service. Veolia has operated one of Atlanta-Fulton County's northern water treatment facilities for 20 years.
- In March 2010, the city of **East Providence, Rhode Island** reached agreement with United Water for a 10-year, design-build-operate (DBO) contract for the city's wastewater collection and treatment facilities, which provide service to roughly two-thirds of East Providence's 50,000 residents. The contract calls for United Water to take over operational responsibility for the system, while also implementing \$52.5 million worth of infrastructure and treatment process upgrades necessary to achieve compliance with new state environmental mandates. The PPP is expected to save the city \$13 million over what was budgeted to be spent under a traditional project delivery approach. "What the city and United Water have done is nothing short of spectacular," said East Providence Mayor Joseph S. Larisa, Jr. in a press release. "The city and its residents receive a new wastewater treatment plant, a new pumping station and professional wastewater service, and we retain the right to set our rates and keep jobs for our workers."
- City officials in **Rialto, California** are negotiating a 30-year concession of the city's water and wastewater systems with American Water Operations and Maintenance, a subsidiary of American Water selected by officials in a competitive procurement in 2010. The company's offer includes approximately \$40 million in wastewater capital investments, a

\$30 million upfront payment and approximately \$30 million to defeasing the city's existing facility debt, according to *Public Works Financing*. Any final deal would need to be approved by voters to proceed.

- In January 2010, **Evansville, Ohio** Mayor Jonathan Weinzapfel announced that the city was ending its 13-year PPP with American Water for water system operations and its 17-year PPP with Environmental Management Corporation for wastewater service delivery. There were several issues that precipitated the split, including declining system revenues, legal challenges over sewer outflows, disagreements over proposed rate increases and more, according to the *Evansville Courier & Press*. Steve Titzer, the utility board president, told the *Courier & Press* in January 2010 that “he didn’t deny privatization produced savings in the early years,” but city officials now estimate that they can lower costs up to 20% by bringing the operations in-house. “The Achilles heel of outsourcing is that after private companies have optimized a system, you can do the math and see the savings possible by eliminating their profit, overhead, and since 9/11, insurance costs,” noted one municipal water advisor to *Public Works Financing* in March 2010.
- In June 2010, a 51% majority of citizens in **Novato, California** passed Measure F, a ballot measure affirming the decision of the Novato Sanitary District to contract out the operation and maintenance of the District's new wastewater treatment plant. In July 2009, the District's board voted unanimously to proceed with negotiating a \$15 million, five-year contract with Veolia Water North America, citing over \$7 million in savings over the five-year contract, according to an August 2010 article in the *Marin Independent Journal*. Opponents of this contract gathered sufficient signatures to place Measure F on the ballot, which, had it been defeated, would have nullified the contract between the District and Veolia. Veolia will bear the costs and legal responsibility for compliance with wastewater regulations under the contract, which has been an ongoing challenge for the District in recent years.
- In September 2009 the city of **Prichard, Alabama** renewed the PPP between Severn Trent Services and Prichard's Water Works and Sewer Board after a competitive rebidding process. Under the five-year renewal agreement, Severn Trent will continue to operate, maintain and manage the city's water and wastewater facilities, including collection, distribution, meter reading, billing and customer service functions. According to a Severn Trent press release, the first few years of the partnership has so far brought significant improvements in operations, performance and system maintenance; prior to entering the initial partnership in 2007, the Board had experienced significant operational challenges and was operating under a consent order from the Alabama Department of Environmental Management.
- In July 2010, Veolia Water North America signed a 10-year service contract worth \$688,000 per year to manage a new, \$100 million, state-of-the-art wastewater treatment facility owned by the city of **Hollister, California**. Services included in the PPP include

grounds maintenance, water reuse and recycling, emergency response, odor control, computer management and maintenance systems, laboratory work and management of the septic receiving station.

- In March 2010, CH2M Hill announced the opening of a new wastewater treatment/water reuse PPP project developed in conjunction with the city of **Clovis, California**. The Clovis Water Reuse Facility—which the company will operate on behalf of the city for 10 years—will relieve the demand on underground and surface water supplies and will provide recycled water for irrigation of agricultural operations and urban landscaping throughout the city.

## Part 3

# Indianapolis Spinning Off Water, Wastewater Systems to Nonprofit Energy Utility

In 2010, Indianapolis Mayor Greg Ballard announced that the city would undertake a massive restructuring of the city's water and sewer systems, merging them and transferring ownership to Citizens Energy Group—a non-profit public charitable trust that serves as the regional gas utility—after a competitive procurement that saw over a dozen private sector bidders.

Mayor Greg Ballard's administration sought to merge the two utilities, which were both city-owned and operated under long-term service contracts with separate private water firms. According to the administration, the consolidation would generate hundreds of millions in long-term cost savings that would be used to hold water and wastewater rates down, restructure city debt, generate hundreds of millions to invest in citywide infrastructure improvements and transfer rate-setting authority from a local, politically appointed board to the state public utility commission.

City officials estimate a need for over \$4 billion in investment in the systems by 2025 to maintain current levels of service delivery, in large part to achieve compliance with a 2006 federal consent decree regarding sewer overflows, according to *The Bond Buyer*. With the Citizens deal, valued at approximately \$1.9 billion, the utility will take on \$1.5 billion in city debt related to the water and wastewater systems, and the transaction will free up \$435 million for the city to invest in infrastructure, according to a December 2010 article in the *Indianapolis Business Journal*. The deal will also help contain future rate increases, a key concern of city officials who had projected that retaining public ownership of the two utilities would have necessitated water and wastewater rate increases in excess of 400% in coming years to keep up with the systems' investment needs, according to city officials.

The city's water system was privately owned until the administration of former Mayor Bart Peterson purchased it for \$550 million in 2006 and outsourced operations to Veolia Water in a long-term PPP, while the city-owned wastewater system has been operated under a PPP contract with United Water. Under the new structure, United Water will continue to provide wastewater operations and maintenance services to Citizens under a renegotiated service contract, while Citizens will bring responsibility for water system operations and maintenance in-house. As a

result, the city has agreed to pay Veolia a \$29 million early termination payment for cancelling its 20-year water operations contract—the largest termination fee ever for a water management contract, according to a January 2011 article in *Public Works Financing*.

At press time, the city's agreement with Citizens had been approved by the Indianapolis Board of Waterworks and the consolidated City-County Council and was awaiting regulatory approval from the Indiana Utility Regulatory Commission.

## Part 4

# Urban Land Institute Report Recommends Full-Cost Pricing and PPPs to Close Water Infrastructure Gap

In 2010, the nonprofit Urban Land Institute (ULI) and professional services firm Ernst and Young published their fourth annual infrastructure report, *Infrastructure 2010: Investment Imperative*. The report recommends public-private partnerships and the development of a national infrastructure bank as strategies for solving some of the nation’s major water and wastewater challenges, which include deteriorating facilities and pipes, lack of funds for new or modernized infrastructure, conservation and environmental protection, and sound water management.

The report fundamentally argues that public infrastructure needs to be treated like an investment and a centerpiece of national economic competitiveness, noting that “perhaps no other infrastructure category presents the United States with greater challenges than water. [...] [M]ost Americans assume drinkable tap water will always be available and give little thought to how it gets into homes [...] And no one wants to recognize that upgrading systems is extremely costly.”

Further, the report notes that American taxpayers rarely pay the full costs of water and wastewater infrastructure since federal and state grants and tax receipts often subsidize facility construction. With the true costs of service delivery obfuscated, homes and businesses “tend to use water inefficiently and don’t conserve even though per-capita water demand could outstrip future availability” in high-growth areas of the country, according to the report. Widespread government fiscal pressures threaten to further exacerbate the challenge by tightening already insufficient infrastructure funding even further.

Changing the funding approach, shifting to full-cost pricing, promoting PPPs in infrastructure investment, and creating a national infrastructure bank are keys to solving the water/wastewater challenge, according to the report. It notes that “[p]eople have to start looking at water rates ... not as a tax, but as a fee for service and maintaining necessary systems.”

The authors write that water “offers a largely unexploited opportunity” for PPPs given that rate payment structures are well established and given massive facility investment needs. The report notes that:

*Public/private partnerships don't really change the cost equation for infrastructure—in the end, taxpayers and/or ratepayers must pay for building and maintaining systems. But if properly structured, PPPs can provide some advantages: bringing projects online faster (often at half the time of usual delivery methods), attracting investor capital to finance infrastructure projects, managing systems more efficiently, and employing innovative operating technologies faster than government agencies.*

However, the report also notes that water rates—typically underpriced in most areas—will necessarily need to increase to attract investor interest and make investment feasible. Rate increases will likely be a difficult sell to resistant ratepayers, whether projects are delivered through PPPs or traditional public procurement mechanisms.

## Part 5

# U.S. Conference of Mayors Recognizes Schenectady, New York Water Partnership

In January 2011, the U.S. Conference of Mayors (USCOM) announced that the city of Schenectady, New York and partner Veolia Water North America received USCOM's 2011 Excellence in Public-Private Partnerships Award in recognition of the partnership's biosolids program and significant operational improvements at the city's wastewater treatment plant.

Veolia has two primary responsibilities under the long-term PPP contract. First, it manages the city's compost facilities and product marketing (totaling over 15 dry tons per day). Second, the company oversees the rotating biological contactor wastewater treatment plant, eight pump stations and septage receiving and industrial pretreatment program (which accounts for over 18.5 million gallons per day).

“Since entering into our partnership with Veolia Water North America in 1991, the relationship has been nothing but positive,” said Schenectady Mayor Brian Stratton in a press release announcing the award. “Veolia's global expertise helps identify capital needs within the city's system and helps us address the things that are most vital to the operation and safety of the facilities.”

According to the July/August 2010 issue of *Water Utility Infrastructure Management (WUIM)*, the contract itself was signed in 1991, has been renewed twice, and is set to expire in 2011. *WUIM* traces the roots of the partnership back to pervasive odors plaguing the city of Schenectady during the 1980s, which city officials could not solve despite investing millions to solve the issue. Veolia identified air scrubbers in the composting system as the source of the problem, and was awarded a \$1 million contract by the city to implement the necessary retrofits. The city conducted polling on residents' satisfaction, which ranked highly after Veolia solved the odor issues, and the relationship between the company and city continues to this day.

In other news on water PPP awards:

- The city of **Indianapolis, Indiana** and United Water received two Platinum Peak Performance Awards from the National Association of Clean Water Agencies (NACWA)

in 2010 in recognition of their long-standing wastewater PPP's environmental successes. The awards recognize that each of the city's two advanced wastewater treatment plants—operated by United Water since 1994—achieved 100% compliance with environmental discharge standards in 2009. Further, one plant (the Southport Advanced Wastewater Treatment Plant) has six years of perfect compliance, while the other (the Belmont Advanced Wastewater Treatment Plant) has maintained a perfect compliance record for the last 13 years. Indianapolis Department of Public Works Director David Sherman noted in a press release that, “I congratulate my staff, as well as our operating partner, United Water, for their achievements. This is also a testament to the solid partnership between United Water and the City of Indianapolis, and we are proud of that.”

- In 2010, American Water announced that it had received Directors Awards of Recognition for 24 of its facilities from the Partnership for Safe Water, a U.S. Environmental Protection Agency (EPA) initiative that recognizes water providers achieving treatment standards exceeding those required under federal regulatory mandates.
- In 2010, Kentucky American Water's water treatment plant in **Owenton, Kentucky** received the EPA's Area-Wide Optimization Program award for 2009 from the Kentucky Energy and Environment Cabinet (EEC), which recognizes facilities that reduce the levels of water turbidity below that required by federal and state mandates. Water quality was a significant challenge for the plant under city operation until its sale to Kentucky American Water in 2005, but after significant improvements in recent years the plant is now recognized by the EPA and the Kentucky EEC as completely optimized for turbidity and microbial removal.
- The **La Vergne, Tennessee** Water Treatment Plant was awarded a Water Fluoridation Quality Award from the Centers for Disease Control and Prevention (CDC). The plant has been operated and maintained by Severn Trent Services since 2007 and was recognized for its consistent and professional adjustment of the water fluoride content to the optimum level for oral health for 12 consecutive months in 2008.



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