



Local governments will not solve their water infrastructure problems by privatizing their water systems through public-private partnerships. Although some industry and government officials claim that these deals will help improve water provision,<sup>1</sup> a review of the literature reveals that these arrangements are unlikely to help municipalities finance water improvement projects or control costs. Public-private partnerships often increase costs, worsen service quality and allow infrastructure assets to deteriorate. They are an impractical alternative to traditional public water provision.

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A study of local public service delivery in more than a thousand U.S. municipalities found that from 1997 to 2002, twice as many municipalities ended privatization contracts and began public operation of water systems as privatized their water distribution systems. The researchers explained, "This suggests that a large proportion of municipalities experimented with privatization and found the results unsatisfactory."<sup>2</sup>

#### Defining public-private partnerships for water service

In the water sector, a public-private partnership is a type of privatization wherein a local government contracts with a private entity to run all or part of a government-owned drinking water or wastewater system. These arrangements can take a number of forms, with varying degrees of private involvement. They can involve new or existing infrastructure, and can range in scale from a single treatment plant to an entire water or wastewater system. In general, the longer the contract and the broader its scope, the more control a government transfers to the private entity.

In the United States, a common public-private partnership is an operations and maintenance contract with a two to five-year term. Less frequently, a public-private partnership involves the construction of a water treatment plant. In these cases, a private entity designs and builds a facility, and then runs it for a set period, usually 10 to 20 years. In most cases, the local government retains responsibility for capital projects.



# **Examples of Public-Private Partnerships**

Contract Type	Typical Term	Allocation of Responsibilities
Operations and maintenance (O&M)	2 to 5 years	A company runs and maintains all or part of a utility. The local government owns and manages it and finances improvement projects.
Management	10 years	A company runs and oversees the operation of a plant or distribution system, and the local government owns the system and finances improvements.
Design-Build- Operate (DBO)	10 to 20 years	A company designs and constructs a new facility or upgrades an existing one, and then runs and manages it. The local government owns and usually finances the project.
Lease	20 years	A company runs, manages and makes improvements to an entire utility, and the local government owns the system and finances the improvements.
Concession	20+ years	A company runs and manages an entire utility and finances improvements to it. The local government retains ownership.

#### Public-private partnerships are *not* a financing solution.

Private financing is rare in water-related public-private partnerships because of the private sector's higher capital costs. Public utilities finance projects with municipal bonds, which are generally less expensive than private capital. In the United States, municipal bonds have an average interest rate of 5 percent,<sup>3</sup> while a private water utility's financing typically costs approximately 11 percent.<sup>4</sup> Based on these figures, using private financing instead of public financing would increase the cost of a \$100 million water project by \$90 million over 20 years.

In the United States, municipalities usually want to use low-cost, tax-exempt municipal bonds to finance water-related projects, so they structure public-private partnerships in accordance with specific tax rules that restrict contract terms to 20 years. For that reason, contract terms rarely exceed 20 years.<sup>5</sup>

Long-term water contracts that include private financing, while uncommon, are more frequent outside the United States, but the international experience suggests that public-private partnerships are unreliable. The private managers often fail to make needed capital improvements. For example, none of the five concessions in sub-Saharan Africa delivered the promised level of investment.<sup>6</sup>

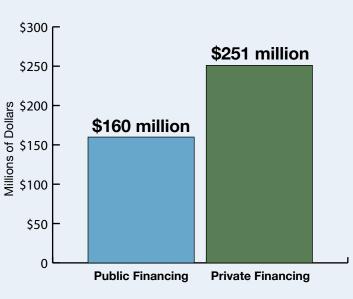




#### Public-private partnerships do *not* reduce costs.

Municipalities should not expect privatization to reduce costs. Empirical evidence indicates that there is no significant difference in efficiency between public and private water provision.<sup>7</sup> In many cases, privatization increases costs. Corporate profits, dividends and income taxes can add 20 to

Total Cost of a 20-Year, \$100 Million Loan



30 percent to operation and maintenance costs,<sup>8</sup> and a lack of competition and poor negotiation skills can leave local governments with expensive contracts.

Municipalities tend to get the bad end of the deal when privatizing monopoly services. For example, many wastewater contracts allow private operators to pass through production costs leaving the local government paying more than it would have with public provision. Private operators also increasingly require public subsidies or guarantees before taking on water projects, especially in underdeveloped countries. 10

In theory, competition would lead to cheaper contracts, but in practice, researchers have found that the water market is "rarely competitive." <sup>11</sup> There are only a small number of private water businesses, <sup>12</sup> and Suez and Veolia, both French multinationals, dominate the market. <sup>13</sup> In the United States, the growing need for expensive improvements to water and sewer systems could inspire corporations to further consolidate and take over competitors in order to have greater access to capital. <sup>14</sup> A lack of competition can lead to excess profits and corruption in private operations. <sup>15</sup>

Poor contract negotiation skills add to this problem. Many municipalities lack the necessary technical expertise to negotiate a complex water privatization contract, particularly one involving private financing. The resulting disparity in bargaining power between the local government and the water company, which is often a large multinational, can increase risks and costs for the public.<sup>16</sup>

### Public-private partnerships can be expensive to implement.

Establishing public-private partnerships for water systems is complicated, expensive and time-consuming.<sup>17</sup> The cost of executing and monitoring a contract can be substantial and erode any potential savings.<sup>18</sup> In total, contract monitoring and administration, conversion of the workforce, unplanned work, and use of public equipment and facilities can increase the price of a contract by as much as *25 percent*.<sup>19</sup> Other hidden expenses, including change orders and cost overruns, can further inflate the price of private service.

Renegotiations also drive up costs. In the United Kingdom, contract changes occurred in a third of all Central Government privatization projects signed between 2004 and 2006 and increased the project costs by an average of £4 million, or the equivalent of 17 percent of the value of each project.<sup>20</sup> A World Bank review of more than 1,000 concession agreements in Latin America and the Caribbean found that renegotiations occurred in three-quarters of the water and sanitation contracts.<sup>21</sup>

Because of transaction costs, public-private partnerships are impractical for both small utilities and large regional water districts. Transaction costs can be prohibitively high for small municipalities. For that reason, the U.K.'s Treasury considers public-private partnerships "not suitable" for projects worth less than £20 million (approximately \$31 million in U.S. dollars). Similarly, given the intricacy of the transaction, the privatization of large water and sewer systems can be especially time-intensive. The U.S. Environmental Protection Agency said, "In the case of extremely large regional facili-

ties with many participating communities the process may become so complex that it would be difficult to implement."<sup>23</sup>

#### Public-private partnerships can worsen service.

There is ample evidence that maintenance backlogs, wasted water, sewage spills and worse service often follow privatization.<sup>24</sup> 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>25</sup>

When private operators attempt to cut costs, practices they employ could result in worse service quality. They may use shoddy construction materials, delay needed maintenance or downsize the workforce, which impairs customer service and slows responses to emergencies. <sup>26</sup> Such neglect can hasten equipment breakdowns and increase replacement costs, which are usually the responsibility of the municipality. In many contracts, private operators can technically comply with their contract terms while effectively shifting upkeep costs to the local government. <sup>27</sup>

A report published by the National Rural Water Association found deterioration of water systems can be "particularly problematic" in long-term contracts. Because 70 to 80 percent of water and sewer assets are underground, a municipality cannot easily monitor a contractor's performance. Consequently, as a researcher for the Global Water Advisory Committee warned, "The effects of shoddy work may not become evident during the contracting period." 29





# Public-private partnerships can lead to job loss.

Government programs aimed at job creation should not allocate resources to or endorse public-private partnerships for water infrastructure. In order to increase profits, private managers usually cut labor costs by downsizing the workforce or scaling back compensation packages, which can worsen service quality.<sup>30</sup> On average, more than one-third of water utility jobs are lost after privatization.<sup>31</sup> Both Fairfield-Suisun Sewer District and Petaluma, Calif., ended contracts and remunicipalized their sewer services to save money, while offering better compensation packages needed to attract qualified personnel.<sup>32</sup>

# Public-private partnerships can reduce accountability.

Private operators usually restrict public access to information and do not have the same level of openness as the public sector. Long-term contracts, in particular, typically reduce accountability and transparency because the nature of the contracts requires projecting needs far into the future, creating terms that are incomplete or riddled with uncertainty. According to the Government of Canada Policy Research Institute, "A lack of transparency protects anti-competitive behaviour and usually results in a loss of efficiency."<sup>33</sup>

### What role should the private sector play?

From developing new technologies to providing construction crews for new treatment plants, the private sector plays an important role in protecting our water resources and finding innovative solutions to the water crisis. Although the public and private sectors work well together in many areas, businesses should not operate, manage or own public drinking water or wastewater systems. Those duties should fall under the purview of local governments, who have a responsibility to ensure safe and affordable service.

It is illogical for taxpayers to subsidize for-profit water service providers, who regularly send profits out of local communities to stockholders. Governments should allocate the limited funding for water projects to publicly owned and operated utilities, which will reinvest the money into their communities.



# Public-public partnerships are a better option.

Instead of privatizing water systems, municipalities can partner together through public-public partnerships. Intermunicipal cooperation, interlocal agreements and bulk purchasing consortiums can improve public services and reduce costs, while allowing communities to retain local control.<sup>34</sup> Public-public partnerships are more equitable than privatization, particularly for rural U.S. municipalities, rife with market failure.<sup>35</sup>

Around the world, public-public partnerships are far more common than public-private partnerships. Public Services International Research Unit has documented more than 130 public-public partnerships in 70 countries. In comparison, only 44 countries have private participation in water services. There is growing momentum in the international community to support public-public partnerships as a development tool for water services.<sup>36</sup>

#### **Endnotes**

- For example, see: Paterson, David A, Arnold Schwarzenegger and Ed Rendell. "The moment for public-private partnerships is now." Huffington Post. June 3, 2009; The National Council for Public-Private Partnerships. "For the good of the people: Using public private partnerships to meet America's essential needs." 2002 at 12; Deane, Michael. National Association of Water Companies. "Addressing America's aging infrastructure." Huffington Post. February 19, 2010.
- Warner, Mildred E. and Germà Bel. "Competition or monopoly? Comparing privatization of local public services in the US and Spain." Public Administration, vol. 86, iss. 3, 2008 at 729 to 731
- Public Administration, vol. 86, iss. 3. 2008 at 729 to 731.
  Bond Buyer Indexes. 20-Bond GO Index. January 1, 2000 to December 31, 2009. Available at www.bondbuyer.com/marketstatistics/search\_bbi.html, accessed February 12, 2010.
- 4 Spelman, Jeff and Mike Isbell. Oklahoma Tax Commission. "Capitalization rate study." April 2009 at 117; American Water Works Association. "Study on private activity bonds and water utilities." June 2009 at 19; Dow Jones Indexes. Historical Utility Index Values from 31 Dec, 1996. January 1, 2000 to December 31, 2009. Available at www. djindexes.com/mdsidx/?event=showCorpBond, accessed February 12, 2010; Organization of Economic Cooperation and Development. OECD Tax Database. Table II.1: Corporate income tax rate. June 19, 2009. For methodology see Food & Water Watch. "Mortgaging Milwaukee's Future: Why Leasing the Water System is a Bad Deal for Consumers." November 2009 at 9 to 14.
- 5 See IRS Revenue Procedure 97-13 (26 CFR 601.6010); U.S. Environmental Protection Agency, Office of Water. "Response to Congress on privatization of wastewater facilities." (EPA 832097-100a). July 1997 at 21 to 22.
- 6 Hall, David and Emanuele Lobina. Public Services International Research Unit. "Pipe Dreams: The Failure of the Private Sector to Invest in Water Services in Developing Countries." March 2006 at 18 to 19.
- Ouyahia, Meriem Ait. Policy Research Initiative, Government of Canada. "Public-private partnerships for funding municipal drinking water infrastructure: What are the challenges?" May 2006 at 2 and 12; Bel, Germà and Mildred Warner. "Does privatization of solid waste and water services reduce costs? A review of empirical studies." Resources, Conservation and Recycling vol. 52, iss. 12. October 2008 at 1337, 1341 and 1342; Pérard, Edouard. "Water supply: Public or private? An approach based on cost of funds, transaction costs, efficiency and political costs." Policy and Society, iss. 27. 2009 at 193 and 197 to 199.
- 8 Association of Metropolitan Sewerage Agencies and Association of Metropolitan Water Agencies. "Evaluating Privatization II: An AMSA/ AMWA Checklist." 2002 at 23.
- 9 Holcombe, Randall G. "Privatization of municipal wastewater treatment." *Public Budgeting & Finance*, vol. 11, iss. 3, Fall 1991 at 29, 32, 33 and 36.
- 10 Ouvahia, 2006 at 30.
- 11 Bel, Germà and Mildred Warner. "Challenging issues in local privatization." *Environment Planning C: Government and Policy,* vol 26, iss. 1. 2008 at 105.
- 12 Black, Roger. Deloitte Corporate Finance. "PPPs and the water sector: Plugging the infrastructure hole." March 2009 at 14.
- 13 Ouyahia, 2006 at 5.
- 14 Fitch Ratings. [Press Release]. "Fitch: Escalating capital costs may lead to consolidation for U.S. water utilities." *Business Wire*. January 23, 2008
- 15 Bel and Warner. "Challenging issues in local privatization." 2008 at 105; Bel and Warner. October 2008 at 1341 to 1342.
- 16 Ouyahia, 2006 at 30.
- 17 Ibid. at 2; Seppälä, Osmo T., Jarmo J. Hukka and Tapio S. Katko. "Public-private partnerships in water and sewerage services: Privatization for profit or improvement of service and performance?" Public Works Management Policy, vol. 6, iss. 42. 2001 at 48.

- 18 Featherstun, Donald G., D. Whitney Thornton II and J. Gregory Correnti. "State and local privatization: An evolving process." *Public Contract Law Journal*, vol. 30, iss. 4. Summer 2001 at 649.
- 19 American Federation of State, County and Municipal Employees, AFL-CIO. "Government for Sale: An examination of the contracting out of state and local government services." Eight Edition. (299-06). 2006 at 2; Martin, Lawrence. Reason Institute. "How to compare costs between in-house and contracted services." March 1993 at 5 to 6.
- Iossa, Elisabetta and David Martimort. Centre for Economic and International Studies, University of Rome. "The simple micro-economics of public-private partnerships." May 11, 2008 at 33.
   Guasch, J. Luis. The World Bank. "Granting and Renegotiating
- 21 Guasch, J. Luis. The World Bank. "Granting and Renegotiating Infrastructure Concessions: Doing It Right." WBI Development Studies. January 2004 at 81; Pérard, 2009 at 202.
- 22 HM Tréasury. "Standardisation of PFI contracts, version 4." March 2007 at 3; HM Treasury. "PFI: Strengthening long-term partnerships." March 2006 at 21; lossa and Martimort. 2008 at 22.
- 23 U.S. Environmental Protection Agency, 1997 at 20.
- 24 For more information, see Food & Water Watch. "Faulty Pipes: Why Public Funding Not Privatization is the Answer for U.S. Water Systems." September 2008.
- 25 Warner, Mildred W. The Century Foundation. "Local government infrastructure and the false promise of privatization." 2009 at 9.
- 26 Smith, Harold J. Raftelis Financial Consulting. "Privatization of Small Water Systems." Rural Water Partnership Fund White Paper, National Rural Water Association. December 23, 2003 at 17.
- 27 Association of Metropolitan Sewerage Agencies and Association of Metropolitan Water Agencies, 2002 at 27.
- 28 Smith, 2003 at 19.
- 29 Rees, Judith. Global Water Partnership, Technical Advisory Committee. "Regulation and private participation in the water and sanitation sector." (TAC Background Papers No. 1). July 1998 at 21; Ouyahia, 2006 at 8 to 9
- 30 Seppälä. Hukka and Katko. 2001 at 46.
- 31 See Food & Water Watch. "Water Privatization Threatens Workers, Consumers and Local Economies." May 2009; Moore, Adrian. "Longterm partnerships in water and sewer utilities: Economic, political and policy implications." Universities Council on Water Resources, iss. 117. October 2000 at 22.
- 32 City Council of Petaluma, Calif. Water Resources & Conservation. 
  "Agenda Title: Presentation, Discussion and Possible Action Regarding Plan for Operation and Maintenance of the Ellis Creek Water Recycling Facility." November 19, 2007 at 18; City of Petaluma. "Regular city council/PCDC meeting." November 19, 2007 at 3 to 4; Fairfield-Suisun Sewer District, Board of Director. "Analysis of the Use of Contract Operations." January 28, 2008 at 44 to 45 and 61 to 63; Fairfield-Suisun Sewer District, Finance Department. "Comprehensive Annual Financial Report for the Year Ended June 30, 2009." 2009 at 5 to 6.
- 33 Ouyahia, 2006 at 17 and 28.
- Bel, Germa and Xavier Fageda. "Between privatization and intermunicipal cooperation: Small municipalities, scale economies and transaction costs." *Urban Public Economics Review.* 2007 at 15, 25 and 27; Doin, Dave. "Public financing and procurement methods." *Water World.* June 2007 at 60; Boag, Gemma and David A. McDonald. "A critical review of public-public partnerships in water services." *Water Alternatives,* iss. 3, no. 1. February 2010.
- 35 Warner, Mildred and Amir Hefetz. "Rural-urban differences in privatization: limits to the competitive state." *Environment and Planning C: Government and Policy*, vol. 21. 2003 at 703, 711, 714 and 715; Boag and McDonald. 2010.
- 36 Hall, David et al. Public Services International Research Unit. "Public-public partnerships (PUPs) in water." March 2009 at 2, 10 and 11.

**About Food & Water Watch:** Food & Water Watch is a nonprofit consumer organization that works to ensure clean water and safe food. Food & Water Watch works with grassroots organizations around the world to create an economically and environmentally viable future. Through research, public and policymaker education, media and lobbying, we advocate policies that guarantee safe, wholesome food produced in a humane and sustainable manner, and public, rather than private, control of water resources including oceans, rivers and groundwater.

