Water Supply Privatization
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Introduction[1]

Water continually crosses political boundaries as it circulates through the hydrological cycle. Locally managed yet transboundary, water raises difficult questions for Canadians within the context of the New American Empire. Responsibility for fresh water in Canada is fragmented, in part because water is a multiple use resource, critical for energy, agriculture, tourism, environmental health and human water supply. Fisheries, navigation, and international waters are federal responsibilities, yet water supply is a provincial responsibility and is usually municipally managed, and is as a result more decentralized than other utility sectors. These governance issues further complicate an already complex debate over how best to meet water quality, environmental protection, and public health goals in an era of public sector fiscal constraints.

The role of the private sector is a particularly emotive and pressing issue in this wider debate, given that private corporations are playing an increasingly important role as builders, owners and operators of water supply systems around the world. Although most water supply systems remain publicly owned, private companies have dramatically increased their market share over the past two decades. As detailed below, several Canadian municipalities have recently signed contracts with private companies for water supply and sewerage management. This increase in private sector involvement has not been without controversy. Advocates argue that the benefits of involving the private sector include improved management and access to much-needed finance. Opponents of private sector involvement warn of decreased accountability, threats to public health, declining service levels and environmental quality. The debate is sharply divided over whether water should be treated as a public good or as a commodity; Canada's largest public services union, CUPE, and the Council of Canadians, have been running sustained campaigns against private sector involvement in the water sector, actively promoted by the Canadian Council for Public Private Partnerships and some government agencies and water supply utilities.

Although the debate over water and North American integration has focused largely on bulk water trading and water exports, the water supply services sector is in fact more integrated and arguably less regulated; any discussion of water and North American integration should thus include consideration of water supply (in distinction from water in its natural state). This briefing note focuses on water supply, and examines forms of private sector involvement and current levels of private sector involvement in Canada and the U.S., before outlining some key issues for Canadians and potential future flashpoints between Canada and the U.S.

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The pressure to restructure water supply utilities

The Walkerton water quality tragedy was a dramatic reminder for Canadians of the consequences of poor governance of water supply systems. After years of relative neglect, Canadians are beginning to focus on the challenges of sustainable water supply (Box 1). Some of the solutions are relatively easy to implement. Improved leakage control methods may, for example, ease the burden on the water supply system, particularly in regions where water is relatively scarce. Poor water quality can be remedied by upgrades in water treatment technology and changes in land use practices. In some cases, however, municipal governments decide that restructuring water supply management is necessary. In simple terms, restructuring changes 'who does what', including: ownership; organizational structure (e.g. integration or separation of water and wastewater services); operational management procedures; scale of operation; governance (allocation of decision-making responsibility and accountability); involvement of stakeholders (e.g. community involvement in decision-making); and regulation.

BOX 1: BARRIERS TO SUSTAINABLE WATER SUPPLY MANAGEMENT

Infrastructural: Supply-side and demand-side

- aging infrastructure
- declining quantity and/or quality of water resources
- increasing unpredictability of water resource availability (related to climate change)
- restricted access to water sources stemming from environmental protection measures
- high and/or rapidly growing per capita demand
- growing population
- consumer expectations for higher levels of service
- high percentage of 'unaccounted for water' (primarily leakage)

Financial

- lack of funding for infrastructure renewals and replacement
- past under-investment in infrastructure renewals and maintenance
- water prices set below sustainable levels (do not support full life cycle cost recovery)
- lack of reliable funding sources
- dependence upon ad hoc government funding

Governance

- inefficient management
- low transparency
- poor accountability
- lack of customer feedback
- lack of managerial autonomy of utility

Private sector participation in water supply management in Canada

Involving the private sector is one option when restructuring water supply provision. The most common business model in Canada is a 'public private partnership' or P3 contract, under which private companies are contracted for a defined period of time (usually less than 30 years) to design, build, operate or manage components of a public water supply system (Table 1, following page). P3s are distinct from privatization, in which infrastructure is sold to the private sector; privatization is rare in Canada, although some small municipal networks have since their inception been privately owned and managed (e.g. White Rock (BC)). Corporatization is another business model in which a water supply utility may adopt many features of private sector management; some municipalities (e.g. Kingston, Edmonton).

P3 contracts for water supply in Canada are concentrated in medium-sized communities, and currently represent a small proportion of Canadian water consumers. Most water supply systems in larger cities in Canada are publicly managed (Table 2, following page), although many municipalities have considered the P3 option. Of Canadian municipalities with populations over 350,000 (2001 census), six follow the 'traditional' municipal services model (Calgary, Montreal, Ottawa, Toronto, Vancouver, Winnipeg). Two others (Halifax and Edmonton) have chosen to corporatize water supply services. Hamilton has chosen a P3 for its water supply systems, and Halifax has opted for a P3 for certain elements of its wastewater treatment system. Toronto and Vancouver recently explored restructuring options (creating a stand-alone corporation in Toronto, and entering into a P3 contract for water treatment in Vancouver), which resulted in heated public debate, after which both municipalities decided to continue with direct municipal management.

Table 1: P3 Contract Types and Allocation of Responsibilities

	Service	**Management**	**Lease**	**BOO/BOT**	**Concession**
TASK					
Asset Ownership	Public	Public	Public	Public/ private	Public
Capital Investment	Public	Public	Public	Private	Private
Commercial risk	Public	Public	Shared	Private	Private
Operations/ maintenance	Public/ Private	Private	Private	Private	Private
Tariff collection	Public	Public/private	Private	Public	Private
Duration (years)	1-2	3-5	8-15	20-30	25-30

Table 2: Water supply business models in large Canadian municipalities

Municipality	**Agency**	**Business Model**
Calgary	Calgary Waterworks	Municipal Utility
Edmonton	EPCOR Water Services	Public Corporation
Halifax (water)	Halifax Regional Water Commission	Public Corporation
Halifax (wastewater)	Halifax Regional Environmental Partnership	P3
Hamilton	American Water Services	P3
Montréal	Public Works, City of Montreal	Municipal utility
Ottawa	Drinking Water Services Division, City of Ottawa	Municipal Utility
Toronto	Toronto Works and Emergency Services	Municipal Utility
Vancouver	Greater Vancouver Regional District	Municipal Utility
Winnipeg	City of Winnipeg Water and Waste Department	Municipal Utility

Private sector involvement in water supply in the U.S.

In order to better analyze the potential implications of deepening North American integration for Canadian's water supply, it is important to understand the diversity of approaches to water supply management in the U.S., where there are approximately 50,000 community water systems: 43 per cent are publicly owned; 33 per cent are privately owned (the majority are small, user-owned or -investor owned rather than publicly traded corporations, and most are domestic rather than multinational companies); and 24 per cent are classified as "ancillary systems" (i.e. serving very small communities such as trailer parks) (NRC 2002). Because most private systems are small, public water systems serve the majority of American households. Moreover, most of these public water systems are publicly run. The National Research Council, in a 2002 study of privatization of water services in the United States, found that 85 per cent of the population was served by publicly-run systems, a figure which had remained stable since 1945.

Private sector involvement in water supply is contentious in the U.S., as witnessed by the debate sparked by the recent decision of Atlanta to cancel its P3 contract – one of the largest in North America. The debate over private sector participation in water supply in the U.S. has received increasing attention in recent years, particularly in light of forecast needs for high levels of capital expenditure to maintain and extend infrastructure networks. Most recently, the U.S. Senate has debated various proposals for a new Water Investment Act (Senate Bills 1961, 2002 and 2813, 2002), in which measures for permitting or encouraging private sector participation in municipal water supply have been considered. This has raised concerns in Congress and the Senate. In response to a request from the Senate's Committee on Environment and Public Works the federal General Accounting Office conducted a comprehensive survey of water supply management, focusing on issues related to privatization in 2002. The GAO study found that U.S. communities require between $30 billion and $1 trillion USD over the next twenty years to repair and expand water supply systems. Although the private sector is one potential source of funding, the report also stressed the importance of public funding mechanisms, including municipal and state bond financing – a major source of funding for municipal water supply systems which is unavailable to Canadian municipalities. Moreover (and unsurprisingly) the report found that "a privatization agreement's potential to generate profit is the key factor influencing decisions by private companies". The likelihood of private sector involvement increasing in the U.S will continue to be strongly influenced by state regulations concerning tendering and contracting procedures: for example, some states restrict the use of particular types of contracts, while other states offer incentives to encourage the takeover of financially troubled utilities.

Key issues for Canadians

The question of whether to involve the private sector in water supply management should never be considered in isolation. Because it is an emotive and politicized issue, privatization may sidetrack debate from the goal of ensuring long-term sustainability of water supply. The three key issues mentioned here are relevant to private sector participation, but are only some of the most important issues facing Canadians' water supply.

- *Financing water supply utilities*

Many municipal water supply systems require large investments over the next two decades to repair, maintain, upgrade and extend infrastructure. In some instances, water supply utilities have an 'infrastructure deficit' – the result of years of under-investment, with negative consequences for water quality and security of supply. Canadian municipalities have fewer options than their U.S.

counterparts. In the U.S., municipal bonds are frequently used as a financing mechanism, often supported at the state level by mechanisms to insure bonds and/or provide matching public funds. Canadian municipalities have been dependent upon transfers from higher levels of government – but these have decreased in recent years. Raising funds through increasing water prices to 'full life cycle cost recovery levels' implies rapid, politically contentious increases in water bills. Accessing finance through the private sector can provide short-term relief to government budgets, but may mean higher bills for consumers in the long run. Private sector finance is not a panacea; Canadians will need to consider when and where private finance is appropriate, as well as mechanisms to assist municipalities that are not sufficiently profitable to be attractive to the private sector.

- *Clarifying the roles of different levels of government*
The question of how to improve the sustainability of water supply management has been addressed in a piecemeal fashion, largely at the provincial level. Although provincial governments bear Constituional responsibility for water supply, the federal government has in the past provided direct subsidies and grants to municipalities. Will the federal government continue to do so? If it does so, should general guidelines on water governance be attached to federal monies (analogous to the health care sector)? Given the overlap between water and public health issues, the federal government sets Drinking Water Quality Guidelines – which are not mandatory. Should these be made mandatory? Should new guidelines on involving the private sector be established? Canada's Water Act was passed in 1970 and last revised in 1985; a much-needed update will require negotiation with the provinces, amongst which consensus will be difficult to reach.

- *Good governance: Accountability, transparency, and public participation*
Improving governance is a key issue for all water supply utilities, whether or not the private sector is involved. In the absence of provincial or federal guidelines on involving the private sector in water supply, the governance of P3s has varied considerably across Canadian municipalities. In some cases, bidding has been non-competitive, and in several cases contracts have not been made public. Ownership of private contractors has changed hands, in some cases more than once. Given the importance of water to publish health, the Walkerton Inquiry recommended that services contracts with external agencies be made publicly available. The report also suggested reporting requirements to municipal councils might also be made at more regular intervals than normal corporate practice. These recommendations are of particular importance given the weakened political accountability that arises under the delegation of utility management to any external agency.

Potential Flash-Points between the U.S. and Canada

This section identifies four potential flashpoints with respect to private sector participation in water supply: deregulation of the water services sector; market concentration in P3s in the water supply services sector; pressure to open up municipal services contracts to external bidding; and transboundary trading of water rights. In addition, it outlines three general potential flashpoints: integrated transboundary watershed management; integration of water, environmental and agricultural policy; and shared groundwater.

- *Deregulation of the water services sector* As U.S. water services firms seek to expand into the Canadian market, Canadians may experience pressure from the U.S. to deregulate the water services sector. Provincial governments may be pressured to enact enabling legislation, force consolidation of service providers, require changes in municipal utility business models, and/or create regulatory

bodies that facilitate the transition to and implementation of P3s (as has occurred in Ontario's electricity sector).

- *P3s: Market concentration in water supply services sector* Globally, there are less than a dozen private water supply companies (multinationals based in France, England and the U.S.) capable of handling large-scale municipal water supply contracts. In many cases, a lack of competition may result in sub-optimal contracts. Moreover, foreign companies regularly out-compete local firms. To date, most of the P3 contracts in Canada to date are run by domestic subsidiaries of foreign firms such as Ondeo (French), or U.S. Filter. This has the potential to become a significant political issue – particularly in the context of a nationalist backlash against integration.

- *Pressure to open up municipal services contracts to external bidding* Greater integration may result in pressureto equalize municipal contracting procedures across North America. This may occur through trade agreement mechanisms; unlike water in its natural state, water supply is considered a good or service in some jurisdictions (e.g. the European Union), and is thus likely to be subject to trade agreement provisions. For example, the argument that exclusive public provision is 'anti-competitive' may be made by private companies in an attempt to force municipalities to open up services contracts to external bidding. This is currently occurring within the European Union in response to pressure from specific governments (e.g. France) where private sector participation in municipal services provision has long been the norm.

- *Transboundary trade in water rights* Albertans have been able to sell water rights since 1999, and there exists a well-developed market in water rights in the south-western US. Most trades occur between farmers, or between farmers and urban areas. Given that precedents have been set in both the U.S. and Canada, and given that private water rights are found in both countries (particularly in rural areas and in the West), pressure to initiate transborder water rights trading may arise. However, in the absence of large-scale integrated bulk water supply networks, these trades would be limited during the 10 to 15 year time frame considered here.

<u>General flashpoints</u>

- *Integrated transboundary watershed management* Many watersheds are shared between Canada and the U.S., but few transboundary cooperative management mechanisms exist. Integration may result in pressure to systematize and integrate transboundary watershed management. This has been the case in the European Union, where a Water Framework Directive specifies basin boundaries and processes for creating river basin management plans. In the absence of over-arching legislative framework such as that existing in the European Union, pressure to integreate transboundary watershed management would raise issues of sovereignty and open up debate over integration of environmental, water and agricultural policy.

- *Integration of water, environmental and agricultural policy* Integration within the European Union has resulted in the development of an extensive body of water legislation. Under the EU's new Water Framework Directive, this body of water legislation has been consolidated, and a new set of principles articulated: management on the basis of watershed rather than political boundaries; tackling diffuse pollution in addition to limiting point source pollution; and integrating environmental and agricultural policy within water management mechanisms. This will have significant consequences; for example, affecting hidden agricultural subsidies via government-

sponsored water supply schemes. Countries relying mainly on rainfed agriculture (Northern Europe) have applied sustained pressure on countries using extensive irrigation (Southern Europe) to reduce such subsidies; a similar scenario might arise between different regions of North America.

- *Shared Groundwater* Groundwater is an 'invisible' resource that has received much less attention than freshwater. Many aquifers are transboundary, and many smaller and rural communities, as well as the agricultural sector, rely on groundwater supplies. Canada lags behind the U.S. in mapping and analyzing the extent and health of its groundwater resources. Shared management of groundwater may become contentious in certain 'hotspots', such as the Washington/B.C. Sumas Aquifer.

RECOMMENDATIONS

Recommendation 1: A political consensus, analogous to that developed for bulk water exports, should be sought on private sector involvement in water supply management, keeping in mind the overall goal of sustainable water management. Political controversy inevitably surrounds the introduction of the private sector into water supply management. The question of 'whether to privatize' is thus more than merely technical; it requires political debate about our worldviews of water, and of society. Debating this issue should not sidetrack Canadians from the overarching goal of improving sustainability of water supply management.

Recommendation 2: Good governance of water supply should be a focus of the debate on how to improve sustainability of water supply management. Based upon a review of relevant Canadian and international documents, a suggested list of good governance principles includes: protection of public health and safety; environmental protection; accountability for stewardship and performance; transparency; public participation; equity; efficiency; and effectiveness.

Recommendation 3: Guidelines for involving the private sector in water supply management should be enacted by appropriate levels of government. These guidelines should address:

- Procedural guidelines: Restructuring should be undertaken as a disciplined, independent policy process, in which all of the available options (including an improved status quo) should be reviewed before selecting a preferred option. The process should be inclusive and transparent, involving all relevant stakeholders, and identifying and quantifying (where possible) costs as well as benefits to entering into a P3.
- Liability and accountability: When considering P3 options, managers of water utilities and the public are concerned about liability, and unsure about accountability. Guidelines on oversight duties and protocols (such as independent performance audits).
- Conflict of interest: Advice obtained from advisers, consultants and managers should be impartial and independent. Corporatization, private sector participation, and privatization generate substantial fees paid to advisors and consultants. Guidelines could include contractual provisions regarding appointments of directors; or changes to municipal bylaws.

Recommendation 4: Municipal contracts with external operating agencies should be required to be made public before they are signed. The municipal government should be required to actively solicit the views of residents before entering into such agreements. This recommendation, made by Justice O'Connor in the final report of the Walkerton Inquiry, was made in part in response to the weakening of political accountability in P3s. Some communities, such as Moncton, have made private sector contracts available to the public.

Recommendation 5: The need for independent regulation and oversight of P3 contracts in water supply at the provincial level should be considered. Without robust regulation, neither public nor private water suppliers are likely to perform well. P3s in Canada are currently regulated 'by contract'. There is potential for cost-savings and improvement in efficiency and effectiveness of regulation through centralization in a supra-municipal regulatory body. Any regulatory framework developed should be applied to all water utilities (above a minimum size), enabling systematic benchmarking and comparisons of performance.

Bibliography

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