PRIVATIZATION OF WATER SERVICES: WHAT'S BEST FOR THE PUBLIC GOOD?

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John Jackson Canadian Environmental Law Association

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PART 1: INTRODUCTION

Access to clean, safe water is essential for the well-being of all people. Therefore, obtaining access to a suitable water source, testing and treating that water, and distributing it to users are essential services for all communities. Unlike other resources, there is no alternative to water.

The Ontario Situation

Ontario has always felt blessed by limitless quantities of fresh clean water. This feeling of living in abundance has resulted in Ontarians being the second highest users and wasters of water in the world, using two to three times as much water per capita as many European countries *(Environment Canada, 1998)*.

But the current status indicates that this blessing is not one that can be taken for granted any longer. Dr. David Schindler, an eminent Canadian ecological scientist, recently concluded, "Unless there is a quick reversal of recent trends in water management, freshwaters will become Canada's foremost ecological crisis early in this century" (*Schindler, p. 26*).

The pollution of Ontario's existing water supplies and ever-increasing taking of water combined with the predicted changes caused by climate change necessitates substantial shifts in the assumptions that we have long made about Ontario's water supplies.

The Continental Situation

Canada and North America appear to have an abundance of fresh water. The Great Lakes alone contain almost 20 percent of the world's fresh water.

But groundwater is being mined at a rapid rate in several major parts of North America. The Worldwatch Institute points out serious depletions of groundwater in the High Plains of the United States (the Ogallala Aquifer), California, the southwestern United States, Mexico City and the Valley of Mexico *(Brown et al, 42)*.

The Commission for Environmental Cooperation (CEC), which was set up under NAFTA, observed that "in 1995, the lack of water in northern Mexico killed crops and cattle, while fish and other aquatic life died from rising salt levels in rivers" (*Commission for Environmental Cooperation*). The CEC concluded that this situation is likely to worsen. These problems led Mexico to ask the United States for alternative water supplies; the United States refused the request.

Water shortages have resulted in numerous schemes for diverting water out of the Great Lakes to other parts of the continent. These have included, for example, a proposal to close off James Bay to turn it into a fresh water lake and divert this water through the Great Lakes to western Canada

and the U.S. southwest. This plan has been brought forward repeatedly. As water sources throughout North America are depleted, the grand plans that have thus far been set aside may become more viable.

Currently, the main calls for water diversions out of the Great Lakes basin are to communities just across the basin's boundaries into spreading suburban communities in Wisconsin, Illinois, Indiana and Ohio *(Bolster & Kershner)*. Already diversions of water out of the Great Lakes basin have been allowed for these purposes to Pleasant Prairie, Wisconsin, and Akron, Ohio.

The Global Situation

As of 1990, experts calculated that each year over 12 million people in the world die because of polluted water, water shortages, and unsanitary living conditions (*Hinrichsen, Robey & Upadhyay, 4*). This number is undoubtedly much higher today.

In 1990, approximately 335 million people in 28 countries were chronically lacking adequate supplies of safe drinking water *(Engelman & LeRoy, 20)*. Experts predict that twenty-five years from now, in 2025, between 2.7 and 3.2 billion people in 46 to 52 countries will be afflicted by on-going water shortages *(Engelman & LeRoy, 20)*. This means that over one-third of the world's population will be experiencing severe water crises.

These numbers do not take into account that 70 percent of water usage is to irrigate food crops *(Clarke)*. This means that water shortages escalate food shortages and the resultant starvation.

These numbers also do not include the predicted water shortages that are now occurring or will be occurring by 2025 in major parts of Asian countries such as China and Pakistan (*Hinrichsen*, *Robey & Upadhyay*, 3).

In addition, these predictions of water shortages do not take into account the impacts that climate change will have. Climate change is predicted to raise ocean levels but decrease the fresh waters in lakes, rivers, and underground in aquifers.

Implications for Ontario

Reduced water supplies as a result of contamination, increased usage, and reduced water quantities will combine to create water stresses within Ontario. Conflicts are bound to rise among water users within Ontario. Confidential briefing notes to Ontario's Minister of the Environment in 1999 warned the Minister of potential conflict if the drought in southern Ontario continued: "Tributary flows have decreased and concern is developing that groundwater levels may be decreasing. If below average precipitation amounts persist, conflicts between competing uses for Ontario's inland water can be expected to occur" (*Mittelstaedt, October 15, 1999*). Ontario's Environmental Commissioner stressed this potential for conflicts over water in a report in January 2001 (Environmental Commissioner of Ontario, 2001, 7).

Ontario could experience significant decreases in the waters in the Great Lakes as a result of diversions of Great Lakes waters to other parts of the continent. Generally the estimate of impacts on water levels across the Great Lakes from a 24,000 million litre per day diversion anywhere in the Great Lakes is a decrease of 0.15 metres (*Michigan House Marine Affairs and Port Development Committee, 30*). A diversion of this size would be small in comparison with the thirst that major areas of the United States and Mexico may experience.

The premiers of Ontario and Québec and the governors of the Great Lakes states just spent a year and a half putting together an agreement to develop a new regime for controlling water diversions and uses. This agreement was signed as an annex to the Great Lakes Charter in June 2001. The debate that occurred while they were creating this annex showed the wide differences in views among the governments around the Great Lakes in their acceptance of the principles of ecosystem protection, restoration, and conservation. These debates are bound to continue and will have major implications for Ontario.

There is now talk of developing a continent-wide energy plan among Canada, Mexico and the U.S. *(Toulin)*. It is feasible that such a continent-wide plan may some day be discussed for water, particularly because many of the international water companies have close ties with major energy companies. This would also have major implications for Ontario's ability to control water supplies within the province.

Ontario will not be able to stay aloof from the growing water crises in distant parts of the world. Calls for water from Ontario to be shipped to other parts of the world are likely to increase.

In 1998, a plan by a Sault Ste Marie company, the NOVA Group, to ship water by tanker from Lake Superior to Asia received approval from the Ministry of the Environment. When knowledge of this came out, it set off alarm bells in Ontario and throughout Canada and the U.S. The Ministry quickly withdrew the water taking permit. When Nova appealed to the Environmental Appeal Board to retain its permit, the Canadian Environmental Law Association, Great Lakes United and many other organizations, including government agencies in the U.S., supported the Ministry. The company eventually withdrew its appeal.

Other such plans are likely to surface to sell water to distant places. The proponents in those cases may not be as easily stopped. Already companies are experimenting with methods to more cheaply ship water around the world through mechanisms such as bladders dragged along behind ships.

The problems with water supply have been presented thus far only from the perspective of human needs. What are the impacts of water shortages and contamination on wildlife, plant life and the planet's natural cycles? Human beings now use more than half of the Earth's accessible water supply *(Postel, 10)*. This percentage will increase as water problems increase. No one

knows the extent to which this will interfere with non-human users of the earth's waters and with biodiversity.

Findings

At the regional, continental, and international levels, water quantity and quality problems will become an increasingly serious issue that Ontario will be forced to address. This means that Ontario must be in a position to address these problems regionally and internationally in a way that protects the public interest.

One of the questions that must be confronted is: What are the structures that will put the Ontario government and the people of Ontario in the best position to make decisions on these matters? As will be discussed later in this paper, who owns and operates Ontario's water supplies and systems has serious implications for our ability to address these issues.

PART 2: PRIVATE SECTOR OWNERSHIP AND OPERATION OF WATER SUPPLY SYSTEMS

The ways in which private companies can be involved in the water supply and delivery system vary. The most common are for municipalities to contract with private companies to design and build water treatment plants, to clean out water mains or carry out other maintenance activities, and to buy technologies from private companies for water filtration and other kinds of water treatment methods. These types of private sector involvement in the municipal water supply and delivery system are not considered to be forms of privatization because the municipality simply purchases a clearly defined service and maintains total ownership and daily control over operations.

The forms of privatization that are either in limited use or have been considered by municipalities in Ontario and Canada are private ownership of the entire system and public-private partnerships. The latter take the forms of private financing; private construction, operation and maintenance; and private operation and maintenance.

Even though public-private partnerships do not result in a private company completely and permanently taking over a water system, public-private partnerships are forms of privatization because daily control over the operation is turned over to a private company and many of the decisions about the nature and operation of the system are made by a private sector company.

The Transnational Private Water Industry in North America

Large transnational corporations based mainly in Europe are targeting North America for business. The two largest, Suez (Suez Lyonnaise des Eaux), and Vivendi Environment SA, are based in France.

Vivendi Environment SA operates water services in over 100 countries. It is involved in water delivery and treatment, energy, and waste management. In 1999 it made a major inroad into North America when it bought United States Filter (USF), the largest water company in the U.S. Through USF, Vivendi Environment's focus on municipal and industrial water services has been strengthened *(Deutsch)*. USF has contracts for operation of water systems with Moncton, New Brunswick, and Goderich and Haldimand-Norfolk in Ontario.

A relatively new entrant into the world water industry is Texas-based Enron. Until recently, Enron was mainly an energy company, but it expanded into water through Azurix, which became the owner of Wessex Water of England. A major focus of Azurix activities is buying, selling, storing, and transporting water in the western U.S. Azurix has its main presence in Canada through a contract with Hamilton. Enron is planning to get involved in Ontario's energy generation market as soon as the Province's plans for deregulating the electricity industry go into effect (*Anderson*). Azurix has just signed a ten-year contract to operate the Lake Huron and Elgin Area water supply system, which services London, Ontario.

Companies that own and operate gas pipelines in Canada have also been trying to get into the water business. They see their knowledge of pipeline installation and operation, and their control over pipeline right-of-ways as giving them strong potential to divert and deliver water over vast distances. For example, TransCanada Pipelines unsuccessfully tried to sell a plan to pipe water from Georgian Bay to Halton, Peel, Waterloo, Wellington, and York Regions *(TransCanada Pipelines)*. When York Region was developing its long-term water supply plan, one member of the industry consortium that they worked with was Consumers Gas.

The objective of these and other companies in the water business is to increase their share of the Canadian water services market. One strong indication of this is that for two consecutive years international summits of the water companies were held in Toronto. The Reason Foundation and the Center for Business Intelligence, both of which are major promoters of the privatization of water systems, sponsored these summits.

Increasingly water and water services are being treated as commodities to be traded. For example, the website <u>www.waterbank.com</u> is an internet site "dedicated to creating a broad marketplace for buying, selling, trading, and marketing of [among other items]: water rights, water utilities, property and water, bulk water, and spring water.

The major water companies want to transform the provision of water from a public service to a private business opportunity. Speaking at a conference on water and markets, John R. "Woody" Wodraska of Azurix lauded the growth of major private water companies and the movement to water privatization as a way to move "competition for water" from the "political arena" to the "market arena." He said that this means switching the decision-making factors from "votes and political influence" to "dollars and economic influence" (*Wodraska, 2000*).

The Ontario Government's Promotion Of Water Privatization

The Common Sense Revolution, the campaign platform for the Conservative Party during the 1995 election campaign, said, "History has shown that the private sector can use such assets [government assets] more efficiently and provide better services to the public." Since taking office in June 1995, the Conservative government has made legislative, policy, and funding changes to encourage the privatization of water services.

The financial reductions at the Ministry of the Environment, the downloading of responsibilities to municipalities, and reduced financial support programmes for municipalities have combined to create a crisis mentality among some municipalities around water services.

One way out of this crisis that is being increasingly promoted is to turn to the private sector to provide the services and financial resources to provide water that the province used to provide.

Although these government initiatives have been furthered in many areas, no irrevocable decisions with respect to the privatization of water have yet been made.

Findings

A few large transnational corporations are moving to develop business opportunities in the North American water services sector.

The big water companies are buying out smaller companies, increasing their control over the industry. They are also conglomerates, simultaneously controlling a wide-range of services, including energy and garbage as well as water.

These companies want to turn a previously publicly provided service into a private business opportunity.

These companies make decisions about the provision of water on the basis of private income and profit levels as with any other business, rather than on the basis of provincial and local public objectives.

The Ontario government supports the privatization of many services, including water services, but has not yet made any irrevocable decisions on this matter.

PART 3: PUBLIC OR PRIVATE? WHICH SUITS OUR NEEDS?

This paper uses five criteria to assess the relative appropriateness of the options for ownership, financing and management of Ontario's water supply system. These criteria are: security of supply, ensuring quality, environmental protection, accountability to the public and public involvement, and full and fair pricing of water. In this part of the paper, we apply each of these criteria to bring us to a conclusion on the appropriateness of privatizing Ontario's water systems.

Security of Supply

Access to water is a basic need for all people. It is essential for a wide range of users: householders, industry, businesses, agriculture, and institutions.

Does privatization have any impact on the availability of adequate supplies of water? The best time to answer that question is during a period of crisis. Is the water supplier prepared for such situations?

Experience in the U.K. after the water systems were privatized raises alarm bells about the impact that privatization can have.

In 1988, the U.K. government passed legislation that put the water systems in England and Wales into the hands of private companies. In 1995, parts of the U.K. experienced a drought. In some parts of the country the shortage of water for drinking and sanitation needs was so severe that water had to be trucked in. This operation was so large that it took almost all of the food-grade trucks to provide enough water in northern England, especially in the Yorkshire area. Even at Christmas, long after the drought had ended, some consumers still had to collect water from standpipes.

The regulatory agency responsible for overseeing the water industry, the Office of Water (OFWAT), concluded that Yorkshire Water PLC's serious failure to ensure a reliable and continuous supply of water, as well as to control leakage and flooding from sewers, was related to the company's dividend policy (*Lobina & Hall, 22*). To make more profit, the company had failed to make adequate investment in the system.

In addition, "the companies were not trusted by the public, and were perceived as greedy. As a result, the public were less willing to make sacrifices to conserve water, when the companies had clearly made no sacrifice at all" (*Lobina & Hall, 22*). For example, Yorkshire Water imposed bans on watering gardens, while making 7.2 million pounds by selling off water in reservoirs that could have supplied the needed water (*Today*).

In Canada, we can expect increasing water crises in the future, including possible shortages. As the Ontario Ministry of the Environment and Ontario's Environmental Commissioner have noted, conflicts are already arising in Ontario over access to water supplies (*Mittelstaedt, October 15, 1999; Environmental Commissioner of Ontario, 2001, 7*). These problems are expected to escalate dramatically as the impacts of climate change are increasingly felt.

Private companies are not the appropriate bodies to make the decisions that must be made in such situations of conflict.

In addition, as we undergo increasing stresses, long-term knowledge of the water supply system becomes even more critical to be able to make the appropriate adjustments to changes. Private companies rarely are stable in their ownership and management over the long or even short-term. For example, Hamilton made a public-private partnership with a local water company, Philips Utilities Management Corporation, in December 1994. In May 1999, the local company was bought out by the Texas-based company Azurix. In 2001, there are again discussions of the contract being sold to another company. It has been noted that "The RA (Regional Authority, the Regional Municipality of Hamilton-Wentworth) faced new types of financial and operating risks from the instability of its private partner which it would not have faced had it continued to operate the utility itself" (Anderson and Loxley, 14).

Private companies motivated by the need to make profit are much less likely to make the investments in infrastructure and to put into place conservation measures to reduce water use than is a public body whose motivations do not include having to make a profit. This is discussed further in *Accountability to the Public and Public Involvement* later in this part. If such actions are not taken, we will not be prepared for these crises.

In order to ensure access to water as the water supply situation goes through dramatic changes over the next fifty years, public policy will have to play a strong role. Would privatization affect the development and implementation of such policies?

To the extent that transnational water companies gain an interest in Ontario's water supply and delivery system (either through actual ownership of water systems or through long-term publicprivate agreements with municipalities), they will play a stronger role in affecting the content of those policies. Also, since many of these are also energy companies and have oil and gas pipeline corridors across North America, they may well try to develop similar continent-traversing networks of water pipelines.

The transnational companies are sure to lobby strongly for policies that encourage and facilitate the free movement of water to places where it will bring the biggest profits. They are sure to lobby for a weakening of Ontario's *Water Taking and Transfer Regulation*, which prohibits the transfer of water from the Great Lakes-St. Lawrence River, Nelson, and Hudson Bay basins. They are also sure to be major lobbyists for a continental water plan, which would result in the wholesale movement of water from Ontario to the southwestern U.S. (*Reguly; Diebel*).

Ensuring Quality

Neither a publicly nor a privately owned or operated water treatment utility can guarantee safe potable water. Things can go wrong and drinking water quality can be compromised. The question really is one of whether a public or private regime would provide more assurance of safe drinking water.

There are a number of reasons to suggest a public regime would provide a greater assurance to the Ontario public. First, as noted below, a public system provides better opportunity for financial resources to maintain and operate the facility. While public water treatment systems can be criticized for not spending sufficient resources, they certainly do not have the additional obligation of ensuring a profit margin for the shareholder.

As is also mentioned below, public systems tend to promote a greater security in the quality of the water because publicly owned and operated systems tend to be more accountable. Operators cannot hide behind a business contract; their actions and performance are directly linked to officials who must explain if there is a problem or poor quality. In addition, public systems are more likely to be familiar with the body of laws and regulations for protecting drinking water and have the ability to consult with regulators as needed.

There is also another context to the notion of accountability. Private utilities are not designed to protect the more general public interest; they are interested in a reasonable return on capital for their shareholders. Public facilities have a greater tendency to be more sensitive to public concerns and indeed may decide to take a more precautionary approach if it is deemed to be in the public interest. In other words, public facilities may make decisions that are proactive and responsive to the community even though they may not, at least ostensibly, be the most cost-effective business decision and be strictly required by regulations.

For example, Health Canada has been warning us about the dangerous health effects of chlorination by-products such as trihalomethanes (*Riedel, Tremblay & Tompkins, 282*). Because of this concern, some municipalities have put in ozonation water treatment systems to reduce their use of chlorine. Water companies are highly unlikely to put in treatment systems such as this that go beyond the regulatory requirements.

Finally, public facilities tend to promote the security of quality because there is a greater potential for the development of a safety culture within the institution. This safety culture can arise because the operation is seen as delivering an essential resource (as opposed to a commercial product) and as such understands its mandate to be broader than a private enterprise. This safety culture affects the attitudes of the employees, expectations in terms of training, and the overall expectation of performance. Of course, this is not to say that all public facilities have achieved this goal of a safety culture, but certainly the opportunity to develop one is present.

Environmental Protection

The major environmental harms caused by our water supply system are the impacts from taking water out of the natural ecosystem to be used by people.

Letting water flow wherever it belongs on the Water Planet is a key part of the wisdom of natural capitalism. For as Carol Franklin of the landscape architecture firm Andropogon puts it, water is not, as most civil engineers assume, mere gallons of H_2O , to be taken

away as quickly as possible in large concrete pipes. Water is *habitat*. Water is life. (Hawken, Lovins & Lovins, 233)

Wasteful use of water may result in lowering of water levels – especially from groundwater sources. The WorldWatch Institute warns that we are already withdrawing water far faster than it can be recharged, "unsustainably mining what was once a renewable resource" (*Abramovitz*, 31). This means that the water needed by future generations and by wildlife may not be available.

We also often divert water from its natural path in order to allow on-going growth in areas that do not have access to enough water or that have contaminated their local water supplies. This has negative effects on all downstream users, including wildlife. For example, at one point TransCanada Pipelines was proposing to divert water from Georgian Bay to supply water to York, Peel, Halton, Wellington and Waterloo Regions (*TransCanada Pipelines*). Ontario Hydro objected to the proposal because they were concerned that it could lessen the flow of water over Niagara Falls and affect their ability to generate power. In addition, several environmental groups, including the Georgian Bay Association, the Safe Sewage Committee, the Canadian Environmental Law Association, and Great Lakes United, objected to the proposal on environmental grounds.

To lessen the negative environmental impacts of our water withdrawal and supply systems, we must reduce our use of water and learn to live within the means of our local water supplies. This means putting a major focus on water conservation programmes. As Hawken, Lovins and Lovins state,

The answer to decreasing supplies of freshwater is not to try to supply more... At home and abroad, with water as with energy, the only practical, large-scale solution is to use what we have far more efficiently (*Hawken, Lovins & Lovins, 213 & 214*).

Many small private firms are involved in water conservation activities, such as selling low flow toilets, better irrigation systems, etc. But the transnational firms interested in owning, financing or operating a municipal water system are not involved in the water conservation field. A company that makes its income through the sale of water loses profits if water conservation increases. As a result, such companies will only pay lip service to promoting water conservation. For example, Suez does not even mention water conservation in its year-end report for 2000.

The experience in York Region provides an example of how the private sector approach does not result in the environmentally preferable solutions.

In 1996, York Region placed responsibility for developing its long-range water supply plan in the hands of a consortium of private water companies called Consumers Utilities (Enbridge, formerly Consumers Gas, and NWW Canada, a subsidiary of the major British water company North West Water). The first plan that they presented to York Region reflected the tendency of water companies to look for the major engineering solution, which is most disruptive to the

environment. They proposed to build a pipeline from Georgian Bay to supply water and then discharge sewage through another pipe into Lake Ontario. After considerable public opposition, York Region rejected the plan. Natural Resources Canada criticized the proposal because it rejected environmentally preferable local solutions such as use of groundwater supplies *(Natural Resources Canada)*.

York Region later developed a long-range plan that put much more emphasis on water conservation and rejected the big pipe solution. York Region included a role for Consumers Utility in the water conservation or water-use efficiency part of its programme. This was a contract to carry out specific tasks for the delivery of which the company would be responsible *(Regional Municipality of York).* It is important to note that Consumers Utilities was not to own the water delivery system and, therefore, its income would not be based on the amount of water sold.

Pricing is one of the tools in an effective conservation strategy. A system in which residential and non-residential water users are charged at a higher rate per unit as they use more water known as increased or inverted block rates is a major incentive to conserve water. But private water companies use the opposite kind of system for setting water prices: charging water users a lower rate per unit as their water use increases (declining block rates). They prefer this approach because it encourages water users – especially industry – to use more water.

Accountability to the Public and Public Involvement

Access to water is a crucial service that householders, industries, business, and agricultural operations must be able to count on being available to them at all times and in high quality. It is not a commodity that we can choose to use or not, but a vital life-giving force. Therefore, its supply and delivery must be carried out in a manner that is accountable to the public and that allows for public involvement in decision-making affecting its availability and quality.

Henry Mintzberg, a management professor at McGill University, contrasts the expectation he has in the delivery of services such as this with the items he purchases from private businesses:

Business is in the business of selling us as much as it possibly can, maintaining an arm'slength relationship controlled by the forces of supply and demand... Sellers inevitably know a great deal more than buyers, who can find out only with great difficulty. In other words, the private ownership model, much as it provides "customers" with a wonderfully eclectic marketplace, does have its limits.

I am not a mere customer of my government, thank you. I expect something more than arms-length trading and something less than the encouragement to consume. When I receive a professional service from government – education, for example – the label *client* seems more appropriate to my role.

But, most important, I am a *citizen*, with rights that go far beyond those of customers or even clients (*Mintzberg*, 77).

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Can private companies have their primary accountability to the public? Two public administration professors at the University of Southern California, Stephen Morgan and Jeffrey Chapman, reviewed more than 45 studies on the privatization of public utilities. They concluded that private companies work well in competitive environments, but their performance diminishes in services such as water, which is a natural monopoly. They conclude that private water utilities ...

... are accountable to two groups, neither of which directly represents their customers. First, they are accountable to shareholders, whose interest is in maximizing profit and who likely do not live in the communities served. Second, they are accountable to a public regulatory body whose purpose is to represent the interests of the citizens, but may be hundreds of miles away ... and often provides a poor substitute for marketplace discipline or ballot box accountability (*Morgan & Chapman*).

A prime example of this approach came out in testimony at the *Walkerton Inquiry*. The private lab that was testing the water saw the Public Utilities Commission rather than the public as its customer. After all it was the PUC that paid its bills. Therefore, it did not notify the Ministry of the Environment when it found problems with the water supply.

Public accountability and public involvement cannot be effective unless there is a transparent decision-making process and unless the public can easily gain access to information. When there is private ownership of a water system or even a public-private partnership, this sort of openness is inevitably diminished.

The public does not have access to the private boardrooms where decisions are made that affect the operation of the water system and future plans for the water system. Indeed, the boardroom where those decisions are made is highly unlikely to even be in the community because the company is transnational.

Likewise private companies are used to operating in an atmosphere where they do not release all of their information. Therefore, gaining access to reports can be a major struggle for a citizen.

The experience in Hamilton since 1995 illustrates the difficulties in having public accountability, public input into decision-making, transparency, and access to information when a public-private partnership has been set up.

Since 1995, the public in Hamilton has had extreme frustration and difficulty with the publicprivate partnership between Hamilton and Philip Utilities Management Corporation, which is now owned by Azurix. It has been almost impossible for the public to get access to testing results for drinking water quality; there is no consultation with the public by the company operating the plant; the annual performance review required by the contract is not made available to the public. When there have been spills of raw sewage into Hamilton Harbour or when sewage has backed up into people's homes as a result of failings at the sewage treatment plant, alarmed citizens have had great difficulty holding anyone responsible because the municipality and the company have simply pointed fingers at each other. *(Anderson & Loxley)*

New South Wales, the most populous state in Australia, had a separate water corporation for Sydney. After problems with water contamination, the New South Wales government changed the legislation to turn the Sydney Water Corporation into a statutory state-owned corporation with more accountability to a Minister. The amendments also provided the Minister with greater powers to access information and to direct the corporation on the grounds of urgency, public health and safety (Concerned Walkerton Citizens & Canadian Environmental Law Association, 83).

Full and Fair Pricing of Water

Recouping all of the costs of the system: The principle here is that the users of water should pay all of the costs of the system. This means, for example, that we should move away from situations were the users pay less than the total cost because of grants and subsidies that municipalities often receive from provincial and federal governments to support their systems. Water users in municipally owned and operated systems frequently pay less than the full cost.

By contrast, in private sector operations, users pay more than the full costs of the system because profits are added onto the costs charged to water users. These usually are about ten percent of the costs charged to users (C.N. Watson and Associates Ltd., 7-11).

Full cycle funding: Full cost pricing of water ensures that water is priced in a way that all the costs of the system are recovered, including collecting money to invest in continually renewing and upgrading the system.

When water systems are turned over to private ownership, the experience has been that there is no guarantee that the long-term investments needed to maintain and upgrade the system and plan for the future will be made – even if these costs are put into the pricing structure.

For example, in the U.K. the OFWAT, which regulates water rates, allows a water company to include predicted capital expenditures in justifying its water rates. But OFWAT discovered that the companies were routinely overestimating how much they would actually put back into the system and using the shortfall in expenditures to increase profits (*Lobina & Hall, 10 & 11*).

One of the reasons that Pekin, Illinois, decided to buy back its water system from the private company it had sold it to was this failure to make the proper investment in the system. Richard Hierstein, the city manager of Pekin, said, "The system is not in good condition and they have not invested as they should have done, but have raised the rates as if they have."

In the case of public-private partnerships, the municipality may be able to keep more control over rate structures and over the use of the money to ensure that long-term needs are being planned. However, some of the money that water users pay in this situation that could have gone towards a reserve fund for future infrastructure expenditures will instead go to the private company's profits.

Reasonable Cost: Gary Scandlan of C.N. Watson and Associates Ltd. conducted a background study for us on capital financing and operating costs of water systems. He concluded:

Capitalization of the assets, higher overall interest costs and return on investment may cause the overall costs to be considerably higher [when the water system is financed or operated by the private sector] than the present costs paid by consumers (*C.N. Watson and Associates Ltd.*, 9-5).

The experiences in other countries where water systems have been privatized confirm this conclusion.

A 1995 study compared the costs of water provision between Swedish and U.K. cities of comparable size. On average, the municipally-owned Swedish water systems had operating costs that were just under half the operating costs of the privately-owned U.K. systems. The capital maintenance costs for the municipally-owned systems were only 20 percent of the costs of the privately-owned systems (*Lobina & Hall, 16*).

In France, home of the largest private water companies, municipalities own the water infrastructure, but many of them contract out management to private companies through long-term franchises. Average water charges in those systems managed by private companies are 30 percent higher than the charges in the systems that are publicly managed *(Bedard, 19)*.

Equitable Access to Water: All people must have access to water in order to survive. This means that no one should be denied access to water because they cannot afford it.

Privatization has consistently resulted in increased water prices. It is for this reason that several Canadian municipalities, including York and Halton Regions, Thunder Bay, Montreal, Edmonton, and Nanaimo, dropped thoughts of privatizing their water systems or of entering into public-private partnerships.

Several municipalities in the U.S. that had privatized their systems are now trying to get out of the agreements or to buy back their system, primarily because of concerns about increased water rates. These include Pekin and Peoria in Illinois, Chattanooga in Tennessee, Lexington in Kentucky, Huber Heights in Ohio, and Joplin in Missouri. Recently, voters in Birmingham in Alabama, Nashville in Tennessee, and Orange County in California have refused bids by water companies to buy their water systems (*Canadian Union of Public Employees, 2001, 59&60*).

The increases in water rates that usually accompany privatization may threaten the ability of poorer people to have access to sufficient water for drinking and for hygiene.

After privatization of the water systems in England and Wales, water prices doubled between 1989 and 1993. In some cases water prices rose 77 percent over that period while company profits rose by 70 percent (*Daily Mirror*). The number of people whose water was cut off because of non-payment of their water bills increased from 480 in 1989 to 21,282 in 1993 (*Harper*). The British Medical Association expressed alarm at the health effects on children in families forced to cut water usage to save money. Due to reduced hygiene, they saw increased incidents of dysentery, hepatitis A, and clothing (body) lice (*Save the Children*).

In reaction to this crisis for the poor, the government curtailed the right of companies to disconnect people from their water supply. The companies then started using pre-payment meters for customers unable to pay their bills. In 1998, new legislation made disconnections and pre-payment meters illegal (*Lobina & Hall, 21 & 22*).

The U.K. experience is a particularly dramatic example of how increased prices to support the profits of private companies can severely affect the poor and reduce equity in access to needed water supplies.

Promotion of conservation: As was pointed out earlier in this part of the report under "Environmental Protection," private companies usually do not institute pricing structures that promote conservation because this does not support the private company's interest in making more money by selling more water.

Conclusion

Our criterion-by-criterion analysis has shown that there are no criteria for which the private sector has an advantage over the public sector in providing water services. The analysis has also shown that in most of the criteria the public ownership and management option has a clear advantage. This has applied both to outright private ownership of the entire system and public-private partnerships.

Public opinion polls have consistently found that the Ontario and Canadian public overwhelmingly prefer public ownership and control of water systems over private ownership. For example, a poll of Ontario residents in 1996 asked "Who should control water systems?" Seventy-six percent said municipal officials; 19 percent said private agencies, and 6 percent gave no response (*Insight Canada Research*).

An Ekos poll in January 2001 asked: "Overall, do you think the public ownership and operation of water services is generally a good thing or generally a bad thing?" Seventy-six percent said it

was "a good thing"; 11 percent said "a bad thing"; 10 percent had no opinion (*Canadian Union of Public Employees, 2001, 61*).

Despite this strong public support for public ownership and operation of water systems, the Ontario government has taken actions since 1996 to make it easier to privatize municipal water systems.

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