

Chapter 10 The Role of Municipal Governments

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Chapter 10 The Role of Municipal Governments

10.1 Introduction

In this chapter, I discuss issues relating to the owners of municipal water systems: municipal governments.¹ I begin by examining the role of municipal government in providing drinking water, including the options available to municipalities in relation to their water systems in light of the recommendations in this report. I then discuss financial issues relating to municipal water systems. Finally, I discuss the involvement of the private sector in the provision of drinking water and the role of the Ontario Clean Water Agency (OCWA).

In making the recommendations in this chapter, I have considered the following general objectives:

- public accountability for decisions relating to the water system,
- effective exercise of the owner's oversight responsibilities,
- competence and effectiveness in the management and operation of the system,
- full transparency in decision making.

10.2 The Role of Municipal Governments

10.2.1 Overview

A number of the recommendations I make in this report will put new burdens on municipalities with respect to their water systems. The purpose of this section is to outline some of the issues that may arise for municipalities and to suggest available options regarding the management and operating structures they adopt

¹ The vast majority of consumers supplied by communal water systems in Ontario are supplied by municipally owned systems; therefore, I refer throughout this chapter to "municipal" water systems. However, I intend to include within this term all owners of water works that serve municipalities. My use of the term "water system" is intended to refer to all of the physical components of a water supply system, including water supply facilities, treatment facilities, storage reservoirs, the distribution network, pumping stations, etc., serving a defined population.

for their water systems.² I specifically recommend that municipal decision makers review the available options with reference to the recommendations in this report. I also recommend that the provincial government support the municipal review process by offering guidance and technical assistance. Finally, I recommend that those responsible for exercising the oversight responsibilities of the municipality, as owner, be held to an explicit standard of care under the *Safe Drinking Water Act* that I propose in Chapter 13 of this report.³

10.2.2 Municipal Responsibility for Water Systems

Water systems in Ontario have been owned and operated by municipalities or other local institutions for well over a century. Local decision makers have governed the delivery of water services from the early days of the industry.⁴ About 8.9 million Ontarians – 82% of the population – receive their drinking water from municipal water systems.⁵ The systems range from single groundwater supplies to large networks of treatment plants and distribution systems.

² I use the term “management and operating structure” throughout this chapter to refer to the overall structure that municipalities adopt to ensure the sound management of the water system; however, the use of this term should not be viewed narrowly. Municipalities may wish to consider broader issues of accountability and governance in relation to the water system, especially regarding how the municipality carries out its oversight responsibility.

³ Some of the recommendations in this chapter may also be appropriate for municipal sewage systems, given the connection between water and sewage services in many municipalities. In light of the mandate of this Inquiry, however, I generally do not make reference to sewage systems.

⁴ The first communal water and sewage systems in Ontario were built in the mid-1800s. Municipal ownership and operation of these systems came about after the passage of the *Baldwin Act* in 1849. See Ontario Sewer and Watermain Construction Association, 2001, “Drinking water management in Ontario: A brief history,” Walkerton Inquiry Submission.

Today, municipal authority to provide water services arises from various provincial statutes, including the *Municipal Act*, the *Public Utilities Act*, the *Local Improvement Act*, and the *Planning Act*. For a more detailed description of relevant legislation, see Strategic Alternatives, 2002a, “Governance and methods of service delivery for water and sewage systems,” Walkerton Inquiry Commissioned Paper 17, pp. 13–22.

⁵ The remaining 18% are served by private water systems, such as household or communal wells or direct surface water connections. See Association of Municipalities of Ontario, 2001, “Financing of municipal waterworks,” Walkerton Inquiry Submission, p. 22, citing Ontario, Ministry of the Environment, 2000, *Drinking Water in Ontario: A Summary Report 1993–1997* (Toronto: Queen’s Printer), p. 3. I note that the statistics in this section, and elsewhere in this report, attempt to offer the best possible approximation of current owners, operating agencies, and population served by municipal water systems in Ontario. There are certain limitations regarding the available data, drawn primarily from the MOE’s Sewage and Water Inspection Program (SWIP) databases of 2001 and 1999, including the data’s reference to water “plants” as opposed to “systems” as I use the term. The statistics presented here should therefore be viewed with caution.

Municipalities have historically played a central role in this area for good reason. Water is unique as a local service. It is, of course, essential to human life and to the functioning of communities; in an urban environment, it is simply not possible to go without a communal water system. Water systems are also normally built around local water sources. As the Walkerton tragedy so clearly showed, the consequences of a failure in the water system tend to be most seriously felt by those who depend on it locally. Finally, the provision of drinking water is characterized by a high degree of natural monopoly. In other words, the service – in terms of both water treatment and distribution – can realistically only be provided by a single entity. The need to ensure the accountability of that entity is acute and, as such, it is understandable why municipalities have played a central role in the provision of drinking water.⁶

Municipal ownership, and the ensuing responsibilities, should provide a high degree of public accountability in relation to the local water system. In the event of mismanagement, municipal residents are in a position to hold those responsible accountable through the electoral process. I see this as a significant advantage to municipal ownership. Although it is open to municipalities to sell their systems, there was no suggestion during the Inquiry that any municipalities are even considering doing so. Moreover, I heard nothing during the Inquiry that led me to conclude that I should make recommendations about the ownership of municipal systems in order to address water safety issues. The recommendations in this report are therefore premised on continued municipal ownership.

The decision of a municipality whether to operate its water system directly, or to engage an external operating agency, is distinct from the issue of municipal ownership. Today, roughly 70% of municipal water systems are operated directly by the municipality. About 23% are operated under contract with the Ontario Clean Water Agency (OCWA), a provincial Crown agency; roughly 6% are contracted to private companies and fewer than 1% to another municipality.⁷

⁶ For further discussion, see A. Sancton and T. Janik, 2002, “Provincial-local relations and the drinking water in Ontario,” Walkerton Inquiry Commissioned Paper 3, pp. 1–2; and Strategic Alternatives, 2002b, “Financing water infrastructure,” Walkerton Inquiry Commissioned Paper 16, p. 3.

⁷ In 2001, of approximately 672 communal water systems in Ontario that serve municipalities, 661 were owned by municipalities; of which 464 were operated by the municipality directly, 151 by OCWA, 42 by a private operating agency, and 4 by another municipality. In many cases, external operating agencies are contracted to operate the treatment plant only, while other components of the system – such as the distribution system – are operated by the municipal owner. Of the 11 communal systems that serve municipalities but that are not owned by municipalities, 5 in Northern

There are a number of intermunicipal agreements governing the consolidated delivery of water services among municipalities.

The provincial government plays a significant role in regulating municipal water systems.⁸ As I discuss in Chapter 13, the Ministry of the Environment (MOE) enforces legislation, regulations, and policies that apply to the construction and operation of communal water systems. The dual roles of the provincial and municipal governments in relation to drinking water might be perceived as unnecessary duplication. The provincial government is primarily responsible for setting standards, approving municipal decisions in some cases, monitoring performance, and enforcing compliance with provincial standards and regulations. As the owners of water systems, municipalities are responsible for the delivery of water services in accordance with provincial standards, and for satisfying their due diligence obligations. I am satisfied that to the extent any overlap of responsibilities exists, it is a good thing; it confers a more stringent system of oversight in an area that is critical to the protection of public health.⁹

10.2.2.1 *Provincial Approval of Municipal Water Systems*

One of the regulatory functions of the MOE is to issue Certificates of Approval for water systems. In this report, I recommend certain modifications to the

Ontario were owned by local private water companies, 5 by industrial (mining and paper) companies, and 1 by the Province. All of these were owner-operated, except for 1 privately owned system operated by the municipality and 1 industrial system operated by OCWA.

⁸ The Province has historically delivered water services directly, especially following the creation of the Ontario Water Resources Commission in 1956. However, municipalities have played by far the most significant role on the ground.

The recent trend has been for the delivery of water services to shift further back to municipalities. The MOE used to own and operate about 25% of all water and sewage treatment plants in Ontario. In 1993, the MOE's water treatment division was made into OCWA, which assumed ownership of those plants. In 1997, the *Water and Sewage Services Improvement Act* transferred ownership to municipalities. In total, 230 plants were transferred. See Association of Municipalities of Ontario, 2001, p. 23. The Province continues to provide operational services for water systems through OCWA.

⁹ Sancton and Janik express this point in their issue paper to the Inquiry, arguing that the joint provincial-municipal responsibility for drinking water

is a form of double protection that should be applauded and supported.... Rather than establishing a situation in which officials at each level hope those at the other will be doing the work, they should be given the opportunity to compete with each other to be more conscientious, more alert, and more technically competent. Indeed, such a form of competition might well produce better results than exhortations of individuals within a single large organization to try harder.

Sancton and Janik, p. 50.

approvals structure for municipal water systems. As they relate to municipalities, as owners, and operating agencies, these recommendations are dealt with either in this chapter (see the list in the next paragraph) or in Chapter 11. As they relate to the provincial approvals regime in general, the recommendations are addressed in Chapter 13.

For ease of reference, I will summarize the modifications to the current approvals regime that will be necessary as a result of my recommendations. First, the owners of municipal water systems should be required to have, and to periodically renew, an MOE licence for their water system(s). Second, in addition to the current approvals requirements, an owner's licence should have the following conditions:

- a requirement to have an accredited operating agency in accordance with a provincially recognized quality management standard (discussed in Chapter 11);
- a requirement to have an operational plan for the water system – focusing on operating and performance requirements (Chapter 11); and
- a requirement to have a financial plan for the water system in accordance with provincial standards for full-cost recovery and asset management (Chapter 10).

10.2.3 Municipal Reviews of Water Systems

Recommendation 44: Municipalities should review the management and operating structure for their water system to ensure that it is capable of providing safe drinking water on a reliable basis.

It is fundamental for municipalities to have a management and operating structure for their water system that enables them to provide safe water. I am making two important recommendations to assist in this regard. First, I recommend that municipalities be required to have an agency, whether internal or external, to operate their systems. The agency should be accredited in the manner described in Chapter 11. The municipality must also submit an operational plan to the MOE for their water system(s). Second, I recommend

that those responsible for exercising the municipality's oversight responsibilities be held to a statutory standard duty of care. I note that, for municipalities, the first recommendation will be a significant step in satisfying the second.

For some municipalities, these recommendations will necessitate a new approach to how they manage their water system. A review of their water system in advance of mandatory accreditation and operational planning to accommodate the new requirements is required. The review should be undertaken in light of recent changes in the industry and regulatory standards, as well as the recommendations in this report.¹⁰ There is no one-size-fits-all solution. Municipalities can decide for themselves how best to structure the delivery of water services within the provincial regulatory framework. I do not see a need for the provincial government to prescribe specific changes to the municipal governance structure except in the most extreme circumstances of non-compliance.

As part of their review, municipalities, especially smaller ones, will need to consider whether there are opportunities to regionalize or consolidate their water system with neighbouring municipalities. I refer below to the recent experience of Chatham-Kent in this regard. Of course, this option may not be feasible for some municipalities. Other options to consider are whether to operate the water system through a municipally controlled operating agency, such as an internal department, or to engage an external operating agency, such as OCWA, another municipality, or a private company to run the system. Whatever the case, I note that municipalities will be required to have an accredited operating agency and to submit an operational plan for the water system to the MOE (see Chapter 11).

Many municipal decision makers are no doubt already well down this road. The intent of the discussion here is to assist them in the process, not to undermine or criticize the important work now underway. Further, I do not suggest that all municipalities need to undergo an all-encompassing review of every legal, financial, and managerial aspect of their water system. The review need not involve extensive time and resources. In most cases, I expect that municipalities will have sufficient internal expertise to address these issues

¹⁰ The most significant recommendations in this regard are those dealing with mandatory accreditation and operational planning, discussed in Chapter 11, and the standard of care, discussed in Chapter 10. However, other recommendations will also be relevant, especially those dealing with watershed planning (Chapter 4), financial planning (Chapter 10), public-private issues (Chapter 10), and small systems (Chapter 14).

without having to obtain a great deal of outside help, especially if provincial guidance is available as I recommend below. Some municipalities may have recently undergone many aspects of the review I envision and it makes no sense for them to repeat the process unnecessarily.

Finally, I recognize that municipalities in Ontario have undergone significant restructuring in recent years.¹¹ As the Association of Municipalities of Ontario (AMO) pointed out at the Inquiry, this has included:¹²

- the elimination of provincial grants and the introduction of a Community Reinvestment Fund;¹³
- the expansion of the number and range of functions that municipalities are required to deliver and finance;
- the restructuring of the electricity sector;
- the overhauling of the valuation system for the property tax assessment base;
- changes to municipal discretion over property tax rates according to provincial legislation that caps rate increases for certain classes of properties; and
- a reduction in the number of municipalities and municipal politicians by 45% and 40%, respectively, through amalgamations.

As a result of these reforms, I was informed that there is a significant degree of “re-structuring fatigue” in the municipal sector.¹⁴ I do not intend through my

¹¹ During 1989–2001, municipal governments have faced, in the words of AMO, “some of the most dramatic, all encompassing changes since the introduction of the *Baldwin Act* of 1849.” Association of Municipalities of Ontario, 2001, p. 3.

¹² Ibid.

¹³ According to the Ministry of Municipal Affairs and Housing, the Community Reinvestment Fund “is provided by the Province to municipalities to balance new costs with new revenues” following the introduction of Local Services Realignment in 1998. See <www.mah.gov.on.ca/inthnews/backgrnd/20010819-2.asp>.

¹⁴ According to AMO, the degree and speed of change, especially during the last six years, has been “extremely challenging for municipal governments,” and has taken place in the context of fairly restrictive financial circumstances, inability to use deficit financing, pressure to freeze or reduce property taxes, and a large share of expenditures that is non-discretionary. See Association of Municipalities of Ontario, 2001, p. 3.

recommendations to initiate a whole new wave of municipal restructuring. However, considering the restructuring that has occurred, the ongoing changes to the water industry, the recommendations of this Inquiry, and the lessons of Walkerton, I am satisfied that now is an appropriate time for municipalities to review the operating and management structure for their water system.

10.2.4 Survey of Options

In this section, I discuss a variety of options that municipalities should consider when reviewing their water system. The options presented below do not address all the issues that municipalities may wish to consider in light of their oversight responsibilities or the recommendations coming out of this report. Rather, they focus on a central issue: the operating and management structure of the water system. A summary of the available options is provided in the following table.

Table 10.1 Summary of Options for Municipal Water Systems

Operating Agency	Options
1. Municipal operating agency	<ul style="list-style-type: none"> → a. Municipal department → b. Public utilities commission → c. Municipally owned corporation
2. Regional water provider	<ul style="list-style-type: none"> → a. Regional governments → b. Intermunicipal agreements
3. External operating agency	<ul style="list-style-type: none"> → a. Ontario Clean Water Agency → b. Another municipality → c. Private operating agency

10.2.4.1 *Municipal Operating Agency*

A municipality may decide to operate its own water system, either directly through the municipal administrative structure, or through an operating agency that the municipality owns and controls. Historically, many municipal water systems were run by public utilities commissions, creatures of municipalities that were governed by elected commissioners on behalf of the municipality. Following recent reforms in the electricity sector, the majority of municipalities

have disbanded their public utilities commissions and most now run the water system through a municipal department or a separate municipal corporation.¹⁵

Municipal Department

Most communal water systems in Ontario are operated by a department of the municipality. The strength of this model, according to the AMO, lies in the integration of decisions about the water system with other municipal functions, such as public health, land use planning, and economic development. A municipal water department may also be able to achieve greater economies of scale, according to AMO, by sharing administrative services with other municipal departments.¹⁶

This model is criticized by some for two main reasons. First, it leads to the diversion of water-related revenues from the water system to other municipal programs and services. This cross-subsidization can occur directly, where water-related revenues or reserve funds are simply redirected elsewhere. It can also occur indirectly, such as where a municipality overcharges the water department for general municipal services, or where the municipality does not remit interest earned from water-related reserve funds to the water system. Cross-subsidization becomes a safety issue when it interferes with the adequate funding of the water system. The basic purpose of the water rate, after all, is to provide a sustainable and identifiable source of revenues for water services. In light of this, I recommend in section 10.3 of this chapter that municipalities be required to have a financial plan for the water system according to provincial standards for full-cost recovery and asset management.

¹⁵ See N. d’Ombrain, 2002, “Machinery of government for safe drinking water,” Walkerton Inquiry Commissioned Paper 4, p. 63. Until the late 1990s, public utilities commissions commonly provided both water and electricity to local ratepayers. This situation changed with the passage of the *Energy Competition Act*, which received Royal Assent on November 7, 1998. The Act required municipal councils to establish new companies under the *Ontario Business Corporations Act* to own and operate local electrical assets. Municipalities had to decide (1) whether or not to continue to own and operate their electric utility (and as such become the shareholder of the new company) and (2) whether the utility would be a commercial or a not-for-profit company. See Sancton and Janik, p. 45; Strategic Alternatives, 2002a, p. 23. One impact of this policy change, according to Sancton and Janik, was that public utilities commissions no longer dealt with electricity, “causing many municipal councils (and various participants in the municipal restructuring process) to question whether they are needed at all.” Sancton and Janik, p. 45.

¹⁶ Association of Municipalities of Ontario, Walkerton Inquiry Submission (Expert Meeting, June 20–21, 2001).

Second, the model is criticized on the basis that municipal councillors may not have sufficient knowledge or interest in the water system to adequately fulfill their oversight responsibilities. The response to this concern is straightforward. Since the municipality owns the water system, it is incumbent on the municipal council to ensure that its system is competently managed and operated. To make this responsibility as clear as possible, I recommend in section 10.2.5 the adoption of a statutory standard of care for owners of municipal water systems, and in Chapter 11 the adoption of mandatory quality management for municipal water providers.

Public Utilities Commission

Public utilities commissions (PUCs) were a major part of the water industry in Ontario for the better part of a century. Since 1996, their role has declined dramatically as a result of provincial reforms and municipal decisions to disband local public utilities commissions.¹⁷

Municipal councils were given the power to establish PUCs under the *Municipal Waterworks Act* of 1882. Public water supplies were relatively scarce in Ontario at the time.¹⁸ Most people relied on wells, springs, cisterns, community pumps, private water carriers, and other sources for their water. One of the reasons for the establishment of PUCs was to allow local authorities to pay for water infrastructure directly, without provincial funding. Another purpose was to expand and consolidate newly installed water services across the municipality. Finally, PUCs were established to promote professional expertise and business principles in the operation of public utilities, and to separate that operation from the exigencies of municipal council politics.¹⁹

To ensure local accountability, PUCs were made up of elected three- or five-person commissions, including the head of council in an *ex officio* capacity. To promote expertise and business principles, there were specific provisions for

¹⁷ In 1990, 124 out of 834 municipalities relied on public or water utility commissions to operate water facilities. By 2001, as a result of municipal amalgamations and the spinning off of electrical utilities, only 15 of 447 remaining municipalities continued to use commissions to operate water facilities. Sancton and Janik, p. 43.

¹⁸ In 1882, for example, there were only 13 public water systems in the Province. See J. Benidickson, 2002, "Water supply and sewage infrastructure in Ontario, 1880–1990s: Legal and institutional aspects of public health and environmental history," Walkerton Inquiry Commissioned Paper 1, p. 11.

¹⁹ N.B. Freeman, 1996, *Ontario's Water Industry – Models for the 21st Century*, report prepared for the Ontario Municipal Water Association, pp. 3, 14.

the autonomy of the utility through its separate administrative structure and its powers to raise funds directly from local revenue sources. PUCs operated on a transactional, fee-for-service basis; they had a distinct identity; and they were oriented to a specific public function.²⁰

In 1996 the provincial government, in connection with reforms to the electricity sector, gave municipalities the authority to disband their public utilities commissions without first obtaining the assent of local electors, as had previously been required.²¹ Most promptly did so, in many cases either taking over the operation of the system through a municipal department, or reconstituting the PUC as a municipally owned corporation with appointed – rather than elected – commissioners. There are probably a number of reasons for why this occurred. In many small towns, PUCs could not be justified for managing water alone following restructuring in the electricity sector. However, it is also suggested that some PUCs were disbanded because councils wanted direct control over water-related revenues to be able to cross-subsidize other municipal programs and services, especially following reductions in provincial subsidies.²² To the extent this is the case, it is an unfortunate development.

The elected PUC is, in my view, a very attractive model because of the balance it achieves for accountability, expertise, and business autonomy.²³ It continues to be available as one of the alternatives open to municipalities to manage their water system. However, I recognize that the trend, for whatever reasons, appears to be strongly away from the use of PUCs for the management of water systems.

Municipally Owned Corporation

Proponents of the model of a municipally owned corporation argue that it provides a means to ensure effective management of the water system. Under

²⁰ Ibid., p. 1.

²¹ From 1931 to 1998, the *Public Utilities Act* provided that the disbandment or sale of a utility could proceed only with the assent of the local electors. This requirement was removed with the passage of the *Savings and Restructuring Act* in 1996, amending the *Public Utilities Act*, R.S.O. 1990, c. P.52, ss. 38 and 67. See *ibid.*, pp. 38–39.

²² Strategic Alternatives, 2002a, p. 23; Sancton and Janik, p. 40; and Freeman, p. 2.

²³ As Freeman has commented, the PUC model allowed for the water system and other utilities to be governed with autonomy from municipal council to ensure service accountability to the public and financial separation from the municipality. The fact that public utilities commissioners were elected, rather than appointed, provided for direct accountability between the consumer, without compromising business autonomy. Freeman, p. 4.

this model, the corporation (whether for-profit or non-profit) operates the water system on behalf of municipal council. Its directors are appointed by municipal council and normally consist of persons with relevant expertise.

The Chair of the Peterborough Utilities Commission recommended to the Inquiry that all municipalities adopt this model by restructuring their PUC or water department as a non-profit company, as in the case of Peterborough.²⁴ He cited numerous benefits including competent oversight by the board of directors, dedicated revenues, and enhanced borrowing capacity without the need for private sector involvement. He also indicated that existing economies of scale can be maintained under this model by purchasing services from the municipality.

Another example of the corporate model is EPCOR, a municipally owned, for-profit corporation that offers water and electricity services. EPCOR was incorporated in 1995 by the City of Edmonton, out of the existing Edmonton power and water utility that had been in operation since 1902. The City is its sole shareholder. The City appoints the members of the board of directors, lays out the dividend policy, and approves the company's auditors. Under this structure, according to one of its managers, EPCOR has a great deal of financial and managerial independence.²⁵

The corporate model offers the potential benefit of greater expertise in the oversight of the water system through the appointment of a qualified board of directors. In some cases, there may also be an advantage to having the corporation functioning independently of the pressures of local politics. However, as with the other models, municipalities will want to balance the benefits against the costs, in this case a reduction in direct accountability to local residents.²⁶ I also note that this model has emerged relatively recently in

²⁴ The Peterborough Utilities Commission has existed since 1914, and its municipal water commission since 1902. In 2000, it underwent significant changes as a result of restructuring in the energy sector. The Peterborough Utilities Commission has now been incorporated under the *Ontario Business Corporations Act* as a not-for-profit corporation owned solely by the City of Peterborough. The company is overseen by a board of directors appointed by the municipal council, which replaced the previously elected public utilities commissioners. See C. Maynes, Chair of the Peterborough Utilities Commission, Walkerton Inquiry Submission (e-mail to the Walkerton Inquiry, August 1, 2001).

²⁵ A. Davies, for OWWA/OMWA, Walkerton Inquiry Submission (Public Hearing, September 20, 2001), transcript pp. 24–26; and EPCOR <www.epcor.ca/EPCOR+Companies/EPCOR+Group+of+Companies/default.html> [accessed April 14, 2002].

²⁶ The level of accountability will vary depending on the arrangement between the corporation and the municipality.

the context of water services, and municipalities may wish to evaluate the experience with this model as it unfolds in places like Peterborough.

10.2.4.2 Regionalization

Regionalization is a vehicle to improve the quality of the overall management and planning for a water system. It functions within a decision-making framework that allows for public accountability across the entire service region. As importantly, increasing the overall size of a water system allows for a higher level of expertise within the management and operation of the system. This also leads to greater financial strength and the ability to allocate resources to where they are most needed, whether to address infrastructure challenges or to improve source water and treatment requirements.²⁷ On the whole, regionalization generally improves the safety, reliability, and effectiveness of water services, while preserving a measure of direct accountability for participating municipalities.

The American Water Works Association (AWWA) defines a regional water system as

a management or contractual administrative organization or a coordinated physical system plan of two or more community water systems using common resources and facilities to their optimum advantage.²⁸

Regionalization may take different forms. In the words of AWWA, for example, it may take the form of “an urban complex of water systems with a plan to minimize duplication, identify future service areas ... and establish mutual aid pacts” or “a group of rural or suburban systems that could obtain economies of scale under a common management system.”²⁹

²⁷ A. Davies, 2001, for OWWA/OMWA, “Effective water utility management and organizational behaviour,” Walkerton Inquiry Submission, p. 30, citing D.A. Okum, “State initiative for regionalization,” *AWWA Journal* (May 1981). There may, of course, be limits to the benefits of regionalization, depending on the circumstances. See Association of Municipalities of Ontario, 2001, p. 28, citing S. Renzetti, 1998, “An empirical perspective on water pricing reforms,” paper presented at the Workshop on Political Economy of Water Pricing Implementation, Washington, D.C., November 3–5.

²⁸ See J.A. MacDonald, 2001, for OWWA/OMWA, “Review of issue #8 – Production and distribution of drinking water,” Walkerton Inquiry Submission.

²⁹ *Ibid.*

In Ontario, municipal amalgamations and the creation of regional governments have historically led to the consolidation of municipal water services, as discussed below.³⁰ However, municipalities also have the authority to enter into intermunicipal agreements for the delivery of water services. Intermunicipal agreements may provide for joint municipal ownership, joint operation, or both.³¹ Each model provides different degrees of accountability. This choice is especially significant where a municipality wishes to retain some ongoing control over its water system beyond the provisions of a service contract with an external operating agency.³²

The recent amalgamations of municipalities have in some cases brought different water systems under the authority of a single municipality.³³ In these cases, opportunities exist to consolidate the management of disparate water systems and thus achieve greater coordination of the water system across the entire region. I discuss one such example, Chatham-Kent, below.

The Chatham-Kent Public Utilities Commission

The Municipality of Chatham-Kent was created in 1997 following the amalgamation of 23 municipalities and 13 public utilities in Kent County. All of the pre-existing water systems in the region were integrated into a single utility for water, sewage, and hydro services: the Chatham-Kent Public Utilities

³⁰ Consolidation, short of the creation of a regional or amalgamated municipal government, has also occurred historically through various “area schemes” that were built by the provincial government to deliver shared water and sewage services to groups of municipalities. The Province divested the ownership of these area schemes to participating municipalities in 1997 under the *Water and Sewage Services Improvement Act*. See Strategic Alternatives, 2002a, pp. 25–28.

³¹ *Municipal Act*, R.S.O. 1990, c. M.45, s. 207 and s. 210.1. Intermunicipal agreements of this nature are reportedly common. See Strategic Alternatives, 2002a, pp. 26–28.

³² One model of regionalization, from Manitoba, is the Pembina Valley Water Cooperative Inc., an incorporated cooperative owned by 18 municipal governments, and serving about 40,000 people. The Cooperative is a not-for-profit organization with surplus revenue put into a reserve fund for infrastructure upgrades. Any surplus remaining after upgrades is paid back to the municipalities. The Cooperative is governed by an assembly of one representative from each participating municipality.

³³ From 1996 to January 2002, 566 municipalities were amalgamated into 198, and the total number of municipalities in Ontario was reduced from 815 to 447; Ministry of Municipal Affairs and Housing, “Restructuring *FlashNews*” <<http://www.mah.gov.on.ca/business/flashnews/flashnews-e.asp>> [accessed April 3, 2002].

Commission (PUC).³⁴ The overall water supply system has, spread over the region, 10 wastewater treatment facilities, 9 water distribution systems, about 800 km of water lines, and about 330 km of sanitary sewers. The integrated system has a number of water sources, including wells, streams, small lakes, large lakes, and water purchased from municipalities outside the county.

Following the amalgamation, the Chatham-Kent PUC completed a master plan for how to service the needs of the amalgamated systems for the next 20 years. It consolidated 11 existing billing and collection systems into a single system. The PUC also terminated its existing operating contracts to gain full control over the financial management of the system, and to address the high interest rates on debt for some of the systems. Further, the PUC carried out a detailed mapping project of the entire system to assess the possibilities to standardize service levels and it did a rate study as to how to finance all the systems and a range of capital projects in the future. It is adopting a fully harmonized rate structure for all of Chatham-Kent, and a life-cycle reserve for the complete replacement costs of the existing system.

Overall, the amalgamation has led to significant cost savings.³⁵ On an annual basis, the PUC achieved overall savings in debt payments of \$980,000,³⁶ savings in administrative costs of \$430,000, savings in billing and collecting of \$150,000, and savings in operations of \$400,000. It is estimated that \$2.5 million per year (out of an annual budget of \$17 million) has been saved through staff realignment, operating efficiencies, and economies of scale.³⁷

These cost savings have allowed the PUC to put more money back into the system, especially to meet infrastructure needs. The PUC has plans for about \$160 million in water and wastewater projects over the next 20 years, to be financed from the newly harmonized water rate, and assuming no outside

³⁴ The manager of Water and Wastewater Services of the Chatham-Kent PUC, Jack Sonneveld, spoke about these reforms in a presentation to the Inquiry in Windsor on June 12, 2001. Unless otherwise indicated, the information in this section is adopted from his presentation.

³⁵ All figures were reported by Jack Sonneveld.

³⁶ At the time of amalgamation, the outstanding OCWA/MOE debt in the system was \$4.9 million in water and \$1.3 million in wastewater, with interest rates ranging from 8% to 14%. After amalgamation, the Chatham-Kent PUC paid out existing debts of over \$5.6 million in debt with savings from the amalgamation, and refinanced at 5.25%, leading to the annual savings in debt payments of \$980,000. This new borrowing was financed internally through the municipality because the PUC is not large enough to issue debentures.

³⁷ I note that amalgamation does not always lead to cost savings. There will usually be significant transitional costs, and in some cases costs may increase as a result of the harmonization of service levels or the harmonization of wages and salaries.

subsidies to offset the cost.³⁸ It has also established reserve funds of about \$4.8 million for the water and wastewater systems. The water rate is reportedly comparable to others in the area.³⁹ According to the water manager of the Chatham-Kent PUC, “the cost of potable water is lower than high speed Internet, and this is a necessity of life.”

In terms of staffing, the PUC has the same number of staff as before the amalgamation, although workloads have reportedly risen to address increased maintenance activities, increased sampling, work related to the new requirement for engineering reports, increased contracts to build and upgrade infrastructure, and a 20% increase in the service population. The salaries of PUC staff have been standardized; many wage levels increased while several positions were frozen. There were no strikes in the transition. In large part because of the consolidation, the PUC reportedly has a good cross-section of knowledge and skills across its workforce, allowing for cross-training and knowledgeable back-up staff.

Thus, the Chatham-Kent PUC has achieved higher standards of safety and has spread them throughout the service area at a common water rate. It has also maintained accountability to electors as part of the amalgamated municipality. An important part of the success of the consolidation, according to the water manager, was that the project was kept within manageable limits. Now that the management of the existing water systems has been consolidated, the PUC is at a stage where it can accommodate contracts with water systems from outside the municipality. Thus, as a regionalized entity, the PUC offers an option to neighbouring municipalities looking for an external operating agency to run their water systems.

Regional Governments and Shared Service Delivery

The establishment of 12 regional governments in Ontario between 1969 and 1975 is another example of how the management of water systems has been consolidated across a wide service area. The Regional Municipality of Waterloo submitted to the Inquiry that the consolidation of water services under regional governments has provided for “better planning, a critical mass for staffing,

³⁸ Among other projects, the PUC is constructing a new water treatment plant to replace two other plants, is going to micro-filtration technology, and will construct a new trunk water line to supply one small community.

³⁹ In July 2001, rates were about \$38 for 30 cubic metres per month for water and sewage.

expertise in operations, and the ability to finance major works.”⁴⁰ Also, it was submitted that regionalization has allowed for greater integration of the water system with other regional services, such as the public health programs of the Medical Officer of Health and his/her staff, who work within a regional department rather than a separate local health unit.⁴¹

In a few cases where regional governments were established, the responsibility for water is shared between the regional government and the lower-tier governments.⁴² The regional government treats the water and sells it at a wholesale rate to the lower-tier governments, which in turn distribute it to consumers. The lower-tier governments also collect revenues from water rates.

Representatives of regional governments in Ontario recommended to me that, in these circumstances of shared responsibility, the provincial government should require lower-tier governments to transfer the water distribution systems to the regional government.⁴³ I have decided not to make a formal recommendation in this regard because I did not hear fully from the affected lower-tier municipalities about their positions and the possible implications to them. However, I am attracted to the idea for a number of reasons.

First, as discussed above, regionalization allows for greater economies of scale in the operation of water systems. Second, the regional government is in a better position to coordinate the management of distribution across the entire system; it is important to coordinate water treatment and distribution since decisions that relate to one frequently impact on the other. Third, the regional government is in a better position to implement common standards of service across the service region. Further, in cases where residents in different parts of a region have different levels of services at different costs, regional representatives are in the best position to decide how new or improved service should be allocated, and how the costs should be recovered. Finally, dividing the

⁴⁰ The Regional Municipality of Waterloo, Walkerton Inquiry (Town Hall Meeting, March 22, 2001), transcript p. 34.

⁴¹ *Ibid.*, p. 35.

⁴² This is the case in the regional municipalities of Niagara, Waterloo, and York.

⁴³ The Regional and Single Tier CAOs of Ontario recommended that “future legislation identify the control of water treatment process and delivery be maintained under one roof, at the Regional or Upper Tier level where there is a two-tier system to maintain quality and consistent service delivery”; see A.B. Marshall, for the Regional and Single Tier CAOs of Ontario, Walkerton Inquiry Submission (letter to the Commissioner, November 28, 2001). The Regional Municipality of Waterloo made a similar recommendation.

responsibility for water services may discourage lower-tier municipalities from promoting conservation through full-cost pricing.⁴⁴

In summary, it is my view that where the ownership and operation of a water system is shared between a regional and lower-tier municipality, there are significant advantages to coordinating the treatment and distribution of water under the direction of the regional government.⁴⁵ The provincial government may wish to consider requiring lower-tier municipalities to transfer ownership of their water systems to the upper-tier municipality.

10.2.4.3 *External Operating Agency*

Where a municipality decides not to operate its water system directly or join with other municipalities in a regional arrangement, it has the option to contract with an external operating agency, including the Ontario Clean Water Agency, a private company, or another municipality.⁴⁶ An overview of each of these options is presented below.

The Ontario Clean Water Agency

The Ontario Clean Water Agency is a provincial Crown corporation established under the *Capital Investment Plan Act* of 1993.⁴⁷ The Act sets out OCWA's objectives, including its mandate to provide operations and maintenance services to municipalities on a cost-recovery basis. Although OCWA's mandate has changed significantly since it was created, its primary purpose remains the

⁴⁴ This is because most of the savings arising from conservation go to the regional water wholesaler in the form of deferred treatment plant costs, as opposed to the lower tier retailer of the service. However, it is the lower-tier municipality that normally has the capability to implement full-cost pricing by adjusting the water rate structure.

⁴⁵ I note that the *Savings and Restructuring Act* allows an upper-tier municipality to pass a bylaw to provide for a service presently delivered at the lower tier, and if more than 50% of the lower-tier municipalities pass bylaws to the same effect, the service is moved to the upper tier for the whole municipality. *Savings and Restructuring Act*, S.O. 1996, c. 1, Schedule M, Part 1, s. 6, amending the *Municipal Act*, R.S.O. 1990, s. 209.2. See also Freeman, p. 51.

⁴⁶ The *Public Utilities Act*, R.S.O. 1990, c. P52, s.11(2) specifies that contract terms for water supply may not exceed a term of 20 years; in practice, the duration of most such services contracts is much shorter, often in the neighbourhood of 5 years.

⁴⁷ *Capital Investment Plan Act*, S.O. 1993, c. 23. At the time it was created, OCWA assumed the operational (as well as financing) functions for water and sewage of the Ministry of the Environment.

same: to operate water systems under contract with the municipal owner.⁴⁸ OCWA offers an important alternative to other external operating agencies, especially for small or remote municipalities that have limited options to operate their own water systems or to pursue regionalization. Also, OCWA is a useful vehicle for the provincial government in circumstances where it finds it necessary to mandate the restructuring of “non-viable” municipal systems or to respond to emergency situations, as in the case of Walkerton. For these reasons, I see OCWA continuing to play an important role in the province’s water industry.⁴⁹

I discuss OCWA in more detail in 10.4.6 of this chapter; I discuss the issue of non-viable small systems in Chapter 14.

Another Municipality

Here I refer to the option of a municipality to enter into an agreement with another municipality to operate its water system. This differs from other types of intermunicipal agreements, discussed above, that provide for joint ownership or otherwise for direct accountability by all participating municipalities in the joint operation of their water systems. For some small municipalities it may be an attractive option to exchange direct local control for the assurance of a more effective operation.

During the course of the Inquiry, I spoke to the managers of several large water systems. All of them were very receptive to working out arrangements with smaller municipalities for the operation of the water systems in those communities. Such arrangements have the potential to benefit the larger municipality in terms of cost recovery, and the smaller municipality in terms of reduced costs, and greater safety and reliability.

Private Operating Agency

The private sector offers an option for municipalities seeking to contract with an external operating agency. There are a number of companies in Ontario

⁴⁸ In terms of the changes to its mandate, in May 1996 the Province transferred the administration of provincial water and wastewater grants programs from OCWA to the Ministry of the Environment. In 1997, the Province devolved the ownership of provincial water and sewage systems from OCWA to the municipalities served by those systems. See d’Ombraïn, p. 48.

⁴⁹ I also envision OCWA becoming accredited like other operating agencies, as discussed in Chapter 11.

that are capable of operating all or part of a municipal water system. So long as an operating agency is accredited and regulated effectively, in my opinion the question of whether it is publicly or privately owned does not impact on issues of safety. Ensuring public accountability for the safety of drinking water is very important, however, and, in cases where a municipality decides to employ a private operating agency, the means to ensure accountability necessarily shifts to the contractual relationship with that agency. I discuss this issue in section 10.4 of this chapter.

10.2.5 Standard of Care

Recommendation 45: Given that the safety of drinking water is essential for public health, those who discharge the oversight responsibilities of the municipality should be held to a statutory standard of care.

In light of municipal ownership of water systems, municipal councils are responsible for ensuring the effective management and operation of their water systems. In some cases, councillors will assume this oversight responsibility directly; in others, they may delegate aspects of the oversight function. Given the importance of drinking water for public health, those responsible for discharging the oversight function of the municipality (e.g., the council or a committee of council)⁵⁰ should be held to a statutory standard of care that recognizes and formalizes their responsibilities. These individuals should be required under the *Safe Drinking Water Act* to act honestly and in good faith with a view to the protection of the safety of the consumer, and to exercise the care, diligence, and skill that a reasonably prudent person would exercise in comparable circumstances. This standard of care is similar to the standard of care for directors of corporations under the various corporations' statutes.

Depending on the circumstances, the types of oversight responsibilities to be discharged will include: adopting an overall policy for the system, hiring senior management or contracting with an external operating agency, and periodically auditing or evaluating the performance of the operating agency. Where those who are responsible lack the confidence in their expertise in a particular area, they would be expected to obtain outside expert advice. As with a board of directors of a corporation, obtaining and following proper expert advice can

⁵⁰ In order to maintain public accountability, it will be important that at least some publicly elected representatives be included in exercising oversight responsibility.

satisfy the statutory standard of care. Also, the fact that a municipality has an accredited operating agency will do much to satisfy the standard of care.⁵¹

The standard of care I recommend would apply to those discharging the owner's oversight function. I have not recommended a statutory duty of care for water managers and staff because the designated operator of a water system (the senior manager) is currently required, under Ontario Regulation 453/93, to ensure that the operation is safe and that the water is measured and monitored, to keep records, and to maintain the equipment. Also, under the provincial government's operator licensing program, the individual operator-in-charge is responsible for:⁵²

- taking all steps reasonably necessary to operate the processes within his or her responsibility in a safe and efficient manner;
- ensuring that processes within his or her responsibility are measured, monitored, sampled, and tested in a manner that permits them to be adjusted when necessary;
- ensuring that records are maintained of all adjustments made to the processes within his or her responsibility; and
- ensuring that all equipment used in the processes within his or her responsibility is properly monitored, inspected, and evaluated and that records of equipment operating status are prepared and available at the end of every operating shift.

In my opinion, these duties, along with mandatory quality management and effective provincial oversight, are sufficient for the purposes of ensuring that managers and staff adhere to a minimum performance standard.

⁵¹ In cases where a municipality has contracted with an external operating agency to run the water system, the municipal council is still responsible for ensuring effective oversight – including regular audits and evaluation – of the outside agency's performance.

⁵² Water and Wastewater Utility Operator Licensing Program; See G. Samuel, 2001, for OWWA/OMWA, "Training and accreditation of water supply professionals," Walkerton Inquiry Submission, Appendix 1.

10.2.6 The Role of the Provincial Government

Recommendation 46: The provincial government should provide guidance and technical advice to support municipal reviews of water systems.

The provincial government should support municipalities in their review of management and operating models, especially in the case of small and recently amalgamated municipalities. It should offer expertise from the Ministry of Municipal Affairs and Housing or the Ministry of the Environment about the available options – for example, by sponsoring workshops for municipal managers.

In addition, in connection with my recommendations for a statutory standard of care, the provincial government should produce a guidance manual giving direction to municipal officials about their roles and responsibilities.⁵³ In doing so, the provincial government should make clear that drinking water is essential to public health and that it is incumbent on the owner to take reasonable steps to ensure the competence of management. At the same time, the provincial government should indicate that this responsibility does not necessarily require specialized expertise in the operation of water systems, and that the standard of care should not deter dedicated individuals from running for municipal office.

10.3 Financial Issues

10.3.1 Overview

I turn now to financial planning for municipal water systems. In Ontario, municipalities raise money from local revenue sources – such as property taxes and water rates – to pay for operating and capital costs, according to provincial legislation.⁵⁴

⁵³ In this regard, an appropriate approach might be for the Province to provide funding to OMWA or OWWA to develop a handbook oriented to the owners of municipal water systems – and municipal councilors in particular – akin to the *Municipal Electric Association Commissioners' and Senior Managers' Handbook* (Municipal Electrical Association [now the Electricity Distributors Association], 1998), which deals with the role and responsibilities of commissioners of electrical utilities.

⁵⁴ Under the *Municipal Act*, the *Public Utilities Act*, the *Development Charges Act*, and other statutes, municipalities are granted the power to levy taxes and charge fees in order to generate revenues from local residents to support local services and projects, such as the municipal water system.

I have dedicated a separate section to this topic because of the important relationship between financial issues and the capacity of a water provider to reliably deliver safe drinking water. The intent of this section is to show why and how municipalities, and local residents, need to ensure that adequate resources are available. I should note that it is unclear the extent to which municipalities are currently providing adequate resources to support their water systems. The assumption here is that not all municipalities are providing adequate resources⁵⁵ and that it would not be prudent to assume that they are without extensive research that this Inquiry is not in a position to conduct. The recommendations in this section are based on these assumptions.

10.3.2 The Proposed *Sustainable Water and Sewage Systems Act*

On December 12, 2001, the provincial government introduced Bill 155, proposing a *Sustainable Water and Sewage Systems Act, 2001*, for first reading.⁵⁶ If it is passed into law, the proposed Act would require all municipalities to submit to the Ministry of Municipal Affairs and Housing a written report on the full cost of providing water and wastewater services to the public (the “full-cost report”).⁵⁷ In addition, the proposed Act would require municipalities to submit to the ministry, within six months of the approval of its full-cost report, a plan outlining how it intends to pay the full cost of water and wastewater services to the public (the “cost-recovery plan”).

In my opinion, if passed into law, the Act will address many of the important issues concerning the financing of water systems that I discuss in this section. The requirements for a full-cost report and cost-recovery plan, as generally expressed in the proposed Act, are in my view appropriate. The regulations to be promulgated under the proposed Act will be critical since they will define “full cost” for the purposes of full-cost accounting and recovery, and outline standards to guide municipal financial planning, especially regarding asset management. I discuss these issues below.

⁵⁵ Based on the submissions of a number of parties and experts at the Inquiry.

⁵⁶ Bill 155, *An Act respecting the cost of water and waste water services*, 2d Sess., 37th Leg., Ontario, 2001 (1st reading, December 12, 2001); <www.ontla.on.ca/documents/Bills/37_Parliament/Session2/b155.pdf> [accessed April 10, 2002].

⁵⁷ As outlined in the proposed Act, the report would have to contain “such information as is required by regulation concerning the infrastructure needed to provide the water services, the full cost of providing the services and the revenue obtained to provide them and concerning such other matters as may be specified in the regulation.” Bill 155, cl. 3(2).

10.3.3 The Requirement for a Financial Plan

Recommendation 47: The provincial government should require municipalities to submit a financial plan for their water system, in accordance with provincial standards, as a condition of licence for their water systems.

Municipalities need to ensure that their water systems are adequately financed. Over the long term, safety depends on stable and adequate financing to maintain the water system's infrastructure and its operational capacity to supply high-quality water consistently. Without adequate resources, corners will inevitably be cut, whether in the day-to-day operation of the facility, or in its long-term capital infrastructure. Ultimately, safety will be jeopardized.

Municipalities should therefore be required to submit a financial plan that lays out the resources required to run and sustain the water system, and how those resources will be raised. The plans should be filed and referred to by the provincial government in the course of provincial approvals of municipal water systems. As such, it should be a condition of a municipality's licence for its water system from the MOE that it have filed a financial plan. I leave it to the provincial government to determine the degree to which the government should review and approve such plans in detail, and whether they take the form of a policy or annual plan.

The plan would depend on two components: full-cost *accounting* and full-cost *recovery*. The former is a prerequisite for the latter. Once in place, municipalities should update their plan periodically, probably on an annual basis.

10.3.3.1 *Full-Cost Accounting*

Many municipalities in Ontario have worked to assess the costs of their water system in order to charge appropriate rates and generate sufficient revenues to sustain the system. In other municipalities, however, the costs of running the water system and, in particular, sustaining its infrastructure, may not be as well understood.⁵⁸ They may not be fully aware of the current state of the system

⁵⁸ OWWA/OMWA submitted at the Inquiry that most municipalities do have detailed inventory information on their system, although more detailed assessments of the condition and replacement value of the assets may not be carried out by all municipalities. See C.N. Watson and Associates, 2001a, for OWWA/OMWA, "Review of various papers submitted to the Walkerton Inquiry

infrastructure and its replacement value, or the costs arising from the operating requirements of the system. The municipality will not be in a position to put adequate resources into the system if municipal decision makers do not know what the full costs actually are. For this reason, the municipality needs to undertake a *full-cost accounting* of the water system. For consistency, this should be carried out in accordance with a provincial standard.

The proposed *Sustainable Water and Sewage Systems Act* would require municipalities to submit a full-cost report as follows:⁵⁹

Report on Full Cost of Water Services

3. (1) Every regulated entity that provides water services to the public shall give a written report about those services to the Minister before the date specified by regulation.

Contents

(2) The report must contain such information as is required by regulation concerning the infrastructure needed to provide the water services, the full cost of providing the services and the revenue obtained to provide them and concerning such other matters as may be specified in the regulation.

...

Components of Full Cost

(4) The full cost of providing the water services includes the operating costs, financing costs, renewal and replacement costs and improvement costs associated with extracting, treating or distributing water to the public and such other costs as may be specified by regulation.

As proposed, the full-cost report represents an accounting of the full cost of the water system, including various operating and capital costs associated with the water system, as well as other costs that may be specified in the regulations.

Commission regarding financial matters on behalf of the Ontario Municipal Water Association and the Ontario Water Works Association,” Walkerton Inquiry Submission, p. 3-3.

⁵⁹ Bill 155, cl. 3.

I discuss the types of costs that should be included in the definition of “full cost” below. I also discuss below the need for provincial standards in this area, especially in relation to sustainable asset management.

10.3.3.2 *Full-Cost Recovery*

Once the cost of safe water is known, a municipality must raise adequate funds to pay for it. In some municipalities, the pressure to keep water rates low may mean that sufficient revenues are not being generated in the first place. In other cases, the pressure to fund other municipal services and programs may lead council to redirect revenues from the water system to other purposes. Either scenario may result in underfunding of the water system. The purpose of a full-cost recovery plan is for a municipality to determine how it will pay for the full costs of its water system from its local revenue sources, including how it will raise the money to pay for future capital costs, whether from accumulated reserves or from borrowing.

The proposed *Sustainable Water and Sewage Systems Act* includes a requirement for a cost-recovery plan, based on the principle of full-cost recovery, as follows:⁶⁰

Cost Recovery Plan for Water Services

9. (1) Every regulated entity that provides water services to the public shall prepare a plan describing how the entity intends to pay the full cost of providing those services.

...

Sources of Revenue

(4) The regulations may specify those sources of revenue that a regulated entity is, or is not, permitted to include in the plan and may impose conditions or restrictions with respect to different sources of revenue.

...

⁶⁰ Bill 155, cl. 9.

As in the case of the full-cost report, important aspects of the requirement for a cost-recovery plan await the regulations and the definition of provincial standards. I discuss these issues below.

10.3.4 The Definition of Full Cost

In connection with the proposed *Sustainable Water and Sewage Systems Act*, the Province will need to define in some detail the meaning of “full cost” for the purposes of full-cost accounting and recovery. Without a uniform definition, the requirement for a financial plan for municipal water systems would be undermined by divergent interpretations of the requirement. The definition of full cost was the subject of a great deal of discussion during the course of the Inquiry. In this section I offer my views about some of the more prominent positions that were advanced. I do so to provide background as to the definition that I envision under the proposed Act.

Defining full cost runs two competing risks. If the definition is too broad, municipalities may be forced to recover costs that are not legitimately part of the full cost of providing water, or that are too difficult to measure and account for effectively. For these reasons, one should be conservative in defining full cost to make the standard as accurate and practical as possible. However, if the definition is too narrow, one runs the risk of excluding costs that are integral to the delivery of safe water. Municipalities could have a financial plan, in accordance with provincial standards, and still fail to provide adequate resources. This would be a most unfortunate result.

For reasons of safety, full cost should be defined to include, at a minimum, all of the operating and capital costs of the system. I discuss these types of costs below.

Table 10.2 Outline of Operating and Capital Costs

Type of Cost	Description
Operating costs	<ul style="list-style-type: none"> • Salaries and benefits • Material and supplies, such as chemicals • Vehicles, tools, and other equipment • Maintenance • Monitoring and reporting • Accreditation and operational planning • Staff training • Utilities, such as electric power, gas, and telephone • Insurance for equipment and facilities • Sales and property taxes • Contracted or outsourced services, such as meter reading or water main repair • Administrative costs
Capital costs	<ul style="list-style-type: none"> • Upfront costs of infrastructure for supply, treatment, pumping, distribution, and storage • May include buildings, land, equipment, and vehicles • Upgrade, replacement, and growth costs

10.3.4.1 *Operating Costs*

Operating costs arise from running the system on an ongoing basis, including its operation, repair, and routine maintenance of physical assets, and general administration and billing. Examples are costs for labour, materials, energy, taxes, and contract services. Operating costs generally recur on an annual basis and are normally recovered during the year in which they are incurred.⁶¹

One of the most important operating costs is the cost of training for management and operating staff. Training is an investment in the quality of the people who run the water system. In the starkest terms, the safety of drinking water is a product of the expertise and commitment of those people. The cost of providing training, as required by the provincial government, is an operating cost that should be part of the full cost.

Administrative costs, or “overhead,” are also a type of operating cost. In some cases, overhead costs of the water system are borne by the municipality rather than the operating agency.⁶² Given that these are legitimately connected to water services, it is appropriate for the municipality to “charge back” the costs to the water system, although the amount charged back should be accurate to avoid unaccounted for cross-subsidization. In this regard, the provincial

⁶¹ See Strategic Alternatives, 2002b, p. 48; and C.N. Watson and Associates, 2001b, for the Canadian Environmental Law Association, “Financial management of municipal water systems in Ontario,” Walkerton Inquiry Submission, p. 4-2.

⁶² These might include such administrative costs as for the chief administrative officer of the municipality, the accounting department, the planning department, or human resources.

government may wish to consider whether to prescribe a ceiling on charge backs for overhead costs under the proposed *Sustainable Water and Sewage Systems Act*.

Operating costs also include the cost of continuous monitoring of water quality, periodic sampling of raw and treated water, and reporting of results to regulatory agencies and to the public, in accordance with provincial standards. As such, since the closure of provincial testing laboratories in 1996 full cost also includes the cost of laboratory services.

Finally, it is reasonable to expect the cost of accreditation and operational planning, as recommended in Chapter 11, to be recovered from the water system. These costs include the cost to develop a quality management system and an operational plan according to a drinking water quality management standard for the industry, and to undergo third-party audit and peer review.

10.3.4.2 *Capital Costs*

Capital costs are incurred in the construction or replacement of a water system (e.g., including wells, treatment plants, reservoirs, and distribution systems). They represent the investments required to maintain a system that meets current and changing standards, meets customer needs, maintains the facilities, and provides for future growth.⁶³

Capital costs include upfront costs for physical assets such as infrastructure, buildings, and equipment. They may also include costs for major rehabilitation or replacement of those assets.⁶⁴ Related items such as land and design work may also be considered capital costs. Because physical assets may need to be upgraded or replaced, it is necessary to maintain an asset inventory.

Capital spending tends to be “lumpy” in nature; that is, a major expenditure may be made one year, without a need for large investments for many years down the road. For this reason, municipalities commonly set aside reserve funds or borrow money to pay for capital costs. The annual cost of contributing to capital reserves, or of servicing debt incurred to pay for capital projects, is

⁶³ Strategic Alternatives, 2002b, p. 43.

⁶⁴ On the other hand, routine repair and maintenance costs are typically considered operating costs.

sometimes classified as an operating cost, but may also be reasonably viewed as a capital cost.

10.3.4.3 *Environmental Costs*

Water services include costs to the environment, some of which may not be accounted for in the financing of the water system. These costs result from the impacts of water takings and wastewater emissions in particular. Costs associated with these impacts are often considered “external” because they tend not to be incurred as actual expenditures by the municipality or its customers.⁶⁵

Over the course of the Inquiry, there was a great deal of discussion about whether municipalities should recover an amount for environmental costs of water (and sewage) services, to support efforts to protect and clean up water sources. Many parties felt that they should, mainly because of the environmental benefits, but also because these costs are undeniably a part of the cost of our consumption of water and disposal of wastes into the environment. Other parties submitted that it is too difficult and contentious to assess and allocate environmental costs, and it would be unfair to charge water ratepayers without charging other users of the resource.

I do not consider it necessary for safety reasons to recommend that the provincial government require municipalities to incorporate environmental costs as part of the full cost of water systems. As I discuss in Chapter 4, however, municipalities should consider the option of raising funds from the water system to support at least part of the costs of implementing the measures I recommend relating to source protection.

10.3.5 Sustainable Asset Management

Sustainable asset management⁶⁶ entails both full-cost accounting and full-cost recovery for the costs of water infrastructure. Because water systems are capital-

⁶⁵ The costs are said to be “internalized” when the regulatory action of senior governments forces the municipality to adopt measures to prevent or offset the impacts or to compensate injured parties for their loss, or when the municipality otherwise takes the external costs into consideration. See Strategic Alternatives, 2002b, pp. 52–53.

⁶⁶ This is also described as “life-cycle costing.” With respect to sustainable asset management and life-cycle costing, see respectively Pollution Probe, 2001, “The management and financing of

intensive, outlining capital costs is one of the most important parts of financial planning in this area. The purpose of sustainable asset management is to collect information about infrastructure so as to plan for its maintenance and eventual replacement over the lifetime of the asset.

Many municipalities presently face uncertainty with respect to their future costs to replace underground water infrastructure, stemming from the lack of information about it. In order to plan for future costs, information is required as to the size and location of system components, their anticipated lifespan, and their replacement value. All municipalities need to systematically compile this information and record it in a standard, accessible format as a basis for a comprehensive asset management plan.

I recognize that estimating an asset's lifetime is not necessarily straightforward.⁶⁷ However, asset management does not require an individualized assessment of every specific component in the system. It extrapolates conclusions about the system as a whole based on a sampling of information about the different component types. Still, the process may require a significant commitment of time and money, depending on the size, age, material of construction, and complexity of the system.

A number of Ontario municipalities⁶⁸ now have in place long-term infrastructure replacement programs, based on asset management plans; their experiences may prove useful to others.⁶⁹ In addition, the provincial government has a useful and important role to play in assisting municipalities to generate asset management plans. In particular, the provincial government should initiate and guide the development of a generic asset management standard for the water industry in Ontario, as discussed below.

drinking water systems: Sustainable asset management," Walkerton Inquiry Submission; and Watson and Associates, 2001b, p. 5-1.

⁶⁷ The anticipated lifetime and future costs for a water main, for instance, depends on a number of variables, such as its age, the original design, material used, the manner of construction, historical disturbances to the foundation, vibration, corrosion, the quality of maintenance over the years, and other local circumstances. Association of Municipalities of Ontario, 2001, p. 25.

⁶⁸ Such as in Aurora, Chatham-Kent, St. Thomas, Lincoln, and Halton Region. Watson and Associates, 2001b, pp. 5-9-5-10.

⁶⁹ OWWA/OMWA raised concerns about some of the practical problems associated with life-cycle costing and asset management, arguing that the assessments can be difficult, expensive, and unreliable, and that engineers who carry out the studies may overstate problems in the hope of winning bigger contracts to fix them. I anticipate that this can be addressed through the development of a provincial asset management standard with the involvement of the industry. OWWA/OMWA, Walkerton Inquiry Submission (Expert Meeting, June 20-21, 2001).

The Association of Municipalities of Ontario indicated that one difficulty associated with life-cycle costing and asset management is that some assets may have a much longer lifespan than the typically 10- to 20-year amortization periods for debt financing. In such circumstances, where the municipality borrows to pay for its capital costs, those customers who use the asset during its early years will bear a disproportionate share of its cost. To some extent, these concerns about intergenerational equity can be addressed through the municipal financial plan, based on the skilful use of both reserve funds and borrowing, to smooth the cost burden as much as possible over the lifetime of the asset. Also, in some cases, the costs will be offset by ongoing expansion.

However, where some assets have a lifespan of more than a few decades, some users will end up paying a higher share of the costs than others. Those generations who pay more in the future, or who have done so in the past, may have to accept this burden, either on behalf of those who came before them, or for those who will come after. The more municipalities invest today in careful financial planning to spread out the costs of long-term capital assets in an appropriate way, the less generational unfairness there will be in the future.

10.3.5.1 *The Extent of Future Capital Costs*

Capital costs appear to constitute the greatest cost for municipal water systems in future, calculated on an average basis for Ontario municipalities.⁷⁰ However, there is significant uncertainty about the extent of these future costs. Also, not all capital costs raise the same concerns in relation to drinking water safety.⁷¹ The most that can be said is that future capital costs will be an important safety issue for some municipalities, and that all municipalities need to ensure they have a sustainable asset management plan as part of their financial plan.

⁷⁰ A number of parties at the Inquiry submitted that investments in water system infrastructure have been insufficient for several years. The downward trend corresponds with the reduction of water-related grants by the provincial and federal governments, according to AMO. See Association of Municipalities of Ontario, 2001, pp. 30–32. See also E. Doyle, 2002, “Production and distribution of drinking water,” Walkerton Inquiry Commissioned Paper 8; Strategic Alternatives, 2002b, p. 85–86; and Watson and Associates, 2001b, p. 7-7.

⁷¹ Capital costs are commonly divided into three categories: costs to address deficiencies in existing infrastructure and to bring the water system up to present standards, costs of replacement of existing infrastructure, and costs of infrastructure to accommodate growth. The first, “deficiencies,” raises greater safety concerns than the other two categories because deficiencies in infrastructure will generally weaken the multi-barrier system that is in place to ensure drinking water safety. In contrast, the category of capital costs related to “growth” raises relatively few safety concerns. See generally Association of Municipalities of Ontario, 2001, pp. 25–26; and Watson and Associates, 2001b, p. 3-1.

Future capital costs will become fully apparent only after municipalities have done a comprehensive financial plan – including an asset inventory and sustainable asset management plan – for their water system. To assess future capital costs across the province, it would be helpful for the information reported in municipal “full-cost reports” under the proposed *Sustainable Water and Sewage Systems Act* to be consolidated into a provincial database and made available to municipal water providers, as recommended by OWWA/OMWA.⁷² The priority should be for municipalities to assess capital costs that raise immediate or short-term safety concerns as part of a comprehensive financial plan. To facilitate this, the provincial government should provide guidance regarding what constitutes a safety-related water system deficiency, in association with the provincial asset management standard.⁷³

Capital costs facing municipalities were described by some at the Inquiry as a provincial “infrastructure deficit.” I am not in a position to say to what extent this may be the case. A legitimate reason for using this term is to highlight the importance of municipalities adequately investing in water infrastructure. Given that the extent of future capital costs is unclear, however, the term can also be misleading. For one, it conveys the message that all municipalities in the province have been underinvesting in their infrastructure, which is unfair to those that have effectively assessed and planned for their capital costs. In addition, not all future capital costs arise from past underinvestment in infrastructure. To the extent they relate to the replacement and expansion of existing infrastructure, capital costs are more appropriately viewed as normal expenditures to meet future needs.⁷⁴

⁷² I also note that the Ontario SuperBuild Corporation issued a number of contracts in 2001, including one that “will collect information on Ontario’s water and sewer infrastructure assets and compile it into a comprehensive data base.” Ontario, Ontario SuperBuild Corporation, 2001, “Request for proposals – #SSB-003505” (Toronto: Management Board Secretariat), Appendix A, p. 23.

⁷³ As the Ontario Water Works Association and the Ontario Municipal Water Association pointed out at the Inquiry, “deficiency” can be defined in many ways: source water quality, ability to treat the water, security of the water supply through the year, and so on. Different types of deficiency need to be addressed in different ways once they are understood. Watson and Associates, 2001b, pp. 1-1-1-2.

⁷⁴ To illustrate, a 1998 Canadian Water and Wastewater Association study identified \$12.5 billion in water infrastructure needs for Ontario. Of this amount, only 9% related to deficiencies in the existing system. About 12% of the total needs related to ongoing replacement costs and a further 12% of the total needs to expanding the system to bring the entire service population onto municipal systems. The costs to expand the system to service new development over the next 15 years, based on a 30% increase in Ontario’s population, was 65% of the total. Finally, 2% of the total estimated cost related to metering. Analysis for the Inquiry by Mike Loudon of data in Canadian Water and

The priority is for all municipalities to carry out comprehensive assessments of the current condition of their water system assets, the expected lifetime of those assets, and the anticipated maintenance and replacement costs over the long term. They will then be in a position to plan how to pay for those costs on a sustainable basis.

10.3.5.2 *Accounting Methods*

The starting point for asset management is to measure the value of assets and their rates of depreciation; to do this effectively, municipalities need to generate data regarding replacement value and depreciation. During the Inquiry, there was an involved discussion of accounting methods.⁷⁵ I do not think it necessary to make a recommendation regarding the accounting methods that should be adopted for water systems in Ontario. However, I would encourage the provincial government to consider this issue in relation to a generic asset management standard for the water industry.

10.3.6 **The Role of the Provincial Government**

The provincial government has an important role to play in supporting and overseeing the development of financial plans for municipal water systems. The provincial government's role is, in part, to establish common standards, where necessary, so that the requirements under the proposed *Sustainable Water and Sewage Systems Act* can be practically implemented by municipal water providers.⁷⁶ The provincial government will need to define "full cost" as it applies to mandatory cost recovery and develop a methodology for sustainable asset management. It should do so as part of a provincial standard. This process should involve municipalities and industry stakeholders. It should also involve the Ministry of Municipal Affairs and Housing and the Ministry of the Environment, given their joint interest in this area.

Wastewater Association, 1998, "Municipal water and wastewater infrastructure: Estimated investment needs, 1997–2012."

⁷⁵ For a discussion, see Strategic Alternatives, 2002b, pp. 99–112.

⁷⁶ I recognize that the Province has taken steps in this regard, such as the publication of the Ministry of Municipal Affairs and Housing, 2000, *Municipal Capital Budgeting Handbook* (Toronto: Queen's Printer) <www.mah.gov.on.ca/business/BudgHandbk/index-e.asp> [accessed April 10, 2002].

Under the proposed *Sustainable Water and Sewage Systems Act*, the Minister of Municipal Affairs and Housing would have the authority to approve, reject, or change both the full-cost report and the cost-recovery plan submitted by a municipality. The minister could also order a municipality to pay the full cost of water services by requiring it “to generate revenue in a specified manner or from a specified source to pay all or part of the cost of providing the services and to make specified or necessary amendments to existing contracts, resolutions or by-laws.”⁷⁷

It may very well be appropriate for these powers to rest with the Ministry of Municipal Affairs and Housing, given its historical role in relation to municipal financial affairs. However, the Ministry of the Environment may also have to play a role given that it will license municipalities in relation to their water systems and so that municipal water providers are not asked to satisfy disparate provincial requirements.

10.3.7 Paying for Future Costs

In this section, I discuss how municipalities can approach the issue of paying for the full cost of water services. The cost of water services in Ontario has risen since 2000 and will rise further if the recommendations of this Inquiry are implemented.⁷⁸

Rising costs will put concurrent demands on local revenue sources, especially local water rates.⁷⁹ The question of how much water rates will rise depends on whether a given municipality has planned for the cost of its water system, especially capital costs. For municipalities that are not presently paying the full cost of their systems, especially in relation to infrastructure, the costs in future will be greater.

⁷⁷ Bill 155, cl. 21.

⁷⁸ To assist in planning for these costs, I have commissioned Strategic Alternatives to assess the cost implications of the recommendations in this report. Strategic Alternatives et al., 2002, “The costs of clean water: Estimates of costs arising from the recommendations of the Walkerton Inquiry,” Walkerton Inquiry Commissioned Paper 25.

⁷⁹ In Ontario, water rates are the most common means for municipalities to recover the operating costs (excluding capital expenditures) of water services. In 1999, water rates accounted for 88% of revenues as a percentage of total revenue. In comparison, property taxes, other local charges, and grants accounted for 4.6%, 7%, and less than 1%, respectively. See Strategic Alternatives, 2002b, p. 15; and Association of Municipalities of Ontario, 2001, p. 36.

10.3.7.1 *Municipal Responsibility for Future Costs*

Recommendation 48: As a general principle, municipalities should plan to raise adequate resources for their water systems from local revenue sources, barring exceptional circumstances.

Since municipalities own their water systems and are accountable for the delivery of water services, and since the benefits of water services overwhelmingly go to local consumers, it is appropriate to expect municipalities to pay for the cost of their water system from local revenue sources,⁸⁰ within reasonable and clearly defined limits of affordability. The corollary to this is that it is generally not appropriate for senior governments to subsidize municipalities that have not planned effectively for the cost of water services, or that have underinvested in their system. Doing so would in effect penalize the residents of municipalities that have practised sound financial planning in the past.

I see two general exceptions to this. The first is where the additional costs of new regulatory requirements since the Walkerton outbreak, including those resulting from the recommendations of this report, overwhelm a municipality's ability to pay. This exception is discussed in Chapter 14. The second is where the residents of a municipality are unable to afford the future capital costs needed to ensure the safety of their drinking water. This exception is discussed in section 10.3.7.4 of this chapter.

10.3.7.2 *Household Affordability*

I would like to comment briefly on the prospect of rising water rates. At present, the average municipal water rate compares favourably to the cost of other household purchases such as Internet service or cable television. For the same cost as a bottle of spring water (\$1.25) bought at the store, consumers receive several thousand glasses of tap water. Thus, there appears to be room for water rates to rise in cases where consumers are not paying the full cost of safe water. Ideally, water rates will rise as necessary to generate adequate resources for drinking water safety while remaining within reasonable boundaries of affordability. This should be possible in the large majority of municipalities.

⁸⁰ Own source revenues are total revenues minus transfers from other levels of government, transfers from reserves, and proceeds from the sale of property. Strategic Alternatives, 2002b, p. 21.

That said, the financing of water systems does not occur in isolation of other pressures on municipal budgets. In light of recent re-structuring in the municipal sector, especially the transfer of additional open-ended social service costs (e.g., welfare) to municipalities in 1998, there is currently some uncertainty about the ability of municipalities to finance all of the programs they are responsible for, including water services. Municipalities may be reducing spending (including borrowing) to plan for potential increases in social service costs. Although I consider it beyond my mandate to make a recommendation in this area, I encourage the Province to publicly review the program responsibilities and fiscal capability of municipalities in light of recent restructuring to ensure that the financial pressures on municipalities do not crowd out the adequate financing of water systems.⁸¹

I also recognize, however, that rising rates may constitute a significant burden for low-income families and individuals. I do not see it as being within my mandate to comment on the means by which this problem might be addressed. There are a variety of possible approaches. Suffice it to say that, since water is an essential need, it would be unacceptable for those who are unable to pay for safe water to go without. The provincial and municipal governments should ensure that this does not occur by whatever means they consider appropriate.

10.3.7.3 *Future Capital Costs*

The greatest future costs facing some municipalities, as discussed in section 10.3.4, appear to be for infrastructure. In light of my recommendation that municipalities, barring exceptional circumstances, pay for those costs from local revenue sources, I discuss here the financing options that are available.

Municipalities can raise funds for capital projects in three ways. First, they can pay for capital costs directly from water rates, or other revenue sources,⁸² on a year-to-year basis. It usually does not make sense to pay for large-scale projects in this way, however, because of the sheer size of the costs involved. Municipalities can also raise money for capital spending on the longer term by

⁸¹ See Association of Municipalities of Ontario, 2001, pp. 19–20; and Strategic Alternatives, 2002b, pp. 78, 93–96.

⁸² Growth-related capital costs could be financed from development charges or construction by a developer, for example.

accumulating reserves (or reserve funds)⁸³ or by borrowing. Most municipalities rely on a mixture of annual revenues, reserves, and borrowing.

Municipal Reserves

Municipalities can put money away in a reserve fund each year to save for future capital projects. Thus, a portion of annual revenues is set aside in a special account and allowed to accumulate until withdrawn and used for a specific project.⁸⁴

Financing capital projects through reserves is the reverse of financing through borrowing. Instead of repaying costs in the future, reserve funds pay for costs from past savings. The key advantage of using reserves is that it avoids having to go into debt and pay interest. If planned far enough in advance, life-cycle reserves can provide adequate financing for future capital costs.⁸⁵ Municipalities also develop reserve funds, according to the Association of Municipalities of Ontario, to cushion impacts in the case of an emergency and to help deal with unanticipated in-year expenses or potential overruns.⁸⁶

On the other hand, the overuse of reserves may reflect an unduly conservative approach to financing. This appeared to be the case in Walkerton.⁸⁷ Reserves do not reflect the ideal in terms of intergenerational equity since those who put aside the money to pay for the asset may not be the ones who benefit from its use.⁸⁸ For this reason, it is reasonable and often preferable for municipalities to balance the use of reserves with borrowing for capital spending. Of course, some municipalities may simply find they have not put aside enough money to cover all capital costs necessary to address safety deficiencies. Where they have borrowing capacity available, as discussed below, those municipalities will

⁸³ There is a difference between municipal reserves and reserve funds, the former generally being permissive and at the discretion of municipal council, the latter being segregated for a specific purpose and established by statute (obligatory) or by municipal council (discretionary). For discussion here, both may serve the same ends of putting aside funds to pay for future capital costs, and I therefore use them interchangeably.

⁸⁴ Strategic Alternatives, 2002b, pp. 93–94.

⁸⁵ Watson and Associates, 2001b, p. 5-5.

⁸⁶ P. Vanini, for the Association of Municipalities of Ontario, “Presentation on municipal financing authority,” Walkerton Inquiry Submission (Expert Meeting, June 20–21, 2002).

⁸⁷ The Walkerton Public Utilities Commission had a fiscally conservative approach to its water system. The PUC had roughly \$347,000 in its reserve fund as of January 1, 2000.

⁸⁸ Strategic Alternatives, 2002b, p. 94.

have no choice but to borrow the necessary funds to invest adequately in the water system infrastructure.

Municipal Borrowing

Municipalities frequently finance major capital investment through borrowing. Municipalities are permitted to borrow for capital spending as long as they are within their borrowing limit as set out by the provincial government. This means a municipality's debt charges cannot exceed 25% of its local revenue sources without approval from the Ontario Municipal Board.⁸⁹ Most municipalities are well within this limit, and thus have room to borrow within provincial guidelines.⁹⁰ This estimated borrowing capacity would be available to finance future capital costs.⁹¹

10.3.7.4 *The Role of Provincial Subsidies*

Many of the parties in Part 2, including many with distinct interests, recommended that provincial subsidies for municipal water systems should only be available in exceptional circumstances. I agree. As I point out above, there are advantages, including from a safety standpoint, if municipal water systems are operated on a sound and sustainable financial basis. Experience indicates that relying on subsidies from senior levels of government can be unpredictable and, in some cases, can lead to delays in decision making about necessary capital expenditures.

Given that I did not address this issue in depth and that the full extent of future capital costs is as yet unknown, I do not consider it appropriate to make a definitive recommendation in this area. I do note, however, that in some situations where the amount of investment needed to address infrastructure

⁸⁹ Under O. Reg. 799/94 as amended by O. Reg. 75/97 and O. Reg. 155/99. See Association of Municipalities of Ontario, 2001, p. 15. *Municipal Act*, R.S.O. 1990, s. 187.

⁹⁰ On average, municipal debt charges do not exceed 5.1% of operating expenditures for any category of municipality. Water and sewage debt account for about 30% of the total debt incurred by Ontario municipalities and this proportion has remained roughly the same over the past ten years. Municipal borrowing in Ontario, on average, has reportedly fallen over the same time period, from about 18% of operating expenditures in 1989 to 13% in 1999. See *Strategic Alternatives*, 2002b, pp. 91–92, 114. Also, Watson and Associates, 2001b, Appendix A, provides a summary of the debt capacity of Ontario municipalities that deliver water services.

⁹¹ See Watson and Associates, 2001b, pp. 1-6 and 3-8.

deficiencies to ensure the safety of drinking water overwhelms the ability of local residents to pay, the provincial government will have to make the necessary funds available. Many suggest low-interest loans rather than grants as the appropriate means for doing so.

I would suggest that such subsidies be made available (1) only in accordance with defined affordability criteria; (2) only to the extent necessary to bring the cost of water services within an affordable range; and (3) only after a municipality has reviewed available options for restructuring or has provided a reasonable timeline by which costs will be brought within an affordable range.

10.3.8 Methods of Cost Recovery

Many parties and members of the public made submissions to the Inquiry regarding the methods of cost recovery adopted by municipalities for their water (and sewage) systems. As I have indicated, so long as the full costs of water are accounted for, recovered, and put back into the water system, adequate resources will be available for safety. The related questions of how and from whom a municipality recovers those costs are not directly related to safety. Therefore, I do not make any recommendations in this regard. Similarly, decisions about the structure of water rates should also be left to municipalities and their operating agencies to determine, and I do not make any recommendations in this regard.⁹²

I comment below, however, on methods of cost recovery and rate structures for municipal water systems. There are compelling arguments, for reasons of conservation and efficiency, to implement full-cost pricing and metering, to the extent they are appropriate in the local circumstances, in designing rate structures for water services. I also discuss other issues relating to cost recovery that were raised over the course of the Inquiry and that warrant a brief comment.

⁹² The Ontario Water Works Association and the Ontario Municipal Water Association recommended that water service providers maintain the ability to use a variety of user fees and charges, and capital funding mechanisms. I accept that there are important advantages to retaining the existing flexibility in this regard. See Watson and Associates, 2001a, p. 5-1.

10.3.8.1 *Full-Cost Pricing and Metering*

The term “full-cost pricing” is based on the premise of user pay: those who benefit from water services should generally pay a price that reflects the full cost of providing those services. The reason to adopt full-cost pricing in the context of water services is to require people to pay the full cost of the water they use. Doing so gives them a better appreciation of the value of water, and encourages them to use it wisely. I encourage municipalities to adopt full-cost pricing in the context of the water system. Full-cost pricing generally means that most water system costs are recouped from the water rate; only water rates allow consumers to be charged according to the amount of water they use. However, it may be that some costs are appropriately recouped from other municipal revenue sources, such as using property taxes for fire protection and capital charges for system expansion.⁹³ Municipalities may also decide to adopt exceptions to full-cost pricing for reasons of household affordability, as discussed in section 10.3.7.2.

As in the case of full-cost pricing, the decision whether to meter the water system should be left to municipal water providers. I do note, however, that metering makes sense for reasons of conservation and efficiency. Even though installing meters can be expensive, the cost will normally be recovered in time through reduced water usage and lower infrastructure costs.⁹⁴

10.4 Public-Private Issues

In section 10.2.3 of this chapter, I discussed the various models available to municipalities for the management and operation of their water systems. One of many options is to involve the private sector. A distinction can be made between different forms of “privatization” in relation to water systems. First, privatization can mean the engagement of a private operating agency to run the water system. Second, it can mean private ownership of the water system. The former type of privatization is discussed throughout this section; the latter is discussed separately in section 10.4.3.

⁹³ See Strategic Alternatives, 2002b, pp. 51–52; and Watson and Associates, 2001a, p. 3-2.

⁹⁴ One Canadian study estimated that metering reduces water demand by 15% to 20%, although estimates vary; D.W. Tate, 1990, “Water demand management in Canada: A state of the art review,” Environment Canada, Soc. Sci. Ser. No. 23, p. 36. See also B. McGregor, Walkerton Inquiry (Town Hall Meeting, March 22, 2001), transcript p. 54; and R. Rivers, Walkerton Inquiry (Town Hall Meeting, April 10, 2001), transcript p. 191.

The issue of private sector involvement in providing drinking water has engendered a great deal of controversy in a sometimes emotional discussion. I have concluded that the so-called public-private debate has more to do with issues outside my mandate and less to do with the provision of safe drinking water. If implemented, the recommendations in this report should address safety concerns whether systems are operated by public or private entities. However, because of public interest and the prominence of the issue in the submissions to the Inquiry, I think it advisable to set out my analysis in some detail.

10.4.1 The Public-Private Dimension

During the past century and a half, water services have been handled in a variety of ways in industrialized countries. The roles of individuals, communities, and the private sector have shifted over time in response to changing circumstances, evolving community values, and altered understandings of relative costs and benefits.

During the nineteenth century there was a wide variety of family and community-based arrangements for providing water. As cities grew and scientific research established the link between disease and contaminated water, governments intervened, assuming broader regulatory and delivery roles to protect public health. Public ownership and operation of water systems became the pattern in most industrialized countries during much of the twentieth century.⁹⁵

The past two decades, however, have seen significant changes in some countries, with the introduction of a larger role for private companies in the delivery of this vital public service.⁹⁶ In the water field, as elsewhere, there has been heated debate about the merits of the public sector and the private sector. The issue of the private sector's involvement in drinking water provision was extensively canvassed in Part 2 of the Inquiry. I will summarize below a number of the central contentions of the two positions.

⁹⁵ A significant exception to the case is France, which has traditionally organized the provision of these services with substantial private sector involvement. See, for example, J. Hassan, 1996, "France: Public Responsibility – Private Execution" in *The European Water Environment in a Period of Transformation*, J. Hassan et al., eds. (Manchester: Manchester University Press).

⁹⁶ The most radical reforms occurred in the United Kingdom, which turned over both ownership and management of water and sewage systems in England and Wales to private operators. No other industrialized state has privatized in this field to this extent; the normal practice is to retain public ownership of the assets and infrastructure.

Exponents of the private sector claim a number of significant benefits of private sector involvement, which include:

- greater access to financing and greater willingness to charge the full cost of the service;
- greater efficiencies in operation and management;
- greater technical and managerial expertise, and innovation;
- flexibility in terms of management, labour, and procurement;
- director expertise and legal liabilities;
- depoliticization of management decisions;
- stronger incentives to comply with standards; and
- transfer of risk to the private operator.

Overall, it is contended that private sector operators can provide competent service at lower cost than the public sector. The criticism that the drive for profit diverts revenue from reinvestment in future safety is countered by pointing out that the surplus can also be diverted from municipally operated utilities to other municipal services.

Promoters of the public sector argue that it has many advantages, including the following:

- priority of the public interest over shareholder interests;
- greater accountability and an obligation to keep the revenues in the municipality;
- greater transparency because of fewer confidentiality concerns;
- lower cost of capital (at least in the municipal sector in Ontario);
- comparable levels of efficiency, expertise, and innovation in well-run public utilities;

- better cooperation among agencies, greater concern with conservation, and higher sensitivity to social concerns (e.g., in rate setting); and
- capacity to restructure poor public sector performers.

In general, public sector advocates argue that public operations are at no disadvantage with respect to finance and capital investment, operational efficiency, and access to expertise and new technologies, while they display a marked advantage over the private sector in public accountability, equitable access to water and water services, and environmental protection and conservation.

10.4.2 Comments Regarding Private Operation

My first observation is to note that most of the arguments advanced on either side of the public-private debate touch only indirectly on the central matter confronting this Inquiry; namely, the safety and quality of drinking water. Although it is apparent that such things as compliance with standards, greater public accountability and transparency, adequate financing, and a higher sensitivity to social concerns are all likely to have a place in a water system that performs well, the achievement of high water quality as such is not typically a claim advanced by either side in the debate. Indeed, the quality management systems that have been designed to produce high-quality results generally do not either presuppose or exclude private sector operation.⁹⁷

My second observation is that the private-public debate is frequently carried on at a level of abstraction far removed from the kinds of issues decision makers, confronted with the practical challenges of running a water system, normally have to face. There is rarely one big question for which there is one big answer, but rather a whole series of issues and decisions where sensible judgment will need to take into account a wide range of options and considerations. These include such things as the size of the operation, the existing weaknesses and strengths of the system, in-house capacity, the age and condition of the infrastructure, the regulatory framework, the relative cost of capital, the need

⁹⁷ Models of quality management are discussed in Chapter 11.

to gain access to the best expertise and technology, and the preferences of the local community.⁹⁸

This brings me to my third point, namely, that it is not a matter of choosing between a “public system” and a “private system,” pure and simple, but of deciding on the best mix of concrete arrangements in the circumstances at hand. Questions of ideological purity are less important than the day-to-day choices that need to be made in order to achieve the best operation of the water system. It is most unlikely that any system will be exclusively either private or public. Even in a radically privatized water system, such as exists in England and Wales, an elaborate, intrusive regulatory oversight role remains, as it must, with the public authority.⁹⁹

In Ontario, on the other hand, public sector regulation, ownership, and management is the order of the day. The dominant pattern is provincial regulation, and municipal ownership and operation of water systems.¹⁰⁰ Municipalities have had the option of contracting with private actors to operate their water system, but have generally chosen not to. Yet, even in what would universally be acknowledged as a public system, the private sector has a notable presence.¹⁰¹

Let us suppose, for example, that a municipality with a public system decides to build and operate a new water treatment plant. If it chooses to float a

⁹⁸ See D. Cameron, 2002, “Drinking water safety: Do ownership and management matter?,” Walkerton Inquiry Commissioned Paper 18, c. 4, for an account of the different ways in which three Ontario municipalities coped with the challenges they faced. The three municipalities reported on are the regional municipalities of York and Peel, and the amalgamated City of Hamilton.

⁹⁹ The *British Water Act* of 1989 removed regulatory functions from the water authorities and instituted three new agencies to regulate the industry. The Drinking Water Inspectorate (DWI) is responsible for ensuring that water companies supply water that meets all water quality regulations and is safe to drink. The Environment Agency (EA), formerly the National Rivers Authority (NRA), has responsibility for environmental regulation and implementation of European Community directives. These standards, to a large extent, determine the investment program necessary for the companies. OFWAT, the Office of Water Services, is the economic regulator for the water industry. All three report to the Water and Land Directorate of the Department of the Environment, Transport and the Regions (DETR), which works to coordinate the three and to set water policy. *Ibid.*, p. 61–62.

¹⁰⁰ Strategic Alternatives, 2002a, pp. 14–15; and d’Ombain, pp. 10–11.

¹⁰¹ An example of the impact of the private sector on a public water system is the Regional Municipality of York. In making its decision to continue with direct public delivery, it was greatly aided by a highly productive relationship with the private sector. York reportedly came to understand its needs better, reached a grounded appreciation of its financial position, and learned about international norms and practices in part from its association with Consumer Utilities, a corporation created by North West Water and Consumers Gas. See Cameron, c. 4.

municipal debenture to finance the construction of this new facility, it will almost certainly rely on the expertise of a private financial services firm; engineers in a private firm will design the facility and lawyers will handle the legal process; engineering and construction firms will bid on the contract to build the structure; and private maintenance and service crews may assist in keeping it operating well once it is built. So the public-private distinction has more to do with an assessment of where the key functions and responsibilities are located than it has to do with a simple choice to make the system either entirely public or private.

Fourthly, as discussed in section 10.2.1 of this chapter, the provision of water services is almost a natural monopoly. It is not realistic to think of several service providers – governments or private actors – competing in the offering of some of the key services in question. Just as there can practically be only one electrical power grid in any given territory, there will be only one water system. Unlike electricity, however, which can have several electricity providers competing over a common grid, a water system doesn't usually accommodate multiple suppliers. This is because distinct lines of accountability for the quality and reliability of the water that is carried through the pipes is difficult.

It is thus more appropriate to speak of designated roles for the private sector in the water field, than it is to speak comprehensively about the wholesale "privatization" of water.¹⁰² The latter suggests the existence of a market in a monopolistic industry in which, for the most part, there will be regulated service delivery by a single supplier, not market competition among multiple actors. To the extent that the advantages claimed for privatization rest on assumptions about the benefits of the market mechanism, therefore, they cannot be assumed to automatically exist in the largely monopolistic water industry. Normal market mechanisms simply do not apply, or apply only at specific points in the process, such as the bidding for a contract.

¹⁰² According to Canadian Environmental Law Association/Canadian Union of Public Employees/Ontario Public Sector Employees Union, 2001, "Water services in Ontario: For the public, by the public," Walkerton Inquiry Submission, p. 14:

The ways in which private companies can be involved in the water supply and delivery systems vary. The most common are for municipalities to contract with private companies to design and build water treatment plant, 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.

Thus, the involvement of the private sector in the water field typically entails the competitive bidding of private firms for the chance: to offer a specific, time-limited service such as the construction of a pumping station (“competition in the market”); or to operate a part of the system as a tightly regulated monopoly in the water industry (“competition for the market”); or some combination of the two.¹⁰³

10.4.3 Comments Regarding Private Ownership

Rarely does the discussion of privatization in the water industry in Ontario include the contention that the ownership of water facilities and infrastructure should be placed in private hands, and there was little argument during the Inquiry’s hearings that Ontario municipalities should move in that direction.¹⁰⁴ Given that municipal responsibility and accountability flow from municipal ownership, I see no advantage for safety reasons to turning over ownership of municipal water systems to either the provincial government or to the private sector. Changes in the ownership regime for water systems would raise a number of significant issues in relation to the recommendations in this report. I have premised many recommendations on continued municipal ownership of water systems.

In not recommending the sale of municipal water systems to the private sector, my conclusion is based on several considerations: the essentially local character of water services; the natural-monopoly characteristics of the water industry; the importance of maintaining accountability to local residents; and the historical role of municipalities in this field. Given the wide range of circumstances, it does not seem desirable to formally exclude the possibility of a transfer of title in a particular case, but I see no reason, as a practical matter, why municipal ownership should not be continued. I would also note that, if a private firm actually owns some of the facilities in the monopoly components of a water system, then rate regulation would be required to establish fair and reasonable prices in the absence of competition.

¹⁰³ The use of terms has been adopted from Cameron, p. 9.

¹⁰⁴ The only party to recommend the privatization of ownership of municipal water systems was the Energy Probe Research Foundation. See E. Brubaker, 2001, for the Energy Probe Research Foundation, 2001, “The promise of privatization,” Walkerton Inquiry Submission.

10.4.4 Implications for Safety

As in other countries, the water systems serving Canadians are made up of many different components and processes. My report in Part 1 of the Inquiry determined that multiple factors contributed to the contamination of Walkerton's water system. A review of other comparable situations and the information before the Inquiry confirms that high water quality is achieved when all the parts of a water system are working effectively together, and an organized procedure exists for identifying and correcting weaknesses when they occur. These are hallmarks of the quality management approach. The effectiveness with which the various elements of the system are connected to one another, the degree to which the right information circulates in a timely manner, and the extent to which multiple barriers bind the entire set of processes into a coherent whole, are all as important to the provision of safe water as is the quality or condition of any one of the components or parts. A community could endow itself with top-of-the-line pipes and pumping stations, but if staff are ill-trained or water quality monitoring is ineffective, the system as a whole will be at risk.

What impact does the introduction of private actors into a water system have on water quality? To begin, government is responsible for ensuring public health and safety. This means that public regulation of private actors whose conduct could put individual or community safety at risk is a primary function of government. Even in cases in which the regulatory function is devolved, for example, to an industry association, the ultimate accountability of public officials for the protection of health and safety remains. Water is a particularly sensitive resource, in view of its necessity to life, the absence of any alternatives, the wide range of uses to which it is put, and the risks of contaminated water harming large groups of people in short periods of time. As I discuss in Chapter 13, the provincial government should not devolve or transfer its regulatory function to third parties unless it is established that this will result in greater safety. Specifically, I propose that cost should not be the reason for any devolution.

Ultimately, the decision whether to engage a private company at a water system, and, if so, under what conditions, depends on a wide variety of considerations in the concrete circumstances of the case. These include: the legal and regulatory environment in which the transfer occurs; the professionalism of the public authority, and its ability to recruit expert assistance to support it in the negotiations; the integrity of the bidding process; and the existence of

experienced private firms prepared to offer their services.¹⁰⁵ In terms of water safety, though, there are no simple answers. Both public and private operating agencies may perform well or badly. I am not convinced that either is uniquely able to operate a water system so as to achieve consistently high-quality drinking water.

10.4.5 The Decision to Engage a Private Operating Agency

The decision whether to engage an external operating agency is best left to municipalities to determine in light of local circumstances and because of their accountability to local residents. From the perspective of protecting water quality, the Province should adopt a position of neutrality with respect to the decision of municipalities to engage, or not to engage, private operating agencies to deliver water services. The provincial government should ensure that this neutrality is reflected in provincial legislation and regulations including Bill 46, *An Act Respecting the Accountability of Public Sector Organizations*, introduced into the Legislature in May 2001, as well as in the provision of SuperBuild funding for water systems.

Municipalities may invite the participation of private operating agencies in a variety of ways, or they may preserve to themselves, or to a public body that they create, the responsibilities for the operation of the system. Alternatively, they may choose to employ a provincial-level public contractor, such as the Ontario Clean Water Agency, as many of them do now. Whatever they choose to do, the regulatory framework outlined in this report is clear. All must be equally subject to the regulatory requirements elaborated by the provincial government with respect to water quality standards, licensing, training and accreditation, and the like. These are features of the Ontario system designed to protect the province's water; as such, they must be adhered to by all players in the system, public or private.

¹⁰⁵ One reason commonly cited for moving to privatization was to gain access to greater financing. However, the information presented to the Inquiry indicated that, if anything, the municipal sector in Ontario is able to borrow funds at lower cost than the private sector. See Strategic Alternatives, 2002b, pp. 96–99; and Watson and Associates, 2001b, pp. 7-1–7-11.

10.4.5.1 *The Importance of the Operating Agreement*

The public model aims to serve the public interest within a framework of public accountability where the elected representatives are held to account by their electors for their management of the system. A private company, on the other hand, pursues as its central objective the interest of the shareholders of the company; profit making and increasing shareholder value are the key indicators of success. Thus, the lines of accountability run back to the owners of the company.

The operating agreement, or contract, becomes “the means by which the public and private interest are brought together.”¹⁰⁶ It effectively transfers responsibility for addressing a portion of the public interest to the private operator who is accountable for doing so only within the terms of the contract; the longer the term of the contract, the more this is the case.¹⁰⁷ As such, the operating contract between the public and private entities takes on a great deal of importance in terms of the municipality’s responsibility for the system. It lays out the respective responsibilities, allocates the benefits, and assigns the risks between the two parties. Disputes will be resolved according to the contract or otherwise through the legal process.

Given the importance of the operating agreement, municipalities must ensure they are fully apprised of the legal implications in terms of future liability, financial responsibilities, information disclosure, dispute resolution, and enforcement.¹⁰⁸ Safety should be the primary principle governing the decision to contract with an external operator and the oversight of the operating agency once the operating agreement is in place. The municipality should include performance-based safety bonuses and penalties in the contract, and should have sufficient remedies if there is a default on safety issues. In the event of a major emergency, the onus will be on the municipality to show that safety was not compromised as a result of the operating arrangement.

Municipalities also have a legitimate interest in assessing the health and stability of the corporate structure of the private operating agency, since changes in ownership have the potential to generate instability with respect to the operating agreement. In the case of the City of Hamilton, for example, the ownership of

¹⁰⁶ Cameron, pp. 11–12, 146.

¹⁰⁷ *Ibid.*, p. 146.

¹⁰⁸ This includes the implications of investment provisions under the North American Free Trade Agreement and other relevant trade agreements, a subject discussed at some length during Part 2.

the private operating agency has changed hands several times since the operating contract was signed at the end of 1994.¹⁰⁹

10.4.5.2 *Municipal Accountability and Transparency*

Recommendation 49: Municipal contracts with external operating agencies should be made public.

Once an agreement with an external operating agency is signed, the orientation of the municipality shifts from direct-service delivery to ensuring contract compliance. The accountability of the municipality will be exercised as supervisor of the agreement, and the municipality will need to dedicate enough resources and personnel to fulfill this oversight role effectively. Although a municipality may engage an external operating agency, the municipality remains responsible for ensuring the safety of water delivered to consumers. The cost to a municipality of due diligence before entering a contract, and of compliance monitoring over the term of a contract, are an important part of its oversight responsibilities and, as such, the full cost of water services.

A municipality contemplating the engagement of an external operating agency to deliver water services should ensure that the proposed transaction is fully transparent. The concern for water quality justifies full publicity in the operation of a community's water system, whether it is run privately, by the public, or as a mixed system. Municipalities should actively solicit the views of residents before entering into such agreements so that the community can have a role in determining the preferred course of action. Also, the agreement should require the operating agency to report regularly and publicly on the achievement of water quality standards, on system performance, on financial results, and the

¹⁰⁹ The Regional Municipality of Hamilton-Wentworth entered into a contract in 1994 with Philips Utilities Management Corporation (PUMC) and its parent, Philip Environmental (later Philip Services Corporation), for the operation and maintenance of the city's water system. The collapse of the parent company, Philip Environmental, in 1998–1999, led to the subsidiary (PUMC), being sold in May 1999 to Azurix, a subsidiary of Enron Corporation. Azurix Corporation created Azurix North America, a wholly owned subsidiary of Azurix, which assumed responsibility for the contract with the now amalgamated City of Hamilton. Soon after, Enron, before it collapsed into bankruptcy, sold Azurix North America in the autumn of 2001 to American Water Works. Before the sale was completed, the German conglomerate RWE AG acquired American Water Works. At the time of preparing this report, therefore, the operating agreement rests with American Water Works, a subsidiary of RWE AG.

like. In some cases, operating contracts have been kept secret on grounds of commercial privacy; they should be made public.

10.4.6 The Ontario Clean Water Agency

The Ontario Clean Water Agency (OCWA) was established in 1993 as a Crown entity to assume the operational and financing functions for water and sewage of the Ministry of Environment. The Act establishing the agency¹¹⁰ defined its mandate, which included the provision of operations and maintenance services to municipalities on a cost-recovery basis. In 1996, OCWA's administration of capital assistance programs for water and sewage facilities was transferred back to the Ministry of the Environment, and in 1997 ownership of water and sewage systems was shifted from OCWA to the municipalities those systems served. OCWA's central function remains the same, however: to operate water and wastewater facilities for those municipal authorities that choose to engage the provincial agency.

OCWA runs approximately 151 water treatment facilities in Ontario;¹¹¹ it has about 95% of the market of those municipalities that choose to outsource the operation of such facilities. It also provides project management services to municipalities seeking technical advice on planning, design, and construction of new and upgraded water and sewage treatment facilities.¹¹² The agency receives no funding from the Ontario government; it competes for municipal operating and maintenance contracts.

In addition to being one of the largest water operating agencies in the country, OCWA is unique in Ontario. As an "operational enterprise" (formerly, a schedule IV government agency) created under the *Capital Investment Plan Act*, it reports to the Minister of the Environment.¹¹³ OCWA's chair and board of directors are Order-in-Council appointees, appointed in consultation with the minister.¹¹⁴ The agency's approximately 675 staff are public servants and

¹¹⁰ *Capital Investment Plan Act*, S.O. 1993, c. 23.

¹¹¹ Ontario, Ministry of the Environment, 2002, *Sewage and Water Treatment Program Database*. In all, OCWA runs over 400 water and sewage treatment plants. See <www.ocwa.com/fropsm.htm> [accessed April 17, 2002].

¹¹² d'Ombain, pp. 48–49.

¹¹³ Ontario Clean Water Agency, *Memorandum of Understanding*, March 31, 1994, s. 1.5. The Minister of the Environment has chosen on a number of occasions to extend the MOU without changes.

¹¹⁴ *Ibid.*, s. 3.1 (a), (b).

are hired pursuant to the *Public Service Act*, with bargaining unit employees represented by the Ontario Public Service Employees Union.

OCWA had operating expenses of just over \$100 million for its 2000 fiscal year.¹¹⁵ As a public corporation, it pays no corporate taxes, it is exempt from collecting GST on the fees it charges, and its clients do not normally require it to post performance bonds. In addition, its financial liability is backed by the province's guarantee.¹¹⁶

10.4.6.1 *Submissions Regarding OCWA*

Proponents of private sector involvement in the water industry criticize the privileged position of OCWA and argue that it should be forced to operate on a “level playing field” with private firms. For example, the Energy Probe Research Foundation states that OCWA should be disbanded, and, if it is not, it should be an arm's-length agency without subsidies, and it should be required through a dividend policy to turn over surplus cash to the public.¹¹⁷ Other parties, however, submit that OCWA should be retained as a provincial Crown corporation, with a mandate to assist municipalities, especially small municipalities, to achieve self-sufficiency, to train municipal employees, and to act in water emergencies.¹¹⁸

OCWA itself reports that the fact it is clearly a government agency – operating under statute, possessing a public sector board appointed in consultation with the Minister of the Environment, and made up of employees who are public servants – provides some reassurance to local government decision makers who had to make important choices about how to deliver water services after the passage of Bill 107 in May 1997.¹¹⁹ According to OCWA, this sense of comfort

¹¹⁵ d'Ombrain, p. 49.

¹¹⁶ Ibid.

¹¹⁷ Energy Probe Research Foundation, 2001, “Recommendations for public hearings 7 and 8: The management of water providers,” Walkerton Inquiry Submission, p. 2.

¹¹⁸ Canadian Environmental Law Association/Canadian Union of Public Employees/Ontario Public Sector Employees Union, p. 52. The Ontario Public Service Employees Union also strongly favours the retention of OCWA, although it supports a clearer specification of its role as an “enterprise agency.” Ontario Public Service Employees Union, 2001, “Recommendations and rationale concerning laboratories and drinking water providers,” Walkerton Inquiry Submission, pp. 19–20.

¹¹⁹ M. Brady, general counsel; L. Morrow Wickson, vice-president finance and corporate services; and N. Reid, vice-president business development; interviewed by D. Cameron and D. Whorley, June 13, 2001. See Cameron, p. 111. See also OCWA's *Memorandum of Understanding*, s. 3.1 that sets out the Minister of the Environment's responsibilities *vis-à-vis* the agency, and stipulates the

seems to have increased somewhat in the post-Walkerton environment in which municipalities have become more aware of their due diligence requirements, and the risks involved in the operation of water systems.¹²⁰

After an organizational review in 1996, OCWA established its hub and satellite system. Prior to the review, the agency was responsible for what amounted to several hundred stand-alone operations and believed that there would be collective benefits available through reorganization. In the hub and satellite configuration, OCWA now has regional plants surrounded by smaller nearby satellite operations. The new configuration delivers economies of scale, introduces staffing flexibility, and facilitates information sharing that might not otherwise take place.¹²¹ The agency suggests that smaller municipalities in particular seem to have benefited from the flexibility available through OCWA's organizational design. Smaller plants might, for example, only require a part-time staff person on-site for their operation. By folding the smaller plant's requirements into the hub plant's overall duties, OCWA has been able to meet the marginal requirement efficiently. In this respect, smaller municipalities buy into the expertise of the larger system, and the benefits of mutual assistance that it provides.¹²²

There is some reason to believe that the types of benefits derived from contracting with OCWA differ based on the size of the contracting municipality. The larger municipalities are more likely to have in-house expertise on water systems and are therefore more likely to be aware of the risks and responsibilities associated with these operations. By comparison, smaller municipalities seem less likely to have resident expertise, and therefore may operate in a state of relatively higher uncertainty compared to larger centres. OCWA reports that, while cost considerations will also be important, smaller municipalities tend to be motivated by the desire to mitigate risk and obtain expertise.¹²³

minister shall "assume accountability for the activities of the Agency at Cabinet or any of its committees as required."

¹²⁰ Cameron, p. 111.

¹²¹ *Ibid.*, p. 112.

¹²² *Ibid.*

¹²³ *Ibid.*, pp. 112–113.

10.4.6.2 *OCWA's Future Role*

A Crown corporation such as OCWA can perform a significant role in the provincial water supply system. It is a useful option for municipalities considering how best to discharge their responsibilities for the delivery of safe water. OCWA should continue to offer operational and maintenance services to Ontario municipalities, subject to the same safety, accountability, and transparency requirements as apply to all other external operating agencies in the province. Clearly, a publicly owned operating agency of this kind must accept the same accountability and transparency requirements as other actors in the system. Equally, it must be subjected to the same safety standards relating to accreditation, licensing, and enforcement that apply or will apply to other actors. As with private operating agencies, OCWA's contracts should be made public.

In addition to continuing its existing role as an external operator competing for municipal service contracts, it is apparent that OCWA offers the provincial government a useful instrument to assist in the reorganization of small water systems that would otherwise have great difficulty meeting contemporary safety and quality expectations. In addition, a formal emergency response mandate should be assigned to OCWA, so that the provincial agency is in a position to step in and offer needed support in times of crisis. In this regard, I note the crucial role that OCWA played in responding to the water contamination in Walkerton.

Recommendation 50: The role of the Ontario Clean Water Agency in offering operational services to municipalities should be maintained. The provincial government should clarify the Ontario Clean Water Agency's status and mandate. In particular, OCWA should be:

- an arm's-length agency with an independent, qualified board responsible for choosing the chief executive; and
- available to provide standby emergency capabilities.

Some clarification of the status and mandate of the Ontario Clean Water Agency would make sense at this juncture. This could be done by drafting a new Memorandum of Understanding and altering any other relevant instruments. By endowing the agency with greater operating independence, the province would more clearly separate the regulatory functions for which it is responsible from the operating mandate of OCWA.

The current board should be replaced by an independent board made up of persons with relevant experience, and the board should choose the agency's CEO. The new MOU should specify OCWA's mandate, setting out the objectives the government would expect it to meet. These objectives should include: offering water operating services on contract to municipalities; assisting small municipalities to achieve provincial standards of safety and quality management; and developing the capacity to provide emergency services when necessary. Board meetings and board minutes should be made public, with exceptions for bid strategies and other information reasonably related to OCWA's competitive position. As for other operating agencies, OCWA should be required to make its operating agreements¹²⁴ with municipalities, and ongoing water quality monitoring data, publicly available.

¹²⁴ I recognize that, in some cases, detailed financial and business information about an operating agency may be attached to bids or operating agreements and that it may be legitimately withheld. The MOE should have a process to review public complaints regarding non-disclosure by municipalities or operating agencies in this regard, and should have the authority to order disclosure where appropriate.