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**TURNING OFF THE TAP:
WATER CONSERVATION LAW IN ONTARIO**
WITH EMPHASIS ON THE MUNICIPAL LEVEL

Prepared by:

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INTRODUCTION

Ontario residents remain one of the most wasteful populations in the world when it comes to water use.¹ Moreover, water consumption can be expected to increase in light of population growth, continued economic development and the potential greenhouse effects of global warming (such as decreased precipitation and increased evaporation).² Ontario's wasteful water use can be explained in part by the undervalued nature of the resource. Water costs in Ontario are about two-thirds the cost of water in the United States and one-fourth the cost in some European countries.³ Coupled with the increased demand for the province's water resources is the emerging realization that water and sewage treatment facilities in various parts of the province are no longer able to meet capacity requirements or the public's expectations for a higher quality of water supplies.⁴

While a number of policy responses to address these issues are possible, the most direct response is the conservation and the more efficient use of existing water resources and facilities. If water conservation is to become a priority in Ontario, however, there will be a need for the development of a water conservation strategy, multi-dimensional in nature, that includes an array of components such as an education and public awareness component, a regulatory and policy component, a fiscal and pricing component and an institutional component.

0.1 Objectives and Overview to the Study

The primary objective of this paper is to examine one component of a water conservation strategy - the regulatory component. More specifically, this paper will provide an overview of the regulatory framework governing water conservation with emphasis on the municipal level of government. In this context, the paper analyzes the legal framework pertaining to the development, financing and implementation of water conservation strategies including mandatory installation of water meters for residential and commercial premises, full cost pricing schemes, financing of water and sewage infrastructure upgrading, earmarking of funds and revenues from water rates for conservation, and specific conservation measures such as conservation plumbing.

At present, legal and policy arrangements provide both constraints on, and opportunities for, the development and integration of water conservation policies. Legislation now in place provides a general framework for water resource management by defining rights and obligations with respect to water, by laying out the responsibilities of governmental bodies, and by setting out their policy objectives.

Generally, however, laws, policies and institutional arrangements governing water conservation in Ontario are not embodied in a comprehensive framework. Instead, water conservation laws and policies, to the extent they do exist, have developed in an ad hoc and piece-meal fashion. The diversity of water uses, the crisis-by crisis

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approach to water supplies and use, the multiplicity of agencies having some authority over water issues, the lack of clear water use and conservation policies and mandate, and a general lack of awareness of the importance of water conservation issues, are just some of the factors that can be cited as reflecting the existing fragmented approach to water quantity management. In order to develop an effective regulatory component to a water conservation strategy, existing laws and policies at both the provincial and municipal levels must work toward a less fragmented and more integrated overall approach focused on water resource management.

0.2 Methodology and Outline of the Study

This paper reviews the legislation, policies and programs which govern water conservation in the province with emphasis on the municipal level of government. The statutes and regulatory initiatives reviewed are listed in Appendix A. It should be recognized that, owing to the number and diversity of statutes involved, some generalizations are made to simplify the discussion. Furthermore, statutes and policies may in varying circumstances suggest different interpretations. This paper has attempted to discuss the accepted or literal interpretation, recognizing that the application of the law may not always be consistent.

The paper is divided into four parts. The first part provides an overview of the legislative authority governing water management policy in Canada. The second part

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describes the regulatory framework governing water conservation with special emphasis on the municipal level in the province of Ontario. For the sake of convenience, a detailed chart summarizing the legislative framework and issues governing water conservation at the municipal level is provided in Appendix B.

The third part of this paper examines relevant laws, policies and programs with a view to identifying the extent to which they provide vehicles for, or barriers to, the adoption and implementation of water conservation measures. Recommendations will be presented in the fourth part of this paper.

1. LEGISLATIVE AUTHORITY PERTAINING TO WATER CONSERVATION

1.1 Overview

The Constitution Act, 1867⁵ allocates exclusive spheres of legislative authority to the provinces and to the federal government. Like many matters pertaining to environmental protection and resource allocation, water conservation is not explicitly dealt with in the specified heads of power. It is therefore necessary to examine the specific allocated sources of authority in order to identify the powers each level of government has which may be relevant to water conservation.

The province has primary legislative authority over water resources. Furthermore, municipalities are created by, and therefore, subject to, provincial law. Nevertheless, the federal government still retains some important constitutional powers which may directly or indirectly impact water conservation measures. Where valid authority to legislate co-exists between the provincial and federal governments and there is a conflict, the federal legislation is paramount and the provincial legislation is invalid to extent of conflict. Similarly, provincial legislation is paramount over municipal regulation.

1.2 Federal Authority

The federal government has proprietary rights over designated works listed in the Constitution. Although the provinces are the owners of the natural resources within their territorial limits, the federal government retains important legislative powers over those resources because of the specific heads of power granted to it

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under the Constitution. The federal government has the power to legislate with regard to seacoast and inland fisheries, interprovincial trade and commerce, navigation and shipping, and criminal law, all of which are specifically assigned by s. 91 of the Constitution Act, 1867. As a general rule, these specific heads of power support federal water legislation such as the Fisheries Act,⁵ the Navigable Waters Protection Act,⁷ among other such statutes.⁸

The federal government may also exercise control over matters which pertain to works connecting two or more provinces or extending beyond the territorial limits of a province. Similarly, it has authority pertaining to the "Peace, Order and good Government of the nation". This latter source of authority may be called into play where a national emergency exists or where a matter is of "national concern".⁹

The federal government is empowered to enter into international agreements and treaties, even though the provinces may have the ultimate authority to implement and fulfil the commitments under those instruments.

The federal government could have a marginal regulatory role in a number of matters ancillary to water conservation. For example, it has prescribed emission standards for automobiles imported into Canada under the power given to it to regulate trade and commerce. Similar measures could conceivably be adopted with respect to plumbing fixtures and water appliances imported into the country.

While the language of the Constitution is very broad in empowering the federal Parliament to legislate with respect to "the regulation of trade and commerce"¹⁰, judicial interpretation has restricted its meaning. This power was defined as including interprovincial trade and general regulation of trade affecting the whole Dominion.¹¹ While the definition of international trade has caused few problems, "interprovincial trade" is, however, more difficult to define. The test applied to interprovincial trade and commerce is whether a trade activity, including manufacturing or production, involves a matter of extra-provincial interest or concern. If so, the activity is put beyond provincial powers.¹² If the primary objective of the statute or regulation is related to the heads of power specifically allocated to the legislative authority in question by the Constitution, then the enactment will be successful.¹³

In the United States, the federal authority to regulate trade and commerce allows the federal government to regulate international trade and also trade between states. This power has been used to support national plumbing standards for water appliances. Additional support for this action is found in the status of water which is recognized as a marketable commodity. Water has not been accorded this same status in Canada.

1.3 Provincial Authority

It is well accepted that "the regulation and distribution of water resources in a province for domestic consumption or industrial processes are within exclusive

provincial competence."¹⁴ This authority over water resources is based on the ownership of lands and other natural resources including water within each province as well as the specific grants of authority granted under section 92 of the Constitution Act, 1867. Provinces also have exclusive legislative power over direct taxation within the province in order to raise revenues for provincial purposes, the right to create corporate bodies for the management of municipal affairs, certain revenue raising activities, local works and undertakings, property and civil rights, and matters of a merely local or private nature.

The Constitution distinguishes between proprietary rights over resources and legislative competence to regulate those resources. Flowing from sections 108 and 117 of the Constitution Act, 1867, Ontario owns the waters, the bed and the fish thereof, within its territorial boundaries. Ownership in this context denotes the ability to deal with resources as a private owner, subject to common law and any validly passed statute. The province, therefore, possesses not only legislative competence relevant to the management of water but also the underlying resource itself. As noted above, however, even though the provinces are resources owners, provincial legislative powers are limited to the extent to which they are inconsistent with federal powers.

The power to create municipal corporations is allocated to the province by the Constitution Act, 1867 and falls under jurisdiction over municipal institutions. The

provincial legislature has empowered the Ontario Municipal Board to grant corporate status on the inhabitants of a particular area who apply for incorporation and satisfy the requirements set out in the Municipal Act.¹⁵ Alternatively, a municipal corporation may be created by a Special Act of the Legislature passed upon the petition of the inhabitants of the locality. Unless otherwise specified, references to municipalities in this paper are to localities which are incorporated municipalities.

1.4 Municipal Authority

Municipalities are created and are given powers by the provinces. In Ontario, there are three categories of municipal government: counties, regional municipalities, and local municipalities. An outline of the nature of these varied levels of government is given in section 2.4. It should be made clear, however, that a local government can only act under the authority bestowed upon it by the province pursuant to its enabling legislation or its action will be deemed invalid. Unlike federal or provincial powers, municipal governments do not have any inherent legislative authority, except for those powers derived from the enabling legislation.

While as a general rule municipal corporations may only exercise the powers given to them by statute, they also may exercise powers necessarily or fairly implied in, or incident to, their express powers which are essential (not simply convenient but indispensable) to the achievement of the purposes of the municipality. Moreover, section 104 of the Municipal Act broadly authorizes municipal councils to pass by-

laws and make regulations for the "health, safety, morality and welfare" of the inhabitants of the municipality in matters "not specifically provided for" in the Act as "may be deemed expedient and are not contrary to law."¹⁶

Despite the generality of this "good government" clause, it has a number of limitations. First, the municipal action must not be contrary to law, that is, not outside the constitutional limitations imposed on provincial powers. Secondly, if the province has already dealt with a matter, the municipality is excluded from legislating in the same area unless there is room for complementary regulation.

The third limitation is that where a power to regulate a particular subject matter is specifically given, it may result in the excluding by implication of all other powers respecting the subject matter.¹⁷ For example, section 104 does not allow a municipality to license personal property such as the keeping of slot machines in restaurants if there are already detailed licensing provisions in the Act restricting the licensing power to trades, callings, business or occupations. In such a case the municipal council is limited to these specific grants of power and cannot derive additional power to license from section 104.¹⁸

1.5 Riparian Rights

Finally, it is important to note the common law concerning water rights or riparian rights. Under this body of law, a riparian owner is entitled to both a reasonable quantity and quality of water of the riparian watercourse. Ontario remains

the only province not to legislate water rights in this regard. Riparian rights are important to take into account when discussing a province-wide water conservation program. However, because the focus of this paper is with respect to the municipal level, the general importance of riparian rights is recognized but will not be dealt with in any detail.

1.6 Summary

(a) The constitutional authority governing powers to legislate water conservation measures is shared between federal and provincial governments. The federal government has certain legislative powers over resources owned by the provinces, for example, with respect to interprovincial trade and commerce, shipping and navigation, and seacoast and fisheries, as well as control over matters extending beyond the territorial limits of a province.

(b) The provinces have the primary legislative authority over water conservation stemming from their ownership of natural resources (including water), together with numerous other heads of power (such as property and civil rights, and matters of a local concern). Municipal governments are created by, and therefore, subject to, the provincial law.

(c) The provincial power to regulate and distribute these resources, including water, can be delegated by the province to municipalities. Municipal corporations are entities created by the province and can exercise only those powers which are delegated to them or those which are necessarily implied in the powers expressly

delegated.

(d) Because of the divided legislative authority among federal, provincial and municipal governments, it is essential that a water conservation strategy make clear its objectives and closely assess which level of government is best able and empowered to achieve those objectives. It is apparent, however, that a comprehensive strategy must involve all levels of government, even though the bulk of the authority rests with the provincial and municipal governments.

Interjurisdictional coordination and cooperation would be key principles in an effective water conservation strategy.

2. REGULATORY FRAMEWORK GOVERNING WATER CONSERVATION

2.1 Overview

When surveying the laws, policies, and programs of federal, provincial and municipal governments, it is apparent that water conservation has not been a policy priority for any level of government. The initiatives that do exist have been undertaken in a disparate, piecemeal fashion. What is also evident is that there is little coordination between the various levels of government. For example, while the federal government has an express policy on water conservation, it is not linked directly to a provincial initiative to implement it. By and large, the initiatives that have been forthcoming have emanated from the municipal level of government. For a variety of reasons, municipalities are enacting various regimes for water conservation in the absence of provincial and federal leadership.

2.2 Federal Law and Policy

As noted above, the federal role in water conservation is circumscribed by the constitutional division of powers between the federal and provincial governments. Despite its limited legislative authority, the federal government can, and to some extent has, taken a leadership role in setting water management policy. For example, it declared a Federal Water Policy¹⁹ which identifies the role the federal government plays with respect to water conservation. In the policy, the federal government states that it is committed to a "fair value for water". To implement this concept in federal policies, programs and initiatives, the federal government

committed itself to endorsing the concept of realistic pricing as a direct means of controlling demand and generating revenues to cover costs, and to developing new water-efficient technologies and industrial processes that minimize costs and encourage water conservation and improved water quality. The government also committed itself to undertaking, supporting and promoting joint federal-provincial examination of the costs and pricing of water for both consumptive and non-consumptive water uses, and to encouraging efficient water use through the application of pricing and other strategies such as the "beneficiary/polluter pays" concept.

Pursuant to this policy, Environment Canada is funding in part a joint project of the Canadian Water and Wastewater Association and the Rawson Academy of Aquatic Science who are cooperating in the development and promotion of cost allocation methods and rate-setting strategies. This project is also supported by the Federation of Canadian Municipalities.²⁰

Apart from these initiatives, the federal government could further exercise its leadership role through existing legislation. Under the Canadian Environmental Protection Act, (CEPA) ²¹ environmental quality objectives, guidelines, and codes of practice could be established by the Minister of the Environment to promote uniform, nation-wide goals for water conservation, although these goals would be unenforceable.²² Similarly, CEPA also empowers the Minister to establish an

advisory committee to provide advice on the matter and liaison with the provinces for the purposes of implementation.²³

Further, under the 1970 Canada Water Act,²⁴ the federal government is empowered under Parts I and II to provide for comprehensive water resource management projects relating to any waters in which there is "significant national interest". The Act, therefore, could provide a basis for the implementation of a water conservation strategy. The Act, however, has never been invoked for such purposes.

2.3 Provincial Law and Policy

At this time, there is no provincial law or policy providing a water conservation strategy for the province of Ontario. In fact, there has been little indication in law or policy of the province's view on water conservation, including the nature and content of overall provincial goals, the allocation of responsibilities among various agencies and what measures or mechanisms are appropriate. Despite the absence of comprehensive law and policy, it is possible to identify the framework for water supply and waterworks in the province. These examples are found in the Conservation Authorities Act, the Planning Act and the Environmental Protection Act.

2.3.1 Conservation Authorities Act

The Conservation Authorities Act²⁵ provides that programs designed to further conservation of certain natural resources, including water, may be undertaken by an Authority in the area over which it has jurisdiction. Regulations may not be made,

however, which interfere with the use of water for domestic purposes or with any rights conferred on municipalities in respect of the use of water for municipal purposes. Some scope exists nonetheless for conservation authorities to play a role in research and education pertaining to water conservation. (See section 3.3.4 Education and Research below.)

The Act is administered by the Ministry of Natural Resources. More specifically, the Ministry's Conservation Authorities and Water Management Branch has administrative powers with respect to conservation authorities. This branch also has some authority over water conservation generally. As will be discussed below, the Ministry of the Environment also has authority over certain matters relevant to water conservation.

2.3.2 The Planning Act

The Planning Act²⁶ is administered by the Ministry of Municipal Affairs. This Act requires that plans of subdivisions be approved by the Ministry. Approval of draft plans is to consider such matters as the health of the present and future inhabitants and is to have regard to the "conservation of natural resources".²⁷ At this time, however, the Act has not been applied in a comprehensive or consistent way to implement water conservation measures.

2.3.3 Environmental Protection Act

The Environmental Protection Act²⁸ gives the Ministry of the Environment jurisdiction over the "conservation" of the natural environment.²⁹ The Act does not contain a definition of conservation nor does it set out any objectives or policies with respect to conservation of water.

Apart from statutes, the province also exercises powers through a number of statutes and instruments which, while they do not mention conservation of natural resources, are indirectly relevant to the achievement of water conservation goals.

2.3.4 OWRA - General

Generally, provincial law governing water use is found under the Ontario Water Resources Act³⁰ (OWRA) which establishes a framework for approvals of large water users and the construction and operation of water and sewer works in the province. It is also the enabling statute for the provincial plumbing code.

Section 7 of OWRA vests the Minister of the Environment with the function and a broad ambit of power to construct, operate, maintain and make available supplies of water to municipalities and persons; to construct, operate and maintain sewage works and to receive and treat sewage delivered by municipalities and persons, to conduct research in the areas, to disseminate information and advice and other such functions as assigned by the government. As discussed below, these powers include the ability to enter into an agreement with a municipality with respect to the supply of

water and treatment of sewage.

While the MOE has the overall mandate to oversee water and sewer works, it is important to recognize the broad categories of these works. These include those water and sewer works that are (a) owned by the municipality but constructed and operated by the MOE [Municipal Projects]; (b) owned and operated by MOE [Provincial Projects]; and (c) those owned and operated by a regional or local government yet operating under the approval of the MOE [Water and Sewer Works Approvals]. In addition, the government has recently announced the establishment of a new Crown water and sewage corporation. Each of these categories is discussed below.

2.3.5 OWRA - Municipal Projects

Under the OWRA, a municipality (or more than one of them) may apply to the Minister of the Environment for the provision and operation of water and sewage works.³¹ The Minister may enter into an agreement with the municipality which then must pass by -laws authorizing it to do so. These agreements set out the cost schedules, financial matters, such as mode and date of payments, reserve accounts, debt retirement accounts, along with other related provisions.³²

If the municipality requires approval from the Ontario Municipal Board, the MOE would be vested with the responsibility of making such an application. The municipality is empowered to set and impose rates for the water and sewage rated

upon owners or occupants that derive any benefit from the undertaking.³³ Once all obligations to the Crown have been discharged, the ownership of the facility reverts to the municipality, although the operation may still be maintained by the MOE.

Conceivably, the municipal-provincial agreements could be an instrument employed by the province to encourage water conservation programs by municipalities. For instance, it could be a term of the agreement that rates imposed would be based upon full cost pricing. Terms and conditions of this nature do not seem to be employed at this time in the agreement.

2.3.6 OWRA - Provincial Projects

Provincial projects are similar to municipal projects except that, with provincial projects, the ownership and operation of the facility is retained by the provincial government. The financial arrangements for both Municipal and Provincial Projects have been supported by the view that smaller municipalities have an inadequate tax base to financially undertake the construction and operation of these facilities.³⁴ As with Municipal Projects, it is clear that the Province could exert a considerable degree of influence to encourage water conservation through provincial-municipal agreements concerning the operation of water and sewer works.

2.3.7 New Crown Water and Sewage Corporation

In May of 1990, the government announced the establishment of a new Crown water and sewage corporation.³⁵ This corporation will be authorized to own or

operate all facilities now owned or operated by Ministry of the Environment. The corporation, reporting to the Minister of Municipal Affairs, will have a mandate to ensure an adequate supply of water and provision of sewage treatment facilities. While there may be considerable potential for this corporation to adopt principles of water conservation, no analysis is possible until details of its mandate, operating principles, authority and resources are announced.

2.3.8 OWRA - Water and Sewer Works Approvals

The Ontario Water Resources Act³⁶ also deals with the approval of plans for water works systems. MOE approval must be obtained before water works can be undertaken by municipalities or other owners or operators, or before a by-law can be adopted to raise money to finance these works. If it is in the public interest to do so, approval may be refused or granted on whatever terms and conditions are deemed necessary.

2.3.9 OWRA - Direct Withdrawals

Major water users, including municipalities, in the province are regulated by a permit system administered by the MOE under the OWRA.³⁷ Permits are required for withdrawals in excess of 50,000 litres per day. Permits are issued on the equitable basis of precedence and priority among competing users. Exemptions are provided for ordinary household purposes, the watering of livestock or poultry or fire fighting purposes, as well as water uses established before 1961.

Any withdrawal may be brought under the permit system, even if it consumes less than 50,000 litres per day, if it interferes with any public or private interests in water, subject to the exempted purposes listed above. If the use would be wasteful or malicious or would have adverse environmental effects, regional directors appointed under the Act have the discretion to refuse an application for a permit.³⁸

At this time, it seems that withdrawal permits do not contain any water conservation conditions or terms.

2.3.10 OWRA - Discharge Approvals

A certificate of approval is required from the MOE before a municipality can discharge sewage into any Ontario waterway or watercourse. The OWRA also outlines a number of exceptions to this provision.³⁹ Such approvals do not include requirements to reduce quantities of waste water discharges or any other mechanism which would encourage the establishment of water conservation programs by municipalities.

2.3.11 Plumbing Code

Section 44 of the Ontario Water Resources Act provides that the Minister of Housing may regulate and control the location, construction, repair, renewal or alteration of plumbing and of the materials used in the construction thereof and may require municipalities to conduct inspections of plumbing. The Minister may also adopt by reference standards made or adopted by the Canadian Standards

Association (CSA) relating to pipes, fittings, fixtures and materials used in plumbing and prohibiting the use of non- approved materials. The Ontario Plumbing Code⁴⁰ was enacted under this section and provides that no person shall construct, repair, renew or alter any plumbing system except in accordance with this Code. This deprives municipalities of any authority they may have had with respect to plumbing arising from their powers under other statutes.

The Plumbing Code specifies minimum requirements for plumbing appliances and fixtures that depend on a plumbing system in order to be used. CSA standards are adopted by reference. These standards do not embody a water conservation dimension.

2.3.12 Building Code Act

Ontario has a Building Code Act⁴¹ which declares that it supersedes all local by-laws with respect to the construction of buildings. This deprives municipalities of the power given by the Municipal Act to regulate structural aspects of construction for the purposes of public safety and fire prevention and prevents them from adopting standards stricter than those prescribed by the provincial code even if there is no conflict.⁴²

The building code is embodied in a regulation made under this Act. Its intent and purpose is related to fire and safety matters.⁴³ With respect to plumbing, the Code merely sets out the minimum number of facilities and fixtures required in

various types of buildings and not the standards these must comply with.

2.3.13 Other Legislation

The Ontario Municipal Board, under the Ontario Municipal Board Act has supervisory jurisdiction over a wide range of municipal affairs pursuant to the Municipal Act, Municipal Affairs Act, and other such statutes. It acts as an arbitrator in some matters such as zoning where the interests of municipality and its inhabitants or some of them conflict. The Ministry of Municipal Affairs has general oversight over government and administration in municipalities and specific powers with respect to municipal accounting.

Some of the provincial powers discussed in this section could, if the will to do so existed, be exercised in a manner which would recognize water conservation objectives. The province also has a number of other powers which, if it so chose, could be employed to further conservation goals of the province. These powers include various provisions under land use planning legislation. These potential powers are discussed under section 3.3 "Non-pricing Measures".

2.4 Municipal Law and Policy

As mentioned above, the provincial legislature has the power to establish local works and undertakings. It has delegated this right to municipal bodies with respect to water and sewer works.

2.4.1 Overview to Municipal Organization

There are three categories of municipal government in Ontario: counties, regional municipalities and local or area municipalities. The province of Ontario is divided into 31 counties, 11 regional municipalities and hundreds of municipalities, as outlined in the Territorial Division Act.⁴⁴ Parts of the province which have not been consolidated or organized into a regional municipality or county are known as "unorganized territory" and are divided into "territorial districts". Unless power is specifically delegated by statute to persons or localities within an unorganized territory, the province retains its authority over the matters listed in s. 92 of the Constitution.

Counties are civil and judicial divisions imposed on local municipalities by the province for administrative and judicial purposes. Counties other than Oxford and territorial districts do not have powers relevant to water supply and distribution.

Incorporated local municipalities possess powers derived from the Municipal Act and other acts of general application such as the Public Utilities Act.⁴⁵ They exist within territorial districts or within counties or other forms of regional organization.

Regional municipalities are created by special acts and are consolidations of local municipalities to which certain powers and functions have been assigned. In addition, the County of Oxford and District Municipality of Muskoka are the subject of special acts and are granted functions similar to those assigned to regional

municipalities. The special acts deem these regional municipalities to be municipalities for certain purposes under the Municipal Act and other acts governing municipal activities. There are both "single-tier" and "two-tier" regional governments. Single-tier regional governments are given authority for both the supply of water and sewer utilities (such as the production, treatment and storage of water and the distribution of the service (which includes the system to make the services available to the end users). In this context, the powers includes the ability to fix the rates to be charged for water and sewer utilities. The regional municipalities of Durham, Haldimand-Norfolk, Halton, Hamilton-Wentworth, Ottawa-Carleton, Peel and Sudbury, and the District Municipality of Muskoka and County of Oxford were created on the single-tier model.

A two-tier arrangement for water management was created in the regions of Niagara, Metropolitan Toronto, Waterloo and York. In this situation, the regional governments were given authority over the supply of water including the establishment of water works systems but local municipalities retain power over the distribution of water including the authority to levy retail water and sewer charges. Two-tier regional municipalities have all of the powers conferred by any general or special acts upon area municipalities with respect to the supply of water.

2.4.2 Public Utilities Act: Authority to Own and Operate Waterworks

The Public Utilities Act grants municipal corporations the authority to regulate the nature of the water supply by their works and all other matters which it may be proper to regulate in order to secure a continued and abundant supply of water to their inhabitants.

The provisions of Part 1 of the Public Utilities Act authorize municipalities to acquire, establish and operate water works to enable them to supply water, where a public utility commission is not created for this purpose. In areas where regional government has been established, this general power is transferred to the regions by the special acts which created them with the exception that regional municipalities are denied the right to establish public utility commissions. The regional municipalities, therefore, are deemed to be municipalities for water works purposes under part 1 of the Public Utilities Act. Authority for sewage works is found under the Municipal Act.

2.4.3 Municipal Act and Regional Acts: Water & Sewer Works

Local municipalities in two-tier regional governments or in unorganized territories and single-tier regional governments derive their authority to own and operate water and sewage works under the Municipal Act. The Act also provides authority for the imposition of water and sewer works rates to cover the capital cost of construction of such works. The rate structure for this type of rate is to be

established on the basis of benefits accruing, classes of work, and what is equitable and just. By-laws establishing rate structures for such works are subject to the approval of the Ontario Municipal Board, discussed below. Rates levied by municipal councils are to be based on amounts required within the year to cover current annual expenditures, all debts of the municipality, and amounts to be paid into sinking funds for debenture repayment purposes. No mention is made of amounts to cover depreciation of the infrastructure.

The Municipal Act also provides for the imposition of a sewer service rate in addition to a sewer works rate. There is no similar provision dealing with a water service rate.

As well as being subject to the provisions of the general acts, the special acts of two-tier regional governments provide that regional councils may fix charges to meet the cost of any work or service done for the purposes of the supply of water. These rates are to be fixed so that the revenues of the water works system will be sufficient to make the system self-sustaining after providing for such maintenance, renewals, depreciation, debt charges and reserves as regional councils think proper.

Depreciation is specifically considered in the two-tier regional acts unlike the general Municipal Act which is silent on this point. The result of this difference is that two-tier regions are able to levy for amounts that will be required to rehabilitate or replace depreciated assets on an on-going basis and are therefore less likely to

have an outdated water works system with no funds accumulated for their improvement or replacement.

With respect to one-tier regions, the provisions of any general acts relating to the financing of the supply and distribution of water apply with the necessary modifications. It appears, therefore, that one-tier regions and local municipalities that are not part of regions are unable to provide for depreciation and rehabilitation of supply and distribution systems.

2.4.4 Ontario Municipal Board Act

One of the more complicated issues pertaining to water and sewage works pertains to their financing. Owing to the capital nature of these undertakings, the revenues from annual rates for the current year may be insufficient, and thus require some sort of debt financing. Two types of debt financing are most commonly employed: temporary borrowing of the monies needed or the issuance of debentures, both of which are subject to restrictions.

Section 64(1) of the Ontario Municipal Board Act⁴⁶ states that no municipality can proceed with any undertaking that is to be paid for in a subsequent year or by an issue of debentures without approval by the Ontario Municipal Board (OMB). An exception to this rule may be made where the debt in question is payable within the term for which the municipal council was elected. In exercising its approval power, the Act outlines the appropriate criteria for the OMB. In particular, it is to review the

necessity or expediency of the application, the financial position and obligations of the municipality with respect to its ability to carry debt, the burden of taxation upon the ratepayers and other relative matters that appear to be necessary or expedient.⁴⁷

A general view is that the Board is not restricted to financial considerations in its assessment, suggesting that non-financial considerations such as the environmental and planning aspects of the decision are appropriate matter for review.⁴⁸ However, not all courts agree as in one case where a court hinted that the OMB had overextended its jurisdiction by ruling the applicant municipality did not establish need for a sports facility which was justified to promote socially desirable activity.⁴⁹ If financial considerations are the basis on which approval is based, then consideration could be given to the characterization of a water conservation plan as an alternative source of supply to the establishment of additional facilities. In this way the impact on the capital budget of a municipality could be viewed to be minimal or even non-existent.

Under the Municipal Act, the term of debentures issued for water works purposes is restricted to 30 years. The term of debentures issued for purposes not specified in the Municipal Act is subject to Municipal Board approval.

2.4.5 P.U. Act and Regional Acts: Rates for Water

Parts I and III of the Public Utilities Act give municipal councils the authority to pass by-laws or resolutions to fix rates or charges for the distribution of water and

charges to meet the cost of any work or service done or furnished for the purpose of the supply of a public utility. Section 8 of the Act provides that municipal corporations may fix the prices for the use of water while subsection 27(1) provides that municipal councils may "fix the rates or charges for supplying the public utility and the charges to meet the cost of any work or service done or furnished for the purpose of a supply of a public utility, and the rent of or charges for fittings, apparatus, meters or other things..." Subsection 27(2) gives municipal corporations discretion as to the fixing of rents, rates or prices to be paid for the supply of a public utility by various classes of consumers and by various purposes for which the water is supplied.

Regions to which the power to regulate the distribution of water has been allocated (single-tier regions) step into the shoes of the local municipalities within the regions for water distribution purposes including under the Public Utilities Act.

Regional municipalities operating under the two-tier system are only able to charge the area municipalities within the regions for water and are prohibited from selling water on a retail basis to users. Water distribution is left to the area municipalities which fix the price to be paid by water users in their jurisdictions pursuant to the provisions of the Public Utilities Act. This means that local municipalities in unorganized territory, area municipalities within two-tier regions, and one-tier regional municipalities are authorized to charge consumers directly for water.

In some jurisdictions the powers described above are delegated to public utilities commissions. The powers conferred by the Public Utilities Act are to be exercised by these commissions subject to the overriding authority of the municipal councils over certain financial matters. The authority to fix rates rests in the discretion and control of the commissions but the power to provide funds for works remains with the municipal council.

2.5 Summary

(a) Water conservation programs have been targeted in the Federal Water Policy. While the Policy defines the federal role, there are other mechanisms that the federal government could employ to provide leadership in goal-setting, research, and promotion of a national water conservation strategy. For example, it could develop national water conservation goals and establish a national advisory body for water conservation. By and large, however, implementation would have to be left to provincial and local governments.

(b) The province of Ontario has yet to develop a comprehensive water conservation strategy. The province has neither established water conservation as a legislative or policy goal nor vested any one agency or institution with the authority to oversee such activities. Conservation Authorities are incidentally vested with such powers, however, their powers do not extend to residential consumers.

(c) There are a variety of existing mechanisms available to the provincial government to further water conservation objectives. For example, terms and conditions to encourage water conservation could be imposed by the province in municipal-provincial agreements concerning Municipal and Provincial projects. Further, similar terms and conditions could be appended to water-taking permits under the Ontario Water Resources Act. Similarly, approval of plans for water and sewer works are given by the Ministry of the Environment on such terms and conditions as are deemed to be in the public interest. The types of conditions that could be imposed are not restricted by the Act. Finally, water conservation policy could be realized through such statutes as the Ontario Plumbing Code is administered by the Ministry of Housing under regulatory authority given in the Ontario Water Resources Act.

(d) Matters pertaining to municipal water use and consumption are generally left to local authorities but, by and large, the provincial government retains considerable influence over the implementation over municipal policy through a variety approval processes such as those involving the Ontario Municipal Board and the Ministry of the Environment. These bodies could constructively and effectively encourage the establishment of water conservation measures within the municipal context.

(e) Local governments are given fairly broad powers to establish and improve water and sewage works. Their ability to improve and upgrade these facilities is limited in part by restrictions placed upon them to undertake long-term financing through either borrowing or the issuance of debentures. Revenues from water conservation charges could be justified in part as a means of overcoming some of these limitations.

(f) Few barriers now exist for municipalities to implement full cost pricing of water. The legislation gives them broad discretion to set water and sewage rates.

(g) To date, few regions or municipalities have exercised their authority to institute a comprehensive water conservation program. The exceptions are the Regional-Municipality of Kitchener-Waterloo and the City of Toronto. Some localities may have enacted some measure with a water conservation dimension to it, although these initiatives are undertaken in a ad hoc, piecemeal basis.

3. LEGISLATIVE PROBLEMS AND OPPORTUNITIES FOR MUNICIPAL WATER CONSERVATION

3.1 Overview

In preceding sections, the legal framework governing water conservation in Ontario was reviewed in general terms. This part will more specifically examine the opportunities and limits existing within that regulatory framework to implement conservation measures.

Obviously, it would be impossible to review the legal barriers to every conceivable conservation measure. The primary or basic water conservation measures will be examined. Two categories of measures have been identified for review. These are as follows: (a) water pricing schemes; and (b) non-pricing measures.

3.2 Water Pricing System

A water use charge system establishes a structure for imposing a charge or surcharge on users of water. The implementation of such a system has been promoted on a number of grounds. First, there is an understanding that water, as a commodity or resource, is undervalued in that the actual and prospective costs of maintaining an adequate supply of water are not and will not be covered by consumers under present schemes in many municipalities. Costs of water include the costs of treatment, transmission, and upkeep of facilities necessary to ensure the water is potable and fit for human consumption as well as for use by commercial

and industrial facilities. As understanding of the effects of toxic chemicals on human health evolves, and the levels of detectability of those chemicals are lowered, there will be a need for further and more sophisticated water treatment facilities. In terms of waste treatment facilities, the costs includes the establishment of facilities that will treat waste waters to the extent provided under existing standards. These standards are becoming more stringent, and hence, the need for further and better treatment technologies will be required. Both of these factors contribute to the need for a more effective pricing mechanisms for water.

A water pricing system has also been justified on the ground that it will send an appropriate price signal to the consumer. The higher the price of water, the more the consumer will be encouraged to conserve and use the resource in a wise and efficient manner.

A water charge system could be implemented either at a provincial or municipal level, or both. Such a system could be implemented at the provincial level, for example, by way of monetary conditions on water user permits, and through various initiatives at the municipal level such as an explicitly full cost water use pricing scheme with a universal metering policy. Most of the opportunities identified may not require legislative changes, although policy reform may be required.

3.2.1 Terms and Conditions for Water User Permits

Ontario receives \$80-90 million annually in water royalties from power generation, however, other users including municipal, industrial and commercial users do not pay a fee for the resource. While the province has established a water-taking permit system to manage withdrawals under the Ontario Water Resources Act, a water pricing system has not been established under these provisions so there is no penalty for inefficient water use.

The Northern Inland Water Act⁵⁰ pertaining to the Northwest Territories and the Yukon goes a bit further. It sets limits on the quantities of water that can be withdrawn or discharged but does not go as far as imposing charges for the "raw" resource.

The permit provisions of the Ontario Water Resources Act together with the province's general legislative authority to regulate natural resources suggest that a water use charge system could be established. For example, authority is given to impose terms and conditions on permits required by certain water users, such as payment for use. It is clear, however, that a water charge system was not contemplated when this legislation was drafted. The opportunities offered by this legislation are limited also by the application of permit requirements only to large water users and by the exemptions given to farming and other activities.

Should the province pursue the implementation of a water conservation pricing strategy, it could require municipalities to obtain a water use permit under the Ontario Water Resources Act and then charge an appropriate amount for the quantities consumed. The municipality, in turn, would then be required to recoup these costs through the imposition of water charges on municipal users.

3.2.2 Provincially Operated, Owned, or Funded Facilities

Terms and conditions may be incorporated into agreements where the province owns, operates, or funds (whether through grants, subsidies, or loans) municipal water or sewage works. There is no legal barrier to terms and conditions being inserted in agreements requiring the adoption of water conservation measures. However, in some instances, this opportunity may also be a detriment. The fact that the province is in this instance both the regulator and regulated may give rise to a conflict. For this reason, it has been suggested that the ownership of these facilities be transferred to another governmental agency to allow the Ministry of the Environment undertake its environmental protection and conservation role.⁵¹

3.2.3 Municipal Authority to Fix the Price of Water

It is clear that municipal authorities have the authority to set rates which would provide for the cost of a water conservation program. In this regard, there are no legislative barriers to a more realistic pricing scheme such as an inclining block rate. Hence, whether it is a single-tier region, an area municipality in a two-tier region, a

local municipality in an unorganized territory, or a public utility commission, rates may be set more appropriately to further water conservation objectives.

A number of municipal authorities have already moved toward full cost pricing. For example, the City of Toronto, which is part of the two-tier Regional Municipality of Metropolitan Toronto, has implemented what purports to be a full cost pricing system for water distributed to its inhabitants.⁵²

Several changes to the pricing structure in the Regional Municipality of Hamilton-Wentworth have been proposed. This is a one-tier region with regional authority over supply and distribution, and wholesale and retail sale, of water. A proposal presented to the regional council in January of 1990 called for increases in the price of sewer and water service to business and industry. Commercial users have in the past benefitted from lower charges for larger quantities. These discounts are to be phased out over three years. In addition, a report presented to the Hamilton Harbour Remedial Action Plan team recommended a user-pay pricing structure for water and proposed that water rates be increased to reflect all treatment costs from the time the water is taken from Lake Ontario to the time it is returned to it via the sewer system.⁵³ Unfortunately this report has no legal force. These initiatives do, however, offer evidence of a growing trend towards recognition of the value of water.

Just how far a municipality could go in setting rates is unclear. For example, rates are justifiable which ensure that the revenues of the waterworks system will be sufficient to make the system self-sustaining after providing for such maintenance, renewals, depreciation, debt charges and reserves. However, some problems may appear where, once the fixed costs are recouped through the rates, the price is increased to fulfil a social policy of conservation or for the purposes of placing an intrinsic value on the resource itself.

There is some authority for the view that municipalities are not allowed to levy rates exceeding the direct and foreseeable costs of furnishing the water service.⁵⁴ As a rule, however, wide discretion is given in the setting of rates, so long as the rates are uniform and nondiscriminatory.⁵⁵ In this sense, it is possible to vary rates according to different classes of customers and for different purposes without infringing on these principles.

The OMB has the jurisdiction to determine whether water rates are "unlawful, unfair or unjust".⁵⁶ There do not seem to be any cases, however, where rates have been challenged on the grounds that the promotion of environmental objectives is improper in this way.

3.2.4 Metering

One of the key implementation mechanisms for a water conservation pricing scheme is the metering of household and non-domestic water use. Generally, there

are no legislative limits on municipal governments initiating and carrying-out programs to install water meters in all households within their territorial limits. The barriers, should they exist, pertain primarily to the lack of municipal policy and commitment of financial resources to install and maintain meters. The Ministry of the Environment's Guidelines for the Design of Water Distribution Systems⁵⁷ state that the Minister recommends that all water service connections to all potable water distribution systems and any non-domestic connections be metered. This recommendation could be given more force as a condition on approval of the construction or alteration of distribution systems.

The Public Utilities Act gives municipal corporations owning or operating a municipal utility the power to regulate any matters connected to the supply of water. The authority to install meters is implied from the express grant of authority to persons authorized by the corporation to enter premises for the purpose of placing meters upon any service pipe or connection. Municipal corporations may recover the cost of alterations required by the installation of meters and may fix the price to be paid for the use of the meter to be collected in the same manner as rates for the supply of the public utility.

Hamilton-Wentworth is a one-tier region with full responsibility for water supply and distribution. In January of 1990, a plan was presented to the regional council in the Regional Municipality of Hamilton-Wentworth calling for the metering of many

older Hamilton homes. Owners of rental properties were to be given until the end of June to comply and purchasers of unmetered houses were to have six months to comply. This plan was passed in amended form wherein it was required that all houses sold after January 1, 1991 be retrofitted with water meters. In addition, a report presented to the Hamilton Harbour Remedial Action Plan team recommended that the phased-in metered billing policy be stepped up in the region. Although, the proponents of this report have no legal authority to enforce the strategy, they reflect the trend of public opinion.⁵⁸

A policy of universal metering has been passed for the City of Toronto.⁵⁹

3.2.5 Earmarking of Funds for Water Conservation

A. Municipal Reserve Funds

The legal authority to impose water rates and to meter water consumption is an important component of a water conservation strategy. Another component, however, pertains to the allocation of revenues from water charges to directed ends, such as the improvement of water and waste treatment facilities or the adoption of metering policies. The earmarking of funds for water conservation can be achieved in two ways: through municipal annual budgets and revenues or by reserve funds established at the municipal or provincial levels.

Authority to establish reserve funds is given to municipal councils by section 165 of the Municipal Act. A reserve fund must be for a particular purpose for which

the council has authority to spend funds and it must be provided for in the yearly estimates.

The reserve fund provisions of the Municipal Act apply to every municipality as defined in the Municipal Affairs Act.⁶⁰ The special acts creating regional governments state that regional municipalities shall be deemed to be municipalities for purposes of the Municipal Affairs Act and the Ontario Municipal Board Act. It appears, therefore, that the general provisions of the Municipal Act dealing with reserve funds are applicable to regional governments by reference.

The crucial issue is what purposes each local or regional council has authority to spend funds on. The regional acts setting up two-tier water management arrangements contain general reserve fund provisions similar to those found in the Municipal Act with the additional stipulation that reserve funds established with the revenues from a water works system are to be used for purposes of debt reduction, operation and improvement of the water works system, undertaking or financing of sewage works or stabilizing rates. Any surplus revenues not required for such purposes are to remain credited to the water works system and shall not form part of the general funds of the regional corporation. This would suggest that earmarking of surplus revenues from a water works system is not only allowed but is required. Funds earmarked for the water works system can, however, only be allocated to the purposes enumerated which include the improvement of the water works

infrastructure. It is unclear whether programs to provide universal metering or hand-outs of water-saving devices would qualify as "operation or improvement of the water works system".

These regional acts also provide more generally for reserve funds to be set up for any purpose for which a council has authority to spend funds. This would suggest that funds raised in some manner other than water works revenues could be allocated to reserve funds established for a broader range of purposes. Two-tier regions only have authority over, and the right to spend money on, the supply of water and not its distribution. This restricts the purposes for which reserve funds may be set up and, therefore, does not expand the powers given with respect to reserve funds for water works purposes.

The regional acts of one-tier regions provide that reserve funds may be set up for the purposes for which the regional council has authority to spend funds. Area municipalities are also empowered to establish reserve funds for purposes over which they have retained the authority to spend funds. The result of these provisions is that regional councils have the authority to establish reserve funds pertaining to the supply and distribution of water. This encompasses not only the maintenance of an adequate supply through the operation of water works systems but also metering and retail pricing schemes.

If revenues and other monies to be allocated to a reserve fund by a municipality are to be derived from revenues in a subsequent year or by the issuance of debentures then the approval of the Municipal Board would be required under section 64(1) of the Ontario Municipal Board Act. Approval need not, however, be obtained for the establishment of a reserve fund which is provided for in a specific year out of the revenues of that year for that year alone to finance a specific undertaking or part thereof. The creation of a fund for a particular purpose, for example, the construction of a water tower, may qualify as a "scheme, act, matter or thing" within the meaning of s.64(1) of the Ontario Municipal Board Act but, if its cost is not to be raised in subsequent years but is instead provided for in part each year out of revenues for that year, the jurisdiction of the Board is not invoked.⁶¹

Public utilities commissions created by local or area municipalities can establish reserve funds but only for the construction of works which the commissions are empowered to undertake in fulfilling their statutory functions.⁶²

In summary, the authority of a particular local or regional municipality to set up reserve funds depends on what purposes each council has authority to spend money on. Local municipalities have the authority to operate public utilities and therefore are empowered to set up water works systems, and for example, to install meters, unless some of these powers have been transferred to a regional government. Regional municipalities in one-tier regions have authority over supply

and distribution of water systems therefore can spend money on both of these systems. Two-tier regional municipalities can only spend money on ensuring an adequate supply of water to area municipalities including the construction of water works systems. Area municipalities in two-tier regions have the authority to spend money on distribution systems for water and can, therefore, establish reserve funds for these purposes.

B. Provincial Reserve Funds

The Ontario Water Resources Act allows the Ministry of the Environment to set up reserve funds with respect to water works projects undertaken by it but the funds so raised are to be applied only to renewals, replacements, contingencies and capital expenditures for improvement of the project in respect of which the reserve fund was established. In other words, the reserve fund is set up to pay for the cost and operation of the facility.

Under this Act, revenues are also obtained from the rates charged to persons or municipalities for the provision of water service in areas designated as public water service areas. The revenues are paid over to the provincial Treasurer. Reserve funds are not provided for in this section of the Act therefore there is nothing which facilitates the earmarking of such revenues for water conservation purposes.

It is worth noting, however, that section 9 of the Ontario Water Resources Act states that the Minister may exercise for his purposes all powers conferred on municipalities regarding the establishment, construction, maintenance or operation of water or sewer works. If the purposes of the Minister under this Act include the maintenance of an adequate water supply through the implementation of a water conservation strategy, then it would appear that a reserve fund could be established for this purpose.

Once again, therefore, the question with respect to provincial reserve funds is not whether there is legal authority to create one. Instead, the question is whether there is a policy commitment or incentives to invoke existing authority. As a general rule, even though governments may collect special revenues or charges, the monies collected seldom are earmarked or placed in a reserve fund for a designated purpose.

3.2.6 Grants and Subsidies

Grants to municipalities may be conditional upon the funds being used for a specific program or service within the municipality. Conditional grants account for approximately 73% of total provincial grants. They are provided for various purposes including the environment.⁶³ Ontario's Direct Grants for Water and Sewage Systems are offered on the basis of a review which examines health or environmental problems which a project is designed to correct. While this suggests that grants

could be given for municipal water conservation programs, the costs that are eligible for grant assistance are restrictive. These are engineering costs for design and construction supervision, construction costs, land acquisition costs, legal, survey and appraisal costs, and finally miscellaneous costs which may include advertising, disbursements for permits or licences.⁶⁴ Many of the costs involved in the development and implementation of a municipal water conservation undertaking are clearly not contemplated by this program.

3.3 Non-Pricing Measures

There are a variety of legislative mechanisms possible directed at reducing consumption of water by users. These measures may be considered as supplementary to water pricing systems which alone may not achieve water conservation objectives.

3.3.1 Conservation Plumbing

A plumbing code does not exist at the federal level in Canada. The National Building Code of Canada⁶⁵ does not deal with plumbing except to the extent that the minimum number of facilities are to be provided in certain types of buildings. Certainly, a federal role of leadership would be appropriate in terms of research and the development of national water use objectives. Moreover, a regulatory role could also be possible. For example, the federal government could enact national plumbing standards so as to regulate the importation of water appliances.

Chapter 3

At the provincial level, as discussed above, the Minister of Housing is empowered, subject to the approval of the Lieutenant Governor in Council, to make regulations controlling the location, construction, repair, renewal or alteration of plumbing and the material to be used in the construction thereof. Furthermore, the Minister may make regulations adopting by reference standards made or adopted by the Canadian Standards Association (CSA) pertaining to pipes, fittings, fixtures and materials used in plumbing. This power has been exercised and a Plumbing Code has been adopted within which CSA standards are adopted. The province has thereby occupied the regulatory field with respect to plumbing and municipalities are prevented from adopting codes of their own. While the province has the power to adopt or not to adopt CSA standards by reference, it does not determine the content of those standards. CSA Committee B-125 has the authority to establish standards. This is a federally appointed committee, therefore, the federal government exercises a measure of control over the standards that are adopted.

There is no formal role for the municipalities to play in the definition of water efficiency for purposes of provincial plumbing codes and informally nothing has been achieved.⁶⁶ The only kinds of activities proposed dealing with this area are initiatives such as watermain leak detection programmes, water audits programs, and rebates for the installation of water efficient appliances.⁶⁷

Chapter 3

In the United States, there has been a discernable trend to mandating water conservation through legislation pertaining to water appliances and plumbing. The National Plumbing Fixtures Efficiency Act was introduced in the House of Representatives and Senate in March 1989. This bill sets quantitative performance standards and labelling requirements that manufacturers are to meet for the water consumption of appliances. Retrofitting is not required by this bill; rather it is aimed at new and renovated facilities. Industry standards already exist but are voluntary in nature.

This legislation does not intrude on state and local powers to set building codes because it is aimed at regulating plumbing products in interstate commerce, a power which is assigned to the federal government by the U.S. Constitution. This is made possible by the fact that water is recognized as a commodity.

Many local and state jurisdictions have enacted similar standards but have encountered or are anticipating compliance problems due to the continued availability of non-complying products. Standards adopted at the federal level assure uniform compliance and are therefore to the benefit of both manufacturers and consumers. A summary of American jurisdictions enacting plumbing standards as stringent or more stringent than the federal legislation is presented in Appendix C.

By the mid 1980's approximately one third of states had plumbing codes that set standards for the water efficiency of certain fixtures. Plumbing codes in Canada

do not include efficiency provisions and do not contain measures designed to encourage water conservation such as water conservation audits, the mandatory use of water efficiency appliances, or appropriate plumbing practices. As a result, there is little incentive for the development of water efficient appliances or practices that would encourage wise water use.

3.3.2 Subsidies, Credits, Rebates for Water Saving Appliances and Devices

Municipal authority to hand-out water saving devices, to provide subsidies to consumers and to offer rebates and credits is derived from the Municipal Act which empowers a municipality to make grants for any purpose that, in the opinion of its council, is in the interests of the municipality. This includes the power to make donations of merchandise. Such programs may be financed out of a current year's revenues thereby not requiring Municipal Board approval.

By analogy, many municipalities have undertaken a program to subsidize households to purchase composting bins for the purposes of diverting wastes from sanitary landfills.

The regional municipality of Kitchener-Waterloo provides the best example of the adoption of such water conservation strategies. A retrofit program involving the installation of water-conserving devices in 650 homes has been followed by the free distribution at municipal offices of such devices. Kitchener-Waterloo offers a \$75 rebate per living unit to any plumbing contractor who installs water-saving fixtures in

new residential units. This program became more successful when the region began publishing a catalogue of CSA-approved fixtures to make selection easier.⁶⁸

3.3.3 Education and Research

At the provincial level, conservation authorities and the Ministry of Natural Resources which oversees them are authorized to study and develop programs whereby natural resources may be conserved, restored, developed and managed and may cause research to be done. Although the jurisdiction of the authorities is limited to the area over which they have jurisdiction, there appears to be no reason why water conservation policies of general application may not be conceived and promoted.

In addition, the Ministry of the Environment is empowered by the Ontario Water Resources Act to conduct research and to disseminate information and advice with respect to the collection, production, treatment, storage, transmission, distribution and use of water for public purposes.

Although the formulation and dissemination of policies at this level is essential, of equal importance is the education of the public at the municipal level. For example, wholesale and retail purchasers of plumbing fixtures could be influenced by complete information being made available to them on the water use characteristics of those fixtures. The catalogue published annually by the region of Kitchener-Waterloo is a promising step in this direction but it is, unfortunately, not widely

available. Other educational strategies adopted in that region include liaison with teachers aimed at curriculum modification, publication of a newsletter delivered to households within the region, shopping mall displays and water conservation contests with rewards offered to successful participants.⁶⁹

3.3.4 Other Mechanisms to Promote Water Conservation

In addition to the above measures, there are also a number of measures that could be used by the appropriate authorities to instill water conservation principles.

A. Municipal By-Laws - Water Use Restrictions

Municipal corporations operating public utilities and regional governments with authority over the distribution of water are empowered to make by-laws to limit water use within their territorial limits. Many municipalities already have by-laws restricting lawn watering, automobile washing and other non-essential activities.⁷⁰ How far municipalities can go is unclear.

B. Conditional Water-Taking Permits

Another issue is the extent to which the province can encourage water conservation through its permit issuing system under the Ontario Water Resources Act. Although the Act allows discretion with respect to its application, discretionary powers have not been exercised with a view to promoting water conservation. It appears to be possible for the province to demand that municipal water conservation by-laws be passed prior to the issuance of permits for direct water withdrawals.

Some American states have begun to limit the granting of water drilling, taking or other water use permits to applicants who are able to demonstrate that they do not neglect low-cost conservation measures.

In the State of Illinois, efficient management of the water supply was decreed by a decision of the U.S. Supreme Court in 1980.⁷¹ Municipalities wishing to be eligible to receive Lake Michigan water are required to regulate outdoor use of water for lawn watering and to undertake repairs to reduce leakage in their water mains. Other compulsory measures include the metering of all new construction and the adoption of ordinances requiring the installation of water efficient plumbing fixtures.⁷² Such steps may be legally feasible in Ontario under the provision which allows terms and conditions to be imposed on permits granted for direct withdrawals by large users but would be limited in effectiveness unless the exemptions currently available were to be restricted or eliminated.

C. Conditional Approval of Municipal Works

As discussed in section 2.3 above, the Ministry of the Environment also has authority over the approval of municipal water works systems. Approval may be refused or granted on conditions if deemed necessary as being in the public interest. The Ministry's guide for applications for approval states that applications are reviewed from a public health and functional point of view based upon the Ministry's water quality objectives and accepted principles of sanitary engineering but that

applications are not reviewed with respect to other provincial or federal by-laws, codes, regulations or statutes which may pertain to water works. This appears to be a matter of policy rather than of legal requirement therefore the scope exists for the consideration of water conservation measures as conditions to the granting of approvals. In California, for example, water utilities considering expansion are required to develop long-term conservation plans.⁷³

D. Agreements for Municipal/Provincial Projects

It has already been noted that the province often enters into agreements of to finance and operate water and sewage works. Such agreements could incorporate or mandate water conservation requirements and incentives.

E. Approval of Undertakings

The constraints on municipal action with respect to municipal undertakings or schemes to be financed by revenues from a subsequent year or by the issue of debentures may offer an opportunity at the provincial level to direct policy by selective approval of projects by the Ontario Municipal Board. For instance, if appropriate policies were in place, the Board could withhold approval of such municipal undertakings or schemes unless a conservation oriented water pricing scheme were to be adopted.

F. Conditional Planning Approval

The Ministry of Municipal Affairs in performing its functions under the Planning

Act has the opportunity to adopt policies directed at the conservation of natural resources. Pursuant to the Ontario Planning Act, an official plan is intended to contain objectives and policies to provide guidance for the development of a municipality, "while having regard to relevant social, economic, and environmental matters". Official plans are devised by municipalities and approved by the Ministry of Municipal Affairs. It is conceivable that official plan policies at both the municipal and provincial levels could be formulated to require consideration of environmental impacts on natural resources including water throughout the planning process. Prior to approval of official plans by Municipal Affairs, the Ministry of the Environment is given the opportunity to comment on such matters as water quality and quantity and these comments are taken into consideration in the approvals process.

The Planning Act requires that plans of subdivisions must be approved by the Minister of Municipal Affairs. In approving draft plans, the "health, safety, convenience and welfare" of present and future inhabitants, and matters of "provincial interest" set out in policy statements are to be considered among other matters. Regard must also be had to the "conservation of natural resources." The Minister may impose conditions on the approval of a plan relating to these matters. The effectiveness of these provisions is limited by their permissive nature. The Minister need only have regard to these matters and there is nothing to compel making the approval of a subdivision plan conditional on the adoption of a strategy for the

conservation of natural resources. Nevertheless, these provisions offer potential for the promulgation of policy where the political will to do so exists.

Ontario municipalities have no authority over subdivision plans unless the Minister has delegated his approving authority to them but may indirectly influence them through the plans they refer to the Minister and the recommendations which accompany them. Municipalities are free to formulate policy on the basis of the factors listed in the Planning Act including those discussed above.

Zoning by-laws deal with the use of land and location and the use of buildings. The Planning Act provides that municipal zoning by-laws may authorize increases in the height and density of a development in excess of those permitted by the by-law in exchange for "such facilities, services or matters as are set out in the by-law." The range of matters that could be considered in these bonusing agreements does not seem to be restricted.

For example, the City of Toronto is to introduce water conservation requirements on new major developments.⁷⁴

G. Sewer Overflow Prevention

In June 1989 the Ministry of the Environment announced that area municipalities within the Regional Municipality of Niagara would be required to develop plans or adopt strategies to eliminate sewer overflows in their sewer systems within a five to ten year time frame. Pursuant to this requirement the municipal

council for the City of Niagara Falls has recommended the adoption of water conservation measures. These include the compulsory installation of water conservation devices (6 litre flush toilets and low flow shower heads) as a condition to the approval of all tourist/commercial, commercial and multiple-dwelling development proposals. It has also been recommended that the City investigate the costs and benefits of implementing city-wide water conservation measures such as water meters, low flow shower heads, low flush toilets, in order to reduce sanitary sewage production. It is understood that the adoption of these measures would comply with the requirement imposed by the MOE in June 1989.⁷⁵

3.4 Summary

The findings in this section can be summarized as follows:

- (a) The federal government has recognized the importance of water conservation and has offered to provide a leadership role in the area as outlined in the Federal Water Policy. However, only a few initiatives have been undertaken to demonstrate this leadership.
- (b) The provincial government does not have a formal water conservation policy. As a result, it does not have a coherent framework to mandate or encourage water conservation generally or with respect to residential end-users in particular.

(c) With respect to water use charges, the province does have a number of mechanisms available to it to encourage water conservation at the local level through appropriate pricing of the resource. Some of these mechanisms include:

(A) conditions attached to the various MOE permits and approvals required by municipalities, including the approval of water and sewage works;

(B) approvals required by the OMB with respect to the financing of water and sewage works;

(C) the financing of water and sewage works.

(d) In other cases where the MOE both owns or operates water and sewage works for the benefit of a municipality pursuant to an agreement, the terms of the agreement could be renegotiated require conservation pricing of water.

(e) The province retains jurisdiction over users taking water directly from provincial waterways. The existing permit system for these users was neither designed nor intended as a component of a water conservation strategy. Its primary application is to large users; it exempts several categories of major consumers of water. This system could conceivably be used to require regions or municipalities to obtain a water-taking permit and then to make the issuance of the permit contingent upon a water conservation strategy by the permittee.

(f) At the local and regional municipal and county levels, there do not seem to be any barriers to governments proceeding with a water charge regime based upon use and consumption. In fact, most regions and municipalities already charge for water. The issue is whether all customers are charged and whether the charge for water is appropriate. There do not appear to be any legal barriers to the restructuring of the regime by making it universal and reflective of water conservation goals. In this instance, one of the problems is that few municipalities have developed a water conservation strategy which would encourage the adoption of such measures.

(g) Similarly, there are no legal barriers to mandatory metering of water use. Many local governments already have programs underway to ensure new and resold home have such meters installed. The barrier which exists pertain to financing of metering installation but this can easily be circumvented by financing as much of the scheme in each year as annual revenues allow.

(h) The issue of the allocation of proceeds or revenues from water charges is slightly more complicated. At the local level, reserve funds financed by annual revenues are commonly used and could be employed to ensure that monies from water charges are dedicated to specified uses. Should a provincial water charge system be implemented, the availability of a reserve fund financed by these charges and dedicated to water conservation purposes is unclear and may require legislative amendments.

(i) Through the use of grants and subsidies, the province could encourage municipal and regional water conservation measures.

(j) The province could play an important role in the area of conservation plumbing but has not exercised its powers accordingly. The Ontario Plumbing Code could be reformed to include a number of conservation-encouraging measures, such as the mandating of water efficient applicants. Although this approach has been adopted in the U.S., a similar approach has not been followed in the province.

(k) While a local or region municipality may not be able to mandate changes to plumbing codes and the use of water appliances, local governments can still encourage the use of water conserving devices on a voluntary basis through the use of subsidies, credits, and rebates. Some municipalities are now employing such mechanisms to encourage water conservation.

(l) Regions and municipalities are empowered to pass water use restriction by-laws, and in a piece-meal fashion, many municipalities already do. Whether the province can direct local governments to enact such by-laws under Ontario Water Resources Act provisions dealing with water taking permits and approval of water and sewer works is not known but these provisions have potential.

(m) There are an array of measures available to the provincial government to encourage municipalities to undertake water conservation programs about from full cost pricing schemes. For example, through their approval powers, grant and

subsidies, water taking permits, and other such measures, the province could incorporate terms and conditions that would further water conservation objectives.

(n) Local and regional municipalities are free to undertake extensive public education programs to promote water conservation measures.

4. IMPROVING WATER CONSERVATION MEASURES: RECOMMENDATIONS FOR REFORM

Water conservation is an issue that has continued to escape the attention of decision-makers. As attention is now slowly being devoted to it, it is clear that, from a point of view of law and policy, there is no coherent framework for water conservation in the province. The absence of a water conservation policy is especially apparent at the municipal level.

While the findings for each chapter were presented above, a number of general conclusions can be made with a number of recommendations. These are discussed below.

4.1 General Recommendations

4.1.1 The Need for a Provincial Water Conservation Policy

The most glaring need in Ontario in this area is for a comprehensive water conservation policy for the province with appropriate targets and deadlines, delineation of institutional responsibilities, and an action plan to ensure the attainment of the objectives. The following paragraphs identify some of the measures that could be employed with marginal legislative reform.

4.1.2 Institutional Reform

At present, there is little institutional leadership for the furtherance of a water conservation policy in the province. It is suggested that a lead agency to oversee, further develop, provide leadership, undertake research, and seek to implement,

measures should be mandated with respect to water conservation.

As noted in section 2, a new water and sewage crown corporation has been proposed by the province. However, details about its mandate, operating principles, and authorities have not been released at this time.

4.2 Recommendations Pertaining to Municipal Water Use Charges

Certainly water use charges hold tremendous potential to further water conservation aims. The findings of this study indicated that, in a substantial way, there are few legislative barriers for the imposition of appropriate water use charges at this time. The absence of appropriate policy in this regard seems to be outside of legislative realm. Nevertheless, there are a number of reforms which would encourage such measures at this time.

4.2.1 Provincial Reforms

There are a number of mechanisms available to the province to encourage appropriate water pricing schemes. Each mechanism is identified, however, their practical or political feasibility is not assessed in detail at this time.

A. Water and Sewage Approvals

Water and sewage approvals are undertaken without terms and conditions for the implementation of water conservation measures. Some of the more important approvals include: water taking permits; approvals for construction and operation of water and sewage works.

With respect to water taking permits, there are numerous exemptions list in the legislation from requiring a permits. The desirability of these exemptions should be reexamined.

B. Provincially Owned Water and Sewage Facilities

One of the problems in this regard, however, is that the province owns or operates most of the water and sewage facilities in the province. A potential conflict, therefore, is possible where the Ministry is in effect imposing terms and conditions on itself.

C. Provincial-Municipal Agreements for Grants and Subsidies

As noted in Chapter 2, section 2.3, the province and the municipalities often conclude an agreement with respect to the operation of the water and sewage facilities, which in effect, are translated into a grants and subsidies to municipalities.. While the municipalities still set the rates for the end users, these agreements could provide a vehicle to encourage municipalities to set appropriate water rates through a system of incentives and discentives.

D. Research on Water Pricing

One of the possible barriers to water conservation pricing is lack of a clear and accepted rational for appropriate water rates. Hence, the provincial (in conjunction with the federal government) could certainly take the initiative in this regard.

4.2.2 Reform at the Municipal Level

Municipalities also have considerable opportunities on their own to instill water conservation measures, apart from the appropriate water pricing. These include:

A. Development of a Municipal Water Conservation Policy

Few municipalities have undertaken a comprehensive water conservation policy, which would serve as the basis for full cost pricing.

B. Rate-Setting and Mandatory Metering

There are few limitations to implementation of full cost pricing at the municipal level. Perhaps the barriers in this regard is the lack of awareness and constituency for appropriate pricing policies. However, care will have to be exercised with respect how the rates are justified, structure and nature of the reserve funds. Moreover, the first step would be mandatory metering of new homes and a policy of retrofitting water meters in older homes.

4.3 Recommendations Concerning Non-Pricing Measures

4.3.1 Provincial Reforms

A. Provincial Approvals, Grants, Subsidies

In the same way that provincial approvals, grants and subsidies were suggested as methods to instill appropriate pricing schemes for waters, these same instruments could be employed to encourage non-pricing measures at the provincial level.

B. Reforming the Ontario Plumbing Code

The Ontario Plumbing Code provides one of most important long term mechanisms to further water conservation in the province. To realize this aim, the following reforms are suggested:

- (a) mandate the installation of water efficient appliances, including retrofitting of appliances in new and resold homes;
- (b) mandate water audits to all commercial facilities; and
- (c) ensure the application of appropriate plumbing practices

4.3.2 Municipal Reforms

The non-pricing measures at the municipal could be varied. Some of the example described already include the use of by-laws, subsidies for, and retrofitting of, water efficient appliances, incorporation of principles in planning approvals, as well as a public awareness and education campaign on the benefits of water conservation.

ENDNOTES

1. In fact, Canadians use double the water used by Europeans. Tate, Water Demand Management, Environment Canada, 1987.
2. See: Currents of Change - Inquiry of Federal Water Policy, Environment Canada, September, 1985.
3. Tate, Water Demand Management, Environment Canada, 1987.
4. Ontario Ministry of the Environment - J.W. MacLaren et al. - "Report on a Water Distribution and Sewerage Rehabilitation Program for Ontario Municipalities" - June 30, 1983; Ontario Ministry of the Environment - J.C. Elstad - Findings of a Canada Works Project Study - "The Need for a Rehabilitation Program for Water Distribution and Sewage Collection in Ontario" - January, 1987.
5. Constitution Act, 1867, 30 & 31 Vict. art.IV.
6. Fisheries Act, R.S.C. 1985, Chap. F-14, as amended.
7. Navigable Waters Protection Act, R.S.C. 1985, Chap. N-22, as amended.
8. For example, the International Boundary Waters Treaty Act, R.S.C. 1970, c. I-20.
9. See for example, R. v. Crown Zellerbach Canada Ltd., [1988] 1 S.C.R. 401.
10. *Supra*, n. 1, section 91(2).
11. Citizens Insurance Co. v. Parsons, (1881), 7 App. Cas. 96.
12. Reference Re Farm Products Marketing Act, [1957] S.C.R. 198.
13. Labatt's Breweries of Can. Ltd. v. A.G. Canada, (1979) 30 NR 496.
14. Laskin, "Jurisdictional Framework for Water Management" in 1 Resources for Tomorrow 211, 216 (Kristjansen, ed. 1961).
15. Municipal Act, R.S.O. 1980, Chap. 302, as amended.
16. *ibid*, s. 104.
17. R. v. Thompson (Thompson) [1957] OWN 60, 117 CCC 269, 9 D.L.R. (2d) 107; Re Morrison and Kingston [1938] O.R. 21, [1937] 4 D.L.R. 740 (CA). The contrary view was expressed by Meredith CJO in JG Butterworth Co. v. Ottawa (1919) 46 O.L.R. 49 49 D.L.R. 262 (CA), at p. 60 who suggested that the clause could be invoked to support an exercise of power independently of a specific delegation of power in respect of the subject matter.

Endnotes

19. Canada, Department of Environment, Federal Water Policy, (Ottawa, 1987).
20. Canadian Water Watch, September, 1989, vol.2, No. 9, p. 67.
21. Canadian Environmental Protection Act, R.S.C. 1985, Chap. 16 (4th Supp.), ss.1 to 139, Amended 1989, c.9.
22. Ibid, Part I.
23. Ibid, section 5.
24. Canada Water Act, R.S.C. 1985, Chap. C-11, as amended.
25. Conservation Authorities Act, R.S.O. 1980, Chap. 85, as amended.
26. Planning Act, 1983, S.O. 1983, Chap. 1, as amended.
27. Ibid, s. 50.
28. Environmental Protection Act (Ontario), R.S.O. 1980, Chap. 141, as amended.
29. Ibid, s. 1 (1)(k), s. 2, "The purpose of this Act is to provide for the protection and conservation of the natural environment." The natural environment is defined as "the air, land and water, or any combination or part thereof, of the Province of Ontario."
30. Ontario Water Resources Act, R.S.O. 1980, Chap. 361, as amended.
31. Ibid, s. 34.
32. Ibid, ss. 34-35.
33. Ibid, ss. 36-38.
34. A.W. Bryant, "Chapter 6 - An Analysis of the Ontario Water Resources Act" in P.S. Elder, Environmental Management and Public Participation (Toronto: Canadian Environmental Law Research Foundation, 1972), at 166.
35. Statement for the Legislature, The Honourable John Sweeney, Minister of Municipal Affairs, May 2, 1990.
36. Supra, n. 26.
37. Ibid, s. 20.
38. From a personal interview referred to in David R. Percy, The Framework of Water Rights Legislation in Canada, The Canadian Institute of Resources Law, (1988).
39. Supra, n. 26, s. 16.

Endnotes

40. Ontario Plumbing Code, O. Reg. 815/84, Amended 675/85, 588/88, 734/88.
41. Building Code Act, R.S.O. 1980, Chap. 51, as amended.
42. Re. Minto Construction Ltd. and Twp. of Gloucester (1979), 23 O.R. (2d) 634, 96 D.L.R. (3d) 491 (Div. Ct.).
43. Re Toronto and Manolan Enterprises (1978) 22 O.R. (2d) 60 (H.C.).
44. Territorial Division Act, R.S.O. 1980, Chap. 497, as amended.
45. Municipal Act, supra n. 11; Public Utilities Act, R.S.O. 1980, Chap. 423, as amended.
46. Ontario Municipal Board Act, R.S.O. 1980, Chap. 347, as amended.
47. Ibid, s. 62.
48. Re Township of Westminster and City of London (1975), 50 D.L.R.(3d) 481 (Ont. Div. Ct.).
49. City of Hamilton v. OMB, (1987), 36 M.P.L.R. 89 (Div. Ct.). Also see: Re Victoria Harbour Sewage Service (1979), 7 M.P.L.R. 166 (O.M.B.). Also see: S.M. Makuck, Canadian Municipal and Planning Law (Toronto: Carswell, 1983), at pp. 60-63.
50. Northern Inland Water Act, R.S.C. 1985, Chap N-25, as amended.
51. A. W. Bryant, "Chapter 6 - An Analysis of the Ontario Water Resources Act" in P.S. Elder, Environmental Management and Public Participation (Toronto: Canadian Environmental Law Research Foundation, 1972), at 166.
52. The City of Toronto recently passed a "Water Conservation Programme" with full cost pricing as a component. See: City of Toronto, Department of Public Works, Report to City Services Committee, April 30, 1990, passed by Council, June 29, 1990. (Hereinafter cited as, Toronto, "Water Conservation Programme".)
53. The Spectator, (Hamilton), January 15, 1990 and February 1, 1990.
54. Ian MacFee Rodgers, The Law of Canadian Municipal Corporations, (1986), at 1132.
55. See: Hamilton v. Hamilton Distillery Co. (1907), 38 S.C.R. 239.
56. Supra n. 42, s. 70(c).
57. Ontario, Ministry of the Environment, Guidelines for Water Distribution Systems.
58. Supra, n. 35.
59. Supra, Toronto, "Water Conservation Programme".
60. Municipal Affairs Act, R.S.O. 1980, Chap. 303.

Endnotes

61. Lewis v. Town of Prescott, [1970] 3 O.R. 759, 14 D.L.R. (3d) 143 (HCJ).
62. Ibid.
63. Ministry of Municipal Affairs, Municipal Councillor's Manual, (Ontario, January 1989), p. 54.
64. Ministry of the Environment, Ontario's Water and Sewage Systems: Direct Grants, brochure, (Ontario, 1988).
65. National Building Code of Canada (National Research Council of Canada, 1985, 1990).
66. David B. Brooks and Roger Peters, Marbek Resource Consultants Ltd., Discussion Paper, Water: The Potential for Demand Management in Canada, Science Council of Canada, June 1988, quoting J.E. Robinson, personal communication, February 1987.
67. Such ideas are to be used by the City of Toronto, see: supra, Toronto, "Water Conservation Programme".
68. Supra n. 62, p. 25, referring to J.D. Pawley, "Water Demand Management - A Case Study, The Canadian Public Works Conference, Ottawa, 12 May 1986; Benedict A. Benninger, "Evaluating Water Efficient Plumbing Fixture Use", University of Waterloo, (1986); and personal communication with Benedict A. Benninger, December 1989.
69. Personal communication, Benedict A. Benninger, December 1989.
70. Ibid, p. 24.
71. Ibid, p. 22.
72. Rules and regulations for the allocation of water from Lake Michigan, January, 1985, Illinois Department of Transportation, Division of Water Resources, p. 26-7.
73. Supra, n. 62, p. 22.
74. See: supra, Toronto, "Water Conservation Programme".
75. The City of Niagara Falls, Municipal Council and Municipal Works Committee Reports, December 1989 to February 1990.

Legend to Abbreviations used in Paper

- AA Assessment Act
BCA Building Code Act (Ontario)
CAA Conservation Authorities Act
CEPA Canadian Environmental Protection Act
CWA Canada Water Act
EPA Environmental Protection Act (Ontario)
MA Municipal Act
MAA Municipal Affairs Act
Metro Regional Munic. of Metrop. Toronto Act
MFA Municipal Franchises Act
MWAA Municipal Works Assistance Act
OMBA Ontario Municipal Board Act
OPC Ontario Plumbing Code
OUGA Ont. Unconditional Grants Act
OWRA Ont. Water Resources Act
PA Planning Act
PUA Public Utilities Act

APPENDIX A - LIST OF STATUTES REVIEWED

Canada:

Constitution Act 1867, 30-31. Vict. C.3 [UK]
Canadian Environmental Protection Act S.C. 1988 C.22
Fisheries Act R.S.C. 1985, C.F-14
Canada Water Act R.S.C. 1985, C.C-11

Ontario:

Assessment Act R.S.O. 1980, C.31
Building Code Act R.S.O. 1980, C.51
Conservation Authorities Act R.S.O. 1980, C.85
Environmental Protection Act R.S.O. 1980, C.141
Local Improvement Act R.S.O. 1980, C.250
Municipal Act R.S.O. 1980, C.302
Municipal Franchises Act R.S.O. 1980, C.309
Municipal Works Assistance Act R.S.O. 1980, C.313
Ontario Municipal Board Act R.S.O. 1980, C.347
Ontario Municipal Improvement Corporation Act R.S.O. 1980, C.349
Ontario Unconditional Grants Act R.S.O. 1980, C.359
Ontario Water Resources Act R.S.O. 1980, C.361
Planning Act, 1983 R.S.O. C.379
Public Health Act R.S.O. 1980, C.409
Public Utilities Act R.S.O. 1980, C.423
Regional Municipality of Durham Act R.S.O. 1980, C.434
Regional Municipality of Haldimand-Norfolk Act R.S.O. 1980, C.435
Regional Municipality of Halton Act R.S.O. 1980, C.436
Regional Municipality of Hamilton-Wentworth Act R.S.O. 1980, C.437
Regional Municipality of Niagara Act R.S.O. 1980, C.438
Regional Municipality of Ottawa-Carlton R.S.O. 1980, C.439
Regional Municipality of Peel Act R.S.O. 1980, C.440
Regional Municipality of Subdury Act R.S.O. 1980, C.441
Regional Municipality of Waterloo Act R.S.O. 1980, C.442
Regional Municipality of York Act R.S.O. 1980, C.443

APPENDIX B

REGULATORY FRAMEWORK GOVERNING WATER CONSERVATION

GENERAL PROVISIONS

SIGNIFICANCE: WHO CAN DO WHAT GENERALLY RE. WATER RESOURCE
MANAGEMENT?

A. FEDERAL

- Part 1 CEPA -unforceable environmental quality objectives, guidelines and codes of practice could be established to promote uniform, nation-wide goals for water conservation
- Part I-II CWA -federal government may provide for water resource management where there is "significant national interest"

B. PROVINCIAL

- s.20 CAA -objects of conservation authorities are to undertake program designed to further conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals in area over which authority has jurisdiction (however, authorities may not make regulations dealing with matters which limit use of water for domestic purposes or interfere with any rights or powers conferred upon a munic. in respect of use of water for munic. purposes)
- chap. 1 PA -approval of draft plans of subdivisions is to have regard to "conservation of natural resources"
- s.2 EPA -purpose of Act is to protect and "conserve" natural environment (incl. water per s.1(1)(k))
- s.3 EPA -MOE may with approval of LG in Council enter into agreement with any government or person relating to protection and conservation of natural environment

FINANCING OF MUNICIPAL WATER SUPPLY AND DISTRIBUTION SYSTEMS

SIGNIFICANCE: RESTRICTIONS ON FINANCING OF MUNICIPAL UNDERTAKINGS WILL AFFECT ADOPTION OF WATER CONSERVATION MEASURES

- s.14 PUA -munic. corp. has power to levy special rate for purpose of assisting in payment of any debentures issued for waterworks purposes and interest thereon up to four mills to the dollar according to assessed value of land
- s.16 PUA -munic. corp. has power to levy special rate re. cost or maintenance of water main
- s. 27(1)&(2) PUA -municipal council may pass by-laws or by resolution fix rates or charges for supply of public utility and charges to meet cost of any work or service done or furnished for purpose of supply of p.u.
- s.28 PUA -no rate to provide for maintenance or mgt of utility shall be levied except to the extent to which revenues from utility are insufficient
- s.34(3) PUA -except where water works rate is imposed under s.218 OMA, not necessary to levy rate to provide for sinking fund and interest or other payments on account of debentures issued by munic. for construction, extension or improvement of utility except to extent to which excess of receipts from supply of utility over expenditures are insufficient to meet annual payments falling due on account of principal and interest of debentures
- s.158 OMA -munic. council to levy in manner set out in OUGA on whole assessment for real property and business a sum equal to estimates adopted under s.164 OMA (as above)
- s.164(1) OMA -munic. council is to prepare estimates of expenses and revenues; tax rate is calculated and rates levied on basis of these estimates; sum to be levied is amount required within year of current annual expenditures adopted in estimates, all debts of corp., and amounts to be paid into sinking fund
- s.215 OMA -special rate may be imposed on users who require extra capacity
- s.218 (1)-(6) OMA -rates to cover capital cost of construction of water and sewer works may be imposed
- s.218(7)& (8) OMA -computation of sewer and water works rate on basis of metre frontage or hectarage rate
- s.218(9) OMA -revenue from sewer or water works rate imposed under s.218(2) shall be applied

PRICING SYSTEM FOR WATER

SIGNIFICANCE: WHO CAN SET THE PRICE FOR WATER AND ON WHAT BASIS CAN IT BE SET?

A. STRUCTURING OF TARIFFS

- s.8 PUA -corp. of local munic. may fix prices for use of water
- s.12 PUA -corp. may pass by-laws for regulating price of supply
- s.27 (1) PUA -council of munic. corp. owning or operating public utilities may pass by-laws or by resolution fix rates or charges for supplying p.u.
- s.27 (2) PUA -corp. may use discretion in fixing rents, rates or prices to be paid for supply of a p.u. as to various classes of consumers and different purposes for which p.u. is being supplied
- s.35(1) Metro -metro council may pass by-laws fixing rates at which water will be supplied to area munic.
- s.35(4) Metro -excludes application of .53(1)(k) OMBA
- s.53(1)(k) OMBA -OMB has jurisdiction to confirm, fix or vary rates charges by one munic. for supply of water service to another
- s.70(c) OMBA -OMB has jurisdiction re. p.u. rates and tolls charged
 - (a) in excess of those approved or lawfully prescribed or
 - (b) otherwise unlawful or unjust
- s.74(2) OMBA -OMB shall require and report as to whether rates charged are sufficient to pay debenture debt, interest, cost of operation and maintenance, or too great for these purposes

B. METERING

- s.12 PUA -regulation of any matters connected to supply of water
- s.49(1) PUA -person authorized by corp. has free access for purpose of placing meters upon any service pipe or connection
- s.27(1) PUA -rates or charges to meet cost of work or service done or furnished

D. GRANTS AND SUBSIDIES

-s.55(1) AA

-grants apportioned between munic. and localities by Min. of Revenue upon examination of assessment amounts on just and equitable basis
-OMB can vary apportionment

-s.55(6) AA

-s.5(2) OUGA

-Min. of Munic. Affairs may make grants or loans to munic., under terms and conditions if necessary, where Min. is of opinion that property taxes in a munic. are unduly high or have been or may be unduly increased because of: substantial loss of revenue, change in legislation or unforeseen commitment imposed on a munic.

-s.136(1)(i) EPA

-IG in Council may make regulations prescribing amounts of grants and loans and terms and conditions (grants for construction or rehabilitation of water or sewage works or water distribution systems)

NON-PRICING WATER CONSERVATION MEASURES

SIGNIFICANCE: HOW CAN WATER CONSERVATION MEASURES BE ADOPTED?

A. CONSERVATION PLUMBING

-s.44(2) OWRRA (OPC)

-subject to approval of IG in Council, Min. of Housing may make regulations
(a) regulating and controlling location, construction, repair, renewal or alteration of plumbing and material to be used in construction thereof and requiring munic. to carry out inspections and
(b) adopting by reference standards made or adopted by Canada Standards Association (CSA) re. pipes, fittings, fixtures and materials used in plumbing and prohibiting use of non-approved and marked pipes, etc.

-s.62(a) EPA

-plumbing as defined in OWRRA regulations is excluded from MOE/EPA jurisdiction

-s.19 BCA

-building code is regulations made under this section "governing standards for construction and demolition of buildings...including manner of construction and types and quality of materials... and adopting by reference...any code or standard

STATES AND COMMUNITIES WITH LOW CONSUMPTION PLUMBING PRODUCT REGULATIONS THAT ARE IDENTICAL TO, OR MORE STRINGENT THAN, THE PROPOSED FEDERAL LEGISLATION

STANDARDS PROPOSED IN THE NATIONAL PLUMBING PRODUCTS EFFICIENCY ACT

	EFFECTIVE DATE	WATER CLOSETS*	URINALS*	SHOWER HEADS**	LAVATORY FAUCETS**	KITCHEN FAUCETS**
PROPOSED NATIONAL STANDARD	1/1/91 1/1/92	1.6	1.0	2.5	2.0	2.5

REGULATIONS ENACTED IN STATES AND COMMUNITIES

STATE	COMMUNITY	EFFECTIVE DATE	WATER CLOSETS*	URINALS*	SHOWER HEADS**	LAVATORY FAUCETS**	KITCHEN FAUCETS**
ARIZONA	GLENDAL	1/1/88	1.5				
	TOLLESON	5/1/88	1.5				
CALIFORNIA	GOLETA	1983	1.6		2.0	2.0	2.0
	LOS ANGELES	7/1/89	1.6				
	MONTEREY PENINSULA	8/13/87	1.5				
	PETALUMA	6/6/88	1.5				
	SANTA MONICA	7/1/88	1.6	1.0			
	SEBASTOPOL CITY	4/5/88	1.5				
	WINDSOR	9/86	1.5				
COLORADO	STATE WIDE	1/1/90					2.5
CONNECTICUT	STATE WIDE	10/1/90		1.0	2.5		2.5
		1/1/92	1.6				
DELAWARE RIVER BASIN COMMISSION (DE,NY,NJ and PA)		1/1/91	1.6				
MARYLAND	FREDERICK	9/1/88	1.6				

STATE	COMMUNITY	EFFECTIVE DATE	WATER CLOSETS*	URINALS*	SHOWER HEADS**	LAVATORY FAUCETS**	KITCHEN FAUCETS**
MASSACHUSETTS							
	STATE WIDE	3/2/89 †	1.6				
NEW YORK							
	HIGHLAND	5/1/89	1.5		2.5		
	NEW YORK CITY	1/1/92	1.6	1.0			
	STATE WIDE	1/26/88		1.0			
RHODE ISLAND							
	STATE WIDE	9/1/90††	1.6				
TEXAS							
	AUSTIN	11/10/83		1.0			
WASHINGTON							
	STATE WIDE	7/1/93	1.6	1.0	2.5		2.5

REGULATIONS PENDING IN STATES AND COMMUNITIES

STATE	COMMUNITY	EFFECTIVE DATE	WATER CLOSETS*	URINALS*	SHOWER HEADS**	LAVATORY FAUCETS**	KITCHEN FAUCETS**
ARIZONA							
	PHOENIX	6/30/90	1.6			2.0	2.0
	TUCSON	1/1/90	1.6	1.0	2.5		
CALIFORNIA							
	STATE WIDE	1/1/91	1.6	1.0			
NEW YORK							
	NEW PALTZ		1.6				
	STATE WIDE	1/1/91		1.0	2.5	2.0	2.0
		1/1/92	1.6				

Source: "Water Conservation Network", National Wildlife Federation, June 9/1989

* - gallons per flush

** - gallons per minute

† - The 3/2/89 effective date applies to all two piece water closets and all floor mounted flushometer water closets.
Effective 3/2/90, the standard applies to all types of water closets.

†† - The 9/1/90 effective date applies to all two piece water closets and all floor and wall mounted flushometer water closets.
The effective date for one piece water closets is 3/1/91.