CHAPTER 2. WATER

I. Introduction

In CIELAP's *Fifth Year Report*, water was "ground-zero" in terms of the impact of the Common Sense Revolution on Ontario's environment. There were deaths and illness in Walkerton from drinking the water. There was fear and anger in rural areas across the province about the increasing impact of animal wastes from intensive livestock operations on rivers, lakes and streams and the agricultural sector's resistance to demands for stricter environmental controls. There was the ongoing issuance by the Ministry of the Environment ("MOE") of permits to take water coupled with an increasing lack of public confidence that the government has any real regulatory handle on removals of surface and groundwater by commercial and industrial interests. Finally, these concerns were played out again at the regional and transboundary level as governments on both sides of the Great Lakes — but particularly Ontario — took turns picking up and dropping the ball on water quality and water quantity issues for the Great Lakes Basin as a whole.

In this year's report, we offer both a recap and update on the situation. This chapter addresses what should be the four key components of sound water policy in Ontario — but currently aren't. First, drinking-water protection. Second, source-water protection (with a primary focus on agriculture). Third, water-conservation measures. Fourth, measures to protect both the water quality and water quantity of the Great Lakes.

II. Drinking Water Protection

A. The new Ontario drinking water regulations

In its *Fifth Year Report*, CIELAP reported on and briefly summarized the contents of the June 2000 Ontario government proposal to promulgate a drinking-water regulation. The proposal followed hard on the heels of the Walkerton calamity of May 2000 in which seven people died and more than 2,300 were taken ill (out of a population of 5,000) from drinking water contaminated by *E. coli* bacteria following heavy rains and flooding.[1] The tragedy triggered not only a public inquiry, discussed below, but also regulatory reform of drinking water protections at a level of intensity, rigour and detail that the province has not seen since the enactment of its first water resources law in the 1950s. The results of the Inquiry likely will trigger further drinking water law reforms.

Given the timing of the publication of the *Fifth Year Report*, CIELAP was able to do little more last year than report that the regulation, Ontario Regulation ("O. Reg.") 459/00, promulgated under the *Ontario Water Resources Act* ("*OWRA*"), had become law in August 2000. This year we provide a more detailed review of the key requirements of the regulations.

The new regulations apply to every water treatment and distribution system in the province that serves more than five private residences[2] and imposes the following obligations on such systems:

- Persons who apply for a waterworks approval must do so in accordance with the Ontario Drinking Water Standards (the former Ontario Drinking Water Objectives updated and now forming a package with the regulations) and the MOE Director of Approvals must "have regard" to the standards when considering an application;[3]

- Owners of water treatment or distribution systems that use groundwater or surface water must ensure that a minimum level of treatment consisting of disinfection, chemical treatment, and chlorination, as the case may be, is maintained,[4] subject to certain exceptions;[5]

- Owners of water treatment or distribution systems must ensure that water sampling and analysis are carried out in accordance with a schedule appended to the regulations and that the analyses are conducted by an accredited laboratory as also set out in the regulations;[6]

- Owners of water treatment or distribution systems must give notice to the Medical Officer of Health (MOH) and the MOE of any exceedance of the drinking water standards; accredited laboratories must do the same when they report an exceedance to an owner;[7]

- Where an exceedance is reported, owners of water treatment and distribution systems must undertake corrective measures set out in a schedule to the regulations and post warning notices in prominent locations so that the information comes to the attention of users of the water system;[8]

- Owners of water treatment or distribution systems must ensure that certain minimum information, such as laboratory water-sampling analyses, approvals orders or directions, are available for inspection by any member of the public during normal business hours;[9]

- Owners of water treatment or distribution systems must make quarterly reports containing certain minimum information, such as measures taken to comply with the regulations and the standards and results of water-sampling analyses during the reporting period, to the MOE Director and must ensure that any person who requests a copy of the report is provided with one; that steps are taken to advise water-system users that the report is available; and, where the system serves more than 10,000 people, ensure that it is available through the Internet;[10]

- Owners of water treatment and distribution systems must ensure that reports written by engineers regarding the status of the systems are prepared for review by MOE by certain dates and every three years thereafter.[11]

These provisions, as far as they go and with some exceptions, are laudable and will improve drinking-water protection in the province. However, in law reform terms, these regulations were developed and became law at an almost unheard of speed — within just three months of the Walkerton tragedy.[12] Under the circumstances, it is not surprising that while some parts of the regulations are a dramatic improvement over the pre-May 2000 situation,[13] other parts should be repealed and replaced as soon as possible.[14]

Moreover, there are two fundamental issues that still need to be addressed. First, what is the capacity of MOE to actually oversee policy development, approval, standard setting, compliance, enforcement or other measures under the existing regime, including the new regulations? Second, what other substantive drinking water reforms are needed and how well placed is MOE to oversee their implementation?

B. The ability of the province to deliver safe drinking water under the current regime

In many respects, the ability of the provincial government to ensure the delivery of safe drinking water to the Ontario public is at the heart of the Walkerton Inquiry. The terms of reference of the Inquiry, established under the *Public Inquiries Act* and headed by Mr. Justice Dennis O'Connor of the Ontario Court of Appeal, required that three matters be investigated:

- The circumstances surrounding the deaths and illnesses experienced in Walkerton at a time when *E. coli* bacteria were found in the town water supply;

- The cause of these events including the effect, if any, of government policies, procedures, and practices; and

- Other relevant matters the Commission considers necessary to ensure the safety of Ontario's drinking water.[15]

From the terms of reference alone, it is apparent that the roles of the government in the specific events at Walkerton and with regard to the future of the province's drinking-water regime as a whole constituted major issues for the Inquiry.

In practice, the Inquiry was divided into two parts to address these terms of reference. Part I of the Inquiry examined the first two questions (called Parts IA and IB). Evidence given by witnesses under oath called by the Commission was heard between October 2000 and July 2001.

Part II of the Inquiry examined the third part of the reference. This part of the Inquiry ran from October 2000 to October 2001. Part II consisted of

the preparation of consultant reports sponsored by the Commission, responses to those reports prepared by Parties to Part II, meetings with the general public, meetings of experts of the Parties to Part II, and public hearings where the Parties made submissions before Commissioner O'Connor.

What emerged from the evidence of both Part I and II of the Inquiry is the extent to which grave concern continues to exist about the ability of the MOE to ensure the delivery of safe drinking water to the Ontario public.

1. The evidence from Part I of the Walkerton Inquiry

The testimony during Parts IA and IB of the Inquiry painted a disturbing picture regarding the ability of the MOE, in the wake of heavy budget and staff cutbacks, to oversee protection of drinking water in the province. Among the revelations were that:

- MOE environmental officers knew of *E. coli* contamination in the Walkerton water system 10 months prior to May 2000 but did not know that *E. coli* could cause death;[16]

- MOE environmental officers never ordered the town's public utility commission to take any action, even though *E. coli* bacteria showed up in Walkerton drinking water numerous times over a five-year period commencing in 1995, because MOE felt that requirements could be met through voluntary compliance;[17]

- Many municipalities were left struggling with the costs of testing their water after the provincial government closed its laboratories in 1996 and privatized water-testing services, according to a MOE district supervisor;[18]

- Expecting large-scale cutbacks in 1995, MOE planned to give up its responsibility for monitoring drinking water; the ministry identified communal water as "non-essential," which meant that drinking water would be left almost entirely to municipalities to look after. MOE would be left only with the responsibility for "source water;"[19]

- Ten months before the tragedy at Walkerton, senior MOE staff noted that the province's inspections of waterworks were being conducted too infrequently and that the program lacked clarity as to which violations of drinking-water objectives would trigger priority action; while annual inspections were recommended, they were scaled back following cutbacks in 1996 and thereafter;[20]

- Throughout the 1990s, internal documents prepared by an assistant deputy minister spelled out the implications of continuing cuts to MOE budgets in terms of "seriously and significantly" impairing MOE's ability to meet statutory obligations;[21]

- Provincial health ministry officials during the 1996-1997 period were so concerned about a breakdown in reporting of contaminated water tests to medical officers of health that they lobbied the environment minister of the day — unsuccessfully — to get the law strengthened;[22]

- In 1996, a government advisory committee recommended that provincial subsidies for water (and sewage) works, subsidies that were viewed as having led to an overbuilding of infrastructure and a failure to conserve water, be terminated. At the same time, the committee also recommended that efforts to set and enforce environmental health standards be improved. The government terminated the subsidies[23] but instead of plowing the savings into MOE's enforcement and oversight efforts also implemented major cuts to MOE's overall budget.

This list merely skims the surface of problems and concerns identified during Parts IA and IB of the Inquiry. Overall, this phase of the Inquiry raised serious concerns about provincial decisions to:
1. close government water-testing laboratories;
2. rely on voluntary compliance; and
3. cutback MOE budgets, staffing, training, and oversight.

2. The evidence from Part II of the Walkerton Inquiry

The evidence in Part II of the Inquiry reinforced that of Part I regarding MOE's ability, or lack thereof, to ensure protection of drinking water in the province. The following is a sampling of

observations, findings and conclusions on this issue contained in the record of Part II of the Inquiry:

A March 2001 Commission-sponsored report, prepared by Nicholas D'Ombrain, on the machinery of government in Ontario for the delivery of safe drinking water, made the following observations about MOE capabilities:

- MOE does not have the mandate to manage drinking water resources on a watershed basis and there is no agreed-upon policy with respect to drinking water with other provincial ministries such as agriculture, municipal affairs, and health;[24]

- MOE problems appear to include budget reductions; staff cuts, and; loss of technical expertise and institutional memory, resulting in declines in inspection, monitoring and enforcement activities;[25]

- Budget cuts have led to MOE staff reductions as well as declines of more than 50 per cent in inspections of municipal water-treatment plants in the past five years;[26]

- Very significant budget cuts to MOE have had adverse consequences for the capacity of the government to fulfill its environmental responsibilities respecting clean drinking water. MOE is not seen as equipped — by way of resources or expertise — to support the government's responsibilities in this area;[27]

- The drinking water policy function rests with MOE, but the ministry does not have the mandate to develop policy beyond its own regulatory/ operational reach (In other words, it cannot direct other ministries to implement policies to protect drinking water);[28]

- Ontario has not adopted policies that would change the way water-treatment facilities are financed. Some large municipalities use full-cost pricing, some use water charges that are more than full-cost as a means of subsidizing their municipal budget, while some recover less than cost and others do not have the data to know whether they are charging too much or too little. Ontario's recent funding efforts to renew infrastructure for smaller municipalities continues a pattern of ad hoc programs that, in the past, have distorted pricing of water services. As long as water users do not pay the real costs of water treatment, facilities will be substandard unless the province is prepared to provide financial assistance (subsidies) comparable to the 1960s. To the extent this is unlikely, the current arrangement is a threat to public health.[29]

A May 2001 submission to the Commission by the Ontario Public Service Employees Union (OPSEU) on behalf of MOE employees who are OPSEU members made a number of similar observations on the weaknesses within the current MOE system:

- There is an expectation that waterworks are to be inspected once a year, but there is a lack of resources to do so. Anticipated new regulations to cover smaller waterworks would likely quadruple MOE's workload within a year;[30]

- Lack of MOE field staff, training, expertise and experience in water management may only get worse. Within the next five years, 50 per cent of the experienced MOE staff in technical support-water will be retiring. Any new staff are being hired on contract rather than on a permanent basis, resulting in their possible loss in two years;[31]

- Wellhead protection and rules with respect thereto are not a priority within MOE regional offices. Reliance for wellhead protection is placed primarily on municipalities. The result is that MOE is most often reactive rather than proactive when dealing with contamination problems;[32]

- There has been fragmentation of the water policy and implementation function within MOE since the reorganization that ended the existence of the Water Resources Branch. Coupled with this is the lack of legislation in areas such as watershed protection;[33]

- Many MOE environmental officers lack training for the waterworks facilities they will inspect. The result is inspections take much longer to perform;[34]

- Lack of MOE ability to focus on the problems of smaller water systems including water distribution, trailer parks, results arising from the new engineer report requirements, and related matters.[35]

A July 2001 Commission-sponsored report on the ability of MOE to deliver drinking water services, prepared by former MOE assistant deputy minister Jim Merritt, came to several similar conclusions:

- Many MOE staff are confused about whether they should take a strong regulatory approach or pursue voluntary compliance;[36]

- There has been a reduction in the level of expertise within MOE. Because of the number of tasks MOE environmental officers and technical staff are now expected to undertake, the skills of officers are often too general to be able to execute detailed inspections of complex operations such as water- treatment facilities;[37]

- Elimination of MOE staff, particularly two major cuts in 1996 and 1997, has had a serious impact on the overall performance of the ministry. Coupled with an increasing number of tasks, the capacity to meet the operational goals of the MOE has been compromised and therefore significantly limits the ministry's capacity to provide comprehensive operational service relating to drinking water in Ontario.[38]

An August 2001 Commission-sponsored report on water suppliers in Ontario, prepared by former United States Environmental Protection Agency (EPA) official Edwin Geldreich, came to similar conclusions regarding MOE, noting that:

- While some water utilities still have good communication with MOE and Medical Officers of Health, others report that communication and in-depth assistance is not like they were in years past. Some of the problems relate to new employees at the MOE who are inexperienced in water-supply problems and cite only references to regulations, providing no in-depth assistance;[39]

- Shifts in responsibilities for both MOE and local MOHs have resulted in a loss of technical support and expertise that water utilities in the province can draw on, particularly the small water systems that cannot afford the cost of private consulting firms and certified laboratories.[40]

These observations and conclusions do not paint a pretty picture about the state of MOE readiness to protect drinking water under existing requirements, let alone under future drinking-water law reform initiatives.

C. Future drinking water reforms?

If a consensus can be said to have emerged from the evidence at the Walkerton Inquiry about what may be needed in future to secure safe drinking water for the Ontario public, it can be said to have focused on the need for a new safe drinking water law. From a variety of Commission consultants[41] to parties representing diverse interests,[42] the theme of the need for new law in this area was sounded early and often. Indeed, even the provincial government has recognized that more initiatives may be necessary. In July 2001, it proposed a special drinking-water regulation applicable to schools, day nurseries, health and social care facilities.[43] While it is impossible to fully predict what the current or some future government may do, it is instructive to attempt to list what might be some of the key components of a future drinking-water law. Drawing on a review of drinking water legislation in other jurisdictions and recommendations made to the Commission during the Inquiry, the following might be said to be key components of sound drinking water law (and how Ontario's existing regime measures up by comparison):

- *Development and promulgation of legally enforceable standards for drinking water contaminants and treatment measures.* Since August 2000, Ontario has had enforceable drinking water standards for certain contaminants comparable to those of leading jurisdictions that have regulated those same contaminants.[44] However, the province still appears to lag in comparison to other jurisdictions on the issue of standards for other parameters including certain industrial and agricultural chemicals and heavy metals;[45]

- *Groundwater protection including requirements to identify and protect sole-source aquifer areas,*

critical aquifer areas within sole-source areas, and wellheads. Ontario law is silent on these matters.[46] (In mid-December 2001, the province passed the *Oak Ridges Moraine Conservation Act*, which it has suggested will eventually include "strong policies" to protect water quality, including wellheads, recharge areas and groundwater in the Oak Ridges Moraine area[47]);

- *Watershed (source water) assessment and protection not otherwise covered in respect of the groundwater matters referred to above.* Ontario law is silent on source-water assessment, protection, planning, and implementation.[48] Whether the new *Oak Ridges Moraine Conservation Act* changes this situation remains to be seen;

- *Operator training and certification*. The existing regulations (O. Reg. 435/93) on training and certification of operators require amendment and better enforcement;[49]

- *Consumer and public access to information*. The new drinking water regulation (O. Reg. 459/00) has improved the situation, but may require further amendment in future;[50]

- *Demonstration by water utilities of technical, financial and managerial capacity to meet drinking-water standards*. This is not a requirement of Ontario law. The engineers' reports required under the new drinking water regulation may assist in demonstrating gaps in these areas, but a province-wide gap analysis study may be necessary to determine the nature and extent of technical, financial, and managerial problems across the province and the measures and costs necessary to remedy the situation;[51]

- *Financial regime, such as a revolving-loan fund, consistent with full-cost recovery to sustain the above program elements, including renewal of drinking-water infrastructure*. This is not a requirement of Ontario law. Depending on the findings of the gap analysis suggested above in terms of the costs of infrastructure renewal, the federal government may have a role in assisting the province in establishing and maintaining such a financial regime.[52] In late December 2001, the province introduced the *Sustainable Water and Sewage Systems Act, 2001* that would require primarily municipalities to undertake a full accounting of the costs associated with delivering water and sewer services and to develop plans for moving to full cost recovery.[53]

These elements represent some of the fundamental components of new drinking water legislation that the Commission was asked to consider recommending to the province. It could fairly be said that considerable consensus developed across the spectrum of interests appearing before the Commission around these elements. On other matters, there was less consensus and more doubt. These matters included:

1. whether the public should have a legally enforceable right to safe drinking water;
2. whether water treatment facilities should remain largely in public hands;
3. what to do about smaller water systems; and
4. how aggressively to regulate agricultural sources of water pollution.

As noted above, the province introduced or passed in late 2001 certain legislative or regulatory measures in areas such as smaller waterworks systems, protection of the Oak Ridges Moraine and sustainable water and sewage systems. These measures will be examined in future CIELAP reports to assess how well they promote sound drinking-water protection goals.

One further area of apparent consensus, but potential problems, is the issue of what entity within the provincial government should take the lead for drinking-water protection in the province. In general, both Commission-sponsored studies[54] and many of the Parties to Part II of the Walkerton Inquiry[55] were of the view that MOE was best placed to be the lead provincial agency on drinking-water matters. However, no one has forgotten that MOE has been badly decimated by budget and staff cuts. Accordingly, without restoration of MOE's budget and staffing levels and a significant infusion of new funding, the ministry could not possibly take on added statutory responsibilities in the drinking-water area at this time.

Indeed, the government itself appears to have reservations about MOE taking on new responsibilities even in an area that has been seen as a traditional ministry responsibility — source-water

protection. This particularly appears to be the case where such a role would place MOE in direct conflict with an industrial sector politically important to the government, such as agriculture. The next part of this chapter explores this issue more closely.

III. Source Water Protection: Focus On Agriculture

A. Animal waste management and water pollution: The rising tide

Even before the tragic events at Walkerton, the government had initiated a review regarding the effects of intensive agricultural operations on water quality in the province and the adequacy of existing policy and legislation. This part of the chapter examines both the impacts of agriculture on source-water quality and the adequacy of the government's proposed legislative response to the problem.

The Walkerton Inquiry generated considerable information regarding the magnitude of potential impacts to source-water quality arising from agricultural activities. Commission-sponsored studies indicated, for example, that non-point sources of water pollution (i.e. overland runoff) are contributing as much as two-thirds of the surface water pollution in waterways of the United States. The largest contributor by far is agricultural activity, including sediment runoff, nutrient loadings and pathogens from livestock.[56]

The problem is so bad in the United States that the EPA, which has been regulating animal feeding operations since the 1970s, recently has proposed new rules to impose greater controls on manure from stockpiles, lagoons, and excessive land application. The agency has concluded that such rules are necessary because otherwise manure from these activities can reach waterways through runoff, erosion, spills, or via groundwater. These discharges, according to the agency, can result in excessive nutrients (nitrogen, phosphorous, and potassium), oxygen-depleting substances, pathogens and other pollutants in water. The resulting contamination can kill fish, cause excess algae growth, harm marine mammals, and contaminate drinking water.[57] In its discussion of the justification for the proposed amendments to the existing rules on animal feeding operations, the EPA cites the Walkerton tragedy as one of the many pieces of evidence it is relying on for proceeding with its regulatory initiative.[58]

Several of the Parties to Part II of the Inquiry also contributed additional understanding of the dimensions of the problem in Ontario. Studies performed for the water-utility parties to the Inquiry noted the work of the International Joint Commission (IJC) in the late 1970s and early 1980s in reporting the impacts on Ontario waterways of agricultural activity. The IJC reported that the Great Lakes Basin as a whole, including central and southwestern Ontario, was being polluted from nutrient runoff from feedlots and other livestock operations, inadequate soil conservation and drainage practices, and improper or excessive fertilizer application, including spreading of manure in winter.[59]

Apparently, the problem has not changed much in the Basin in the last 20 years. In an October 2001 report to the House of Commons, the Commissioner of the Environment and Sustainable Development (CESD) reported that:

> "Livestock operations in Ontario and Quebec generate enough manure to equal the sewage from over 100 million people. And the problem of how to manage it safely is getting worse….
>
> Between 1988 and 1998, a total of 274 manure spills were reported in Ontario. Fifty-three of these spills resulted in fish kills, primarily due to the ammonia in liquid manure….
>
> Many of the basin's rivers in southwestern Ontario and Quebec have concentrations of phosphorus higher than amounts set as provincial objectives for water quality. Seven of the eight watersheds in Canada with the highest counts of coliform and fecal coliform bacteria are in the basin….
>
> [I]norganic nitrogen is accumulating on farmland in the basin. Roughly 70 percent of

> Ontario and Quebec farmland had much higher nitrogen levels in 1996 than in 1981 - and much of it above levels that cause groundwater and surface water contamination….
>
> The misuse of manure and fertilizer on farmland has damaged the ecosystem in the basin….[60]

The Environmental Commissioner of Ontario (ECO) also has weighed in on the subject in a special report to the Ontario legislature. In July 2000, the ECO reported that:

> "…over the past few decades…the size of the average farm [has been] increasing dramatically…[N]ew farms are often high-investment intensive operations, with very large numbers of livestock. Farms with 3,000 or more pigs or 1,200 cattle are increasingly common….As this new form of farming spreads, environmental laws created when small operations were the norm may not address the associated environmental risks that come with more intensive farm operations.
>
> The management of nutrients, particularly from manure, is one of the major sources of environmental risk in agriculture. When manure is incorrectly stored, handled, or spread onto land, it can harm…water….[N]ew large-scale farms produce vast quantities of manure and often do not have correspondingly large areas of farm land. Ontario currently has over 3.4 million hogs…and altogether, they produce as much raw sewage as the province's 10 million people.
>
> Excess manure application can result in runoff to streams or leaching of nutrients from the soil into groundwater. The runoff spurs additional growth of algae and other aquatic plants…which may make water unusable for drinking or swimming…[E]xcess aquatic plant growth reduces oxygen levels in …water, leading to fish-kill incidents. Excess nitrogen (as nitrate) can make groundwater unsafe to drink, particularly for infants and the elderly….Epidemiologists have also recently found that Ontarians living in rural areas with high cattle density have elevated risk for toxic *E. coli* infections. The contamination of drinking water with *E. coli* that killed several residents of Walkerton…in May 2000, is suspected by some experts to be related to livestock manure."[61]

The Ontario government also recognized the nature and extent of the animal-waste management problem before the events at Walkerton. As early as January 2000, the province embarked on a task force review, headed by the parliamentary assistants for the ministers of agriculture and environment, on the effects of intensive agricultural operations on rural areas of the province.[62] Their report to the government in the summer of 2000[63] paved the way for the legislative response developed by the government in the summer of 2001: the *Nutrient Management Act, 2001*.

B. The government's response: The Nutrient Management Act, 2001

In mid-June 2001, the Ontario government, through the Ministry of Agriculture and Rural Affairs (OMAFRA), introduced Bill 81, the *Nutrient Management Act, 2001*.[64] Bill 81 provides enabling authority for the province to introduce standards for the management of nutrients used on lands and to make regulations governing farm animals and lands where nutrients are applied. The regulations may require persons to hold a certificate if they carry out prescribed management practices, to have a licence if they are engaged in the business of applying materials containing nutrients to lands or to obtain an approval for their nutrient-management plans or strategies. Regulations also may govern the location and operation of feedlots and restrict the access of farm animals to water and watercourses.[65] As of December 2001, Bill 81 has been through both second reading and public hearings before a standing committee of the Legislative Assembly.

The introduction of Bill 81 suggests that the province may be prepared to address the problems posed by agricultural impacts on source-water quality and drinking water. However, the findings of the EPA, IJC, the CESD and the ECO on the magnitude of pollution contributed to source waters by agricultural activities, coupled with the

events at Walkerton, are of great concern. The reports and initiatives from these institutions chronicle the extent to which agricultural activities may be a threat to source-water quality in the province. Over 20 years ago, the IJC recommended to governments a four-pronged strategy for solving the problem consisting of the following measures:

1. Land-use measures,
2. regulatory measures,
3. fiscal measures, and
4. educational/voluntary/technical assistance measures.[66]

It is this background that gives us reason to be concerned about the province's proposed solution to the problem under Bill 81. First, with respect to land-use measures, Bill 81 states that provincial regulations on a subject supercede any municipal by-law that addresses the same subject matter.[67] As worded, it is not simply the case that a municipal by-law would be of no force or effect if there were operational conflict between it and a regulation promulgated under Bill 81. Merely addressing the same subject matter as the regulation is sufficient for the by-law to be overridden by the regulation. Thus, Bill 81 has the potential to remove all municipal land-use planning powers under provincial enabling law from addressing concerns with agricultural impacts. This would be the effect of Bill 81 because municipalities make land-use planning decisions under the *Planning Act* through the passage of by-laws. Accordingly, any municipal land-use decision implemented in the normal course through passage of a by-law (e.g. official plan, zoning, etc.) merely by addressing the same subject matter as a regulation promulgated under Bill 81 will be rendered inoperative.

As a result, the province appears to have no land-use strategy planned under Bill 81 for protecting water quality from agricultural activities. Indeed, even though this has been an on-going area of dispute, municipal by-laws have been one of the principal means of addressing agricultural impacts to water quality in recent years.[68] Bill 81, however, appears to be designed specifically to eliminate the municipal role in solving the problem.[69]

Second, there are also no fiscal or technical assistance measures proposed under Bill 81 for dealing with the problem of agricultural wastes.

Finally, it is unclear at this stage what the true nature and effectiveness of the preventive regulatory regime contemplated under Bill 81 will be because the teeth of the law are to be found in the regulations, which have not yet been made public. What we do know at this stage about Bill 81 is troubling:

- It is unclear which ministry (OMAFRA or MOE) will be ultimately responsible for the Act and therefore whether Bill 81 is consistent with the notion of MOE being the lead ministry for drinking-water protection in the province;

- Bill 81 is merely discretionary enabling authority to develop regulations that will be the actual teeth of the law. However, the regulation-making authority under Bill 81 contains no mandatory requirements to develop specific regulatory provisions, no timetable or schedule for when proposed regulations must be produced, or minimum conditions or criteria that must be achieved by the regulated community;

- Bill 81 rarely mentions environmental or water-quality protection - and never mentions drinking water protection - as the objective to be achieved by a particular enabling provision;

- Standards to be developed under Bill 81 would apparently apply initially to only new construction or expansion of large livestock operations. However, it is unclear from the bill what size of operation would constitute a large livestock operation and therefore how many such facilities in the province will actually be subject to the most stringent standards under the new law. OMAFRA background information suggests as an example that a large livestock operation might be 450 livestock units,[70] but it is unclear whether this number will be adopted in the regulations;

- It is not clear what standards would apply to construction of new or expanded smaller livestock operations;

- Existing larger livestock operations would not be subject to the standards for at least three years according to OMAFRA background information;[71]

- Existing smaller operations would not be subject to standards for at least five years, nor is it clear what standards these smaller operations would be subject to, according to OMAFRA background information;[72]

- It is unclear what criteria, if any, other than size would cause a livestock operation to be subject to the most stringent requirements under Bill 81 regulations - whatever those turn out to be. In contrast, under U.S. clean-water law an animal-feeding operation can become subject to the permit requirements applicable to a concentrated animal-feeding operation regardless of the number of animals at the facility if the facility is found to be a "significant contributor of pollution to the waters of the United States";[73]

- Bill 81 is silent on the availability of fiscal measures to assist farmers with compliance or technical assistance in meeting new standards promulgated under the regulations.

In the circumstances, while the introduction of Bill 81 may prove to be a positive step forward it would also appear necessary for the province to go beyond the approach currently outlined in the Bill. For example, it would still appear necessary to address agricultural impacts to water quality through the adoption of the four-pronged approach recommended by the IJC and others.

IV. Water Conservation

A. Permits to take water: The continuing unmanageable outflow

Water conservation is a third facet of water policy that requires serious attention by the province - but isn't getting enough of it. In a January 2001 brief to the Walkerton Inquiry, the Environmental Commissioner of Ontario (ECO) noted that:

> "Water resources are vital to Ontario's environment and ultimately sustain all of the plant, animal and human life in the province. Surface water bodies (e.g. lakes, streams, and rivers) support many important ecosystem functions, such as providing reliable drinking water and habitat for fish, birds and wildlife. In many parts of the province groundwater sustains ecosystems by releasing a constant supply of water into wetlands and by regularly contributing up to 20 per cent of the flow of headwater streams. During dry periods, when surface water flows diminish, groundwater may supply most of the flow of some streams."[74]

In this part of the chapter, we review the situation during the past year regarding potentially excessive water takings, their impacts on the water environment, and proposals to stem the tide of what amounts to "water mining" in this province.

The *Ontario Water Resources Act* (OWRA) is the primary means by which MOE regulates water withdrawals (called water takings) from surface or groundwater supplies in the province. The OWRA requires that most water takings in excess of 50,000 litres a day require a permit from the MOE.[75]

In his January 2001 report, the ECO noted that the impetus for the preparation of his report was the mounting evidence of problems surrounding the permit to take water (PTTW) program that in turn pointed to problems in water-resource management in the province. Problems identified included water shortages, competition for water, on-again off-again moratoriums on water takings by the MOE, lack of information on water-taking trends in the province, and controversial proposals for bulk water removals from the Great Lakes.[76]

According to the ECO the impacts from heavy extractions from water bodies can include:

- Habitat destruction;

- Elevated turbidity (loss of water clarity);

- Reduced diluent capacity (ability to absorb runoff and contaminants); and

- Drought exacerbation.[77]

Because of these potential impacts, the ECO decided in 1999 to review certain aspects of MOE's PTTW program. In the report on the results of his investigation in January 2001, the ECO

pointed out a number of inconsistencies and deficiencies in the PTTW program including:

- Public notices that included inadequate or inaccurate descriptions of PTTW proposals and permits, including ambiguously or incorrectly reported sources of water and inaccurately or inconsistently reported water quantities;

- Inconsistent PTTW evaluations by different MOE regional offices;

- Takings that did not appear to take into account the water quantity available in particular watersheds;

- No clear evidence that MOE consistently applies an ecosystem approach to assessing PTTW applications and issuing permits, even though regulations that have been law since 1999 require that consideration be given to ecosystem function and the public interest when proposed water takings are being reviewed.[78]

These problems, in conjunction with the broad exemptions that already exist under the PTTW program, led the ECO to make certain findings. In particular, he felt that the information generated by the PTTW program could not be relied upon by the government or the public in four critical areas: First, to make informed decisions on PTTW applications; second, to develop a picture of water-taking trends; third, to understand how much water is being taken or is available for use; fourth, to ensure that natural ecosystem functions are protected as required by the 1999 regulations.[79]

These findings, in turn, caused the ECO to identify three major areas of concern with the PTTW program. First, public accountability is threatened because of inaccurate information in the public notices issued under the *Environmental Bill of Rights* (*EBR*) and through the PTTWs themselves. Second, environmental protection is threatened because the MOE is issuing permits for new water takings without access to complete or accurate information on existing water takings. Third, the above problems are promoting conflict in local areas and leading to an increasing number of leave to appeal applications under the *EBR* regarding PTTW applications.[80]

Continuing problems with the PTTW program have been made especially clear in appeal applications filed under the *EBR*. In November 2000, a panel of the Ontario Environmental Appeal Board in *Dillion v. Ontario (Director, Ministry of Environment)* decided that it was not reasonable for an MOE Director of Approvals to issue a PTTW when the first relevant streamflow information would not be available until January 1, 2004. In fact, the proponent's own engineer acknowledged that reliable data might not be available for years. Accordingly, the panel found that the absence of this information created a degree of uncertainty about impacts on the aquatic habitat that raised the possibility of significant harm to the environment.[81] Indeed, the degree of alarm of the panel is captured in the following portion of the reasons for judgment granting leave to appeal to a group of local landowners that challenged the Director's decision to issue the permit:

> " These contradictions: between the time required to obtain reliable streamflow data, and the expectation of meaningful data within a few years (by January 1, 2004); and between the professed confidence in the 1,483 cubic metres per day taking, and the initiation of a field investigation program to obtain the most fundamental information on the aquatic environment only after the Permit is issued — these contradictions do not inspire confidence. In fact, this is the kind of uncertainty about a critical consideration — the very information base of the Director's decision — that dictates precaution in deference to the importance of protection of the environment."[82]

Findings like those of the ECO, and decisions like that of *Dillion*, suggest that notwithstanding recent MOE initiatives in such areas as the funding of groundwater studies, and related initiatives,[83] the province has a long way to go in conserving water in the rivers, lakes, streams, and groundwater of Ontario.

A Non-governmental Response: The CELA Model Water Conservation Law

Concern about the PTTW program and the generally unhappy state of affairs concerning water-quantity protection in the province inspired the Canadian Environmental Law Association (CELA) to propose a solution to the problem. In May 2001, CELA released a model water conservation law designed to provide an integrated approach to water management in the province.[84] The model law addresses issues of water quantity, conservation, source protection, land-use impacts, ecosystem protection, and water takings using an integrated watershed-based approach. Generally, the purposes of the model law are three-fold. First, protect the water regime from activities that negatively impact it, such as diversions, water removals, and development. Second, encourage reductions in water use on a watershed basis by engaging in a variety of water-conservation planning and implementation measures. Third, restore the water regime from past damage.[85]

Central to the CELA model water conservation law is the establishment of water planning boards (WPBs - a conservation authority-municipality mix in that they are organized on a watershed basis but invested with municipal powers). These bodies would be responsible for water-conservation planning and implementation of water-conservation measures on a watershed basis across the province.[86]

The model law is organized around a five-part strategy to conserve water consisting of:

- Protecting Ontario waters from projects, water removals, and development;
- Planning for conservation of Ontario waters;
- Providing for restoration of Ontario waters;
- Establishing a water superfund to pay for the above; and
- Recognizing a role for the public in the process.

Each of these parts is discussed more fully below.

Protect Ontario Waters. This part of the model law is designed to "prevent bad things from happening" by addressing four primary concerns: First, projects, such as water diversions both between watersheds and within a single watershed. The model law would only allow smaller projects within a single watershed if the information submitted to MOE for approval demonstrated that the purposes and objectives of the law could be met. Second, water removals (what the current Ontario law describes as water takings). These would be subject to the same requirements and process as projects. Third, development of the type currently covered by the *Planning Act*. Under this part of the model law, WPBs would be authorized to issue water-impact permits that would be a prerequisite for development. Fourth, development in "special areas." Under this part of the model law, areas that provide unique benefits to the water regime over a wide geographic area (e.g. Oak Ridges Moraine, Niagara Escarpment) would be designated as "special." In these areas development approval will be, as a matter of both law and policy, much more difficult to obtain.[87]

Conserve Ontario Waters. This part of the model law is designed to "make good things happen" by establishing a proactive regime of water-conservation planning and implementation for every watershed in the province. The model law designates WPBs to undertake watershed planning that consists of the following:

1) assessment of water use, demand, and availability in the watershed, and
2) submission of a water-conservation plan to MOE for approval. The plan must achieve the goals and objectives enumerated in the model law such as efficient water use, reduction in per capita, peak daily, monthly and yearly water-consumption rates and related matters.[88]

The plan also must contain certain water-conservation measures designed to achieve the goals and objectives of the law. These measures include several elements. First, water rates that operate on the principle of the more you use the more you pay (subject to protecting certain disadvantaged groups from genuine hardship from rate increases). Second, water-use audits of the public water system to quantify how much water is used and how usage might be reduced. Third, retrofits of fixtures, faucets, showerheads and other facilities to increase efficiency. Fourth, implementation of a system of

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V. Great Lakes Protection

As we noted at the outset, concerns about drinking water, source water, and water conservation play out again at the regional and transboundary level on both sides of the Great Lakes. In the final part of this year's review on water, we examine two Great Lakes issues where Ontario has tried to polish its image internationally on both water-quantity and water-quality issues.

A. On the water quantity front: Amending the Great Lakes Charter — Annex 2001

On June 18, 2001, the Great Lakes Governors and Premiers of Ontario and Quebec signed the Great Lakes Charter Annex 2001. The Charter Annex is an amendment to the Great Lakes Charter of 1985.[95] The 1985 Charter was designed to address "serious concerns" on both sides of the Great Lakes regarding new or increased diversions and consumptive uses of Great Lakes Basin water resources. The intent of the 1985 Charter is that diversions of Basin water resources not be allowed if, individually or cumulatively, they would have any significant adverse impacts on lake levels, in-basin uses, and the Great Lakes ecosystem.[96] The primary measure established under the 1985 Charter to achieve this goal is the provision of prior notice and consultation with affected

accounting for, detecting, and preventing water loss through leaks. Fifth, enacting water-use regulations and by-laws to restrict non-essential uses of water during drought conditions and other emergency situations.[89]

This part of the model law also requires the private sector to undertake and periodically update water-use audits and implement water-use reduction plans. The latter must be consistent with water-conservation plans discussed above and remedial plans discussed below.[90]

Restore Ontario Waters. This part of the model law imposes obligations on WPBs, (and where necessary the province) to restore the water regime of a watershed where it has been diminished or damaged by past human activities. WPBs must undertake remedial plans that

1) define the nature and extent of the problem and its causes,
2) evaluate existing and alternative measures, and
3) implement, monitor, and evaluate the effectiveness of the measures in restoring water productive capacity, features and functions.[91]

Establish Water Superfund. This part of the model law would establish a "water superfund" to allow WPBs to pay for undertaking the tasks set out under the first three parts of the law (e.g. water conservation planning, remedial planning, implementation, etc.). No statutory text is provided in this part of the model law. Instead, principles are set out for funding a regime of water-conservation planning and related activities. The model law calls for the sources of funding to include those that apply for or retain permits or other approvals from the province for such activities as water-diversion projects, water removals, development, etc. The fund would be financed through a serious of fees on these users, with rebates to those experiencing genuine hardship in paying water bills.[92]

Recognize Public Role. This part of the model law provides for a series of measures recognizing the role of the public in the processes established under the law. These include improvements in public notices and comment periods and rights to hearings, funding, appeals, and access to the courts.[93]

Overall, the CELA model law addresses water sustainability from both a watershed and financial-management perspective. In establishing a fund built from imposing fees on water-taking permits and other approvals, the model law overcomes the common problem of a lack of public resources to implement watershed management, assess water supplies, and improve water databases, all necessary to reform the water-taking process. Thus, the model law constitutes a response to a range of issues from depletion of rural groundwater supplies caused by over-permitting to bulk water removals.[94] In light of the findings of the ECO and others, all of this would seem to be just what the doctor ordered. It remains to be seen whether and, if so, how the patient's current caregiver, the provincial government, will respond.

Great Lakes states and provinces before approval of any major new or increased diversion or consumptive use of the water resources of the Great Lakes Basin. The threshold for notice and consultation is any proposal involving five million gallons (19 million litres) per day. The further intent of the Charter is to seek the consent and concurrence of the other jurisdictions before such approvals are granted.[97]

The Annex 2001 amendment to the Charter establishes a framework for a more binding set of agreements among the Great Lakes states and provinces. It also establishes a series of principles for a new standard for reviewing withdrawals of Great Lakes water and for public involvement in the development of the agreements and how the standard will be implemented.[98]

During development of Annex 2001, Ontario Minister of Natural Resources John Snobelen stated that: "We need to make sure that the cumulative results of small-scale diversions are considered…to ensure no net loss of water from the basin." The minister also confirmed that the Ontario government agrees with the International Joint Commission that the provinces and states in the Great Lakes basin should not "permit any removal of water from the Great Lakes Basin that would endanger the integrity of the basin ecosystem."[99] This is a laudable, if surprising, statement coming from a representative of a government in which a sister ministry, MOE, did the following in the late 1990s: First, MOE issued and then withdrew — following a major public outcry — a permit to an Ontario company to withdraw up to 10 million litres of water per day from Lake Superior for export to Asia.[100] Second, MOE approved water-taking permits for commercial bottlers allowing the removal of 18 billion litres of water per year.[101] Perhaps MNR should investigate MOE.

Environmental groups applauded the draft version of Annex 2001 but also raised concerns about whether diversions under a million gallons per day would get less scrutiny than normal. The groups fear that future threats to the Great Lakes lie not in mega-project diversions but in many smaller projects that would circumvent full regulatory and public review.[102] It is not clear at this stage whether the final version of Annex 2001 will resolve or perpetuate this problem.

B. On the water quality front: The Canada- Ontario Agreement on the Great Lakes Basin Ecosystem

In late September 2001, the governments of Canada and Ontario released for comment a draft 2001 Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem (COA). The draft outlines how the two governments will cooperate and coordinate their efforts to restore, protect and conserve the Great Lakes Basin ecosystem. The particulars of this draft and its adequacy will be outlined more fully below. However, the mere existence of a draft is a minor cause for celebration.

1. Pulling the plug

In our *Fifth Year Report*, we noted that the 1994 version of COA expired in March 2000 and left Ontario without a comprehensive cooperative strategy for protecting the Great Lakes ecosystem. The *Fifth Year Report* noted that several months after the expiry of COA, Ontario was still negotiating the renewal of the agreement with the federal government. We also noted reductions in Ontario funding for projects critical to the success of Great Lakes' restoration in recent years.[103] At the time of the COA's expiry, CIELAP wrote to the Ontario Minister of the Environment, then the Hon. Dan Newman, and outlined concerns that COA's specific goals and objectives had not been met. These included:

- restoration of 17 heavily polluted Areas of Concern (AOCs) identified in a 1987 protocol to the Canada-United States Great Lakes Water Quality Agreement (GLWQA) that are wholly located in Ontario or that are shared with the U.S.;

- major reductions in the use, generation and release of persistent toxic substances identified in the agreements; and

- conservation and protection of human and ecosystem health in the Basin.[104]

CIELAP also noted that the situation was likely to worsen without speedy renegotiation and adoption of a new COA containing at least the following elements:

- re-commitment to the basic goals of the GLWQA including the virtual elimination of persistent toxic substances from the Great Lakes, completion of the remediation of the AOCs, and restoration and maintenance of the chemical, physical and biological integrity of the Lakes;

- provisions for achievement of specific targets and benchmarks;

- recognition of the role of municipal governments, conservation authorities and First Nations in the process;

- secure funding for the Remedial Action Plan (RAP) process established under the GLWQA to clean up AOCs; and

- delivery of annual progress reports to the Parliament of Canada, Legislative Assembly of Ontario, the IJC and the public.[105]

In July 2000, the IJC released its 10th biennial report to the Governments of Canada and the United States on the state of water quality in the Great Lakes. The primary portions of the report addressed all the usual suspects that impair Great Lakes water quality, including persistent toxic substances, land-use activities and related matters. The report also addressed programs initiated under the GLWQA to correct these problems. The report pointed out that at a conference in Gary, Indiana, the Great Lakes mayors passed a number of resolutions addressing water-quality concerns, including one declaring the need for the COA to be renewed.[106]

It is arguable that without the existence of the COA, the GLWQA would not likely have achieved many of the successes that have led over the last three decades to improving water quality in the Canadian half of the Great Lakes Basin. The reason, of course, relates to real or imagined jurisdictional restrictions under the *Canadian Constitution* that in practice make it virtually impossible for the federal government to initiate regulatory measures.[107] While the federal government may have been the signatory to the GLWQA, it is actually the province that must undertake the bulk of regulatory measures necessary to meet Canada's GLWQA obligations.

In October 2000, the annual report of the ECO noted the measurable results, milestones, and performance indicators to be met under the 1994 COA[108] and the extent to which they remained unmet under the expired agreement.[109] The ECO also identified four primary reasons why COA targets were not met by the agreed-upon deadlines: First, inadequate funding as a result of provincial budget cuts; second, failure of COA to specify which level of government was accountable for any given action; third, vague targets not connected with measurable performance indicators, and; fourth, inadequate project management and quality control, including ineffective and unhelpful progress reports from the governments.[110] The ECO concluded that a new agreement with clear objectives and timelines was required.[111] The ECO urged the province in developing a successor agreement to COA to include clear public accounting of both accomplishments and shortcomings of the expired COA; a management structure with clear interim benchmarks and mechanisms for mid-course corrections when barriers are encountered; and timely public consultation.[112]

In July 2001, Ontario and Canada were still renegotiating COA, nine months after the release of the ECO report, a year after the resolutions passed by the Great Lakes mayors, and 15 months after the expiry of the 1994 COA.

In early October 2001, in a report to the House of Commons, the CESD also reported on several significant failures under COA. Principle among these was progress on cleaning up AOCs. Of the 17 AOCs identified under the GLWQA that are in or adjacent to Ontario, the CESD found that only one had been cleaned up. Yet under the terms of the 1994 COA that expired in March 2000, nine were to have been cleaned up by the end of the agreement. The CESD also found that the primary vehicle for cleaning up AOCs, the RAP program, suffered during the 1990s due to budget cuts - both provincial and federal. Moreover, lack of

priority-setting, clear direction on what constitutes a good cleanup plan, and indicators of what constitutes a successful cleanup also impeded progress on AOCs. According to the CESD, until these problems are resolved, "we may still have contaminated water, toxic fish, and beach closings."[113]

2. Back from the dead?

Finally, in late September 2001, Ontario and Canada released for public comment a draft 2001 COA. The draft consists of a Framework Agreement and four Annexes that address AOCs, lakewide management, harmful pollutants, and monitoring and information management. Additional Annexes can be negotiated at any time.[114]

The purpose of the 2001 COA is to build on the previous COAs that were designed to restore, protect, and conserve the Great Lakes Basin ecosystem.[115] In this regard, the Framework Agreement establishes 12 principles to guide Ontario and Canada. These principles are accountability, adaptive management, conservation, ecosystem approach, free exchange of ideas, pollution reduction, precautionary principle, prevention, public and stakeholder participation, rehabilitation, science-based Great Lakes' management, and sustainability. The principle of accountability, for example, requires that "the parties must establish clear commitments in relation to agreed-upon goals and objectives for this Agreement and regularly report on progress in relation to the achievement of those commitments."[116]

The Framework Agreement also sets out what is expected under each Annex. Expectations include:

- Five-year societal goals for the Basin that are specific to the environmental issue that is the subject of the Annex;

- Identification of the results the parties will pursue to meet the stated goals;

- Clear articulation of the specific commitments each of the parties will deliver during the period to meet the stated goals and objectives; and

- A management structure that will include timeframes for meeting the results and quantitative and measurable environmental outcomes as well as the names of the parties — government, department, ministry — responsible for specific actions.[117]

The Framework Agreement also commits the parties to conducting a "comprehensive review of the effectiveness" of the 2001 COA after five years. This review must be completed within six months and be subject to public consultation.[118]

Ontario and Canada further commit to providing the resources needed to implement the 2001 COA and the Annexes.[119] As we noted above, a similar commitment under the 1994 COA seems largely to have been observed in the breach.

Finally, the Framework Agreement also establishes a COA Management Committee. This committee is responsible for the following matters: setting priorities, establishing strategies, identifying gaps, approving work plans, coordinating internal annual assessments, evaluating assessment results, conducting on-going evaluations of implementation, facilitating information exchange, producing progress reports, conducting public consultation and coordinating with American agencies and the IJC.[120]

The overall stated intentions identified in the 2001 COA Framework Agreement are laudable. However, where the rubber is truly expected to meet the road in the 2001 COA is in the Annexes. It is precisely in the Annexes, though, where the wheels potentially come off this bus.

The AOC Annex illustrates the problem. The problems start with the preamble, which states, in part, that "RAPs have made considerable progress towards restoring environmental quality in AOCs. However, additional effort and resources are needed to make further advances."[121] This statement makes it seem like the authors have never read the reports of the ECO or the CESD that found that only one AOC had been restored in the 1994-2000 period, when nine of 17 were expected to be cleaned up.

The problems continue under the goals articulated for the AOC Annex. The first goal calls for "restoring environmental quality and beneficial uses in at least two locations" over the next five years "resulting in the removal of the [AOC] designation."[122] If this goal is indeed met by the year 2006, the parties will be one-third of the way to the goal they originally committed themselves to achieving by 2000.[123] At a cleanup rate of two additional AOCs every five years, if that is now the standard established by the new draft agreement, the goal that was to be achieved originally by the year 2000, will now not be reached until the year 2021. That would still leave six AOCs (one wholly in Ontario and five shared with the United States) with no cleanup date identified.

The second goal calls for completing all required actions for RAPs in at least six AOCs in the next five years.[124] The third goal calls for "making progress towards rehabilitation of ecological systems in the remaining AOCs" in the next five years.[125] Considering that the 1994 COA called for removing nine of 17 AOCs from that designation by 2000, it is an interesting question whether the goals articulated for cleaning up AOCs under the draft 2001 COA are adequate.

A further concern with the AOC Annex relates to the results that the parties propose to achieve in addressing continuing sources of pollution affecting AOCs. The approach for reducing pollutants, including nutrients, pathogens and trace contaminants from sewage-treatment plant discharges, combined sewer overflows, urban stormwater and agricultural non-point sources, is entirely qualitative in nature.[126] None of the results proposed are quantitative, specific or measurable, notwithstanding the ostensible commitment to measurable objectives in the draft 2001 COA Framework Agreement.

Overall, the draft 2001 COA is long on vision, but short on the types of specific targets and benchmarks urged for it by the ECO, CESD and CIELAP. Whether the final version of the 2001 COA will be improved appreciably remains to be seen.[127]

VI. Conclusions

In CIELAP's *Fifth Year Report*, we noted that "The tragedy in Walkerton is only one piece of a much larger problem."[128] That continues to be true. Whether it's drinking water, source water, water conservation or the Great Lakes, provincial environmental controls, with some exceptions, have either been in full retreat or have had only a marginal positive impact.

Ontario water law and policy must address these four issues as a whole and the government must rededicate staff, budgetary, legislative and regulatory measures to the tasks necessary to protect, restore, and enhance provincial water resources. As somebody once said: "It's not good enough to be in the boat. You must have an oar in the water and be moving in the right direction. Otherwise, you'll go over the falls."