# FRESHWATER MANAGEMENT IN CANADA: I. JURISDICTION

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# FRESHWATER MANAGEMENT IN CANADA: I. JURISDICTION

### INTRODUCTION

Water is of vital importance to Canada's environment, economy and population. Water not only represents one of the primary environmental concerns of Canadians, but is an important element of our culture, history, and national identity. As we move into the 21<sup>st</sup> century, water managers and policy makers face new threats to freshwater resources. These threats include pollution, climate change, a resurgence of water-related diseases, and the destruction of freshwater ecosystems. Recent water contamination events such as that in Walkerton, and the national debate in recent years about bulk exports of water to the United States, are Canadian symptoms of a worldwide water crisis. Is Canada ready to deal with the problems associated with this crisis, and how do policy makers foresee the future management of this resource?

This first paper in a series of three on freshwater management in Canada<sup>(2)</sup> examines issues of responsibilities and jurisdiction pertaining to water. Canada's unique situation in terms of the distribution of responsibilities among the various levels of government, and the fact that responsibilities for some water issues are shared between the federal and provincial governments, have a major effect on water management across the country and how current and future challenges will be met.

<sup>(1)</sup> David Boyd, *Unnatural Law: Rethinking Canadian Environmental Law and Policy*, UBC Press, Vancouver, 2003, p. 13, <a href="http://www.unnaturallaw.com/">http://www.unnaturallaw.com/</a>.

<sup>(2)</sup> The other papers in this series are *Freshwater Management in Canada: II. Resources, Use and Treatment*, PRB 04-47E, and *Freshwater Management in Canada: III. Issues and Challenges*, PRB 04-51E, both by François Côté, Parliamentary Information and Research Service, Library of Parliament, Ottawa, 2004.

### GOVERNMENT MANAGEMENT OF WATER IN CANADA

#### A. Jurisdiction

Jurisdiction over water is complex. Neither water nor the environment is specifically mentioned in the sections of the *Constitution Act*, 1867 that define the distribution of federal and provincial responsibilities. Jurisdiction differs depending on the issue at hand or on defined areas of responsibility. Responsibilities for water are often shared.

- The provinces have primary responsibility for the management of water resources, both surface and groundwater, and are responsible for:
  - legislation in matters of water supply, pollution control, and thermal and hydroelectric power development;
  - authorization of water use development; and
  - flow regulation.
- Federal responsibilities are in areas such as:
  - boundary and transboundary waters;
  - fisheries;
  - navigation; and
  - water on federal lands, in the territories and on First Nations reserves.
- Shared federal-provincial responsibilities include:
  - agriculture;
  - health;
  - interprovincial water issues; and
  - significant national water issues.

### **B.** Legislation

The obligations arising from these responsibilities have given rise to numerous federal statutes that enable Canada to manage water in certain areas. Key statutes include the following:

- Arctic Waters Pollution Prevention Act;
- *Canada Shipping Act*;

<sup>(3)</sup> Environment Canada, *Freshwater Website*, "Federal-Provincial Cooperation: Jurisdictional responsibilities," Ottawa, 2003, <a href="http://www.ec.gc.ca/water/en/policy/coop/e">http://www.ec.gc.ca/water/en/policy/coop/e</a> juris.htm.

- Canada Water Act;
- Canadian Environmental Assessment Act;
- Canadian Environmental Protection Act, 1999;
- Dominion Water Power Act;
- Fisheries Act;
- International Boundary Waters Treaty Act;
- *International River Improvements Act*;
- Navigable Waters Protection Act;
- *Northwest Territories Waters Act*;
- Nunavut Waters and Nunavut Surface Rights Tribunal Act; and
- Oceans Act.

However, there is no single federal statute governing all aspects of water resources in Canada, and most of the above-mentioned statutes deal with specific sectors.

The *Canada Water Act*, which enables the federal government to play a leadership role in freshwater management, was enacted in 1970, the year before the Department of the Environment was established (1971). It provides for consultation between the federal and provincial governments on any issue relating to water resources, and for the application of unilateral federal measures in the event of cross-border problems. Bilateral agreements have been signed for all the programs arising out of this consultation process. Matters covered by the agreements include the contribution to be made by each level of government in terms of funding, and the provision of information and expertise. Annual reports on water resources, most recently for the 2001-2002 fiscal year, (4) outline the activities undertaken in support of these agreements and programs. The *Canada Water Act* is implemented largely through partnerships between the various levels of government and the private sector.

<sup>(4)</sup> Environment Canada, *The Canada Water Act: Annual Report 2001-2002*, Ottawa, 2003, <a href="http://www.ec.gc.ca/water/en/info/pubs/ar/e">http://www.ec.gc.ca/water/en/info/pubs/ar/e</a> ar01-02.pdf.

The *Oceans Act* and the *Fisheries Act*, the *Canadian Environmental Protection Act*, 1999 (CEPA 1999) and the *Canadian Environmental Assessment Act* support the integrated management of inland, coastal, and marine water resources with an emphasis on sustainable development. These Acts also promote pollution prevention in those waters.

The *Fisheries Act* is considered to be one of the strongest pieces of Canadian legislation that can be applied for the conservation and protection of aquatic ecosystems. The Act contains provisions for the conservation and protection of fish habitat (sections 34 to 42). These include provisions that prohibit harmful changes to fish habitat (habitat protection provisions) and others that prohibit the discharge of deleterious substances into fisheries waters (pollution prevention provisions). The Department of Fisheries and Oceans (DFO) is responsible for administering and enforcing the habitat protection provisions of the *Fisheries Act*, while Environment Canada has been responsible since 1978 for administering and enforcing those aspects of the Act that prevent pollution of Canadian fisheries waters.

The main pollution prevention provision is found in subsection 36(3) of the Act, and is commonly referred to as the "general prohibition." This subsection prohibits the deposit, into fish-bearing waters, of substances that are deleterious to fish. The "general prohibition" provision can include harmful industrial effluents, as well as runoff of pesticides or fertilizers from land, and individual substances deposited to water.

Environment Canada, in collaboration with DFO, regulates six sectors under subsection 36(5) of the *Fisheries Act*: pulp and paper; metal mining; meat/poultry processing; potato processing; chlor-alkali mercury plants; and petroleum refineries. There is also one site-specific regulation governing the effluent from a pulp and paper mill at Port Alberni in British Columbia. These regulations define deleterious substances and set discharge limits. Where no regulations exist, all discharges must comply with the general prohibition in subsection 36(3). The regulations are the following:

- Pulp and Paper Effluent Regulations;
- Metal Mining Effluent Regulations;
- Meat and Poultry Products Plant Liquid Effluent Regulations;
- Potato Processing Plant Liquid Effluent Regulations;
- Chlor-Alkali Mercury Liquid Effluent Regulations;

- Petroleum Refinery Liquid Effluent Regulations; and
- Port Alberni Pulp and Paper Effluent Regulations.

Environment Canada also administers the *Pulp and Paper Mill Effluent Chlorinated Dioxins and Furans Regulations* made under CEPA 1999.

In accordance with the provisions of section 42.1 of the *Fisheries Act*, the Minister of Fisheries and Oceans is required to table in the House of Commons an annual report on the administration and enforcement of the fish habitat protection and pollution prevention provisions of the *Fisheries Act*. The reports for 2001-2002 and 2002-2003 were both tabled in 2004. In terms of enforcement activities related to pollution prevention (general prohibition s. 36(3) and the seven regulations cited above), the 2002-2003 report notes that there was a national total of over 3,900 inspections, 88 investigations, 19 prosecutions, and 4 convictions in that year.<sup>(5)</sup>

In relation to the municipal sector, Environment Canada conducted activities pursuant to both the *Fisheries Act* and CEPA 1999. These two Acts have complementary roles in the matter of harmful municipal wastewater discharges. Environment Canada has developed a risk management strategy that addresses releases of ammonia, inorganic chloramines and chlorinated wastewater effluents. These substances meet the definition of a "toxic substance" under CEPA 1999 and are also considered harmful to fish under section 34 of the *Fisheries Act*. They are released to the aquatic environment primarily through effluents from municipal wastewater treatment and collection systems. Environment Canada's long-term objective is to establish, with cooperation and participation between all jurisdictions, and especially between federal, provincial and territorial governments, an adequate level of municipal wastewater treatment across Canada to address risks posed to human and ecosystem health, fisheries resources and recreation.

<sup>(5)</sup> Fisheries and Oceans Canada, Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the Fisheries Act, Annual Report 2002-2003, Ottawa, 2004, <a href="http://www.dfo-mpo.gc.ca/canwaters-eauxcan/infocentre/publications/reports-rapports/ann02/index">http://www.dfo-mpo.gc.ca/canwaters-eauxcan/infocentre/publications/reports-rapports/ann02/index</a> e.asp.

### C. The Federal Water Policy

The last formal federal policy on water<sup>(6)</sup> dates from 1987. It was drafted by various levels of government, with a view to improving water management. At that time, the federal government had identified two goals with respect to water: to protect and enhance the quality of Canada's water resources; and to promote the wise and efficient management and use of water.

Five strategies touching on water pricing, leadership in science, integrated planning, renewed and consolidated legislation, and public awareness were proposed. Most observers would agree that the federal policy on water is by now in need of a major revision.

Recent initiatives at the federal level include the establishment of an interdepartmental committee on water made up of assistant deputy ministers from 19 departments. A Federal Water Framework has been developed, and a Federal Water Research Network (FWRN) has also been put in place to integrate and coordinate research performed by the federal government. The FWRN involves five departments: Agriculture and Agri-Food; Environment; Fisheries and Oceans; Health; and Natural Resources. This initiative complements the funding by the federal government, since 2001, of a Network of Centres of Excellence on water, the Canadian Water Network.

<sup>(6)</sup> Environment Canada, *Federal Water Policy*, Ottawa, 1987, http://www.ec.gc.ca/water/en/info/pubs/fedpol/e fedpol.htm.

<sup>(7)</sup> John Carey, Director General, National Water Research Institute, Environment Canada, "The Federal Water Framework: Where Federal Initiatives in Water are Headed," Presentation at the Canadian Water Network Annual Symposium, Ottawa, 22 June 2004, http://cwn-rce.ca/pdfs/CWN2004\_JC.pdf.

<sup>(8)</sup> Agriculture and Agri-Food Canada, *Agriculture and the Environment – Water*, Web site, <a href="http://www.agr.gc.ca/policy/environment/water\_e.phtml">http://www.agr.gc.ca/policy/environment/water\_e.phtml</a>.

<sup>(9)</sup> Environment Canada, *Freshwater Website*, accessed 20 August 2004, <a href="http://www.ec.gc.ca/water/">http://www.ec.gc.ca/water/</a>; and Environment Canada, *A Primer on Fresh Water: Questions and Answers*, Ottawa, 2000, <a href="http://www.ec.gc.ca/water/en/info/pubs/primer/e\_contnt.htm">http://www.ec.gc.ca/water/en/info/pubs/primer/e\_contnt.htm</a>.

<sup>(10)</sup> Fisheries and Oceans Canada, *Canadian Waters*, Web site, accessed 20 August 2004, http://www.dfo-mpo.gc.ca/canwaters-eauxcan/index\_e.asp.

<sup>(11)</sup> Health Canada, *Water Quality and Health*, Web site, accessed 20 August 2004, http://www.hc-sc.gc.ca/hecs-sesc/water/index.htm.

<sup>(12)</sup> Canadian Water Network, Web site, accessed 20 August 2004, http://www.cwn-rce.ca.

### **D.** Strategies and Initiatives

Various strategic water-related initiatives have been undertaken jointly by the federal government and the provinces and territories. For example, various ecosystem-based initiatives have been developed since 1988 to alleviate pressures on aquatic ecosystems. They take into account economic and social concerns, as well as environmental concerns, over watersheds. These initiatives are the product of partnerships between federal and provincial or territorial governments and often involve the cooperation of individuals, communities, Aboriginal peoples and private enterprise.

At the end of 2002, the Government of Quebec presented its *Politique nationale de l'eau*,<sup>(13)</sup> which provides for reduction of water wastage in private homes – Quebecers consume on average 400 litres a day – and the implementation of better long-term management by municipalities.

Alberta has developed a strategy entitled *Water for Life: Alberta's Strategy for Sustainability*<sup>(14)</sup> to manage provincial water systems and to assure its residents of an adequate supply of high-quality water.

Partly in response to the 2002 report by Mr. Justice O'Connor on the Walkerton incident, Ontario is implementing a series of initiatives<sup>(15)</sup> to provide Ontarians with Canada's most reliable water, including new regulations on the protection of drinking water. In addition, Ontario has prepared a White Paper on watershed-based source protection planning.

At this time, most provinces have a safe drinking water strategy, or a water resource management plan based on watersheds, or both. The following table contains examples of recent strategies and policy instruments developed across the nation.

<sup>(13)</sup> Environnement Québec, *Politique nationale de l'eau*, Quebec, 2002, accessed 20 August 2004, <a href="http://www.menv.gouv.qc.ca/eau/politique/index-en.htm">http://www.menv.gouv.qc.ca/eau/politique/index-en.htm</a>.

<sup>(14)</sup> Government of Alberta, *Water for Life: Alberta's Strategy for Sustainability*, Edmonton, 2003, accessed 20 August 2004, http://www.waterforlife.gov.ab.ca/.

<sup>(15)</sup> Ontario Ministry of the Environment, *Water*, Web site, accessed 20 August 2004, <a href="http://www.ene.gov.on.ca/water.htm">http://www.ene.gov.on.ca/water.htm</a>.

Table 1: National, Provincial and Territorial Strategies and Policies on Water (16)

### **British Columbia**

### Action Plan for Safe Drinking Water<sup>(17)</sup>

- multi-barrier, source-to-tap approach;
- strengthens existing drinking water protection framework by focusing on preventing and treating contamination, as well as identifying and addressing risks for communities.

### **Alberta**

### Water Strategy (Water for Life)<sup>(18)</sup>

- healthy, sustainable ecosystems;
- a safe, secure drinking water supply;
- reliable, quality water supplies for a sustainable economy;
- knowledge necessary for effective water management decisions.

### Saskatchewan

### Water Management Framework<sup>(19)</sup>

Safe and reliable water supplies within healthy and diverse aquatic ecosystems. Principles include:

- preventing risks to drinking water quality with human health as the primary concern;
- partnership among all levels of government and citizens in developing and implementing water management solutions;
- full-cost pricing for the supply of water.

#### Manitoba

### Water Strategy<sup>(20)</sup>

- development of an integrated water planning and management system;
- review and consolidation of water legislation;
- development of mechanisms for financing water management and planning.
- (16) Environment Canada, *Water and Canada: Preserving a Legacy for People and the Environment*, Ottawa, 2003, p. 6. This table does not include initiatives in all provinces and territories; for information about New Brunswick, consult <a href="http://www.gnb.ca/0009/0003-e.asp">http://www.gnb.ca/0009/0003-e.asp</a>; Prince Edward Island, <a href="http://www.gov.pe.ca/infopei/index.php3?number=860&lang=E">http://www.gov.pe.ca/infopei/index.php3?number=860&lang=E</a>; and Yukon, <a href="http://www.environmentyukon.gov.yk.ca/water/index.shtml">http://www.environmentyukon.gov.yk.ca/water/index.shtml</a>.
- (17) Government of British Columbia, Action Plan for Safe Drinking Water in British Columbia, Victoria, 2002, accessed 20 August 2004, <a href="http://www.healthservices.gov.bc.ca/cpa/publications/safe\_drinking\_printcopy.pdf">http://www.healthservices.gov.bc.ca/cpa/publications/safe\_drinking\_printcopy.pdf</a>. Also see <a href="http://srmwww.gov.bc.ca/wat/">http://srmwww.gov.bc.ca/wat/</a>.
- (18) Government of Alberta (2003).
- (19) Government of Saskatchewan, *Saskatchewan Water Management Framework*, Regina, 1999, accessed 20 August 2004, <a href="http://www.se.gov.sk.ca/ecosystem/water/framework/">http://www.se.gov.sk.ca/ecosystem/water/framework/</a>.

  Also see <a href="http://www.se.gov.sk.ca/environment/protection/water/water.asp">http://www.se.gov.sk.ca/environment/protection/water/water.asp</a>.
- (20) Government of Manitoba, *The Manitoba Water Strategy*, Winnipeg, 2003, accessed 20 August 2004, <a href="http://www.gov.mb.ca/waterstewardship/waterstrategy/">http://www.gov.mb.ca/waterstewardship/waterstrategy/</a>.

  Also see <a href="http://www.gov.mb.ca/waterstewardship/index.html">http://www.gov.mb.ca/waterstewardship/index.html</a>.

### **Ontario** Safe Drinking Water Act<sup>(21)</sup>

- commitment to ensure Ontario has and enforces the best and toughest clean water policies;
- includes establishing drinking water standards, training and certification, inspections, and enforcement.

### **Québec** Québec Water Policy<sup>(22)</sup>

- reform governance by adopting an integrated watershed management approach relying on population involvement;
- recognition of water as an integral part of the collective heritage of the citizens of Quebec;
- protection of public health and aquatic ecosystems with a view toward sustainable development.

### **Nova Scotia**

### Drinking Water Strategy<sup>(23)</sup>

- comprehensive approach to the management of drinking water based on the multiple-barrier approach;
- builds on current legislation and the philosophy of continuous improvement.

### **Newfoundland and Labrador** Multi-barrier Strategic Action Plan<sup>(24)</sup>

- source water protection of public water supply areas;
- implementation of regulatory tools;
- community-based operator training, monitoring;
- public reporting on water quality.

### **Northwest Territories**

### Framework for Management of Drinking Water Quality<sup>(25)</sup>

Source water management is shared with Indian and Northern Affairs Canada and other co-management agencies. Framework is a cooperative initiative among the departments of Health and Social Services, Public Works and Government Services, Municipal and Community Affairs and Resources, Wildlife and Economic Development:

- focus on communicating information to water users;
- review of roles and responsibilities framed in a source-to-tap approach.

#### **National**

### Canadian Council of Ministers of the Environment (26)

development and adoption of a multi-barrier approach to protecting drinking water from source to tap.

- (21) Ontario Ministry of the Environment, *Safe Drinking Water Act*, 2002, accessed 20 August 2004, http://www.ene.gov.on.ca/envision/water/sdwa/index.htm.
- (22) Environnement Québec (2002). Also see http://www.menv.gouv.qc.ca/eau/inter en.htm.
- (23) Government of Nova Scotia, *A Drinking Water Strategy for Nova Scotia*, Halifax, 2002, accessed 20 August 2004, <a href="http://www.gov.ns.ca/enla/rmep/h2ostrat.pdf">http://www.gov.ns.ca/enla/rmep/h2ostrat.pdf</a>. Also see <a href="http://www.gov.ns.ca/enla/water/">http://www.gov.ns.ca/enla/rmep/h2ostrat.pdf</a>. Also see <a href="http://www.gov.ns.ca/enla/water/">http://www.gov.ns.ca/enla/rmep/h2ostrat.pdf</a>. Also see <a href="http://www.gov.ns.ca/enla/water/">http://www.gov.ns.ca/enla/rmep/h2ostrat.pdf</a>. Also see <a href="http://www.gov.ns.ca/enla/water/">http://www.gov.ns.ca/enla/rmep/h2ostrat.pdf</a>. Also see <a href="http://www.gov.ns.ca/enla/water/">http://www.gov.ns.ca/enla/water/</a>.
- (24) Government of Newfoundland and Labrador, *Water Resources Management*, Web site, accessed 20 August 2004, <a href="http://www.gov.nl.ca/env/Env/water\_resources.asp">http://www.gov.nl.ca/env/Env/water\_resources.asp</a>. For information about the Newfoundland and Labrador Multi-barrier Strategic Action Plan, also see <a href="http://sourcetotap.ccme.ca/eng/map">http://sourcetotap.ccme.ca/eng/map</a> eng.php?view id=1&jurisdiction id=6.
- (25) Government of the Northwest Territories, *Managing Drinking Water Quality in the Northwest Territories: A Preventative Framework and Strategy*, available on the *Water and Sanitation* Web site, accessed 20 August 2004, <a href="http://www.pws.gov.nt.ca/WaterAndSanitation/Index.htm">http://www.pws.gov.nt.ca/WaterAndSanitation/Index.htm</a>.
- (26) Canadian Council of Ministers of the Environment, *Water*, Web site, accessed 20 August 2004, http://www.ccme.ca/initiatives/water.html.

### **E.** International Cooperation

The Canada-U.S. border passes through many watercourses and all the Great Lakes<sup>(27)</sup> except one. The International Joint Commission (IJC), which was established under the International Boundary Waters Treaty of 1909 and has six members – three appointed by the President of the United States and three by the Canadian Cabinet on the advice of the Prime Minister – is the agency assigned responsibility for governing relations between Canada and the United States with respect to boundary waters. The IJC established bilateral councils to facilitate investigation, control and monitoring under the Treaty.

The IJC reviews applications for approval of projects relating to boundary and cross-boundary waters and may regulate the operation of such projects. It helps both countries to protect the environment in border areas, including enforcement of the Great Lakes Water Quality Agreement of 1972, and keeps the governments informed about new risks that might lead to disputes between the two countries. (28)

Canada also participates in a number of global initiatives that include both legal instruments and voluntary measures. Their purpose is to prevent a global water crisis which, in the opinion of some international experts, could be imminent and would result not from a shortage, but rather from both internal and international management deficiencies. Canada has participated in the World Water Council's (29) World Water Vision initiative of 1998 and the three World Water Fora (1997, 2000, 2003). Canada has also produced a joint report on water management in North America in partnership with the United States and Mexico. This report stems from the 1998 World Water Vision initiative, and together with reports from other sectoral and regional consultations led to the drafting of the comprehensive report entitled *World Water Vision – Making Water Everybody's Business*. In addition to providing an overview of the world situation with respect to water management, this report proposes the development of management plans that will guarantee the integrity of aquatic ecosystems and ensure access to drinking water for all people.

<sup>(27)</sup> The Great Lakes and St. Lawrence Basin contain one-fifth of the Earth's freshwater resources.

<sup>(28)</sup> The latest report on Great Lakes water quality was published in September 2004: International Joint Commission, *Twelfth Biennial Report on Great Lakes Water Quality*, Ottawa, 2004, <a href="http://www.ijc.org/php/publications/html/12br/english/report/index.html">http://www.ijc.org/php/publications/html/12br/english/report/index.html</a>.

<sup>(29)</sup> World Water Council, Web site, accessed 24 August 2004, http://www.worldwatercouncil.org/.

<sup>(30)</sup> William J. Cosgrove and Frank R. Rijsberman, *World Water Vision – Making Water Everybody's Business*, Earthscan Publications Ltd., London, 2000, <a href="http://www.worldwatercouncil.org/Vision/cce1f838f03d073dc125688c0063870f.htm">http://www.worldwatercouncil.org/Vision/cce1f838f03d073dc125688c0063870f.htm</a>.

### F. Responsibility for Drinking Water

Although the *Constitution Act*, 1867 does not expressly assign responsibility for drinking water to any level of government, the issue is primarily a provincial matter. The provinces have power over drinking water within their boundaries.

The determination of responsibility for drinking water is complicated, however, by the fact that, while sources of water are generally under provincial jurisdiction and protected by environmental legislation, the treatment and distribution of the water relate to public health. The environment and public health are issues too broad to be assigned to one level of government, although the provinces play a major regulatory role. The provinces also define the role of local governments (municipalities), which operate under provincial legislation to deliver water services to most Canadians.

By comparison, in the United States, the federal government provides strong legal protection for drinking water. The 1974 *Safe Drinking Water Act*<sup>(31)</sup> sets minimum national standards for all 50 states of the union. The Act, which was strengthened in 1996, is administered by the Environmental Protection Agency. This national legislation, however, does not prevent the United States from experiencing serious drinking water problems.

Despite the Canadian federal government's limited role in the delivery of safe drinking water, Health Canada<sup>(32)</sup> has, since 1968, helped develop guidelines on drinking water quality and has provided secretariat services to the Federal-Provincial-Territorial Committee on Drinking Water. In December 2001, the Committee published a framework document on the health of Canada's drinking water; and in May 2002, it published a document on the use of the multi-barrier approach<sup>(33)</sup> to managing Canada's drinking water. According to the Commissioner of the Environment and Sustainable Development,<sup>(34)</sup> however, Health Canada does not monitor the quality of drinking water across the country and does not know whether the provinces apply the guidelines.

<sup>(31)</sup> Available on the U.S. Environmental Protection Agency Web site, accessed 20 August 2004, <a href="http://www.epa.gov/safewater/sdwa/index.html">http://www.epa.gov/safewater/sdwa/index.html</a>.

<sup>(32)</sup> Health Canada, Water Quality and Health, Web site, <a href="http://www.hc-sc.gc.ca/hecs-sesc/water/index.htm">http://www.hc-sc.gc.ca/hecs-sesc/water/index.htm</a>.

<sup>(33)</sup> Federal-Provincial-Territorial Committee on Drinking Water, From Source to Tap – The Multi-Barrier Approach to Safe Drinking Water, Ottawa, 16 May 2002, <a href="http://www.hc-sc.gc.ca/hecs-sesc/water/publications/source\_to\_tap/source\_to\_tap-toc.htm">http://www.hc-sc.gc.ca/hecs-sesc/water/publications/source\_to\_tap/source\_to\_tap-toc.htm</a>.

<sup>(34)</sup> Commissioner of the Environment and Sustainable Development, *Report*, Ottawa, 2001, Chapter 1 – "A Legacy Worth Protecting: Charting a Sustainable Course in the Great Lakes and St. Lawrence River Basin," Section 3 – "Water," <a href="http://www.oag-bvg.gc.ca/domino/reports.nsf/html/c101sec3e.html">http://www.oag-bvg.gc.ca/domino/reports.nsf/html/c101sec3e.html</a>.

The federal government is also responsible for the quality of bottled water, since it is considered a food. Health Canada defines the standards for bottled water under the *Food and Drugs Act*, and the Canadian Food Inspection Agency implements the provisions of the Act that apply to inspections, investigations and emergency situations. The federal government is currently revising its regulations on bottled water. (35)

Some believe that the federal government should play a greater role with respect to the quality of Canada's drinking water. A bill that was introduced in the Senate<sup>(36)</sup> in 2001 (but died on the *Order Paper*) proposed amending the *Food and Drugs Act* to add the water in water supply systems to the list of foods subject to federal regulation and approval. A number of observers considered that this proposal, while having merit, could have raised constitutional difficulties.

### G. Role of Municipalities

Municipalities are responsible for ensuring that water is delivered to users and that used water is treated. They primarily build, operate and maintain the infrastructure. In that capacity, municipalities are responsible for meeting the requirements set by higher levels of government (usually the province) in permits, licences or certificates of approval for the quality and quantity of the discharge and overall facility operation. The province is responsible for monitoring and ensuring that standards are met. Finally, municipalities, together with provinces, usually match funds provided by the federal government for infrastructure through various infrastructure programs. (37) Increasingly, municipal governments have played key roles in three policy areas: water pricing as an instrument for demand management, water quality, and source protection.

<sup>(35)</sup> Canadian Food Inspection Agency and Health Canada, *Making It Clear – Renewing the Federal Regulations on Bottled Water: A Discussion Paper*, Ottawa, 2002, <a href="http://www.hc-sc.gc.ca/food-aliment/friia-raaii/frp-pra/water-eau/erfr">http://www.hc-sc.gc.ca/food-aliment/friia-raaii/frp-pra/water-eau/erfr</a> bottle water tofc.php?HCBOTTLEDWATER=7b9c5352f332e00a0d1781e9d4c22092.

<sup>(36)</sup> Bill S-18, An Act to Amend the Food and Drugs Act (clean drinking water), 1<sup>st</sup> Session, 37<sup>th</sup> Parliament, Ottawa, <a href="http://lp-bp/apps/LEGISINFO/LEGISINFO.asp?Lang=E&Chamber=S&StartList=2&EndList=1000&Session=9&Type=0&Scope=I&query=2802&List=toc.">http://lp-bp/apps/LEGISINFO/LEGISINFO.asp?Lang=E&Chamber=S&StartList=2&EndList=1000&Session=9&Type=0&Scope=I&query=2802&List=toc.</a>

<sup>(37)</sup> Canadian Water and Wastewater Association, *Frequently Asked Questions: Municipal Wastewater Services*, Ottawa, accessed 24 August 2004, <a href="http://www.cwwa.ca/faqwastewater-e.asp">http://www.cwwa.ca/faqwastewater-e.asp</a>.

### **CONCLUSION**

Canada faces an emerging water crisis, manifesting itself by an increasing number of water-related disease outbreaks, endangered watersheds and aquatic ecosystems, and a crumbling water infrastructure. Canada's ability to respond successfully to the challenges brought about by this crisis depends in large part on the ability of water managers and policy makers to resolve difficulties related to the current distribution of responsibilities and jurisdiction pertaining to water. Responsibilities for water are often either shared between different levels of government or not well defined. The current situation led the Sierra Legal Defence Fund to conclude in 2001 that there was a "tremendous variation in how different provinces and territories approach[ed] the important task of ensuring that public water supplies [were] safe for human consumption." The organization further characterized the management of freshwater across the nation as a "patchwork approach" that created "serious public health risks." (38)

The following papers in this series on freshwater management in Canada describe the state of water resources and use in Canada and examine current issues and challenges with regard to water quality and availability.

<sup>(38)</sup> Randy Christensen and Ben Parfitt, *Waterproof: Canada's drinking water report card*, Sierra Legal Defence Fund, January 2001, p. 41, <a href="http://www.sierralegal.org/reports/waterproof.pdf">http://www.sierralegal.org/reports/waterproof.pdf</a>.