

MAY 2010



# SEEKING WATER JUSTICE:

STRENGTHENING LEGAL PROTECTION  
FOR CANADA'S DRINKING WATER

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## TERMINOLOGY IN THE REPORT

'Aboriginal peoples of Canada' is defined in Section 35 (2) the Canadian Constitution as being the 'Indian, Inuit and Métis peoples of Canada'.

We use the term 'First Nations' most frequently in this report, as the self-identified term of 'Indian', because First Nations communities fall under the authority of the federal government by virtue of Section 91 (24) of the Constitution. There are fewer statistics and data on Inuit and Métis communities.

# INTRODUCTION

Ten years after the Walkerton tragedy, Canada's worst drinking water crisis, there are still major gaps in Canada's national framework for drinking water protection, and worrying evidence of inequitable access to clean water across the country. In 2008, the Canadian Medical Association reported that 1,766 drinking water advisories were in effect across Canada.<sup>1</sup>

Unequal access to safe drinking water in Canada is particularly evident in Canada's First Nations communities and in rural and remote communities. As of April 30th, 2010, there were 116 First Nations communities across Canada under a Drinking Water Advisory<sup>2</sup> with a mean average duration of 343 days.<sup>3</sup> In rural Canada, it is estimated that 20–40% of all rural wells have nitrate concentrations or coliform bacteria counts in excess of drinking water guidelines and pose threats to health.<sup>4</sup>

## STANDARDS VERSUS GUIDELINES

Standards provide a superior level of protection for human health compared to guidelines because they are legally binding and enforceable and failure to comply with the standards results in punishment.

Guidelines are essentially voluntary targets that water providers may strive toward but are not required to achieve.

*Source: Health Canada, Drinking Water Advisories. Available at: [http://www.hc-sc.gc.ca/fnih-spni/promotion/watereau/advis-avis\\_concern\\_e.html](http://www.hc-sc.gc.ca/fnih-spni/promotion/watereau/advis-avis_concern_e.html)*

Issues with the provision of safe drinking water can in part be attributed to the absence of national legally binding standards in Canada. Unlike the United States and European Union, we do not have legally binding national standards for drinking water. Instead, we have voluntary national guidelines and provinces establish their own standards which may or may not meet those guidelines. This leaves significant populations, such as First Nations and rural communities, vulnerable to waterborne diseases, boil water advisories and associated health effects. The patchwork of drinking water laws across the country also means that depending on the province or territory you live in, you may have access to a higher standard of drinking water than your friends or family in another part of the country.

Justice Dennis O'Connor, in his report on the causes of the Walkerton disaster, emphasized the importance of legally binding standards for protecting the health of Canadians when he concluded that drinking water quality standards "should have the force of law." O'Connor added, "conservative and enforceable water quality standards are an important basis for a multi-barrier approach to water safety."<sup>5</sup> O'Connor also saw a strong role for the federal government, particularly in ensuring First Nations had access to safe drinking water: "I encourage First Nations and the federal government to formally adopt drinking water standards, applicable to reserves, that are as stringent as, or more stringent than, the standards adopted by the provincial government."<sup>6</sup> While the federal government is proposing a new legal

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After being made aware of the issues, most Canadians (74%) are concerned with water quality on First Nations reserves.”

Unilever RBC Water Survey. 2010.

framework to address First Nations drinking water quality, its approach is to apply a broken system – the patchwork of provincial laws and approaches – to First Nations reserves, which is contrary to the recommendations provided by its own Expert Panel and the Assembly of First Nations.<sup>7</sup>

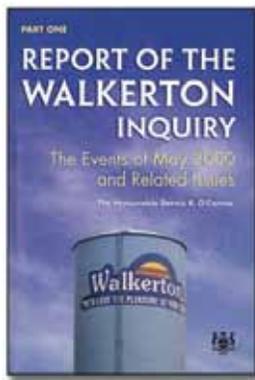
The purpose of this report is to highlight one of the gaps that exist in Canada’s framework for drinking water protection – the lack of consistent and binding drinking water quality standards across Canada – and to outline the necessary steps and actions to address that gap. A review of water testing is beyond the scope of this report, but appropriate testing regimes related to drinking water are also an important part of the provision of safe drinking water and should be based on a strategic risk assessment process.

The authors of this report do not recommend a major overhaul of drinking water responsibility in Canada. Radically changing drinking water responsibility is likely to create as many problems as it solves. However, maintaining the status quo will lead to greater health risks and increase the likelihood of another drinking water tragedy. As set out in this report, we recommend that the current system be strengthened so that a safety net of legally-binding standards apply to all Canadians, including First Nations, and the responsibilities and accountability of all actors be clearly established and articulated.



# CANADA: A HISTORY OF DRINKING WATER TRAGEDIES

## WALKERTON – 10 YEARS LATER



In May of 2000, Canada experienced its most notorious and deadly waterborne disease outbreak due to *E. coli* contamination. Seven people died and more than 2,300 became ill from drinking water in Walkerton Ontario.

Part I of the Walkerton Inquiry examined the events that led to the drinking water disaster. The Commissioner of the Inquiry, Justice Dennis O'Connor, found that the original contamination originated from farm waste that was spread on a field which, during a high rain event, washed into an improperly capped well. Due to improper practices that had stretched back years, the contamination went undetected and inadequately treated.

Justice O'Connor specifically found that a lack of binding standards and provincial government cutbacks contributed to the event.<sup>8</sup>

## KASHECHEWAN – 5 YEARS LATER

Kashechewan is a Cree First Nation community located near James Bay in Northern Ontario. Residents had been living under a boil water advisory for two years when on October 14th, 2005, elevated levels of *E. Coli* were reported in the local school's drinking water supply. Adding excessive chlorine to the water to purify it just compounded the problems, resulting in high cases of impetigo among reserve children for over a year. Eleven days later, a state of emergency was declared and 946 people from a community of 1200 were evacuated to surrounding communities.<sup>9</sup>

The Kashechewan situation was made worse by the confusion surrounding accountability and responsibility for the supply of safe drinking water on reserves. The federal government looked to the Province of Ontario to manage the problem – as the authority primarily responsible for health and water services – while Ontario argued the federal government was responsible given its jurisdiction over First Nations.

## AN INTERNATIONAL COMPARISON: WHERE CANADA STANDS

According to David Boyd author of *The Water we Drink*, “Canada’s lack of standards is a weakness in protecting the health of Canadians.” The voluntary drinking water guidelines in this country are weaker than legally binding drinking water quality standards in other industrialized nations, including enforceable regulations in the United States and the European Union.

The report concluded that Canada’s guidelines were outdated, weaker and more lenient compared to those of our counterparts in Europe and the United States:

- **OUTDATED** – there is an unacceptable backlog of outdated guidelines for physical and chemical parameters due to budget reductions.
- **WEAK** – Many of the parameters in the Canadian guidelines are up to 1000 times weaker than at least one of the other corresponding European standards or Australian guidelines.
- **MORE LENIENT** – Canada has weaker MAC (maximum allowable concentration) guidelines than at least one other jurisdiction (European Union, United States or Australia) or the World Health Organization for 53 of the 67 contaminants examined in the study, including microbiological contaminants, chemical contaminants, radiological contaminants, and disinfection byproducts.

Source: Boyd, D. 2006. *The Water We Drink*.

# HOW SAFE IS CANADA’S WATER TODAY?

Safe drinking water is essential to our health and well-being. World-wide, more than 1 billion people in the world do not have access to clean water and 2.6 billion lack access to adequate sanitation.<sup>10</sup> At least 1.8 million children under five years old die every year due to water related disease.<sup>11</sup> In this context, most Canadians are fortunate to have access to clean water and sanitation, but there are still a few who fall through the gaps and lack regulatory protection.

Canadians clearly appreciate the severity of this threat. Most Canadians (70%) are concerned about water quality, and one in five is concerned about the safety of their drinking water.<sup>12</sup> The dramatic increase in the sale of bottled water is one indication of that concern.

### But is this level of concern justified?

Assessing the safety of Canadian drinking water is a challenge in itself. It is extremely difficult to quantify the level of risk associated with drinking water because of the challenges associated with acquiring accurate, systematic and timely information on important indicators of drinking water health such as waterborne disease outbreaks, hospitalization rates and operator violations. For example, Health Canada does not publicly report the number of drinking water advisories across Canada with the exception of on First Nations reserves. Surprisingly, there is no national surveillance system for waterborne disease outbreaks and we lack a standardized approach to collect this type of information. One of the only accessible measures of drinking water health is the number of Boil Water Advisories (BWA) issued in each province/territory. However, there is no consistent protocol for reporting this type of information.<sup>13</sup> There are a number of problems associated with relying on this information as an indicator of drinking water quality, including that BWA may also indicate a level of

vigilance. As such, this report has tried to use a variety of statistics and indicators such as hospitalization and illness rates. We have found that the isolated studies completed demonstrate cause for concern, and the need for more research.

Environment Canada estimates unsafe drinking water causes 90,000 illnesses and 90 deaths *every year*,<sup>14</sup> the equivalent to 13 Walkerton tragedies. Ongoing studies will almost certainly conclude that these estimates understate the extent of the problem because not all outbreaks are recognized, investigated or reported.<sup>15</sup>

The sheer number of boil water advisories is another indication that our system is in trouble. The number of boil-water advisory days in municipalities across Canada increased *24 percent* between 1993 and 1998.<sup>16</sup> Dozens of communities are under “standing” boil water alerts that have remained in place year after year.<sup>17</sup> In April 2008 the Canadian Medical Association reported that 1,766 drinking water advisories were in effect across Canada.<sup>18</sup>

The problem extends across the country. In Vancouver, it was estimated that unsafe drinking water led to 17,500 physician visits, 85 hospital admissions, and 138 pediatric hospital emergency room visits over a six year period.<sup>19</sup> In Montreal, roughly 1/3 of gastrointestinal illnesses are caused by contaminants in drinking water.<sup>20</sup>

The level of risk and health implications generally depends on the type of contaminant found in the drinking water supply. Table 1 outlines basic information about the three general classes of drinking water quality parameters.<sup>21</sup>

TABLE 1: CATEGORIES OF CONTAMINANTS IN DRINKING WATER

DRINKING WATER QUALITY PARAMETERS	EXAMPLES OF CONTAMINANTS	EXAMPLES OF POTENTIAL HEALTH EFFECTS	EXAMPLES OF TREATMENT METHODS
<b>Microbiological</b>	Bacteria (e.g. <i>E. coli</i> O157: H7, <i>Salmonella</i> ) Viruses (e.g. Hepatitis A) Pathogens (e.g. <i>Cryptosporidium</i> )	Effects range from mild gastroenteritis (upset stomach) to severe diarrhea and death.	Disinfection (e.g. chlorine) – although there are alternatives including ultraviolet disinfection
<b>Chemical</b>	Pesticides Fertilizers Hydrocarbons	Effects include cancer, neurological disorders, gastrointestinal illness, reproductive problems, developmental disorders, disruption of the endocrine or hormone systems.	Treatment requires an advanced form of filtration
<b>Radiological</b>	Uranium Radon	Low dose exposure to radiological contaminants over long time can cause cancer and genetic disorder.	Reverse osmosis

# A TWO-TIERED SYSTEM OF DRINKING WATER REGULATIONS

## A NOTE ON OTHER FEDERAL LANDS

In addition to First Nations reserves, the Federal government also has responsibility for the provision of drinking water on other federal lands such as military bases and national parks. As with First Nations, these areas also fall into a regulatory gap and are vulnerable to drinking water contamination. Most recently in March 2010, 250 people were cut off from their water supply for nearly a month on Nova Scotia's Canadian Forces Base Greenwood when traces of perfluorooctane sulfonate were found in two of the wells supplying drinking water to the base.

Source: "CFB Greenwood without clean water"

<http://www.cbc.ca/canada/nova-scotia/story/2010/04/18/ns-cfb-greenwood-water-1151.html>

The current framework for drinking water protection in Canada has led to a situation where there are 'have' provinces and territories, which have strong or at least adequate legal rules and standards, and 'have not' provinces and territories, where legal protection is far from adequate. This patchwork of protection has also allowed communities in rural Canada and on First Nations reserves to fall through the cracks so that they experience a lower standard of drinking water than the rest of Canada. This fragmentation of responsibilities and regulations has resulted in what is essentially a 'two-tiered' system of drinking water protection across Canada.

## A Patchwork of Protection

In Canada, various levels of government share the responsibility for ensuring safe drinking water. In urban areas, municipal governments are commonly the direct provider of drinking water. The provincial and territorial governments have traditionally taken the main legislative responsibility for regulating the provision of safe drinking water. Nationally, the federal government has direct regulatory responsibility in First Nations communities, on military bases, in national parks, and at federal facilities. Federal government responsibility also extends to transportation conveyances (for example, trains, planes and ships) travelling outside a province.<sup>22</sup> The federal government also has responsibility for regulating food and drug safety, including bottled water, and is positioned to play a lead role in the tracking of trends, best practices and to set requirements for infrastructure funding.

The patchwork of drinking water laws across the country means that depending on the province or territory you live in, you may have access to a higher standard of drinking water than your friends or family in another part of the country. Table 2 illustrates the variation in drinking water legislation across the country. It illustrates that only those living in Alberta, Nova Scotia, Quebec and Ontario have governments that have “adopted” the *Guidelines for Canadian Drinking Water Quality* and that less than half of Canadian jurisdictions require advanced water treatment for drinking water from surface water supplies.<sup>23</sup>

TABLE 2: PATCHWORK PROVINCIAL / TERRITORIAL DRINKING WATER REGULATIONS

JURISDICTION	ADOPTION OF THE GUIDELINES FOR CANADIAN DRINKING WATER QUALITY	ADVANCED WATER TREATMENT FOR SURFACE WATER
Alberta	✓	✓
British Columbia	x	x
Manitoba	x <sup>24</sup>	✓
Newfoundland	x	x
New Brunswick	x	x
Northwest Territories	x	x
Nova Scotia	✓	✓
Nunavut	x	x
Ontario	✓	✓
Prince Edward Island	x	x
Quebec	✓	✓
Saskatchewan	x	x
Yukon Territory	x <sup>25</sup>	✓ <sup>26</sup>

# FALLING THROUGH THE CRACKS

## 1) Drinking Water in Rural Canada: A health concern

Those who depend upon private wells for drinking water, mostly in rural areas, are some of the most vulnerable populations in terms of drinking water quality issues. It is estimated that 20–40% of all rural wells have nitrate concentrations or coliform bacteria counts in excess of drinking water guidelines.<sup>27</sup> For example, in Nova Scotia, the sampling requirements that apply to a “public drinking water supply” become operational “where the system has at least 15 service connections or serves 25 or more individuals per day at least 60 days of the year.”<sup>28</sup> Forty percent of Nova Scotia’s population are served by private wells.<sup>29</sup>

The growing disparity between larger and smaller (mostly rural) systems is extremely worrisome for

many health professionals. Larger systems are held to more rigorous standards as those systems are generally able to purchase better technology and hire specialized personnel. That, however, creates a two-tiered system of drinking water quality which most Canadians would find unacceptable. As Mr. Justice O’Connor wrote in the Walkerton Inquiry Report: “There can be no justification for acquiescing in the application of a lesser public health standard on certain residents of Ontario than that enjoyed by others.”<sup>30</sup>

There is however, some cause for optimism as lower cost Ultra-Violet technology is looking increasingly promising as a form of primary disinfection, which could make it more financially feasible to address unsafe drinking water conditions in small drinking water systems.<sup>31</sup>

## 2) Drinking Water Quality on First Nation Reserves: A chronic issue

### a) A Longstanding Concern

Despite the severity of problems in rural areas, the most persistent and challenging problems with drinking water quality in Canada are generally found in First Nations communities. In these communities, problems with drinking water quality have been a longstanding concern. In 1995, an assessment carried out by the Department of Indian Affairs and Northern Development (DIAND) and Health Canada found that about 25% of water systems on-reserve posed potential health and safety risks to First Nations people in the affected communities. A follow-up assessment in 2001 revealed that almost three quarters of drinking water systems on-reserve posed significant risk. In 2003, the federal government announced a \$600 million investment in a First Nations Water Management Strategy.<sup>32</sup> To address these ongoing issues, the Government of Canada in collaboration with the Assembly of First Nations appointed an Expert Panel on Safe Drinking Water for First Nations in 2006. This independent panel was created as part of the Government's Plan of Action for Drinking Water.<sup>33</sup>

### b) The Current Situation

As of April 30th, 2010, there were 116 First Nations communities across Canada under a Drinking Water Advisory.<sup>34</sup> Between 2003 and 2007, the mean average duration of a Drinking Water Advisory in First Nations communities was 343 days. The shortest advisories were in place for less than a day and the longest was in place for close to 13 years.<sup>35</sup> Thirty-six per cent of these communities still do not have any level of certification for water systems operators.<sup>36</sup> This is despite the policy outlined in the 2006 *Protocol for Safe Drinking Water for First Nations Communities* that requires every First Nations community to have a certified water systems operator.<sup>37</sup>

In addition, as of 2009, there were still 48 First Nations communities whose systems remain classified as high risk. While this number has steadily declined from 218 in 2003,<sup>38</sup> this does not necessarily indicate that the true extent of the problem is being addressed. For example, the Expert Panel report identified communities that were clearly at higher risk, but that “failed to appear as high risk on the Department's risk assessment because they did not have any water systems at all.”<sup>39</sup>

### c) The Government of Canada's Response

#### i) Plan of Action for Drinking Water on First Nations Reserves

In March 2006, the federal government issued a media release outlining a plan of action to improve drinking water quality on First Nation reserves:

- Implement the *Protocol for Safe Drinking Water for First Nations Communities*, including operating standards for drinking water systems in First Nations communities.
- Mandatory training for all treatment-plant operators and a regime to ensure that all water systems have the oversight of certified operators.
- Specific remedial plans for First Nations communities with serious water issues, starting with the twenty-one priority communities.
- Create the Expert Panel on Safe Drinking Water to advise on the appropriate regulatory framework, including new legislation.
- Commitment to regularly report on progress.<sup>40</sup>

This announcement was followed by a summer of hearings in 2006 where the Expert Panel on Safe Drinking Water for First Nations met with First Nations and accepted written comments. In 2006, the Expert Panel issued a legal analysis in which it assessed the viability of a number of approaches to addressing the drinking water-related regulatory gap on First Nations lands.<sup>41</sup> The findings of this analysis are discussed in more depth in the next section of this report.

#### ii) Proposed First Nations Drinking Water Act

In its 2010 Speech from the Throne, the federal government announced its plan to introduce legislation to improve standards for First Nations drinking water quality. The approach they have since proposed to First Nations would “incorporat[e] by reference provincial/territorial regulations and adapt them as required to meet the needs of First Nations communities.”<sup>42</sup> While the goal of seeking to develop the legal regime for First Nations water quality is laudable and long overdue, this approach is contrary to the preferred recommendation of the Expert Panel and the approach recommended by the Assembly of First Nations. Moreover, First Nations believe that they have not been meaningfully consulted regarding the development of the proposed legislation. As a result, First Nations generally do not welcome the federal government's proposed legislation.

# THE WAY FORWARD: STRENGTHENING LEGAL PROTECTION

The groups endorsing this report strongly feel that steps need to be taken to ensure safe drinking water for all Canadians to address the problems associated with the current drinking water system in Canada. The following recommendations focus on efforts to create the regulatory environment that will guarantee resources, deliver technical assistance and – ultimately – provide the compliance and enforcement regime necessary to ensure safe drinking water. This regulatory environment would ensure minimum standards for microbiological contaminants (e.g. pathogens) and naturally-occurring or widespread chemicals that may be present in water systems across Canada such as nitrates and arsenic. Implementing national standards will likely require increased expenditures by both service providers and enforcement agencies. However, we see one of the primary benefits of standards being a driver of much needed investment.

The challenges in providing safe drinking water to First Nations communities are distinct from the problems on non-Federal lands because reserve lands fall under clear federal jurisdiction and trigger unique rights, so these issues are addressed following a consideration of drinking water provision on non-Federal lands.

## **1. Non-Federal Lands: Respect the constitutional authority of local jurisdictions**

Given the primary role of provinces in drinking water protection, there is a strong argument for

making a concerted effort to improve the delivery of safe drinking water at the provincial level before engaging in any overhauls at other levels of government. Arguably, there is also potential for progress through the provinces, territories and federal government working together, along with First Nations. The basic framework for provincial-territorial-federal cooperation is already in place. The Federal-Provincial-Territorial Committee on Drinking Water (CDW), part of the Canadian Council of Ministers of the Environment (CCME), has been in existence for more than 20 years.

The main responsibility of the CDW is to establish the Guidelines for Canadian Drinking Water Quality. The Guidelines are currently non-binding and are only advisory in status. As a result, only four of Canada's provinces and territories have incorporated the standards<sup>43</sup> contained in the Guidelines into their own regulatory standards. The CDW has evolved to take on additional roles to protect drinking water quality, including working in collaboration with the CCME to develop the Multi-Barrier Approach to Safe Drinking Water. Health Canada provides scientific and technical expertise to the Committee, and coordinates its activities.

Given the current involvement of the provinces, territories and federal government in setting the Guidelines, many question why these have not been made legally binding across Canada (regardless of which level of government implements the standards). Frustration with inaction in implementing nationally consistent standards and the sporadic action on drinking water protection in most provinces has led to calls for new federal standards that apply to all Canadians. These calls have been reflected in a

number of recent private members bills that would have enabled new federal drinking water standards.<sup>44</sup> However, rather than displacing provincial government efforts to protect drinking water, a better approach is for the Government of Canada to enact standards that apply only where provincial standards are deficient. This would allow provincial governments that have enacted more stringent standards (such as Alberta, Ontario and Quebec) to continue to play the lead role in standard setting.

Appendix A outlines various constitutional powers that could enable the federal government to set minimum standards for drinking water.

## 2. First Nations: Undertake meaningful consultation and accommodation

Providing safe drinking water to First Nations communities requires more than the federal government establishing or modifying the regulatory regimes. The findings of the Expert Panel on Safe Drinking Water for First Nations, endorsed by the Assembly of First Nations,<sup>45</sup> set out clear pre-conditions to ensure success of any regulatory process:

1. Close the resource gap;
2. Discussions with First Nations are essential;
3. Deal with high risk communities immediately.

Addressing the resource gap is an important first step because regulation alone will not be effective in ensuring safe drinking water unless other requirements are met, including investment in both human resources and physical infrastructure.<sup>46</sup> The Expert Panel considered five options as possible methods for establishing a regulatory framework for First Nations:

1. Existing provincial regimes could be used, as “laws of general application”;
2. Existing federal laws could be used to pass new drinking water-related regulations applying to First Nations lands;
3. **Federal Regime:** Parliament could enact a new statute setting out uniform federal standards and requirements, aided by a newly created First Nations Water Commission;
4. **Provincial Regimes:** Parliament could enact a new statute referencing existing provincial regulatory regimes; or

5. **Customary Law Regime:** First Nations could develop a basis of customary law that would then be enshrined in a new federal statute.

The Expert Panel, after a legal analysis, concluded that the first two options were not workable. On December 7, 2006 the Minister of Indian and Northern Affairs, Jim Prentice tabled the final report of the Expert Panel to the House of Commons. The report narrowed its recommended options to the latter three with the federal regime option as the preferred approach (option 3 above). However, as described in the previous section, Canada now indicates that it wishes to proceed with an approach that incorporates provincial laws by reference (option 4).

The Assembly of First Nations has recommended an alternative approach that is based on the inherent jurisdictions of First Nations and would also honour their role in Canada’s water governance. As described by the AFN, their approach would:

...offer the federal regime option as an interim measure for provision of national standard of safe drinking water in First Nations but would also recognize First Nations jurisdiction, which would be fully applied when First Nations governments are ready to exercise this jurisdiction and meet or exceed the national standard (for instance, many communities currently utilize provincial standards as a basis). The federal legislation would contain a non-derogation clause, entrench federal roles and responsibilities and establish the First Nations Water Commission model to enhance First Nations governments’ readiness to full exercise of their recognized jurisdiction over water management.<sup>47</sup>

Whatever approach is chosen, it is clear that the involvement of First Nations is legally and constitutionally required before new legislation is introduced. A legal analysis carried out for the Assembly of First Nations concluded that at least three classes of First Nations rights may be impacted by all of the options presented by the Expert Panel: water rights, environmental protection rights, and self-government rights. The extent of the impact is uncertain, but all three options create new federal legislation, and therefore, varying degrees of consultation will be required. Further, it must be noted that the federal government has fiduciary responsibilities to First Nations that increase the imperative of federal action on this issue.<sup>48</sup>

# CONCLUSIONS AND RECOMMENDATIONS

Despite being a country envied for its natural resources and high standard of living, there are Canadians who still lack access to the most basic human need: clean drinking water. In part this problem is caused by a lack of national enforceable standards.

Ten years after the Walkerton crisis and five years after the Kashechewan evacuation, we must ask ourselves whether we have done what we reasonably can to avoid another crisis. Findings from this report suggest that patchwork provincial legislation and regulatory gaps on federal lands have left some populations without the necessary protective measures. The authors of this report believe that implementing the following four recommendations would strengthen Canada's legal protection and access to drinking water for all Canadians.

## **1. Legislate enforceable drinking water protection across Canada**

- The federal government should collaborate with provincial, territorial, and Aboriginal governments to assist all parties in adopting legally binding drinking water quality standards (the maximum allowable concentrations of potentially harmful substances in drinking water) in their own legislation within five years.
- The federal government could do this by replacing the Canadian Guidelines for Drinking Water Quality with a Safe Drinking Water Act that has health-based long term objectives and legally binding minimum national standards and regulations. The Safe Drinking Water Act would function as a federal safety net and would apply on federal lands and in provinces that did not provide the same level of health protection as the national standards.

## **2. Enact world-class drinking water standards**

The federal government should ensure Canadian drinking water standards are equal to or better than the highest standards in other industrialized nations to protect human health and the environment.

## **3. Provide resources for safe drinking water on First Nations reserves**

- The federal government should take urgent steps to provide resources, support and capacity development required for safe drinking water on federal lands and all First Nations reserves to enable them to implement national standards and regulations. Resources need to be made available for appropriate treatment and distribution, wastewater treatment and collection, source water protection, training and ongoing support of water and wastewater treatment operators.
- The Government of Canada should work with the Assembly of First Nations and interested parties to develop a First Nations Water Commission – a model the Assembly of First Nations has identified as essential for First Nations-controlled drinking water management.
- First Nations should be co-authors in developing drinking water legislation that applies to them to ensure it is respectful of their inherent, Aboriginal and treaty rights.

## **4. Increase the transparency of reporting on the state of drinking water systems**

Establish consistent and standard reporting mechanisms to increase transparency and track relevant statistics and information about the state of drinking water and wastewater systems through a Federal-Provincial-Territorial body such as the Canadian Drinking Water Committee. This information should be made available to the public through an annual report to Parliament.

# APPENDIX A

## FEDERAL CONSTITUTIONAL POWERS RELATED TO DRINKING WATER

### A. Protect the Health and Safety of all Canadians

Several areas of constitutional authority enable the federal government to take a much stronger role in regulating matters related to health, including the safety of drinking water. Health is the responsibility of the federal Parliament or the Provincial Legislatures, depending on the purpose and effect of the particular health measure at issue. It is the criminal aspect of health, authorizing federal legislation under s. 91(27) of the Constitution, which allows the federal government to require that all food sold in the country be fit for human consumption and to punish conduct that is dangerous to health under the *Food and Drug Act* (FDA).<sup>49</sup> Food as currently defined by the FDA is any article manufactured, sold or represented for use as food or drink for human beings, chewing gum, and any ingredient that may be mixed with food for any purpose whatever.

The FDA regulates bottled water and it has been argued that it could be amended to govern tap water as well. Federal government legal advisors are on record as agreeing that criminal law powers would support federal jurisdiction over drinking water. During the proceedings of the Standing Senate Committee on the private members bill of Senator Jerry Grafstein (Bill S-205, 2006), a representative of the department's Constitutional and Administrative Law Section told the Senate committee that "although arguments can be made to the contrary, there is absolutely nothing under the division of powers that would prevent Parliament from enacting a bill pursuant to the criminal law of power as this bill proposes."<sup>50</sup>

### B. First Nations Jurisdiction

Additionally, the Federal Government has responsibilities to First Nations under section 91(24) of the *Constitution Act*. The Federal Government has jurisdiction over 'Indians and lands reserved for Indians' and has fiduciary duties to First Nations people.

### C. Peace Order and Good Government

Additionally, the federal government arguably possesses jurisdiction to protect drinking water quality under the "peace, order and good government" power ("POGG"). The *Canada Water Act* is a law that enables the federal government to enter into agreements with provinces for the management of water resources, including planning, conservation, development and utilization of the resource. The constitutional basis for this law is the national concern doctrine under POGG, which provides the federal government with the power to control the pollution of air or water that are beyond the capacity of the provinces to control.<sup>51</sup>

### D. Protecting Water Quality

Section 91(1A) of the *Constitution Act* provides for federal jurisdiction over the control of pollution of coastal waters and over international and interprovincial rivers where pollution in one province will be carried into another. The *Canadian Environmental Protection Act* regulates the release of pollutants and protects the environment and human health. The Supreme Court of Canada has found the federal government's criminal law power supports key provisions of CEPA.<sup>52</sup>

## ENDNOTES

- <sup>1</sup> Eggertson, L. 2008. "Investigative report: 1766 boil-water advisories now in place across Canada," *Canadian Medical Association Journal*. 178 (10): 1261-3.
- <sup>2</sup> Health Canada. 2010. First Nations, Inuit and Aboriginal Health. <http://www.hc-sc.gc.ca/fniah-spnia/promotion/public-publique/water-eau-eng.php>.
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- <sup>11</sup> E. Corcoran, C. Nellemann, E. Baker, R. Bos, D. Osborn, H. Savelli (eds). 2010. *Sick Water? The central role of wastewater management in sustainable development*. A Rapid Response Assessment. United Nations Environment Programme. [http://www.grida.no/\\_res/site/file/publications/sickwater/SickWater\\_screen.pdf](http://www.grida.no/_res/site/file/publications/sickwater/SickWater_screen.pdf).
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- <sup>13</sup> Boil Water Advisories (BWA) and Orders are a way to advise the public that they should boil their tap water for drinking and for other uses. Precautionary BWAs may be issued where there is concern. Drinking Water Advisories (DWA) are wider in scope and include BWAs and Orders as well as Do Not Consume advisories. A DWA can affect just one building or a whole community.
- <sup>14</sup> T. Edge, J.M. Byrne, R. Johnson, et al. 2001. "Waterborne Pathogens," in Environment Canada, *Threats to Sources of Drinking Water and Aquatic Ecosystem Health in Canada*. Burlington, ON: National Water Research Institute.
- <sup>15</sup> Personal communication with David R. Boyd. Electronic mail of September 14, 2006.
- <sup>16</sup> Commissioner of the Environment and Sustainable Development. 2005. "Chapter 5 - Drinking Water in First Nations Communities", in *2005 Annual Report of the Commissioner of the Environment and Sustainable Development to the House of Commons*.
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- <sup>18</sup> L. Eggertson. 2008.
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- <sup>24</sup> While Manitoba has not adopted the full range of standards in the Guidelines for Canadian Drinking Water Quality, it has explained its approach to the setting of standards as: "Standards have not been adopted for chemicals that are not widely used in Manitoba or which have not been identified in Manitoba source waters at levels of concern through the provincial groundwater and surface water quality monitoring programs. This ensures that resources can be allocated to most effectively address the issues which pose the most significant risk to Manitobans. If a concern is identified across a broad area, a new standard would be set and enshrined in the regulation based on the Canadian guideline. Where a concern is identified with a specific source water or water treatment plant, a standard would be set in the facility operating licence based on the Canadian guideline." May 21, 2010 letter of Kim Philip, Director, Manitoba Water Stewardship Branch.
- <sup>25</sup> Monitoring for other Guidelines for Canadian Drinking Water Quality may be required "if there is a reason to suspect the presence of other substances in the drinking water. S. 42(2), *Drinking Water Regulation*, Y.O.I.C. 2007/139 (*Public Health and Safety Act*).
- <sup>26</sup> S. 36, *Drinking Water Regulation* (Yukon).
- <sup>27</sup> Van der Kamp, G. et. al. 2001.
- <sup>28</sup> *Water and Wastewater Facility Regulations* (Nova Scotia), Part IV, Section 14(d).
- <sup>29</sup> Ministry of Environment and Labour. 2005. "A Drinking Water Strategy for Nova Scotia: Final Report." <http://www.gov.ns.ca/nse/water/docs/NSWaterStrategyReport.pdf>
- <sup>30</sup> D.R. O'Connor. 2002. p. 487.
- <sup>31</sup> M.A. Shannon, P.W. Bohn, M. Elimelech, J.G. Georgiadis, B.J. Mariñas, A.M. Mayes. 2008. "Science and technology for water purification in the coming decades" in *Nature*. 452: 301 - 310.
- <sup>32</sup> Indian and Northern Affairs Canada. 2007.
- <sup>33</sup> Report of the Expert Panel on Safe Drinking Water for First Nations - Volume 1. 2006. Ottawa: Indian and Northern Affairs Canada. [http://www.sdweeps.gc.ca/rprt/index\\_e.asp](http://www.sdweeps.gc.ca/rprt/index_e.asp).
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- <sup>40</sup> Conservative Party of Canada. 2006. "Government Announces Immediate Action on First Nations Drinking Water". <http://www.conservative.ca/EN/1091/41433>.
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- <sup>45</sup> Assembly of First Nations. 2007.
- <sup>46</sup> Assembly of First Nations. 2007.
- <sup>47</sup> Assembly of First Nations. 2007.
- <sup>48</sup> Assembly of First Nations. 2007.
- <sup>49</sup> Hogg, P. *Constitutional Law* (Butterworth, 5th edition). 18-12.
- <sup>50</sup> Debates of the Senate (Hansard), 1st Session, 39th Parliament, Vol.143, Issue 83.
- <sup>51</sup> Section 91, *Constitution Act* (1867).
- <sup>52</sup> *Attorney General of Canada v. Hydro-Quebec* 3 S.C.R. 213 (1997).



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