

Water

Background

Canada needs a national water policy based on the principles of water as a commons, a public trust, and a human right. The notion of the “commons” asserts that water is a common heritage owned by no one yet belonging to everyone. A commons framework requires a shift in water governance to prioritize the human right to water, public participation, and the inclusion of First Nations and other communities in decision-making. Public trust principles require governments to protect water sources for communities’ reasonable use, and to make private use subservient to community rights.

On July 28, 2010, 122 countries voted to pass a resolution at the United Nations General Assembly recognizing the human right to water and sanitation. On September 23, 2011, the United Nations Human Rights Council (HRC) passed a resolution on the human right to safe drinking water and sanitation and called upon governments to:

- develop comprehensive plans and strategies, including clearly defined responsibilities for all water and sanitation sector actors;
- monitor and assess the implementation of plans of action and ensure the free, effective, meaningful, and non-discriminatory participation of all people and communities concerned, particularly those

living in disadvantaged, marginalized, and vulnerable situations;

- ensure that services are affordable for everyone; and
- provide a framework of accountability with adequate monitoring mechanisms and legal remedies.¹

After its longstanding opposition to the human right to water and sanitation, Canada finally recognized this human right in June 2012 at the United Nations Conference on Sustainable Development.

Current Issues

National Public Water and Wastewater Infrastructure Fund

The AFB will embark on an ambitious 20-year program to maintain and replace water infrastructure across the country. The total replacement value of water, wastewater, and stormwater assets is \$362 billion. The Federation of Canadian Municipalities (FCM) estimates the cost of replacing systems graded “poor” or “very poor” to be \$15 billion (see *Table 15*).²

Over the next six years, the AFB will replace water infrastructure currently rated “poor” or worse. The remaining infrastructure requires a transparent, long-term maintenance plan. In order to maintain water infra-

TABLE 15 Water Infrastructure in Canada (\$ Billions)³

	Replacement value of assets in fair condition	Replacement value of assets in poor or worse condition	Replacement value of assets in good or better condition	Replacement Value of Total Assets	20-year maintenance costs for fair assets (2% of total replacement value)	20-year maintenance costs for good or better (1% of total replacement value)
Drinking Water	23	3	145	171		
Wastewater	31	8	83	122		
Stormwater	12	4	53	69		
Total	66	15	281	362	26	56

structure assets currently graded “fair,” a total investment of \$26 billion over the next 20 years is needed, assuming an annual re-investment rate of 2% of the total value of water, wastewater, and stormwater assets currently worth \$66 billion. Systems graded “good” or better will require a total investment of \$56 billion over the next 20 years, assuming an annual re-investment rate of 1% of the total value of water, wastewater, and stormwater assets currently worth \$281 billion. The total value of water system maintenance and replacement will be \$97 billion over the next 20 years.

As with other infrastructure programs, the AFB will require matching funding from the provinces and municipalities. However, given the disproportionate burden that municipalities already carry for infrastructure, the federal government will pay 40%, the provinces 40%, and municipalities only 20%.⁴

Of the total \$97 billion from all levels of government, the federal government will therefore contribute \$39 billion over the coming 20 years. The AFB allocates \$2.6 billion annually for the first six years to replace infrastructure considered in poor and

worse shape and for maintenance and capital to improve “fair” or better water systems.

After the first six years, the AFB commits \$1.6 billion annually for the remaining 14 years to maintain water systems that are currently “fair” or better. The provinces will match this funding and municipalities will pay 50% of those levels to maintain the federal-provincial-municipal split specified above.

The AFB will create an annual fund to which municipalities with declining tax bases can apply for assistance. Funding will be provided through a mix of both per capita and grant based formulas to ensure equity and to target communities with the greatest needs. Water sustainability planning will be a key component of this, together with training and human resource development.

Over 150 billion litres of raw sewage are flushed into waterways every year.⁵ The federal government passed new wastewater regulations in June 2012. Municipalities depend on federal and provincial funding to implement the regulations and protect wastewater treatment as a public service. The FCM calculates that the new regulations will cost

at least \$20 billion for plant upgrades alone, with further spending on system-wide upgrades required over the next two decades.⁶ The AFB will also work with provincial governments to harmonize reporting requirements, with the goal of reducing the cost of administering regulations.

The AFB will devote spending exclusively to publicly-owned and operated water infrastructure instead of promoting privatization through the Public-Private Partnership (PPP) Canada Fund. Municipalities have the experience and expertise in water and wastewater management and are far more accountable to the public than private corporations. Water and wastewater projects will be excluded from PPP Canada funding criteria. For more details, see the Public Services chapter.

Canada drew lessons from the Walkerton disaster and established provincial regulations and mandatory certification requirements for water operators. The AFB will provide support for ongoing water operator training, public sector certification and conservation programs, including restoring the water-efficiency labelling program cut in May 2011. More needs to be done, however, including enacting national, legally binding standards for drinking water to replace the current guidelines.

First Nations' water rights

Despite repeated pledges from the federal government to ensure clean drinking water, Health Canada reported 89 water advisories in First Nations in December 2013.⁷ There are routinely over 100 water advisories in effect,

with some communities living under advisories for over ten years.⁸ The “Safe Drinking Water for First Nations Act” passed into law in June 2013. The Act sets necessary high standards, but fails to allocate needed funding to meet the standards. Therefore, the AFB makes a significant 10-year investment in on-reserve water and wastewater facilities worth \$4.7 billion. For more details, see the First Nations chapter.

The AFB respects Aboriginal self-determination, the authority of Indigenous governments and First Nations' water rights. It incorporates Indigenous knowledge and seeks the consent of and meaningful participation of Indigenous peoples on water and wastewater policies.

Sustaining and improving quality

The responsibility for monitoring water quantity and quality is shared among all three levels of government. Canada has the resources to be a leader in environmental research but Canadian scientists are concerned that research is under threat because of legislative changes, severe funding cuts and a lack of coordination.

The federal government's cuts to the Experimental Lakes Area (ELA) and other critical environmental programs hinder its ability to develop freshwater policies and respond to threats to water. Since 1968, the ELA, a world-renowned freshwater research centre, has conducted groundbreaking studies on the health of freshwater, including the impacts of human activities and chemical contamination, acid rain, climate change and the effects of mercury on fish and water.

The Ontario and the Manitoba governments have committed to funding the ELA for several years despite the ELA being a federal responsibility. To address the numerous information gaps in water quality and quantity the AFB will reinstate federal funding for the ELA as well as for the UN Global Environmental Monitoring System/Water Programme, a global water quality database. The AFB will create a water minister position to coordinate the more than 20 departments that set federal policies affecting water.

Water withdrawals and exports

Although Canada holds nearly 20% of the world's fresh water, only 1% of our water is renewable, or replenished by rain or snowfall every year. A 2010 Statistics Canada study showed that renewable water in southern Canada declined by 8.5% between 1971–2004.⁹

In recent years, right-wing think tanks in both the United States and Canada have floated proposals to export water from Manitoba and Quebec. The AFB bans bulk water exports as these projects would be tremendously costly, require vast amounts of energy, and pose serious threats to watersheds.

Since a third of Canadian communities rely on groundwater for drinking water, the AFB commits \$3 million to implementing a thorough groundwater protection plan including:

- identifying and mapping groundwater sources;
- applying the public trust doctrine to groundwater, which will give priority to basic human needs and water for ecosystems;
- prohibiting the extraction of groundwater in quantities that exceed its recharge rate; and
- a “local sources first” strategy that gives first rights to local people, farmers, and communities.

Virtual water is the amount of water used to produce or process a good or a service. Canada net exports 59.9 Bm³ of virtual water each year, making it the second net virtual water exporter in the world.¹⁰ The AFB commits \$1 million to complete a comprehensive review on virtual water exports from Canada.

Protecting the Great Lakes Commons and other priority waterways

The Great Lakes hold the majority of Canada's fresh water and provide drinking water to 42 million people in the Basin. They also face significant threats, including pollution, extraction, loss of wetlands, and invasive species. The last federal budget failed to commit any new funding to the Great Lakes.

The AFB commits \$500 million to establishing a Great Lakes Commons framework, based on empowering local decision-making and a co-management model that ensures true collaboration between communities and governments.¹¹ Funding will also be dedicated towards cleaning up areas of concern and priority zones, controlling in-

vasive species, calculating the amount of water in the Great Lakes and total water withdrawals, protecting wetlands, and creating an inventory on pollutants that are not covered by the Great Lakes Water Quality Agreement and the National Pollutant Release Inventory.

The AFB also calls for a ban on fracking and oil and gas exploration in the Great Lakes, St. Lawrence River and Gulf of St. Lawrence as well as a ban on the transport of tar sands bitumen through pipelines and shipments through the Great Lakes Basin. This will curb costly clean up projects.

A just transition from fossil fuels

Tar sands projects release four billion litres of contaminated water into Alberta's groundwater and natural ecosystems every year.¹² Toxins connected to tar sands production have been found as far downstream as the Athabasca Delta, one of the largest freshwater deltas in the world.

Incidents of rare forms of cancer, respiratory diseases, and cardiovascular diseases in communities nearby and downstream have increased with the accelerated rate of tar sands development. Major proposed pipeline projects, including the Energy East pipeline from Alberta to New Brunswick, Enbridge Northern Gateway and Kinder Morgan Trans Mountain Pipeline in British Columbia, the Alberta Clipper to the Great Lakes as well as the reversal of Line 9 in Ontario and Quebec, would transport tar sands or fracked oil across the country, exacerbating climate change and putting water, food, and public health at risk. An in-depth study

on the effects of tar sands development on water is needed.

First Nations and other communities across Canada are raising concerns about hydraulic fracturing (fracking), a controversial practice that uses sand, water and chemicals to blast rock formations in order to extract natural gas or oil from them. There are many risks associated with fracking, including groundwater contamination, poor air quality and climate change. Further challenges include the lack of safe options for disposing of fracking wastewater and the link to increased risk of earthquakes. Environment Canada and the Council of Canadian Academies are conducting reviews on fracking. The AFB calls for a moratorium on fracking until these reviews are complete.

The 2008 report by the Intergovernmental Panel on Climate Change highlighted the effects of climate change on water in Canada, including droughts, intense precipitation, and increased temperatures. The federal government has failed to plan for the impact of climate change on Canadian watersheds and water infrastructure. A just transition away from the tar sands and all fossil fuels, given the reality of climate change, is imperative. In the meantime, the AFB allocates \$5 million for research on the impact of climate change on watersheds and infrastructure, renewal of the Flood Damage Reduction Program, drought and flood planning, and support for Indigenous communities.

Omni-gutting environmental legislation

The 2012 omni-budget bills implemented sweeping changes to environmental laws and removed critical safeguards for water protection. The Canadian Environmental Assessment Act was replaced with a new act that eliminated 3,000 federal environmental assessments. The federal government also gutted the *Fisheries Act*, abdicated responsibility for 99% of lakes and rivers by overhauling the *Navigable Waters Protection Act*, and put in question work safety and disclosure of fracking and other chemicals by eliminating the Hazardous Materials Information Review Commission.

Two project proposals on Line 9 and a water withdrawal application by Encana for a B.C. fracking project that are currently moving ahead are examples of the environmental assessments cancelled by budget bill C-38. The bills not only mark a troubling move to stifle democratic debate on environmental policy, but also cast doubt on the government's ability to uphold the human right to water and sanitation. The AFB will rollback the changes to environmental legislation contained within the omnibus budget bills and require that any subsequent amendments be introduced separately and trigger thorough assessments, including public hearings and the free, prior and informed consent of First Nations.

The AFB removes the Schedule 2 loophole from the *Fisheries Act*. Lakes that would normally be protected as fish habitat by the *Fisheries Act* are now being redefined as "tailing impoundment areas" in a 2002 schedule

added to the Metal Mining Effluent Regulations of the Act. Once added to Schedule 2, healthy freshwater lakes lose all protection and become dump-sites for mining waste. Canada is the only industrialized country to allow this practice. Schedule 2 is the equivalent of a major subsidy to corporations by giving them a lake rather than them building their own containment systems.

The AFB will exclude water as a good and service from all international trade agreements, including the North American Free Trade Agreement (NAFTA) and the Canada-EU Comprehensive Economic and Trade Agreement, and Trans-Pacific Partnership. When water is considered a tradable good or service under international trade agreements, there is too much pressure to commoditize it and leave its management and distribution to "market" forces, undermining sustainability and rights-based access. These agreements also make water-related policy and other measures vulnerable to investor-state challenges that involve a proprietary interest in water, its distribution and treatment.

In 2010, the federal government settled a NAFTA challenge brought against Canada by pulp and paper company AbitibiBowater for \$130 million. By excluding water in trade agreements, the AFB will avert threats to Canada's water and costly NAFTA challenges. It will also protect the rights of municipalities, provinces, and territories to regulate or create new public monopolies for the delivery of water services and sanitation without having to worry about trade and investment challenges. On September 6, 2013, Lone Pine Resour-

ces filed a \$250-million NAFTA lawsuit challenging Quebec's moratorium on fracking in the St. Lawrence Valley. Water-intensive industries such as mining and energy see these treaties as a means to pressure governments into approving potentially dangerous projects, or in penalizing governments who get in their way. The AFB will put an end to Canada's practice of including these excessive investment protections in free trade agreements and stop signing Foreign Investment Protection and Promotion Agreements. Existing treaties will be amended to protect communities' rights to develop regulations on water protection.

AFB Actions

The following measures begin the process of developing a national water policy that makes the conservation and protection of our water a public trust and safe, clean drinking water and sanitation a human right.

The AFB will support the full realization of the Right to Water and Sanitation, including by:

- creating a National Public Water and Wastewater Fund (federal cost: \$2.7 billion a year);
- implementing a new Wastewater Systems Effluent Regulations (cost: \$1 billion a year over 20 years).

The AFB will ensure the safety and sustainability of Canada's freshwater supply, including by:

- implementing a comprehensive action plan to protect the Great Lakes (cost: \$500 million);
- Clean up priority waterways (cost: \$950 million a year for five years);
- establishing water quality and quantity monitoring frameworks (cost: \$327.5 million over three years), including by:
 - increasing the number of monitoring stations;
 - training staff in water monitoring;
 - contributing to the UN Global Environment Monitoring System;
 - creating a new water minister position;
- reinstating federal funding for the Experimental Lakes Area (cost: \$2 million).

The AFB will support and fund environmental impact research, including by:

- providing assessments of all energy and mining projects (cost: \$50 million);
- providing an in-depth and independent study of the effects of tar sands development and incorporating public input in the federal reviews on fracking (cost: \$32 million).

Notes

¹ United Nations Human Rights Council (2011). *The Human Right To Safe Drinking Water And Sanitation (A/HRC/18/L.1)*. Geneva: United Nations Human Rights Council.

² Felio, Guy et al (2012). *The Canadian Infrastructure Report Card*. Canadian Infrastructure. <http://www.canadainfrastructure.ca/en/index.html>

³ Felio, Guy et al (2012). *The Canadian Infrastructure Report Card*. Canadian Infrastructure. <http://www.canadainfrastructure.ca/en/index.html>

- 4** Mackenzie, Hugh. (2013). *Canada's Infrastructure Gap: Where It Came from and Why It Will Cost So Much to Close*. Ottawa: Canadian Centre for Policy Alternatives.
- 5** "Wastewater." Ottawa: Environment Canada. Online at: <http://www.ec.gc.ca/eu-ww/default.asp?lang=en&n=BC799641-1>
- 6** Felio, Guy et al (2012). *The Canadian Infrastructure Report Card*. Canadian Infrastructure. <http://www.canadainfrastructure.ca/en/index.html>
- 7** "Drinking Water and Wastewater." Ottawa: Health Canada. Online at: <http://www.hc-sc.gc.ca/fnihah-spnia/promotion/public-publique/water-eau-eng.php#adv>
- 8** "First Nations and Inuit Health: Drinking Water and Waste Water." Ottawa: Health Canada. Online: <http://www.hc-sc.gc.ca/fnihah-spnia/promotion/public-publique/water-eau-eng.php#s2d>
- 9** *Human Activity and the Environment: Freshwater Supply and Demand in Canada*. Ottawa: Statistics Canada. 2010.
- 10** Rahman, N., Barlow, M., and Karunanathan, M. (2011). *Leaky Exports: A Portrait of the Virtual Water Trade in Canada*. Ottawa: Council of Canadians.
- 11** Barlow, Maude (2011). "Our Great Lakes Commons: A People's Plan to Protect the Great Lakes Forever." Ottawa: Council of Canadians.
- 12** Price, Matt (2008). *11 Million Litres a Day: The Tar Sands' Leaking Legacy*. Toronto: Environmental Defence.