

# Looking Back

“The failures at Walkerton were not failures of the drinking water quality objectives as such but of the systems that were supposed to ensure they were met. Reviews of outbreaks [...] suggest that this pattern holds on a larger scale. As was the case in Walkerton, operational, managerial, and regulatory failures can lead to a major breakdown.” — Honourable Dennis O’Connor

**HERE WE ARE**, nearly a decade after Walkerton. As a result of our failures, we have made great progress—but for all the changes in policy and standards, the battle for high-quality water and better resource management has not yet been won.

This timeline covers some of the more notable events in the last ten years of Canada’s water history.

## 2000

Drinking water contaminated with E.coli and campylobacter bacteria kills seven people and makes over 2,300 ill in Walkerton, Ontario. After the tragedy, the Ontario government established a public Inquiry led by **Dennis O’Connor**, whose findings are released in two volumes. As a result of the media attention on the crisis, contamination becomes a hot topic in mainstream media, bringing to light a wide range of water quality problems across the country.

## 2001

Sierra Legal Defence Fund (now Ecojustice) releases *Waterproof: Canada’s Drinking Water Report Card*. Submitted to the Walkerton inquiry, the report card assigns a D grade or worse to five jurisdictions. Joining pre-Walkerton Ontario with a D are British Columbia and Newfoundland. The Yukon receives a D minus, and Prince Edward Island receives a failing grade of F.

**Roger Grimes**, the new premier of Newfoundland, revives entrepreneur **Gerry White’s** plan to sell water from Gisborne Lake. Details include skimming 500,000 cubic metres each week and shipping it in bulk to overseas customers. Prior to 2001, White argued that the amount would lower the lake by an inch, but that it would be replenished naturally within 10 hours. Environmentalists fight against the plan, and it is abandoned—though a range of export controversies follow.

About 7,000 people suffer from vomiting, diarrhea and high fever when the parasite cryptosporidium seeps into their drinking water in North Battleford, Saskatchewan.

Water Canada’s first incarnation, *Water Treatment Dealer* magazine, launches. The debut issue includes a feature on Walkerton and North Battleford.

The Canadian Water Network/Réseau canadien de l’eau (CWN/RCE) is established through the Government of Canada’s Networks of Centres of Excellence (NCE) Program. CWN’s mission is to establish and nurture national partnerships and communities of practice that brings together multidisciplinary research excellence and water managers providing innovation and highly qualified personnel to address complex high-priority water resource management issues.

## 2002

The Report of the Walkerton Inquiry, Part One: The Events of May 2000 and Related Issues, led by Justice Dennis O’Connor, examines the events in Walkerton and the causes of the tragedy. It contains 28 recommendations, including a point that the Ministry of Environment (MOE) should require continuous chlorine and turbidity monitors for all groundwater sources that are under the direct influence of surface water or that service municipal populations greater than a size prescribed by the MOE.

The Agreement Respecting a New Relationship Between the Cree Nation and the Government of Quebec (or La Paix des Braves) is signed. The 50-year agreement allows for joint jurisdiction between the Quebec government and Cree Nation in the seven municipalities of James Bay and surrounding territories. In exchange, the Cree consented to hydroelectric development of the Eastmain and Rupert Rivers by Hydro-Québec.

O’Connor’s second volume is released. Part Two: A Strategy for Safe Drinking Water contains 93 recommendations.

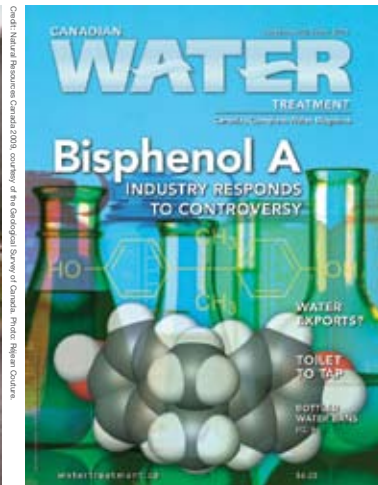
The Canadian Council of Ministers of the Environment releases *From Source to Tap: Guidance on the Multi-Barrier Approach to Safe Drinking Water*.

A drought hits Saskatchewan, Manitoba and Alberta in the summer, searing crops and leaving livestock without feed or water. In August, Natural Resources Canada warns that global warming presents a long-term threat to Canada’s water supply. The drought costs the Canadian economy nearly \$6 billion.

Changes to the federal *International Boundary Waters Treaty Act* come into force, prohibiting bulk water exports from all Canadian water basins. The federal strategy also announces that there will be a joint reference, with the United States, to the International Joint Commission to study the effects of water consumption, diversion and removal from boundary waters, with initial emphasis on the Great Lakes.

Quebec implements its provincial Water Policy.

Ontario’s *Safe Drinking Water Act, 2002* is introduced.



Josephine Mandamin, leader of the Mother Earth Water Walk.

Craig Road washed out by Pouliot Creek, Tingwick, Quebec.

Canadian Water Treatment delves into the debate on bisphenol A.

**2003**

Manitoba releases its Water Strategy document.

Anishinabe woman **Josephine Mandamin** begins her walk around the Great Lakes to raise awareness for this treasured natural resource. Every spring since, Mandamin and a small band of followers walk around one of the lakes. In 2008, Mandamin appears in director **Kevin McMahon's** documentary, *Waterlife*, about the Great Lakes.

The province of Saskatchewan and the city of North Battleford agree to pay \$3.2 million to 700 people who became ill in 2001 after drinking tap water contaminated with cryptosporidium.

Intense rainfalls in southwest Quebec trigger flash floods in the Bois Francs Region, Quebec. The most damaging flooding occurs within a 20-kilometre radius in an area south of Victoriaville. The flooding forces more than 500 residents to abandon their homes temporarily and results in the evacuation of 150 people. Fortunately, no deaths or injuries are reported.

Alberta introduces its Water for Life Strategy. Water for Life: A Renewal is released five years later, in November 2008.

**2004**

A North Dakota judge rejects Manitoba's legal challenge to appeal a permit issued by North Dakota's Department of Health

that will allow construction of the water outlet to drain water from Devils Lake into the Red River system. Manitoba also files a 60-day notice of intent to launch another type of legal action under the federal U.S. *Clean Water Act*. Because Devils Lake contains no natural outlet (other than evaporation), it accumulates high levels of pollutants, such as sulphates, arsenic and phosphorus. Despite the province's claims that it may cause great damage to the province's ecosystem, the outlet opens in 2005, closes due to high sulphate levels, and reopens in 2007.

**2005**

Water Treatment Dealer is renamed Canadian Water Treatment to reflect the magazine's national focus.

A Kashechewan First Nation *E. coli* outbreak leads to the relocation of one thousand people from the reserve. Back in 2003, a report by the Ontario Clean Water Agency describes the situation in Kashechewan as "a Walkerton-in-waiting."

The Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement is signed by the Great Lakes Governors and Premiers, and the Great Lakes-St. Lawrence River Basin Water Resources Compact is endorsed by the Great Lakes Governors. Once enacted, the signed agreements begin to provide the necessary framework to help the states and provinces to protect the Great Lakes Basin.

**2006**

Oakville, Ontario-based water treatment technology firm Zenon Environmental Inc. is acquired by GE Water & Process Technologies in a deal worth about \$760 million. Investors respond by sending shares of Zenon up by more than 53 per cent. "With the synergies we create, we will have the potential to grow revenue in the municipal water segment at more than 30 per cent for the next several years," GE vice chairman **David Calhoun** says in a release.

In a Canadian first, the people of the Nisichawayasihk Cree Nation (NCN) vote in favour of partnering with Manitoba Hydro to build the \$1-billion, 200-megawatt Wuskwatim generating station in northern Manitoba. The NCN will invest \$28 million—plus a \$56-million loan from Manitoba Hydro—in return for a 33 per cent share in the completed dam, to be built on the Burntwood River in the band's resource-management area.

The United Church of Canada (UCC) advises its 590,000 members to stop buying bottled water, expressing concern at a number of levels around the issue of water consumption. "The main thrust is our concern about the privatization of water," UCC social policy coordinator Richard Chambers tells the Canadian Press. "UCC is committed to supporting municipal water sources wherever they exist in the country, and strengthening those."



Wisconsin Governor Jim Doyle, Ohio Governor Bob Taft and Ontario Premier Dalton McGuinty sign the Annex Implementing Agreements on December 13, 2005. In the back row: Representatives from Illinois, Indiana, Michigan, Minnesota, New York, Pennsylvania and Quebec.



Construction on the Wuskawatim generating station dam.



Launching the ONE DROP Foundation. (L-R) Jeremy Hobbs, Oxfam International; Gordon M. Nixon, Royal Bank of Canada; Prince Albert II de Monaco; Guy Laliberté.

## 2007

The Gordon Water Group releases *Changing the Flow: A Blueprint for Federal Action on Freshwater*. The report presents twenty-five recommended actions built around seven priority areas—steps that would reignite the federal government's role in managing water and help guide the nation to a sustainable freshwater future. The Forum for Leadership on Water (FLOW), having evolved from the Gordon Water Group, continues to work with all levels of government and civil society to protect critical freshwater resources.

The Speech from the Throne promises to implement a new national water strategy. The Commissioner of the Environment and Sustainable Development has since noted that there has been limited follow-through on this commitment.

RBC launches the \$50-million Blue Water Project. The project aims to reduce the intensity of RBC's water footprint; provide education and awareness programs to promote sustainable water use; provide financial services to innovative water technology companies and water-related services; and foster collaborations. The ONE DROP Foundation receives RBC's first grant: \$10 million over 10 years.

The Canadian Council of Public Private Partnerships names the District of Sooke and EPCOR as recipients of the C.W. Chuck Wills Award for the 2007 National Awards for Innovation and Excellence in Public-Private Partnerships. The 8,700

residents of Sooke, British Columbia, faced a \$24-million capital and operating expenditure to create the community's first sewer system and wastewater treatment plant using traditional tendering methods. An EPCOR-led project team proposed a \$17-million solution.

## 2008

British Columbia introduces Living Water Smart, a province-wide plan that lays out the vision and steps needed to protect rivers, lakes, streams and watersheds. Key actions include setting ambitious water efficiency and conservation targets, establishing flow requirements in legislation for ecosystems and species, establishing a maximum 40-year term for water licenses in areas of scarcity, regulating large groundwater withdrawals, and looking to safeguard and learn from First Nations' traditional and cultural water uses.

CBC launches its season-long *Watershed* series, hosted by *The Current's* **Anna Maria Tremonti**. The series features radio documentaries that explore the many ways that water flows through everything we do, and "how a simple twist of the tap influences global politics, international economics and the ecology of the entire planet."

Canadian activist Maude Barlow is appointed as the United Nations' first senior adviser on water issues, a role she hopes to use to establish water as a human right and to convince Canada to "change its shameful position" on the issue.

United States President **George W. Bush** signs the Great Lakes-St. Lawrence River Basin Water Resources Compact, following the approval of the compact by the U. S. Congress on September 23. The good-faith commitments of an agreement signed in 2005 by Ontario, Quebec and the eight Great Lakes states will become law on December 8, 2008.

The Governor-General's Speech from the Throne promises to introduce legislation to ban bulk water removals.

## 2009

Guelph, Ontario-based Trojan Technologies changes their residential water treatment business unit name to VIQUA™ – a Trojan Technologies Company.

After spending more than \$30 million trying to find a new water source, the feds commit to nearly \$13.5 million to complete the extension of Shannon, Quebec's municipal network and water supply. Years before, the community is stricken by water contaminated by trichloroethylene—an odourless, tasteless solvent that is proven to cause cancer. About 600 residents sign on to a class-action lawsuit over tainted water against the federal government and engineering company SNC-Lavalin.

Manitoba's spring flood marks the second worst on record since 1826. The recently completed Red River Floodway is not initially opened due to ice jams, and



A satellite view of the floods on Red River.



The St. Lawrence Seaway celebrates 50 years of operation.



Guy Laliberté goofs around at space training.

several towns and rural municipalities declare a state of emergency. Once the jams clear, the Floodway is opened. On April 16, the Red River crests in Winnipeg at 6.9 metres before slowly going down. If Winnipeg did not have any flood protection, it is predicted that the city would be under 9.23 metres of water.

After several years of public scrutiny and public consultation and committees, Victoria's Capital Regional District (CRD) chooses Stantec Consulting Ltd. to guide the development of the region's planned \$1.2-billion sewage treatment system. The job is to take the project through the design, procurement, construction and then post-construction phases, says **Dwayne Kalynchuk**, CRD's manager of environmental services. The contract is estimated to last eight years, with Stantec's fee representing about one per cent of the project's total costs.

Boundary Waters Week celebrates the 100th anniversary of the Boundary Waters Treaty with a series of events in Niagara Falls. At the anniversary celebrations, **Lawrence Cannon**, Canadian Minister of Foreign Affairs, and U.S. Secretary of State **Hillary Clinton** make a joint announcement expressing their intent to modernize the Great Lakes Water Quality Agreement to address current and emerging challenges in the Great Lakes and the portion of the St. Lawrence River that straddles the Canada-U.S. border. FLOW uses the occasion to ask the federal government to invest in Canadian water security, while Great Lakes United, a cross-border group of 38 leading Great

Lakes and St. Lawrence River experts, urges the U.S. and Canadian governments to renegotiate the "outdated" GLWQA.

Celebrations mark the fiftieth anniversary of the St. Lawrence Seaway. The waterway was officially inaugurated in 1959 by Her Majesty **Queen Elizabeth II** and U.S. President **Dwight Eisenhower**. Over its lifespan, the Seaway has facilitated the shipment of more than 2.3 billion tonnes of cargo, valued in excess of \$350 billion, but its construction required the flooding of 10 villages in Ontario. The Seaway's creation also leads to the introduction of foreign species, including the sea lamprey and the zebra mussel, into the Great Lakes Basin.

To great criticism, the Montreal Economic Institute releases an "economic note" authored by **F. Pierre Gingras** called Northern Waters, a realistic, sustainable and profitable plan to exploit Quebec's "blue gold." The report claims that seasonal storage of floodwaters from three unexploited rivers that flow into James Bay and the channelling of this water to the Ottawa River would provide for the generation of 14 terawatt-hours of hydroelectric energy per year, producing annual revenues of nearly \$2 billion.

After nearly a decade of protesting, nearby citizens celebrate as Simcoe County councillors vote 26-3 in favour of discontinuing construction and development of Dump Site 41, located in Tiny Township, Ontario. The Site sits above the Alliston Aquifer, which, according to geochemist and professor

**Dr. William Shotyk**, contains some of the world's cleanest water. "How many people on Earth have the tremendous fortune of water resources of this quality, literally bubbling out of the ground around them?" says Shotyk.

**Guy Laliberté**, founder of Cirque du Soleil, makes headlines as he launches into space for his Social Poetic Mission for water awareness. The trip costs him \$35 million—in his November/December 2009 editorial, John Nicholson wonders how that kind of money could be better spent.

Vancouver-based Ostara Nutrient Recovery Technologies, a company specializing in recovery and recycling of nutrients from water, makes Corporate Knights' third annual Next 10 Emerging Cleantech Leaders list. The company also wins a spot on The Guardian's Global Cleantech 100.

## 2010

Canadian Water Treatment becomes Water Canada. The newly redesigned and named magazine completes the evolution from a residential/commercial water purification and conditioning publication to an integrated water knowledge resource that includes all aspects of water policy, technology and management in Canada. **wc**

Compiled by Kerry Freek, Matthew Evenden of the Canadian Water History Project/Le Project sur l'histoire de l'eau au Canada, and Nancy Goucher of FLOW.