

FACT SHEET: DRINKING WATER

There is huge variation in the management of drinking water across Canada, and currently there is no federal legislation on drinking water standards. The provinces and territories are responsible for the provision of safe drinking water, though the actual management of drinking water often falls to the municipal governments.

The Federal Role

The federal government plays a mainly advisory role on drinking water.

- The *Canadian Drinking Water Guidelines* (1968, 1972, 1978, 1986, 1996, 2006) are developed by the Federal-Provincial-Territorial Committee on Drinking Water and administered by Health Canada. These non-binding, non-enforceable guidelines are reviewed bi-annually by the Committee. Unfortunately there is a "significant backlog" (approximately 10 years) in updating the guidelines.
- Alberta and Nova Scotia are the only regions to have fully adopted the national guidelines in binding legislation.

Water Treatment: a Multi-barrier Approach

The multi-barrier approach (MBA) to drinking water is "an integrated system of procedures, processes and tools that collectively prevent or reduce the contamination of drinking water from source to tap in order to reduce risks to public health." (Canadian Council of Ministers of the Environment, <u>http://www.ccme.ca/assets/pdf/mba_eng.pdf</u>). The main components of a multi-barrier approach include: source water protection, drinking water treatment (including disinfection & filtration), and drinking water distribution (for more information visit www.ccme.ca/sourcetotap/mbc.html.)

- Less than half of Canada's jurisdictions have filtration policies, in contrast to the US Safe Drinking Water Act which has required filtration of surface water since 1989.
- Filtration to remove contaminants and microorganisms is required in Ontario, Alberta, Saskatchewan, Nova Scotia, and Quebec.

The characteristics of the Multi-barrier approach used vary from the provincial/territorial level down to the individual communities. The following summaries address key provincial legislation, treatment and testing requirements, reporting requirements to consumers, and key government bodies.

British Columbia

- Drinking Water Protection Act (2001), Drinking Water Protection Regulation (2003)
- Disinfection required, monitored for 3 bacteriological contaminants and additional testing at the discretion of a certified Drinking Water Officer.
- Water purveyors required to report annually to province, though not on quality. No reporting to consumers required.
- Ministry of Health (administers DWPA through local health authorities) & Ministry of Environment (source water protection)

Source: Carey Hill, Kathryn Furlong, Karen Bakker, and Alice Cohen. "Appendix 1: A Survey of Water Governance Legislation and Policies in the Provinces and Territories" in *Eau Canada*, Ed. Karen Bakker, UBC Press: 2007.

Alberta

- Water Act (2000)
- Disinfection required for both surface and groundwater sources; filtration required for surface and GUDI (Groundwater Under Direct Influence of surface water) supplies. Uses *Canadian Drinking Water Guidelines* for testing parameters (with exception of a higher limit for naturally occurring fluoride). Exceeds guidelines for turbidity.
- Municipalities report on monthly and annual basis to Alberta Environment, reports are available to public.

Saskatchewan

- Water Regulations (2002)
- Disinfection of groundwater based supplies; filtration required for surface, mixed or GUDI supplies. Monitoring for 65 contaminants (3 microbiological, turbidity and 61 chemical, radiological and other parameters).
- Annual water quality notices delivered to consumers.
- Saskatchewan Watershed Authority is a Crown corporation that reports to the Minister of Environment, there is also a steering committee of deputy ministers for the Safe Drinking Water Strategy.

Manitoba

- Drinking Water Safety Act (2002)
- Disinfection required. No fixed contaminant monitoring requirements, rather to approval of Medical Health Officer.
- No reporting to consumers required.
- Ministry of Water Stewardship, the only ministry in Canada entirely devoted to water.

Ontario

- Ontario Clean Water Act (2006)
- Disinfection and filtration required. Drinking water quality standards for 161 parameters, monitoring of 73 contaminants (3 microbiological, 70 chemical, no radiological).
- Reports must be made available free of charge upon request.
- Ministry of Environment, with help of Conservation Authorities

Quebec

- Environment Quality Act (2005)
- Disinfection required, and filtration when turbidity exceeds 1 NTU. Testing for 77 contaminants (4 microbiological, 17 inorganic, 41 organic, turbidity & PH).
- No reporting to consumers required.
- An interministerial committee implements the *Quebec Water Policy* (2002)

Newfoundland & Labrador

- Water Resources Act (2003, 2004, 2005)
- Disinfection required, monitoring for 28 contaminants (3 microbiological, 25 physical & chemical). Only province to conduct all water quality monitoring itself.
- Water purveyors required to report annual to consumers.
- Committee of deputy ministers and a technical working group coordinates among four ministries

Nova Scotia

• Water and Wastewater Facilities and Public Drinking Water Supplies Regulations (2005)

Source: Carey Hill, Kathryn Furlong, Karen Bakker, and Alice Cohen. "Appendix 1: A Survey of Water Governance Legislation and Policies in the Provinces and Territories" in *Eau Canada*, Ed. Karen Bakker, UBC Press: 2007.

- Disinfection and filtration required. Monitors according to *Guidelines for Canadian Drinking Water Quality*.
- No reporting to consumers required.
- Department of the Environment and Labour

New Brunswick

- Clean Water Act (1989, 1990, 1994, 2000, 2001, 2002)
- No set monitoring requirements, sampling strategy at the discretion of the Minister of Health. Policy under development.
- No reporting to consumers required.

Prince Edward Island

- Drinking Water and Wastewater Facility Operating Regulations (2004)
- Disinfection not required, but practiced in all municipalities. Filtration unnecessary because all of PEI's drinking water is from groundwater sources. Monitoring for 50 contaminants (20 organic, 14 inorganic, and 16 other).
- No reporting to consumers required.

Yukon

- Yukon Waters Act and Regulation (2003)
- Proposed *Bulk Delivery of Drinking Water Regulation* requires disinfection and filtration. It defines "safe drinking water" according to the health criteria in the federal Guidelines, with proposed monitoring for 32 contaminants (30 chemical and physical, 2 microbiological).
- No reporting to consumers required.

North West Territories

- Water Resources Agreements Act (1988, 1995)
- Disinfection required. Monitoring of 32 contaminants (1 bacteriological 31 physical and chemical).
- No reporting to consumers required.

Nunavut

- Nunavut Waters and Nunavut Surface Rights Tribunal Act (2002)
- Disinfection required. Monitoring of 24 contaminants (1 bacteriological, 23 physical and chemical).
- No reporting to consumers required.