

Taking Action

We can consume less bottled water and drink more tap water...

As an Individual and at Home

- Get a reusable water bottle that you can fill with tap water and carry with you. Bottles made from stainless steel, #2, #4 or #5 plastic or aluminium bottles are recommended as good environmental choices by Toxic Free Canada (2009).
- Fill a glass pitcher or filter-style pitcher with tap water and place it in your home fridge. Most chlorine used to treat the water will dissipate within a few hours.

At School

- Use the drinking water fountain if one is available. If there isn't a drinking water fountain at your school, request that one be installed.
- Carry a reusable water bottle that you can fill from the drinking fountain or kitchen / bathroom tap.

At Work

- Use tap water whenever it is available - get a reusable water bottle that you can fill from the tap and keep at your work area. Place a pitcher of tap water in the office fridge if you prefer.
- Avoid using water from on-site office water coolers - this is bottled water, just in larger bottles.
- If you are organizing catered work meetings, specify that you do not wish to purchase bottled water. Instead, provide water pitchers with tap water and mugs.

Sports and Special Events

- Fill large water coolers or expandable water containers with tap water. People can use these to fill their reusable water bottles, or provide washable, reusable mugs that people can use.
- If you are having an event catered, specify to the caterer that you do not wish to purchase bottled water.

In Your Community

- Contact your local community government, and ask how your community is implementing the NWT Association of Communities resolution to phase out the sale and use of bottled water.
- Visit the water body where your community gets its drinking water and learn more about the local water treatment system.

Turn on the Tap at Public Events!

- In Yellowknife, Ecology North rents or lends water pitchers and reusable mugs that can be used to make tap water accessible at public events and meetings.
- Is there an organization in your community that can provide a similar service? Please contact the Ecology North office if you would like help to develop a similar mug loaning / rental service.

This information sheet was produced by Ecology North, with funding support from GNWT - Health and Social Services.

Ecology North is a NWT-based charitable, non-profit organization formed in 1971 to support sound environmental decision-making on an individual, community and regional level.

Current priorities for Ecology North include climate change, sustainable living and public education.

For more information, please contact Ecology North:
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Behind the bottle

There's more than you might think to a bottle of water that you drink!

Water. It is the source of life.

It's the principal chemical component in our bodies, and it makes up 60% of our body weight! It is essential for us to drink clean, safe water to remain healthy. Water is also the lifeblood that flows through the diverse landscapes we call home in the NWT.

In our communities, we are fortunate to have access to clean, safe drinking water – from the tap.

Despite this, over the past decade NWT residents, along with other Canadians, have greatly increased the amount of bottled water we consume. In 2006, Canadians drank on average 66 litres of bottled water each – more than twice the amount of bottled water we consumed eight years earlier¹. This tide of increasing bottled water consumption is starting to change as consumers learn about the impacts of drinking bottled water and realize the many benefits of drinking tap water.

How does drinking bottled water affect our environment, communities, health and cost of living?

What are some alternatives to drinking bottled water?

How is tap water treated and tested in the NWT?



www.ecologynorth.ca

¹ Agriculture and Agri-Food Canada. 2009. The Canadian Bottled Water Industry. Available on-line at: www.agr.gc.ca

What's in the Bottle?



HEALTH CONCERNS

Single-use water bottles in the sizes 300 mL to 1.5 litres are made from PET (polyethylene terephthalate) plastic that uses petroleum as a feedstock. PET plastic has been found to release chemical contaminants into the water in water bottles, including endocrine-disrupting chemicals² and the metal antimony³.

The large 18 litre water jugs used in office coolers are made from polycarbonate, which contains bisphenol-A (BPA), an endocrine-disrupting chemical which is of concern because of its potential impact on reproduction and child development⁴.

Testing of bottled water is less stringent than for tap water. Bottled water is tested less frequently and there is less enforcement of testing requirements.

Did you know?

The two most popular brands of bottled water in Canada, Dasani (Coca-Cola Company) and Aquafina (Pepsi Cola Company) are made from municipal tap water.

These companies make a huge profit by withdrawing tap water from the municipal system, filtering it, and then selling it to back to residents at a price hundreds of times more expensive than tap water.

BOTTLED WATER CREATES WASTE

NWT residents recycled nearly 85% of their single-use beverage containers in 2008-2009⁷. Although this is one of the higher beverage container recycling rates in Canada, it still means that 15% of single-use water bottles end up in local landfills.

Even when water bottles are recycled, they usually end up as carpets, fabrics or other materials that don't get recycled again – instead of as new bottles.

A COSTLY BEVERAGE

A typical price for a 1 litre bottle of water in the NWT is \$2.00 – \$2.75. This is more expensive than gasoline or diesel fuel. Tap water in the NWT typically costs less than \$0.01 per litre.

A WASTE OF ENERGY AND WATER

It takes 125 to 150 mL of oil to manufacture a 500 mL PET plastic bottle of water, fill the bottle with water and transport it to the NWT from a southern Canadian source. To get a visual idea of how much oil this is, it would fill the water bottle 25 to 30% full!⁵ The amount of energy required increases further if the water comes from overseas sources such as France or Fiji.

It takes 3 L of water to produce a 1-L plastic bottle of water: 2 L of water are needed to produce the bottle, cap and packaging and for water processing + 1 L of water you drink.⁶

Did you know?

A number of communities in southern Ontario have suffered water shortages and groundwater flow reversals because water bottling companies have extracted millions of litres of water from local watersheds.

NWT RESIDENTS TAKE ACTION TO TURN ON THE TAP!

Did you know?

On June 1, 2009, the NWT Legislative Assembly 'dropped the pop and ditched disposable bottles'. The Legislative Assembly will not sell, purchase or distribute bottled water or pop, including at catered meetings and public functions.

Also in 2009, the NWT Association of Communities passed a resolution which urges NWT municipalities to phase out the sale and purchase of bottled water at their own facilities where appropriate and where potable water is available.

² Wagner, M. and J. Oehlmann. 2009. Endocrine-disruptors in bottled mineral water: total estrogenic burden and migration from plastic bottles. *Environmental Science and Pollution Research* 16: 278-286.

³ Shotyk, W., M. Krachler and B. Chen. 2006. Contamination of Canadian and European bottled waters with antimony from PET containers. *Journal of Environmental Monitoring* 8: 288-292.

⁴ Kuehn, B.M. 2010. Bisphenol A update. *Journal of the American Medical Association* 303(8): 722.

⁵ Calculations derived from Gleick, P.H. and H.S. Cooley. 2009. Energy implications of bottled water. *Environmental Research Letters* 4: 1-6.

⁶ Pacific Institute. 2008. Bottled water and energy: A Pacific Institute factsheet. Available on-line at: www.pacinst.org/topics/water_and_sustainability/bottled_water/bottled_water_and_energy.html.

⁷ GNWT - Environment and Natural Resources. 2010. Beverage Container Program Annual Report.

NWT Drinking Water – Safe. Inexpensive. Local.

Safe...

To make water safe for drinking, each NWT community has a water treatment plant that is designed for local conditions and is managed by a water treatment plant operator.

Tap water in each NWT community is rigorously tested according to Guidelines for Canadian Drinking Water Quality to make sure that it is safe for drinking.

Testing requirements for tap water are more stringent, frequent

and strongly enforced than testing requirements for bottled water.

Want to learn more? Check out the on-line NWT Drinking Water Quality Database that includes:

- Test results for each NWT community's drinking water
- What is drinking water tested for and why?
- What kind of water treatment plant does my community have?

Inexpensive...

• Tap water in NWT communities costs less than 1 cent per litre. Bottled water costs hundreds of times more than this.

• The money we pay for tap water goes towards the costs of drinking water treatment, transportation and wastewater treatment and management.

Local...

NWT communities draw water for drinking from a source that is close to the community. Some communities get their water from a nearby river or lake, and a few use water from deep in the ground.

Visit the NWT Drinking Water Quality Database and find your water source at: www.maca.gov.nt.ca/operations/water/homepage.asp

Recently, the GNWT made a map of each community's watershed, which shows the land and water around each community. These maps help community members to see where the source for drinking water is in relation to other land and water uses.

Find your community's watershed map by visiting the following website: http://maps.gnwtgeomatics.nt.ca/portal/published_maps.jsp