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Item No. 11.1.2

**Halifax Regional Council
September 15, 2009**

TO: Mayor Kelly and Members of Halifax Regional Council

A handwritten signature in cursive script, appearing to read "Dan English".

SUBMITTED BY:

Dan English, Chief Administrative Officer

A handwritten signature in cursive script, appearing to read "Wayne Anstey".

Wayne Anstey, Deputy Chief Administrative Officer - Operations

DATE: August 6, 2009

SUBJECT: Bottled Water

ORIGIN

March 31, 2009: Regional Council Motion 11.1 Bottled Water (Attachment 1)

RECOMMENDATION

It is recommended that:

1. Whereas testing results have deemed that water in City Hall meets the Canadian Drinking Water Guidelines, that Halifax Regional Municipality improve the drinking water sources, including the public drinking fountain, at City Hall to a standard of suitable pressure, temperature, hygiene and aesthetics, and phase out the purchase and distribution of bottled water at this location.
2. Regional Council endorse the HRM Corporate Catering and Meeting guidelines document (Attachment 2).
3. Regional Council endorse the outlined staff action plan.
4. Regional Council defer deliberation on restrictions of the sale of bottled water from HRM Facility vending machines, and the use of office water coolers, until completion of the staff action plan.

BACKGROUND

Following the Motion of Council, Staff has been working on compiling the information required to present to council to enable an informed deliberation surrounding the issue of bottled water consumption and answer the specific questions posed in the March 31st Motion (attached).

In March 2009, The Federation of Canadian Municipalities followed an emerging trend and passed a resolution (Attachment 4) encouraging municipalities to phase out the sale and purchase of bottled water at their own facilities where appropriate and where potable water is available.

A large number of North American municipalities, universities, schools, and other organizations have investigated, deliberated, and considered a similar ban on bottled water or renewed commitment to municipal tap water.

DISCUSSION

Upon approval of the March 31st Motion, staff has engaged with, and sought information from, a large number of external stakeholders, including: Ecology Action Centre, Council for Canadians, Polaris Institute, Nestle, Dalhousie University, other Municipalities, and Nova Scotia Department of Environment. Internal engagement has included staff from Solid Waste, Halifax Water, Procurement, Sustainable Environment Management Office (SEMO), Facility Operations, and Municipal Operations.

Staff has learned that in addition to the Solid Waste Management elements discussed in the update from the Solid Waste Advisory Committee, the deliberation on bottled water touches a large number of other elements, including: health, safety, accessibility, climate change, social, environmental, economic, operational feasibility, and quality of life. Both sides of the Bottled Water deliberation have positions, facts, arguments and counter-arguments (Attachment 5). Staff provides Regional Council with a balanced report (Attachment 6) presenting the elements as understood and investigated in the attachments.

This report specifically addresses the following elements of the Motion:

11.1.1 Continuing to phase out the sale and distribution of bottled water from City Hall

See Recommendation 1.

11.1.2 Phasing out the sale and distribution of bottled water at all HRM owned and operated facilities, including vending machines, where there is appropriate water safety and availability.

See Recommendation 3 and 4.

11.1.3 Increasing the availability of tap water in HRM facilities, where required.

See Recommendation 3.

11.1.4 Committing to provide water dispensing units at HRM organized and sponsored special events.

For the World Canoe Championships, Halifax Water, working with the event organizer purchased fourteen semi-permanent water dispensing units (Attachment 7). The units are valued at \$1,000 each and require a water connection, plus foundation with drainage. Halifax Regional Municipality spent \$28,000 to mobilize and de-mobilize the units (approximately \$2,000 per unit) supplied for the event. The units and installation were well designed and well used. Two units were donated to Canoe-Kayak Canada for future events, remaining units are available for usage by HRM or Halifax Water at future events.

11.1.5 Launching a public awareness campaign to promote the consumption of public water as a safe, high quality and convenient alternative to bottled water.

Halifax Water has a variety of information and promotion campaigns directed at enhancing the awareness of the safety and quality of the water provided to the public. These efforts have included participation in Naturally Green Newsletter inserts in the newspaper, television ads, the recently completed H2O Bottled Water Program which was an awareness campaign to help HRM residents better understand the benefits of our tap water. Awareness and promotional campaigns continue with Halifax Water, and information on safety and quality can be found at www.halifax.ca/hrwc.

11.1.6 Clarify whether tap water at City Hall is safe to drink.

City Hall water is safe to drink. Staff engaged a contractor to perform a variety of tests on City Hall water. Water samples meet Canadian Drinking Water Quality Guidelines. (Attachment 8)

11.1.7 Have a phase-in process due to sponsorship programs at special events that may be affected.

The staff action plan recommended addresses this element of the motion.

11.1.8 List of all HRM owned and operated facilities that would be affected and; provide a list of those facilities that would have access to potable water.

Halifax Regional Municipality owns and operates over 250 facilities across HRM. In order to summarize the facilities affected, groupings can be considered as follows (a comprehensive list of the urban facilities is attached in Attachment 9):

- Administrative Facilities (City Hall, Duke Tower, Alderney Gate)
- Operational Facilities (Turner Drive, Ilesley Ave, MacKintosh Depot)
- Community Facilities (Arenas, Recreation Centres)
- Community Facilities operated under Management Agreement
- Transit Facilities (Ferry Terminals)
- Fire and Police Departments
- Outside Facilities (Parks, Sportsfields)

Plus, with HRM having facilities both serviced by individual wells and Halifax Water, the differentiation for this deliberation must be made between urban and rural facilities.

A comprehensive assessment of the accessibility of drinking fountains at HRM facilities and completed tests is required to identify which facilities have access to clean drinking water.

11.1.9 Provide short term steps that could be taken at little or no cost

- Encouragement of staff usage of canteens
- Endorsement of HRM Meeting and Catering Guidelines (See Recommendation 2)
- Continued Education and Information sharing

A good example of a recent initiative is with respect to TPW outside workers (specifically working in Municipal Operations), to whom we supply bottled water for hydration purposes. One of the regional councillors purchased stainless water bottles for one small group of workers as an example, which has seen them take the responsibility to clean their containers and get their water from taps or fountains that are available at their specific workplace. Following this successful initiative, the Municipal Operations Superintendent and Supervisors arranged for a Price Agreement for small stainless steel water bottles for their outside staff to use themselves in lieu of, or supplementary to, bottled water. Further, following conversation with other HRM departments, the same stainless steel bottles will be used as a substitute for employee recognition and promotional materials to further promote the usage of water canteens in lieu of water bottles. While the original source of this initiative, the outside workers, will continue to need bottled water to ensure that staff are hydrated, particularly on hot days, this initiative is supplementing that volume where possible and has extended it's reach far beyond the initial scope of the initial purchase.

HRM staff are very cognisant of direction from Regional Council on elements of sustainability and have a heightened awareness around environmental issues. Should a member of the public visit an HRM office, it is quite noticeable that a very high percentage of HRM staff use travel mugs and water canteens / bottles in lieu of disposable coffee cups and water bottles. SEMO Staff, and members of the Sustainable Transition Team, can continue to inform their colleagues about environmental and sustainable initiatives through internal communications such as the HRM Staff Newsletter and IntraNet.

In 2008, Procurement Staff, in conjunction with Solid Waste Resources Staff and SEMO, created a proposed Meeting and Catering Guideline. This Guideline is an adoption of best practices identified. The Guideline serves as a tool to help HRM staff organize environmentally progressive meetings when required. Additionally, it served as the basis for the Catering Expression of Interest which qualified a number of companies to provide any required catering for HRM meetings. The Guideline referenced in the Expression of Interest enabled HRM to clarify expectations with Catering Vendors and easily enhance our environmental impact related.

11.1.10 What are the legalities in regard to HRM's ability to enforce reduction of bottled water usage at its facilities?

With regards to facilities that HRM owns and operates, a proposed ban on the sale of bottled water in those facilities would be simply a matter of choice of what the municipality chooses to offer or not offer either in vending machines, canteens, or provision of water coolers and drinking water fountains. The municipality would not be banning citizens or staff from bringing their own bottled water to the facility. There are no legalities preventing implementation with HRM owned and operated facilities.

With regards to facilities operated under a management agreement, such as a sports facility, direction on a ban on bottled water from vending machines would need to be incorporated at the creation of new agreements or at time of renewal. Incorporation of new direction on a ban on the sale of bottled water at facilities operated under management agreement would happen over time as the opportunity arises (related to the expiration or creation of agreements).

11.1.11 Possibility of providing better recycling opportunities at existing facilities and sports fields to reduce the bottles going to the landfill.

Solid Waste Resources works collaboratively with Procurement Services, their Facility and Municipal Operations counter parts, and Civic Events Co-ordinators to enhance the standard for waste management at events and at sports fields and facilities.

Specific examples include:

- Following identification of an opportunity for improvement following the summer concerts at the Commons, Staff are drafting a standard for Waste Management at HRM Concert venues for presentation at the upcoming Special Events Committee meeting in September.
- Subsequent to compliance reports on HRM Arenas, Staff identified that the currently provided bins are not functioning as well as desired. In order to improve waste management practices at Arenas, staff are assessing options for more progressive and environment specific waste management bins (for example, more rugged and sturdy).
- Additionally, a portfolio of bins is being assessed and identified for HRM facilities - this includes the multi-cluster bin that is required for public areas. This assessment will culminate in a catalogue of waste management containers that will be available through Inventory and Stores to meet the various site specific requirements.

Through compliance and education efforts, recycling opportunities continually improve.

11.1.12 What are the risks that HRM could be exposed to by providing potable water to the public at its facilities? (Risk regard to contamination or bacteria)

In our rural facilities that are serviced by individual wells, there is indeed risk of contaminants such as arsenic or bacteria. That risk is present for the thousands of HRM citizens that have wells at their private residences. And, in the same manner that citizens do at home, HRM already undertakes a comprehensive well testing water quality programme that tests water to the Canadian Drinking Water Guidelines and addresses any abnormalities (or in which case access to water is prevented). HRM

already has a well testing programme in place for rural facilities - this report will not impact on that programme. The rural buildings are tested two or three times per year, according to Department of Labor Guidelines for Drilled and Dug wells, and all the systems are registered. This testing program costs HRM approximately \$50,000 per year.

In our facilities serviced by Halifax Regional Water Commission, we know that the quality of water going into the pipe at any of our facilities is safe and of high quality. They meet stringent and regular water testing regulations. More information on HRWC's water quality programme can be found at: <http://www.halifax.ca/hrwc/WaterQuality.html>. The challenge of water quality in our facilities serviced by HRWC is generally the internal infrastructure in the building. In order to mitigate that risk, HRM would need to test the water at our facilities and determine if there are any measures required prior to deeming the water meets Canadian Drinking Water Guidelines. A budgetary cost to perform an initial set of tests on all HRM facilities is \$50,000. This is funding that would need to be identified.

One piece of information is important surrounding lead pipes. Across North America lead is present in plumbing systems in lead pipes, solders and jointing material and brass and bronze plumbing fixtures. Lead was used for piping up until about 1950. Lead has been banned as a component in solders since 1990. The presence of lead in plumbing does not alone render the water non-potable. There are a variety of factors that influence the absorption of lead by water with the most significant being stagnation time (or time that the water is sitting and not moving) of the water in the plumbing. Flushing the lines early in the morning or after any other prolonged period of stagnation, by briefly running water from fixtures, is an effective and appropriate strategy for ensuring water consumed does not have harmful levels of lead.

An additional risk is the spreading of germs on drinking water fountains. Research tells us that the water that spouts from drinking fountains do not carry germs, the concern is contact with the fountain hardware. Many water fountains have bottle filling spigots which prevent the spread of germs from people touching their mouths to the fountains. It would be staff recommendation that fountains purchased and installed have a bottle filling gooseneck incorporated in them. As referenced in the Dalhousie Fountain Assessment Report (Attachment 3), having adequate pressure on the water to ensure that it does not flow over any exposed hardware surfaces prior to ingestion is indeed a hygienic concern. This report was created in February 2009 in support of the review on bottled water at Dalhousie University, and specifically addressing the adequacy of the inventory of water fountains at the university to enable visitors access to clean public tap water. For the sake of perspective, touching a water fountain handle or tap to fill a water bottle would have similar risk of germ presence as an ATM machine or public door or railing.

11.1.13 Provide statistics on facilities in other areas that have banned bottled water from vending machines. What were the alternatives offered to bottled water?

We've not yet been able to obtain statistics from other municipalities on comparative vending machine volumes. However, in calendar year 2008, with HRM's vending contract 17% of product sold was bottled water. Possible substitutes indicated would include flavoured water, ice teas, sport drinks or juices.

One point that is worth noting is that while Nestle is leading much of the effort to provide information contrary to a ban on bottled water, they are not an HRM Vending Machine supplier, nor do they have vending machine contracts anywhere in Canada. The vending machine suppliers in HRM are Coca Cola and Pepsi. During discussions with Nestle, they claimed that they do not feel that they are competing with Municipal Water or Tap Water, they are competing with Soft Drinks, Juices, Colas, etc - other bottled beverages.

Currently, Request for Proposal 08-361 for the Vending Machine Contract for HRM owned and operated facilities is in suspension. Procurement Services had a solicitation to market when the bottled water question arose. Regional Council direction on the staff recommendations will provide the clarity of corporate direction required to proceed with conclusion to that solicitation.

11.1.14 Consider possible partnership with the resource recovery board for recycling containers.

This aspect of the motion will be referred to staff for consideration.

11.1.15 Evaluate what the impact would be to the carbon footprint if alternatives to bottled water were implemented.

Generally, HRM facilities should have clean, potable drinking water and no water filtration or treatment would be required. In those cases, turning on the tap for a glass of water would have virtually no carbon footprint. In cases where a treatment or filtration system is installed, there would be an impact from the purchase, transportation and installation, however it would be much less than the carbon footprint from bottling and transporting and distributing packaged bottled water.

The carbon footprint from bottled water is caused by: the manufacture of PET (for the plastic bottles), the transport of water from an extraction source to a bottling facility, the bottling and packaging operations, the transport of the packaged water to the retail outlet, the transport of the packaged water to a persons home (or place of work), and the transport of the empty bottles to the waste management facilities and then transport to the facility for shredding and processing for re-use of the material.

Staff Action Plan

In order to ensure that HRM Staff or citizens have access to clean drinking water at all HRM facilities, SEMO is recommending that:

1. An assessment be performed at our facilities following the model established by the Dalhousie University Fountain Assessment Report criteria (see attachment 3).
2. To ensure that Occupational Health and Safety concerns are addressed, a comprehensive testing project be undertaken on HRM facilities serviced by Halifax Water to assess compliance with Canadian Drinking Water Guideline standards.
3. Recommendations be made by staff for solutions to any impediments in meeting the standards and criteria.

4. Staff to provide a work plan and budget to provide staff and public access to potable water to a standard of suitable pressure, temperature, hygiene, and aesthetics;
5. Staff to return to Regional Council with a proposed guideline or policy for the incorporation of public drinking fountains in future building construction or renovation projects.

Internal Policy / Guideline for Access to Drinking Fountain

Currently, there is regulatory building code requirements on the installation of drinking fountains. However, there is not a code or guideline for providing a minimum access to drinking fountains in facilities. Immediately upon commencement of the preparation of this report, Staff verified the plans for our most recent building project, the Canada Games Centre, which has six drinking fountains included. Staff will return to Council with a recommended guideline on the inclusion of drinking fountains in new building and major capital renewal projects.

BUDGET IMPLICATIONS

The deliberation on a potential bottled water ban and providing accessibility to water fountains or bottle refill stations has capital and operating costs associated. In addition, there would be an impact on vending machine revenue.

Project Cost for testing and assessment programme

In order to carry out the recommended testing and assessment programme, a one time expense of \$50,000 would be required. A funding request will be included within the 2010/11 operating budget and be allotted to Facility Management W200-6919 if approved.

Infrastructure Improvement Costs

Following the testing and assessment programme, there is potential requirements to install suitable drinking fountains and / or water filtration systems. The cost per installation of a Drinking Fountain / Bottle Filling Station is approximately \$2,000. The cost per installed filtration system can vary widely, ranging from \$500 to thousands of dollars. This Cost would be identified following the assessment and a budget presented for consideration.

Ongoing Operating Costs

After any new filtration or fountain equipment is installed, a maintenance component could arise (changing filters, fountain maintenance, etc).

Revenue

Banning the sale of bottled water from vending machines operated in HRM owned and operated facilities would reduce annual vending revenue by approximately \$20,000. Approximately 9600 bottles of water are sold annually from the Vending Machine contract. It is unclear whether a ban on bottled water would cause purchasers to either choose a non-bottled water alternative (Cola, Ice Tea, Sports Drink, etc) or seek a fountain.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

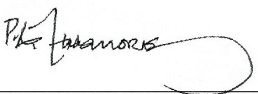
1. Regional Council may wish to accept Recommendations in full or in part;
2. Regional Council may wish to defer deliberation on Recommendations until a full assessment and testing program is complete

ATTACHMENTS


1. March 31, 2009 Motion 11.1
2. Corporate Guidelines: Greening our Meeting and Catering Requirements
3. Dalhousie Water Fountain Assessment Report
4. Federation of Canadian Municipalities Resolution
5. Information and Correspondence: Nestle, Council for Canadians, Polaris Institute
6. Elements to Consider: Bottled Water
7. Product Information Sheet and Photos for Water Filling Station
8. Water Test Reports
9. Comprehensive Facilities List
10. Health Canada: Bottled Water Safety

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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1. MOTIONS

11.1 Councillor Watts

Motion passed requesting a staff report that would encourage environmentally sustainable water choices by:

- 1. Continuing to phase out the sale and distribution of bottled water from City Hall.*
- 2. Phasing out the sale and distribution of bottled water at all HRM owned and operated facilities, including vending machines, where there is appropriate water safety and availability.*
- 3. Increasing the availability of tap water in HRM facilities, where required.*
- 4. Committing to provide water-dispensing units at HRM organized and sponsored special events.*
- 5. Launching a public awareness campaign to promote the consumption of public water as a safe, high quality and convenient alternative to bottled water.*
- 6. Clarify whether tap water in City Hall safe to drink.*
- 7. Have a phase in process due to sponsorship programs at special events that may be affected.*
- 8. Provide a list of all HRM owned and operated facilities that would be affected and; provide a list of those facilities that would have access to potable water.*
- 9. Provide short term steps that could be taken at little or no cost.*
- 10. What are the legalities in regard to HRM's ability to enforce reduction of bottled water usage at is facilities.*
- 11. Possibility of providing better recycling opportunities at existing facilities and sports fields to reduce the bottles going to the landfill.*
- 12. What are the risks that HRM could be exposed to by providing potable water to the public at its facilities (risks in regard to contamination/bacteria).*
- 13. Provide statistics on facilities in other areas that have banned bottled water from vending machines. What were the alternatives offered to bottled water?*
- 14. Consider possible partnership with the resource recovery board for recycling containers.*
- 15. Evaluate what the impact would be to the carbon footprint if alternatives to bottled water were implemented. (What would the comparative cost be to the update the infrastructure throughout HRM to ensure safe potable water was available and also impact of utilizing styrofoam cups instead of bottled water).*



Corporate Guidelines: Greening our Meeting and Catering Requirements

As a community leader in sustainability, Halifax Regional Municipality recognizes the opportunities that are available in making environmental and sustainable choices in organizing our corporate meeting, training, and catering requirements. With these opportunities in mind, staff is expected to follow these Guidelines for Greening our Meetings and Catering Requirements.

Greening our Meetings

Whether organizing a small departmental meeting, or a large event for community consultation, there are a number of elements to consider for the meeting planner:

Planning

- Maximize utilization of electronic notices, agenda distribution, publication, using www.halifax.ca, HRM Intranet, e-mail and other electronic resources as appropriate
- Provide phone or e-mail registration as opposed to facsimile or mail-in
- Minimize your distribution or catering requirements by knowing the number of participants
- If there are handouts or printing requirements, ensure it is double sided. And for larger event requirements, please utilize our Printing Centre – as they provide the most sustainable and minimal impact printing services in the organization
- Strive to deliver a paperless event. Offer attendees presentations, minutes, or agendas via e-mail or posting them on the internet or intranet
- Tell vendors or other organizers that you are organizing a green meeting and request they follow these guidelines

Location

- Organize the meeting in a location that minimizes travel requirements and has Metro Transit service availability
- When possible, select locations that offer the most sustainable facility (for example, several of HRM's newest building facilities are built to LEED standards and require minimal heating or power to support meetings)
- If using a Hotel either for the meeting or for out of town accommodations for attendees, consider using Green Leaf rated facilities

Meeting Room Set Up

- Ensure that the room offers the appropriate waste resource management receptacles, including compost bins, recycling bins for bottles and paper; And, notify attendees that they are available
- Request white boards be placed in the room in lieu of flip charts and request no odor markers
- Request that the facility does not set out pens and note pads





Corporate Guidelines: Greening our Meeting and Catering Requirements

Greening our Catering or Food and Beverage Requirements

- Where possible select caterers who offer local and / or organic foods
- Order fair trade coffee, tea and sugar
- Ask attendees to bring their own coffee mug or water canteen
- Juice and water should be provided in pitchers rather than single serving bottles
- Request cloth napkins or Ecologo certified paper napkins
- Use re-useable mugs, glasses, plates and cutlery. If not available, select compostable paper plates. Please note that despite claims, currently a paper cup is not available that is properly compostable
- Ask for glass or porcelain bowls for sugar, cream and food condiments rather than single serving packages
- Provide compost bins and recycling receptacles
- Again, know your requirements and do not over order food
- At the end of the meeting, invite guests to take any left over food / beverage home.
- If providing snacks or desert, select healthy and nutritious options such as fruits and vegetable trays
- No Styrofoam!

Note on bottled water: Halifax Regional Municipality has one of the highest quality water systems in the world managed by the Halifax Regional Water Commission. Many bottled water brands simply bottle water from their respective municipal supplies. Bottled water has a high environmental cost, including the resources required to make the plastic bottles, transportation emissions, and the waste from bottled water consumption.



**WATER FOUNTAIN ASSESSMENT REPORT:
Dalhousie University**



**GILLIAN PRITCHARD
FEBRUARY 2009**

**SUSTAINDAL
DSU SUSTAINABILITY OFFICE**

ABSTRACT

In response to negative environmental and social impacts of bottled water consumption, a movement to eliminate bottled water from campus is increasingly gaining support. In order to provide a reasonable alternative to bottled water, the water fountain infrastructure at Dalhousie was assessed from Fall 2008 to February 2009. The assessment was based on qualitative indicators including taste, pressure, temperature, fountain appearance and wheelchair accessibility. The results show that approximately two thirds of the water fountains scored favorably in each of the indicators, while the remaining third were showed symptoms of neglect and were deemed inadequate. Fountains considered to need immediate attention are categorized under Section 4.2 – Short-Term Recommendations. A poorly maintained water infrastructure has negative implications in terms of the actual water quality but also public perception of tap water accessibility and importance.

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1. INTRODUCTION

Access to clean drinking water is an important health and environmental issue: given that Dalhousie University provides this access through water fountains, an assessment of the fountains was conducted in the fall semester of 2008. This assessment was conducted through the members of SustainDal, a student campus sustainability group that aims to make Dalhousie's campus more sustainable by moving toward economically beneficial, socially just, and environmentally sound practices

Currently, there are no standards in the Nova Scotia Building Code concerning how many water fountains need to be present in buildings. The building code does state that "if drinking fountains are provided, at least one shall be barrier-free and shall

(a) have a spout located near the front of the unit not more than 915 mm above the floor, and
(b) be equipped with controls that are easily operable from a wheelchair using one hand with a force of not more than 22 N or be automatically operable" (Province of Nova Scotia, 2006).

It is important that Dalhousie go above and beyond this standard and ensure that they have multiple water fountains in every building that are wheelchair accessible, clean, easy to locate and have cold, good tasting water. This is important for Dalhousie to do because the current standards for water fountains are too low which makes students turn to other, less sustainable alternatives such as bottled water, in order to fulfill their hydration needs.

It is also crucial that Dalhousie makes sure that water fountains will be included in any future building plans. Some may believe that the sale of bottled water is a suitable alternative to installing fountains, but reports from EcoJustice (formerly Sierra Legal Defence), the Polaris Institute, the Canadian Centre for Policy Alternatives and the National Resource Defence Council (NRDC) in the United States prove otherwise.

1.1 BOTTLED WATER IS NOT THE ANSWER

By establishing bottled water as the norm on campus, it makes good clean tap water less accessible to those who might not be able to afford it, given that it is up to 10,000 more times expensive than tap water (Clarke 2005). "The more that affluent Canadians rely on bottled water, the less pressure governments will feel to protect municipal sources. Those who are less well-off will have no choice but to drink tap water of potentially diminishing quality (Christensen 2006)" (Dunsby, 2008). This creates inequities in Canadian health and leaves the most vulnerable populations at risk for developing water-borne illnesses. Not only that, but the plastic bottles used for bottled water produce an immense amount of waste which clogs landfills, since only an estimated 10% are actually recycled (Clarke 2005). Bottled water also creates a lot of 'invisible' waste; for every plastic bottle that is made, it takes ¼ of a bottle of oil to produce it, not to mention the fossil fuels that are used to transport it from the bottler to the consumer. It is estimated that, annually, production of bottled water in the United States alone requires 17 million barrels of oil. Also, the bottles are commonly made of polyethylene terephthalate (PET): storage of water in PET bottles results in the migration of chemicals into the water (Christensen 2006), which is known to have potential health repercussions.

Bottled water companies get their water from either municipal tap water systems or ground and surface water. Companies such as Pepsi (Aquafina) get their water directly from municipal sources. This means that they are taking tap water for nearly zero cost, giving it ineffective 'purifying' treatments, bottling it and shipping it around the world which uses excessive amounts of fossil fuels. Companies such as Danone (Evian), take their water from ground sources. This depletes water tables and aquifers and



can cause drought, and damage delicate ecosystems while providing immense profit to the bottled water companies. They are rarely held accountable for the harm that they do to the environment.

Bottled water also encourages the privatization of a public resource and promotes the inaccurate belief that municipal tap water is of lesser quality. In reality, there is no evidence to suggest that bottled water is safer than tap water. Halifax Regional Municipality (HRM) water meets all of the regulatory requirements set in place by the federal government. In fact, HRM water is often even higher than the standard for both quality and safety. This is much better than the bottled water industry which has varying standards. In Canada, water bottling plants are only inspected once every 3-5 years by the Canadian Food Inspection Agency. This varies immensely from the HRM who test their water twice weekly. While bottled water can be helpful in situations where tap water is contaminated, it is better in the long run from an economic, environmental, and public health point of view to improve public drinking water supplies than it is to have a massive societal shift from consumer use of tap water to use of bottled water (NRDC 1999).

2. METHODS

To establish baseline data for determining the state of the water fountains at Dalhousie they were visually assessed using seven criteria:

Criteria*	
Location	Building and the # of the closest room Ex. FASS 2189
Wheelchair accessibility	Unit is between 75-90 cm above floor, provides a water flow at least 10 cm high, directs the water flow parallel to the front on the unit and controls are automatic, or operable with one hand. (Y/N)
Type of fountain	Embedded (EM): Inserted in the wall Wall hung (WH): Hung from the wall Freestanding (FS): No permanent wall attachment Porcelain (P) or stainless steel (SS)
Water pressure	High : strong flow coming out of the spout not touching the fountain hardware Medium : adequate pressure, flow not touching the fountain hardware Low : weak flow, water could be seen to visually spill over the spout touching fountain hardware
Taste	Good : no strong taste present Mediocre : slight taste, does not detract from overall taste of water Poor : metallic or other strong taste present
Water Temperature	Cold Lukewarm Warm
Appearance of fountain (visual hygiene assessment)	Grade 1 (clean): fountain is relatively free from impurities, no obvious buildup of dirt or contamination Grade 2 (intermediate): fountain is relatively free from impurities, some signs of contamination Grade 3 (dirty): visual evidence of contamination on the fountain (e.g. dirt, mould, rust, etc.)
Gooseneck spout for filling drinking containers	Present or not (Y/N)

* Criteria used were closely modeled after those used in the 2002 Walters and Cram study

Proximity to food service locations, vending machines and bathrooms was also taken into account.

3. OBSERVATIONS

117 water fountains were visually assessed in 31 buildings on all three Dalhousie campuses (Carleton, Sexton and Studley). Carleton campus has 23 fountains distributed across four buildings. Sexton campus has 24 fountains distributed across twelve buildings. Studley campus has 70 fountains distributed across 15 buildings. The quality of the fountains varies greatly from building to building.

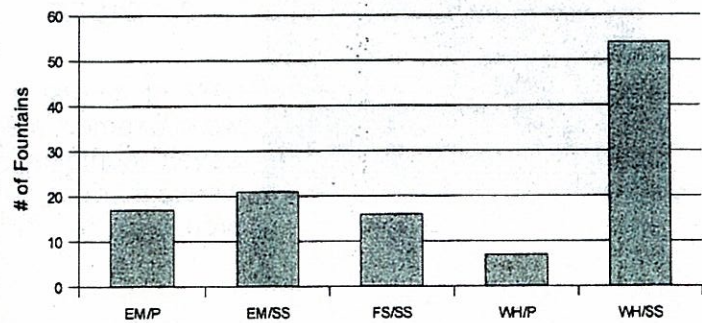
3.1 WHEELCHAIR ACCESSIBILITY

Twelve Dalhousie buildings and two departments in the LSC (A.L. MacDonald, B Building, Chemical Engineering Building, Civil Engineering Building, Mechanical Engineering Building, G.H. Murray, Ira MacNab, Planning, Sexton Gym, Forrest, Dunn, Henry Hicks, LSC Psychology Dept., LSC Oceanography Dept.) have no wheelchair accessible water fountains. The current Nova Scotia Building Code states that there should be at least one wheelchair accessible fountain in every building. On Dalhousie campuses, only 34% of fountains are wheelchair accessible. When this number is broken down by campus, 21% of fountains on Carleton campus are wheelchair accessible, 56% of fountains on Studley campus are wheelchair accessible and 17% of fountains on Sexton campus are wheelchair accessible.

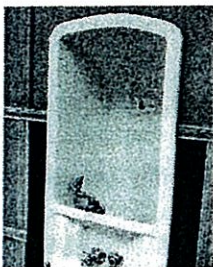
3.2 TYPE OF FOUNTAIN

The majority of the fountains on campus are hung on the wall and are made of stainless steel. Other types found on campus are fountains embedded in the wall and made of porcelain, fountains embedded in the wall and made of stainless steel, freestanding fountains made of stainless steel, and fountains hung from the wall and made of porcelain. Wall hung fountains are generally the best because they are usually wheelchair accessible. The five different types of water fountains on campus are pictured below.

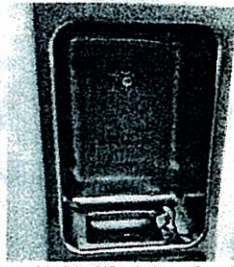
Water Fountain Type



Type of Fountain
 EM/P- Embedded/Porcelain
 EM/SS- Embedded/Stainless Steel
 FS/SS- Freestanding/Stainless Steel
 WH/P- Wall hung/Porcelain
 WH/SS- Wall hung/Stainless Steel



Embedded/Porcelain



Embedded/Stainless Steel



Freestanding/Stainless Steel



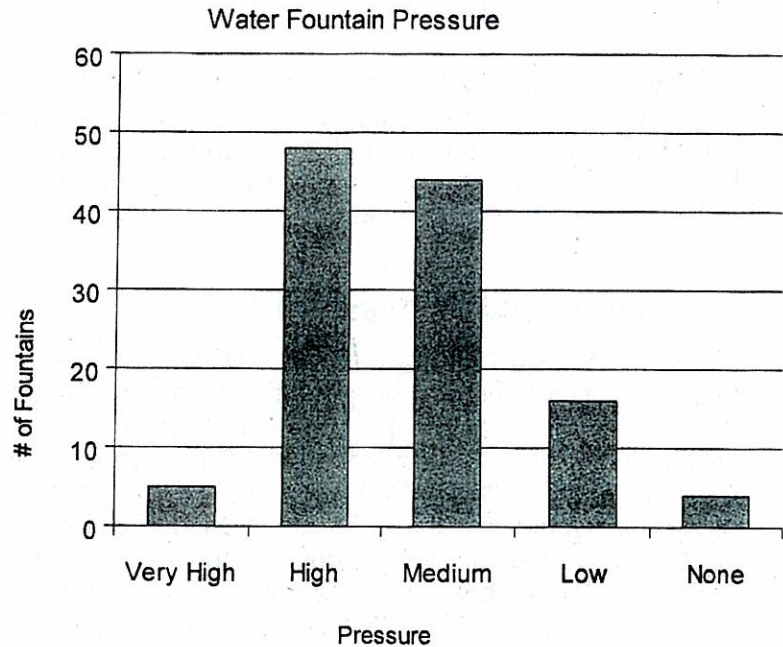
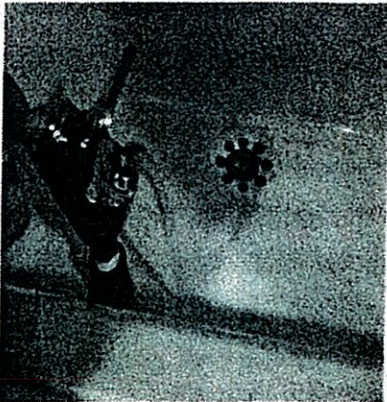
Wall hung/Porcelain



Wall hung/Stainless Steel

3.3 PRESSURE

4% of all the assessed fountain had very high water pressure, 41% had high water pressure, 38% had medium pressure and 14% had low pressure (Figure 3.1). 3% (4 fountains) were not functioning and therefore had no pressure at all. Low pressure fountains are a hygienic concern because in order to drink from them, ones mouth comes very close to the spout.

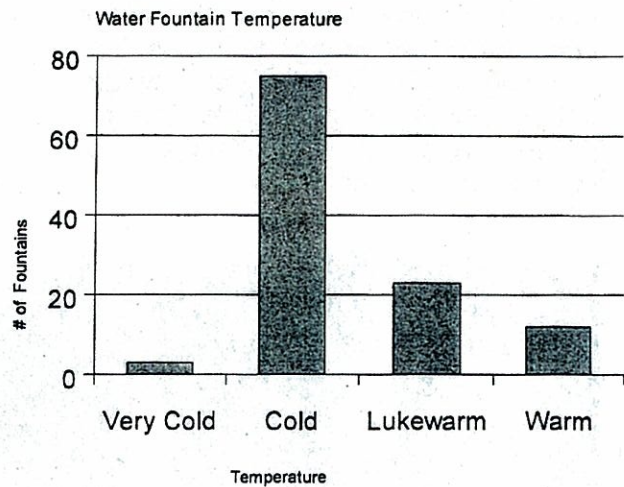


3.4 TASTE

57% of fountains were assessed with good taste and 31% were deemed mediocre tasting. 6% had poor tasting water. Seven fountains could not be tested for taste because they were either not working or the pressure was too low to properly drink from them.

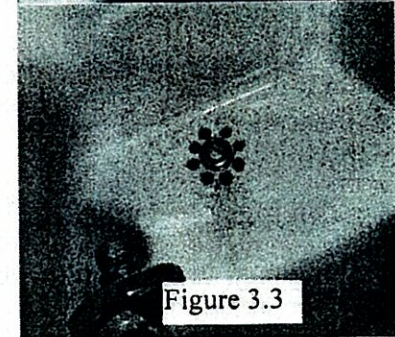
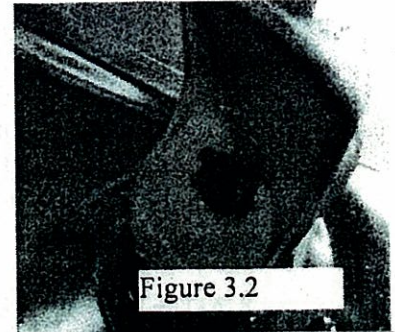
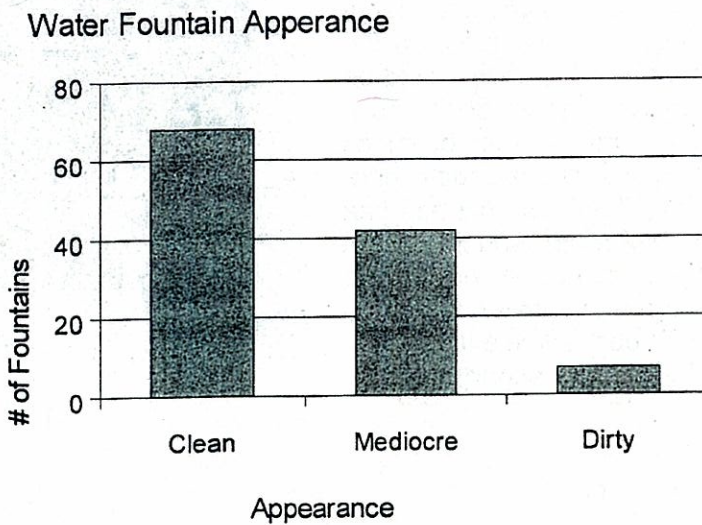
3.5 TEMPERATURE

Most fountains had cold or very cold water but 39 fountains (33%) had lukewarm/warm/undetermined temperatures, which affect the overall taste of the water and make them generally unpleasant to drink from.



3.6 APPEARANCE

58% of the assessed fountains were graded as 1 (clean) for the visual appearance and hygiene assessment. 36% were graded as 2 (mediocre) and 6% of fountains were graded as 3 (dirty) in appearance. These dirty fountains are located in the Tupper, Chemistry, Henry Hicks, A.L. MacDonald, Mechanical Engineering, and Dunn buildings. Examples of dirty spouts and drains are pictured to the right (Figure 3.2, 3.3). Dirty or rusty spouts are especially problematic because one sees clearly how dirty they are when they drink from a fountain which can make them more likely to drink bottled water.



3.7 GOOSENECK SPOUTS

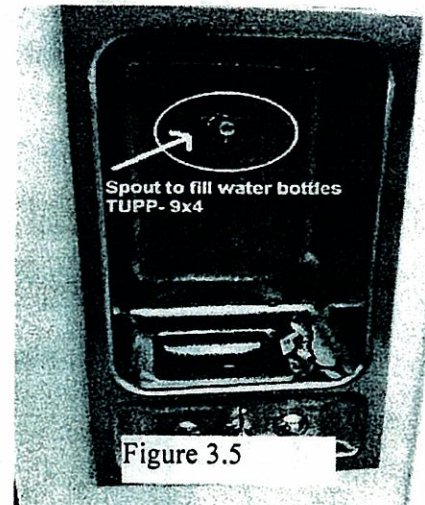
Gooseneck spouts look like a tap for a kitchen sink that is attached to a water fountain (Figure 3.4). They are much more convenient and easy to use for filling up reusable containers. None of the fountains on the Dalhousie campuses were equipped with gooseneck spouts. However, most of the fountains in the Tupper building do have a button that can be pressed so that it dispenses water straight down which can be used to fill reusable water bottles (Figure 3.5). The pressure of these fountains was low and the water was generally lukewarm. If the pressure and



temperature were adjusted this would be a great way to start supporting the use of reusable containers. Reusable containers are important because they cut down on waste and make people more likely to drink tap water as opposed to bottled water. Reusable containers are much easier to fill at fountains with spouts such as the one in Figure 3.4 and 3.5 because the container can be held straight up instead of on an angle which has to be done at conventional fountains. This means that more water can be put in the container and it is less likely to spill or overflow.

3.8 OTHER OBSERVATIONS

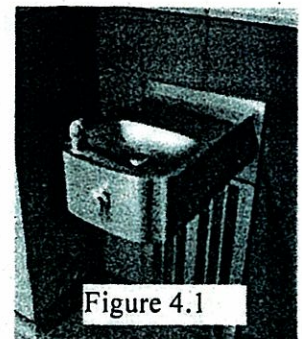
A common trend in most Dalhousie buildings is that water fountains are not located near vending machines or places that sell food or beverages. This is a concern because many of these places are high traffic areas. In the LSC common area there are no fountains. This causes a large inconvenience for students if they buy their lunch in the LSC because if they wanted to drink water they would be forced to walk a considerable distance in order to find a fountain. This situation happens in many other buildings as well. Since this is the case, students are much more likely to just buy a bottle of water. The SUB only has one fountain which is located by the bathrooms which are out of sight from the main entrance and not near where food is sold or consumed. When there are no water fountains within a reasonable distance to food service locations, people are forced to buy bottled water or a sugary drink.



4. RESULTS

4.1 STRENGTHS

- The McCain building has excellent water fountains. All of them are wheelchair accessible and are very clean in appearance (Figure 4.1)
- The Dalplex also had very good fountains which is important considering easily accessible water fountains in good condition encourage their use especially during exercise when people need to keep hydrated.
- The Tupper building fountains have second spouts on the top which squirt the water straight down. This allows for easy water bottle filling (Figure 3.5).



- The following buildings have water fountains in the same spots on several floors. This consistency makes them easier to find. Tupper, McCain, Computer Science, LSC Biology Dept., LSC Oceanography Dept., LSC Psychology Dept.. We recommend this be done in future Dalhousie buildings.
- The building directory in the Killam library notes what floors have water fountains on them.

4.2 WEAKNESSES

- The Dunn, LSC Psychology Dept., LSC Oceanography Dept., A.L. MacDonald, F Building, G. H. Murray, Ira McNab, and the Sexton Gym have no wheelchair accessible fountains. In the LSC there is only one wheelchair accessible fountain and it is not in a very easy to find, nor is it a high traffic area (LSC Biology Dept. 6123).
- There are no fountains equipped with gooseneck spouts. This discourages the use of reusable water bottles since they are difficult to fill at a water fountain.
- Most of the fountains in the Tupper building have water that is either lukewarm or warm, ranked a 2 or 3 in appearance and have various problems with their pressure.
- There are no water fountains in the LSC common area which is a concern since it is a high traffic area with many places to buy bottled water (vending machines and food service locations).
- Two of the fountains in the Henry Hicks building are not in working condition. Even the ones that are working were in various states of disrepair. (Figure 4.2, 4.3) The only fountain in the building that has high pressure and cold water has garbage cans in front of it (Figure 4.4). Two of the fountains have water so warm you could make decent tea with the water.
- Only 34% of fountains on campus are wheelchair accessible.
- 2 of the 3 fountains in A.L. MacDonald do not work.

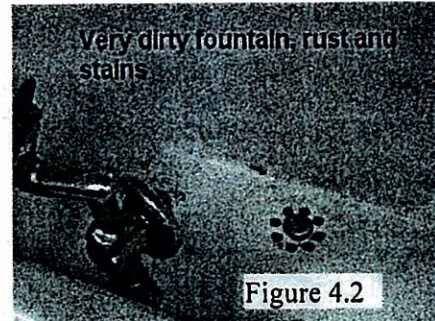


Figure 4.2

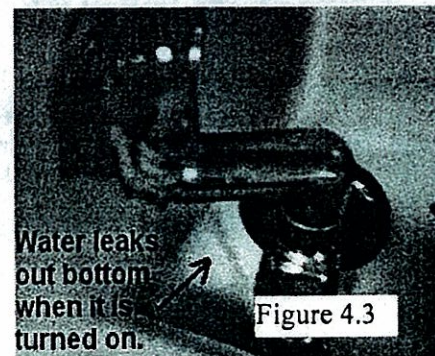


Figure 4.3

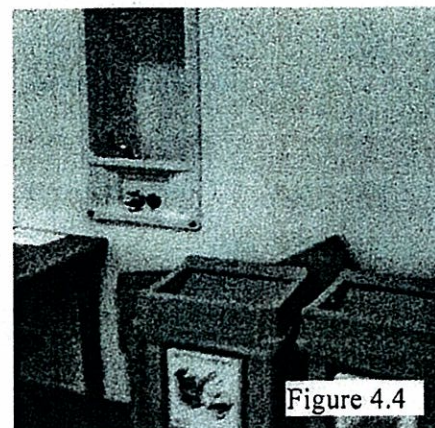


Figure 4.4

- In the cardio room of the Dalplex the pressure is too low to make drinking from it possible. There is a vending machine located near the fountain which makes people more likely to choose bottled water over tap water.
- The water in the first floor Killam library fountain needs to be run for a few seconds before it is consumed because of discoloration. There is a sign on it warning people about this (Figure 4.5). A situation like this lowers people's trust in the quality of water from the fountain and makes them more likely to choose to drink bottled water.
- In the Student Union Building and the McCain the cleaning closets are located right beside the fountains. Because of this, cleaning carts are often left in close proximity to fountain and sometimes completely obstruct the fountains or hide them from view. This close proximity could potentially be unhygienic and should be rectified. (Figure 4.6).



Figure 4.5

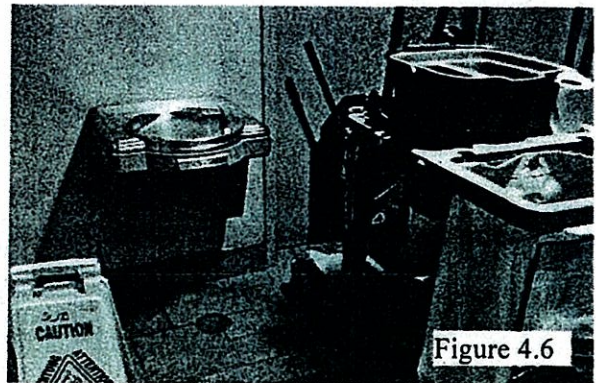


Figure 4.6

4.3 OPPORTUNITIES

- ◆ In locations where fountains are out of the way (Computer Science, Student Union Building) signs pointing the way to the fountain should be put up to direct people to them.
- ◆ During the fall 2008 semester, a group of masters students from Dalhousie conducted a feasibility study on making Dalhousie a bottled water free campus. Some of their main findings were that:
 - ◆ The feasibility of a bottle-free initiative is largely dependent upon the status of Dalhousie's water infrastructure.
 - ◆ The success of a bottled water free environment seems to be highly correlated with proper access to drinking water.

- ◆ In a poll of 100 Dalhousie students, they found that better placement of water fountains and the availability of fountains equipped with "gooseneck" spouts would increase respondents likelihood of using re-usable bottles.
- ◆ Taste is not a major factor influencing the purchase of bottled water on campus.
- ◆ 70% of respondents who do not use a re-usable bottle choose not to because they consider it to be inconvenient.
- ◆ Contrary to the argument that banning bottled water would make people purchase sugary drinks instead, 63.4% of respondents indicated they would use a water fountain instead, while 37.8% indicated they would use a re-usable bottle. (Carter et al., 2009)

Further research will have to be done to see if these results apply to the larger Dalhousie community but these findings definitely demonstrate the importance of maintaining water fountains and making them more re-usable bottle friendly.

4.4 THREATS

- By not having fountains present near places to buy bottled water (SUB, Rowe, Computer Science) it is indirectly encouraging the sale of bottled water on campus because students, staff and faculty do not want to spend their time hiking around a building looking for a fountain that may or may not have good water, instead they will shell out a few dollars and buy a bottle of water for convenience sake. When alternatives are not within sight, they are less likely to be utilized.
- The lack of goosenecks coupled with low/medium water pressure makes filling water bottles difficult and discourages this alternative to bottled water.
- Many of the porcelain fountains do not have cold water, which detracts from the taste.

5. RECOMMENDATIONS

5.1 SHORT-TERM

This is a list of fountains that, given their location or state of disrepair, need an swift and lasting solution. Immediate action is required to avoid health risks and a further decline in the public's opinion of water fountains at Dalhousie. It will also help to discourage the purchase of bottled water on campus.

Location		Reason	Repair Needed
Building	Closest Room		
Carleton Campus			
Dentistry Building	Dental Clinic	Low pressure, poor taste and lukewarm water.	Adjust temperature and pressure. This should improve taste.
Forrest Building	G38	Low pressure, lukewarm water	Adjust temperature and pressure.
	141	Warm water	Adjust temperature
	310	Warm water	Adjust temperature
Tupper Building	3x4	Low pressure, poor taste and warm water. Grade 3 appearance.	Cleaning. Adjust temperature and pressure. This should improve taste.
	6x4	Pressure is too high, water sprays everywhere.	Adjust pressure
	7x4	Pressure is too high, can't drink from it.	Adjust pressure
	9x4	Pressure is too low, can't drink from it.	Adjust pressure
Studley Campus			
Chase Building	1 st floor by elevator	Low pressure, mediocre taste and lukewarm temperature.	Adjust temperature and pressure. This should improve taste.
	3 rd floor by elevator	Dirty drain and spout	Cleaning of drain and spout
Chemistry Building	307	Low pressure, dirty appearance	Adjust pressure and clean.
	512	Low pressure	Adjust pressure

Dalplex	Cardio room	Low pressure (can't even drink from it) and lukewarm temperature	Adjust pressure and temperature
Dunn Building	241	Dirty appearance	Cleaning required
Henry Hicks Academic Building	03	Poor taste, warm temperature.	Adjust temperature. This should improve taste. If not then the fountain will need replacement.
	11	Does not work. Water leaks out of the bottom when it is turned on. Dirty appearance.	Cleaning, maintenance to fix it, or replacement with a more suitable style
	119	Dirty appearance and does not function. High traffic area.	Cleaning, maintenance to fix it, or replacement with a wheelchair accessible fountain.
	1 st floor by elevator.	Rusty spout	Needs cleaning on spout.
	203	Pressure so low that the water only trickles out of the spout. The handle to turn it on does not work, must use push button on top which is confusing and may lead people to think it is broken.	Adjust pressure, fix handle.
	210	Water is very warm.	Adjust temperature
	303	Good fountain but it is leaking and there are garbage cans in front of it.	Relocate garbage cans and fix the leak.
	336	Water is very warm.	Adjust temperature
Killam Library	1 st floor by photocopy room	Water is discoloured, needs to run a few seconds before it is clear.	Test the water to make sure it is safe. Find out why the water is discoloured.
Life Sciences Centre	Biology 4123	Pressure too high, water splashes on to the wall.	Adjust pressure
	Biology 5123	Pressure too low.	Adjust Pressure
McCain Building	1 st floor near atrium stairs	Low pressure	Adjust pressure
	1 st floor study lounge	Broken	Fix fountain, if it can not be fixed it must be replaced

Rebecca Cohn Arts Centre	401	Water is warm.	Adjust temperature.
Student Union Building		High traffic area, only water fountain present is located by the bathrooms which could discourage its use. Also not visible from atrium, nor is it near the food services.	Need installation of a fountain in a visible location in the atrium, preferably by food services.
Studley Gym	Female Locker Room	Poor taste and lukewarm. Since this is a building where a lot of physical activity takes place it is vital that there be a fountain with good tasting cold water. This fountain is equipped with the space required for a gooseneck.	Adjust temperature. This should improve taste. If not then the fountain will need replacement.
	Lobby	Low pressure and warm water	Adjust pressure and temperature
Weldon Law Building	309	Clogged	Needs cleaning

Sexton Campus			
A.L .MacDonald	D002	Fountain barely works	Needs removal and replacement
	D115 B	Fountain does not work	Needs removal and replacement
B Building	B216	Low pressure, warm temperature	Adjust pressure and temperature
	B231	Low pressure, lukewarm temperature	Adjust pressure and temperature
Civil Engineering Building	D215	Dirty appearance	Cleaning required
	D314	Rusty, not a great fountain overall	Cleaning, may need to be replaced.
	D501	Low pressure	Adjust pressure
Industrial Lab	221/2nd floor lobby	Poor taste	Determine why it has such a poor taste, may need to be replaced.
Mechanical Engineering Building	C051	Broken handle plate	Replace handle plate
	C150	Broken handle plate, rusty	Replace handle plate, cleaning required.
	C250	Warm temperature	Adjust temperature
Best places to install new fountains			
All Food Service Locations		All food service locations should be equipped with a refrigerated gooseneck, to encourage customers to fill up their own re-usable containers. There are eight possible locations: Green Cafe (ROWE), Second Cup (CSCI), Killam Atrium (KILM), LSC Food Court (LSCC), Fillings (DENT), Brief Break (WLAW), Tim Hortons (TUPP), and Food Court (SUB).	Installation of at least eight refrigerated gooseneck spouts near food service locations.
Studley Gym	Male Locker Room	There is no fountain	Install Fountain
Life Sciences Centre	Common Area	No fountains present, high traffic area	Need installation of at least two fountains (one per level). Preferably one by the Tim Hortons and one by the food court.

5.2 LONG-TERM

There should be **at least** one fountain per floor in every building that is wheelchair accessible and has a spout for filling up water bottles; they should be located in suitable, accessible areas (eg. In hallways, open high traffic areas, in food service locations, etc.). Water fountains should be cleaned regularly to avoid contamination build-up. Assessments should be conducted annually to ensure that all of the water fountains on campus are clean, have high pressure, are located in appropriate areas, and have water that is cold and good tasting. This assessment should be done by Facilities Management since they are responsible for maintaining the water fountains. This assessment should be easier for them to do now because this report lists the location of every water fountain on all of the Dalhousie campuses (Appendix) and shows the criteria for how to rank them (Methods). Having annual assessments is important because then Facilities Management will have a clear idea each year of the areas of strengths and weaknesses regarding the water infrastructure at Dalhousie. They will also be able to identify all of the fountains that need maintenance, cleaning and replacement.

In February 2009, the new Dalhousie Environmental Policy was written by the Office of Sustainability. It states that it will focus on 'physical system upgrades'. This is important because clearly there is room for improvement for Dalhousie's water fountains. The policy also mentions that some of Dalhousie's sustainability goals are to encourage social norms that promote sustainability, encourage and support physical systems that enhance sustainability, and decrease waste. By improving the water fountains and advertising this fact, their use will hopefully increase which will make using water fountains more of a social norm than drinking bottled water. Their improvement will also cut down on the waste created by empty plastic bottles because less people will be forced to consume bottled water.

To encourage the use of tap water and reduce the environmentally degrading practice of bottling water, Dalhousie's environmental policy should include a clause that states that all buildings constructed on campus need to have at least one drinking fountain per floor and if possible that they be located in the same location on each floor. A standard needs to be established; these fountains need to be wheelchair accessible and have gooseneck spouts to facilitate filling water bottles. If ever any renovations are done where a non-accessible fountain with no spout is present, it should be specified that it will be replaced with one that is. When building renovations are done there should be an investigation to see if the installation or replacement of a water fountain could be done at the same time.

Some of the old water fountains at Dalhousie still have chlorofluorocarbons (CFC) in them. CFCs are greenhouse gases and are known to cause ozone depletion. Although they are much smaller in comparison to CO₂ in terms of volume, have a much worse impact on global warming than CO₂. When replacing old water fountains it must be seen to that Dalhousie responsibly disposes of existing CFC-based coolants and replaces them with non-CFC coolants.

In conclusion, frequent upkeep of the water fountains at Dalhousie will ensure that the water is clean and potable. This will help protect Dalhousie from health liability issues. Dalhousie has to opportunity to take a stand against the harmful environmental, health and social

effects of bottled water and create a campus that is a leader in ensuring that students have an alternative to bottled water. This makes it especially important that water fountains on all three Dalhousie campuses be kept clean, good tasting and accessible.

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APPENDIX

Building	Closest Room	Wheelchair accessible	Type	Pressure	Taste	Temperature	Appearance	Gooseneck Spout	Comments
Studley Campus									
Arena	Locker room hallway	Y	WH/SS	High	Good	Cold	1	N	Great
Chase	3 rd floor elevator	Y	WH/SS	Medium	Good	Cold	2	N	Dirty drain and spout
	1 st floor elevator	Y	WH/SS	Low	Mediocre	Lukewarm	2	N	Drain is rusty
Chemistry	115	Y	WH/SS	Medium	Good	Very Cold	2	N	
	127	N	WH/SS	Medium	Good	Very Cold	2	N	
	223	N	WH/SS	High	Good	Cold	2	N	
	307	N	EM/SS	Low	Good	Cold	3	N	
	444	N	EM/SS	Medium	Good	Cold	2	N	
	512	N	WH/SS	Low	Good	Cold	1	N	
Computer Science	147	Y	WH/SS	High	Good	Cold	1	N	Out of the way
	270	Y	WH/SS	Medium	Good	Cold	1	N	Out of the way
	361	Y	WH/SS	Medium	Good	Cold	1	N	Out of the way
	422	Y	WH/SS	High	Good	Cold	1	N	Out of the way
Dalplex	Fieldhouse- Track	Y	WH/SS	Medium	Good	Cold	1	N	Child accessible
	Female Changing room	Y	WH/SS	High	Good	Cold	1	N	Next to Water (Aquafina) vending machine
	Workout Room	N	FS/SS	High	Good	Cold	1	N	
	Male Changing room	Y	WH/SS	High	Good	Cold	1	N	Next to Water (Aquafina) vending machine
	Fieldhouse-Playground	Y	WH/SS	Medium	Good	Cold	1	N	Child accessible + Next to water vending machine
	Fieldhouse- Weight room	N	EM/SS	Medium	Mediocre	Cold	1	N	
	Entrance to Kinesiology	Y	WH/SS	High	Good	Cold	1	N	
Cardio Room	N	WH/SS	Low	?	Lukewarm	1	N	Located near a vending machine	
Dunn	114	N	WH/P	Medium	Mediocre	Cold	2	N	Clogged
	227	N	WH/P	Medium	Mediocre	Cold	2	N	Table in front of the fountain
	241	N	WH/P	Medium	Mediocre	Cold	3	N	
Henry Hicks	336	N	EM/P	High	Mediocre	Warm	2	N	Water is very warm, could almost make tea with it.
	303	N	EM/P	High	Good	Cold	2	N	Leaking, garbage cans in front of fountain
	210	N	EM/P	High	Mediocre	Warm	2	N	Water is very warm, could almost make tea with it.
	203	N	EM/P	Low	?	Warm	2	N	Pressure so low you can't drink out of it. Handle doesn't work.
	1 st floor by elevator	N	WH/SS	High	Mediocre	Cold	2	N	Rusty spout
	119	N	EM/P	None	?	?	3	N	Dirty, doesn't work
	11	N	EM/P	High	?	?	3	N	No water comes out of spout, just leaks out bottom when turned on.
	3	N	EM/P	High	Poor	Warm	2	N	
Killam Library	1 st floor by copy room	Y	WH/SS	Medium	Good	Cold	1	N	Water is discoloured, have to wait for it to run clear.
	2 nd floor	N	WH/SS	Medium	Good	Cold	1	N	Not easily W-chair accessible
	3 rd floor	N	WH/SS	Medium	Good	Cold	1	N	Not easily W-chair accessible
	4 th floor	Y	WH/SS	High	Good	Cold	1	N	
	5 th floor	Y	WH/SS	Medium	Mediocre	Cold	1	N	
LSC Biology Dept.	212	N	FS/SS	Medium	Good	Cold	1	N	
	312	N	FS/SS	Medium	Good	Cold	1	N	
	4123	N	FS/SS	Very High	Good	Cold	1	N	Hits the other side of the fountain which makes it splash onto the wall.
	5123	N	FS/SS	Low	Mediocre	Cold	1	N	
	6123	Y	WH/SS	High	Good	Cold	1	N	
	7123	N	FS/SS	High	Good	Lukewarm	1	N	
LSC Oceanography Dept	2660	N	FS/SS	High	Good	Cold	1	N	
	3655	N	FS/SS	Medium	Mediocre	Cold	1	N	
	4655	N	FS/SS	High	Good	Cold	1	N	
	5655	N	FS/SS	High	Good	Cold	1	N	
LSC Psychology Dept	1347	N	WH/SS	High	Mediocre	Cold	1	N	Not visible from hallway, not a high traffic area
	4212	N	WH/SS	Medium	Mediocre	Cold	2	N	Taste of fluoride, lime buildup on spout
	5215	N	WH/SS	Medium	Mediocre	Cold	2	N	Lime buildup on spout

Building	Closest Room	Wheelchair accessible	Type	Pressure	Taste	Temperature	Appearance	Gooseneck Spout	Comments
McCain	1 st floor atrium	Y	WH/SS	Low	Good	Cold	1	N	Nice fountain just low pressure
	1 st floor lounge	Y	WH/SS	None	?	?	1	N	Broken
	2199	Y	WH/SS	Medium	Mediocre	Cold	1	N	
	2101	Y	WH/SS	High	Good	Cold	1	N	
	2 nd floor lounge	Y	WH/SS	Medium	Mediocre	Lukewarm	1	N	
	3199	Y	WH/SS	High	Good	Cold	1	N	
	3101	Y	WH/SS	Medium	Mediocre	Cold	1	N	
Rebecca Cohn Arts Centre	401	Y	WH/SS	Low	Good	Warm	1	N	
	Beside bar	N	WH/SS	Medium	Good	Very Cold	1	N	
Rowe	1011	Y	WH/SS	High	Good	Cold	1	N	
Student Union Building	By Grawood	Y	WH/SS	High	Good	Cold	1	N	Located by bathrooms
Studley Gym	Female locker room	N	FS/SS	Medium	Poor	Lukewarm	2	N	Speckled with paint, gooseneck can be installed
	Lobby	Y	WH/SS	Low	Good	Warm	2	N	
Weldon Law	104	N	EM/SS	High	Good	Cold	2	N	
	309	N	EM/SS	Medium	Good	Cold	2	N	Clogged
	328	N	EM/SS	Medium	Poor	Cold	1	N	
	417	N	EM/SS	Medium	Good	Cold	1	N	
	Library 1 st Floor	Y	WH/SS	Medium	Good	Cold	1	N	
	Library 2 nd Floor	Y	WH/SS	Medium	Good	Cold	1	N	
	Library 3 rd Floor	Y	WH/SS	Medium	Good	Cold	1	N	
Carleton Campus									
Burbridge	318	Y	WH/SS	High	Good	Cold	1	N	
Dentistry	Dental Clinic	Y	WH/P	Low	Mediocre	Lukewarm	1	N	Old
	Basement	Y	WH/SS	High	Good	Cold	1	N	Older Model
	2 nd Floor	Y	WH/SS	Medium	Good	Cold	1	N	Older model
Forrest	141	N	EM/P	Medium	Good	Warm	1	N	
	310	N	EM/P	High	Good	Warm	1	N	
	424	N	EM/P	High	Mediocre	Lukewarm	1	N	
	G38	N	EM/P	Low	Good	Lukewarm	1	N	
Tupper	near Theater B	N	WH/SS	Medium	Good	Cold	1	N	Tasty
	near Tim Hortons	Y	WH/SS	Medium	Good	Cold	2	N	
	15-B20	N	EM/SS	Medium	Poor	Lukewarm	2	N	
	14x4	N	EM/SS	Medium	Mediocre	Lukewarm	2	N	
	13-E1	N	EM/SS	High	Mediocre	Lukewarm	2	N	
	12-H1	N	EM/SS	High	Mediocre	Lukewarm	2	N	
	11x4	N	EM/SS	High	Mediocre	Lukewarm	2	N	
	10x4	N	EM/SS	Medium	Mediocre	Cold	2	N	Splashes Randomly
	9x4	N	EM/SS	Low	Mediocre	Lukewarm	1	N	Can't drink
	8x4	N	EM/SS	Medium	Mediocre	Lukewarm	2	N	
	7x4	N	EM/SS	Very High	Mediocre	Lukewarm	2	N	Can't drink, it sprays up the wall of the fountain
	6x4	N	EM/SS	Very High	Mediocre	Lukewarm	1	N	Too strong, sprays everywhere
	5D1	N	EM/SS	High	Mediocre	Lukewarm	2	N	
	4x4	N	EM/SS	High	Mediocre	Lukewarm	2	N	
3x4	N	EM/SS	Low	Poor	Warm	3	N	Calcium build-up, water doesn't spray past the spout	

Building	Closest Room	Wheelchair accessible	Type	Pressure	Taste	Temperature	Appearance	Gooseneck Spout	Comments
Sexton Campus									
A.L. MacDonald	Q100	N	FS/SS	High	Mediocre	Cold	2	N	
	D002	N	EM/P	None	?	Warm	3	N	Fountain barely works
	D115 B	N	EM/P	None	?	?	2	N	Fountain does not work
Architecture	HA19	N	FS/SS	High	Good	Cold	1	N	
	HB5	Y	WH/SS	High	Good	Cold	1	N	Best one!
B Building	B216	N	WH/P	Low	Good	Warm	1	N	
	B231	N	WH/P	Low	Good	Lukewarm	2	N	
	B316	N	WH/P	High	Good	Cold	1	N	
Chemical Engineering	F202	N	FS/SS	High	Good	Cold	1	N	
Civil Engineering	D215	N	EM/P	Very High	Good	Cold	2	N	Dirty appearance
	D314	N	EM/P	Medium	Mediocre	Lukewarm	2	N	Rusty
	D416	N	WH/SS	Medium	Good	Cold	2	N	Rust and dirt
	D501	N	WH/SS	Low	Mediocre	Cold	1	N	Clean!
Electrical Engineering	EL03	Y	WH/SS	High	Good	Cold	2	N	
G. H. Murray	G207	N	FS/SS	High	Good	Cold	1	N	
Ira MacNab	A103	N	WH/SS	High	Mediocre	Cold	1	N	
	21	Y	WH/SS	Medium	Good	Cold	1	N	
Industrial Lab	221	Y	WH/SS	High	Poor	Cold	1	N	
Mechanical Engineering	C051	N	EM/P	High	Mediocre	Lukewarm	2	N	Broken handle plate
	C150	N	EM/P	High	Good	Lukewarm	3	N	Broken handle plate, rusty
	C250	N	EM/P	High	Mediocre	Warm	2	N	
	C369	N	WH/SS	High	Good	Cold	2	N	
Planning	N121	N	EM/SS	Very High	Good	Cold	1	N	
Sexton Gym	J114A	N	FS/SS	Medium	Poor	Cold	2	N	

Communiqué

**THE FEDERATION OF CANADIAN MUNICIPALITIES
ENCOURAGES REDUCED BOTTLED WATER USE AT MUNICIPAL FACILITIES**

***Resolution urging tap water over bottled water where appropriate at municipal facilities
passed at FCM's national board meeting***

VICTORIA, March 7, 2009 – Canada's national municipal organization is encouraging local governments to reduce the use of bottled water in their own facilities where other options are available.

Meeting today in Victoria, B.C., the National Board of Directors of the Federation of Canadian Municipalities (FCM) passed a resolution encouraging municipalities to "phase out the sale and purchase of bottled water at their own facilities where appropriate and where potable water is available."

"Today's action is another illustration of how municipalities are leading by example to encourage environmentally sustainable water choices," said FCM president Jean Perrault, mayor of Sherbrooke, Que.

The resolution does not call for a ban on the sale of bottled water to consumers. "Regulating bottled water for public consumption falls under provincial and federal jurisdiction," said Perrault. "All orders of government must work together to reduce reliance on a product that produces more waste, costs more and uses more energy than simple, dependable municipal tap water."

"This cooperation among governments must extend to investments in local water systems. The most economical and reliable source of drinking water is a first-rate municipal water system. Where these systems are lacking, all orders of government must help fund the necessary infrastructure."

FCM's resolution also calls on municipalities to develop awareness campaigns about the positive benefits and quality of municipal water supplies. Municipalities will determine their local course of action.

The resolution was put forward by the cities of Toronto and London, Ont., over growing concerns for environmental impacts related to the production of bottled water, the energy requirements for the production and transport of bottled water, as well as the disposal and/or recycling of water bottles.

Bottled water containers may be recyclable but they still have to be manufactured and transported, which uses significant energy. Between 40 and 80 per cent end up in the local landfill. That is a burden on the environment and a cost for municipal taxpayers.

About the Federation of Canadian Municipalities (FCM):

FCM is the national voice of municipal governments, established in 1901, representing the interests of municipalities on policy and program matters that fall within federal jurisdiction. With more than 1,775 members representing 90 per cent of Canadians, FCM members include Canada's largest cities, small urban and rural communities, and 18 provincial and territorial municipal associations.

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For further information or to arrange interviews, contact Wendy Cumming: (613) 907-6356 / wcumming@fcm.ca

FCM RESOLUTION – NATIONAL BOARD OF DIRECTORS MEETING – MARCH 7, 2009**ENV09.1.02
BOTTLED WATER**

WHEREAS bottled water consumes significant amounts of non-renewable fossil fuels to extract, package and transport water creating unnecessary air quality and climate change impacts;

WHEREAS it takes about three litres of water to manufacture a one litre plastic bottle of water;

WHEREAS bottled water companies use municipal water and groundwater sources when a growing percentage of Canadian municipalities have faced water shortages in recent years;

WHEREAS although bottled water creates a container that can be recycled, between 40% and 80% of empty bottles end up as litter and/or are placed directly into the garbage and take up unnecessary space in landfills;

WHEREAS tap water is safe, healthy, highly regulated and accessible to residents, employers, employees and visitors to Canadian municipalities and substantially more sustainable than bottled water; and

WHEREAS some municipalities have enacted by-laws to restrict the sale and purchase of water bottles within their own operations;

BE IT RESOLVED that the Federation of Canadian Municipalities urge all municipalities to phase out the sale and purchase of bottled water at their own facilities where appropriate and where potable water is available; and

BE IT FURTHER RESOLVED that municipalities be urged to develop awareness campaigns about the positive benefits and quality of municipal water supplies.

City of London and City of Toronto, Ontario

Five Reasons to Ban Bottled Water

In Canada, we are not immune to the growing threats of water scarcity. Twenty per cent of municipalities have faced shortages in recent years. Canada is a net exporter of bottled water, selling its ancient glacier waters all over the world mostly for the profit of the large foreign-owned, multi-national water companies. In *Blue Covenant: The Global Water Crisis and the Coming Battle for the Right to Water*, Council of Canadians Chairperson Maude Barlow writes, "Most provinces charge these companies next to nothing to extract this water from springs and aquifers, and whole watersheds are now under threat from this practice." But people are fighting back. Questions are being asked in communities across Canada about the extensive and damaging water-taking practices of for-profit bottling companies and citizens are calling on municipal governments and school boards to stop selling bottled water. Now is a great time to join the fight.

Here are five reasons to ban bottled water:

1. Bottled water leads to water shortages.

According to the Earth Policy Institute, water shortages have been reported in the Great Lakes region near water bottling plants. In Guelph, Ontario, a citizen's coalition called the Wellington Water Watchers (WWW), which includes members of the Council of Canadians, has launched a campaign against Nestlé. The corporation's water-taking of 3.6 million litres per day is causing a reversal of groundwater flow to the Mill Creek. Manufacturing water bottles also requires huge amounts of water. It takes three to five litres of water to produce every one-litre plastic bottle.

The demand for bottled water is also contributing to the global water crisis. Water shortages caused by Coca Cola's groundwater draining in Plachimada, India have led thousands of people to demand the closure of the Coca Cola plant in their community. Medha Patkar, a social activist leading the battle in Plachimada recently told the media, "The bottling of water has really exploited

our ground reserves [...] killed our aquifers, and [...] encroached upon the people's rights to natural resources and the right to plan with those resources."

2. Bottled water contributes to climate change.

In an era when the world is dealing with the impacts of climate change, the bottled water industry requires massive amounts of fossil fuels to manufacture and transport their products. According to the Bow River Keeper, a citizens' group that protects the Bow River watershed in Alberta, one quarter of the 89 billion litres of bottled water consumed every year are bought outside of the country where they are produced. The transportation of the bottles produces large amounts of greenhouse gas emissions. The Bow River Keeper estimates that "the manufacturing and transport of a one kilogram bottle of Fiji water consumes 26.88 kilograms of water (7.1 gallons), 0.849 kilograms of fossil fuel (one litre or 0.26 gal), and emits 562 grams of greenhouse gases (1.2 pounds)."



UNBOTTLE IT!

3. Our landfills cannot support bottled water.

Canadian municipalities are dealing with a waste management crisis and our landfills cannot support the amount of garbage generated by the bottled water industry. According to a recent Toronto Sun article, "as few as 50 per cent of the water bottles Torontonians consume everyday are actually being recycled. That means as many as 65 million empty plastic water bottles per year end up as garbage in a landfill waste site." In some communities the percentage of water bottles that end up in landfills can be as high as 80 per cent.

4. Bottled water is not safer.

In order to persuade people to spend 200-3,000 times what they spend on tap water, bottled water companies advertise their products as a "safer and healthier alternative." Nothing can be further from the truth. Bottled water is regulated as a food product under the Canadian Food Inspection Agency. As such, water bot-



ting plants are inspected on average only once every three years, according to the Polaris Institute, an Ottawa-based research organization. Tap water regulation, on the other hand, is far more stringent. Municipal tap water is tested continuously – both during and after treatment.

5. Water is a human right.

Around the world, there is a growing citizens' movement working to establish a global "right to water," affirming that water is an essential and irreplaceable resource for people's health and for our planet as a whole. The Canadian government has been blocking recognition of the human right to water – an issue that affects billions of people who live without access to safe, clean water. Canada first took this position in 2002 in a vote at the Human Rights Commission. In March, our country confirmed its stance at the new Human Rights Council by leading the efforts to gut a resolution on the right to water. Water is a human right and should be guaranteed to all people regardless of their ability to pay.

The bottled water industry has worked hard to undermine our faith in public water. Canada has one of the best public drinking water systems in the world. The Council of Canadians has focused its efforts on fighting for a National Water Policy that would improve the public system, enshrine the human right to water in legislation, and ensure clean drinking water standards for all communities across the country.

Take action!

Join the fight against bottled water. Visit www.canadians.org to find out how you can get a bottled water ban in your municipality or at your school board. For more information about the campaign, contact the Council of Canadians National Water Campaigner Meera Karunanathan at 613-233-4487, ext 234, or by e-mail at meera@canadians.org.

Sources and further reading:

Barlow, Maude (2007) *Blue Covenant: The Global Water Crisis and the Coming Battle for the Right to Water*. Toronto: Mclelland and Stewart.

Arnold, Emily and Larsen, Janet, *Bottled Water: Pouring Resources Down the Drain* www.earth-policy.org/Updates/2006/Update51.htm

Inside the bottle campaign: www.insidethebottle.org

India Resource Centre: www.indiaresource.org

Think Outside the Bottle Campaign: www.thinkoutsidethebottle.org

Wellington Water Watchers: www.wellingtonwaterwatchers.ca

Join the Council of Canadians

The strength of the Council is in its membership. The Council does not accept funding from corporations or from governments, so membership donations are vital to our activities. We work with community groups, seniors, students, unions and other organizations across the country to promote progressive policies on public health care, fair trade, secure energy, clean water and other issues of social and economic concern to Canadians. Visit www.canadians.org or call us at 1-800-387-7177 to become a member today.



For more information about how to protect Canada's water, visit www.canadians.org or call us at 1-800-387-7177

Spinning the Bottle

Tackling industry spin on bottled water

The bottled water industry has worked hard to undermine our faith in public water despite the fact that Canada has one of the best public drinking water systems in the world. Communities across Canada are now questioning the extensive and damaging water-taking practices of for-profit bottling companies, and citizens are calling on municipal governments and school boards to stop selling bottled water. Bottled water corporations are now investing in massive public relations campaigns to counter these community efforts: Here are our responses to some of the myths you will hear from the industry.

They say: The bottled water industry uses a very small percentage of groundwater in Canada.

We say: Arguments regarding the overall amount of groundwater extracted by the bottled water industry fail to acknowledge the environmental impacts on individual watersheds caused by removing large amounts of water. For example, in Aberfoyle Ontario, Nestlé's extraction of 3.6 million litres per day is causing a reversal of groundwater flow to the Mill Creek. The argument also fails to take into account the three to five litres of water required to produce a one-litre plastic bottle. It also fails to recognize the large amounts of water drawn from other sources such as ancient glaciers, lakes, streams and rivers for shipment elsewhere.

They say: The bottled water industry does not compete with public tap water.

We say: While Nestlé claims that "only 10 percent" of Canadian bottled water comes from municipal water systems, a much more significant portion was reported by the Canadian Bottled Water Association (CBWA). According to a 2007 *Maclean's* article, the

industry trade group claims "filtered tap water accounts for more than one-quarter of bottled water consumed by Canadians." Coca-Cola's Dasani brand is municipal water from Calgary, Alberta and Brampton, Ontario, and Pepsi's Aquafina water comes from Vancouver, British Columbia and Mississauga, Ontario. Even still, focusing specifically on municipal supplies obscures the fact that no matter where the water comes from, the bottling process still drains freshwater resources at a time when Environment Canada warns of a looming freshwater crisis, and 20 per cent of our municipalities have faced water shortages in recent years.

They say: If bottled water is not available, people will turn to less healthy alternatives.

We say: An increasing number of people are consciously choosing to avoid soft drinks. A recent study by the Euromonitor International reports a growing tendency for consumers, particularly baby boomers, to avoid carbonated beverages due to health concerns. They are not likely to turn to these beverages if bottled water becomes unavailable. Anyone looking for a drink can easily refill reusable bottles at taps or public fountains.

They say: Banning bottled water in public facilities violates one's freedom of choice.

We say: Given the choice, it makes sense that people would want to drink free, clean, safe drinking water rather than pay for a higher-priced version. We are fighting to ensure that people truly do have a choice by ensuring access to free municipal drinking water in public facilities. Bottled water should not be seen as a solution to poor access to water in schools and other public facilities. We collectively pay for municipal drinking water through our taxes



UNBOTTLE IT!





and should not have to purchase water that does not go through the same stringent testing as tap water in public places. Municipal governments also shouldn't use public funds to purchase bottled water for municipal staff or public functions.

They say: Bottled water contains less plastic than other products.

We say: It is clear that bottled water is harmful to the environment. According to the Earth Policy Institute, manufacturing the 29 billion plastic bottles used for water in the United States each year requires the equivalent of more than 17 million barrels of crude oil. Unlike tap water, bottled water is not produced locally, so energy is needed to pump, process, transport, and refrigerate the products. In the United States, the Pacific Institute estimates the annual fossil fuel footprint of bottled water consumption to be the equivalent of 50 million barrels of oil – enough to run 3 million cars for one year. Canada also imports a portion of the bottled water it consumes from other countries. According to Agriculture and Agri-food Canada, Canadian imports of bottled water increased from \$25.6 million in 1996 to \$75 million in 2007. Drinking tap water is the only sure way to protect the environment.

They say: Ninety-seven per cent of Canadians have access to recycling programs.

We say: Anyone concerned with the environment knows that reducing and reusing are far more important than recycling. Bottled water bans are the outcome of a growing movement of people who are refusing to buy plastic packaging in the first place. Secondly, having access to recycling and actually recycling are not the same thing. According to a 2008 Toronto Sun article, "as few as 50 per cent of the water bottles Torontonians consume everyday are actually being recycled. That means as many as 65 million empty plastic water bottles per year end up as garbage in a landfill waste site." While statistics vary from community to community, rejecting bottled water is the only way to truly eliminate impacts on our landfills and the environment.

They say: Why focus on bottled water instead of soft drinks, juice and other beverages?

We say: The issue isn't simply about packaging. Banning the sale and purchase of bottled water in public facilities is a way to

reclaim the water commons. By challenging the bottled water industry, we are resisting the corporate takeover of a shared public resource. The Council of Canadians has focused its efforts on fighting for a national water policy that would improve the public system and ensure clean drinking water standards for all communities across the country. Water is a human right and should be guaranteed to all people regardless of their ability to pay.

Take action!

Join the fight against bottled water. Visit www.canadians.org or call us at 1-800-387-7177 to find out how you can get a bottled water ban in your municipality or at your school board.

Join the Council of Canadians

The strength of the Council is in its membership. The Council does not accept funding from corporations or from governments, so membership donations are vital to our activities. We work with community groups, seniors, students, unions and other organizations across the country to promote progressive policies on public health care, fair trade, secure energy, clean water and other issues of social and economic concern to Canadians. Visit www.canadians.org or call us at 1-800-387-7177 to become a member today.



Single Use Bottled Water – Why Recycling Is Not the Answer

Recycling enormous amounts of plastic water bottles is not 'green'. Yes – it is better than going to the landfill – but no – it is not 'green' by any stretch of the imagination. Bottled water contributes to vast amounts of pollution and climate change. In an era when the world is dealing with the impacts of climate change, the bottled water industry requires massive amounts of precious and dwindling fossil fuels to manufacture. The manufacturing of bottled water creates massive amounts of CO2 emissions and places great strains on aquifers. Aquifers and whole water sheds are under sever threat due to this practice. All of this in the midst of an alarming global water crisis. In India, whole river systems, such as the River Bhavani in Tamil Nadu state, have been sold to Coca-Cola even as the state is suffering the worst drought in living memory. As one company explains, water is now a "rationed necessity that may be taken by force".

From its extraction through sale, use and disposal, bottled water has dire consequences on our lives, our health, our environment, and those most vulnerable - yet most of this is carefully hidden from view by way of careful branding and deceptive greenwashing practices.

The bottled water industry is growing at an annual rate of 20%. Last year, nearly 100 billion litres of bottled water were sold around the world, most of it in non-renewable plastic. A close look at the myths about recycling shows they are being perpetrated less by those committed to ecology and more by those doing the most damage to the planet.

Plastics recycling only minimally reduce the amount of virgin resources used to make plastics. Recycled plastic is a small percentage of what is manufactured and the amount is actually decreasing. Even those active in administering recycling programs have come to recognize, for instance, that plastics consumption is actually encouraged by recycling.

The notion, that recycling is the answer produces only more illusions, not environmental sustainability. Outrageous levels of production and consumption are at the core of market economies, and unless that process is confronted, little will change. Businesses and leaders have an opportunity and a responsibility to model leadership and embrace this much needed positive change. The bottom line is that there is no need for bottled water to be sold in a facility that provides us adequate access to municipal drinking water. Bottled water is a habit that undermines the safety of tap water and commodifies a natural resource that's a public commons. We must challenge the idea of convenience and make a commitment. As responsible global citizens we must work towards a zero waste, sustainable culture for the future of our planet and for future generations. Our children deserve nothing less.

70 million bottles of water are sold in the U.S. every day.

38 billion single-use water bottles end up in U.S. landfills and waterways leaching toxins into our earth and water every year.

Bottled water production, transportation and disposal required more than **17 million barrels** of oil last year in America alone, enough fuel to power more than 1 million cars for a year, generating more than 2.5 million tons of carbon dioxide.

9 billion gallons of bottled water is consumed each year in the U.S.

The amount of fuel required to transport water bottles in the U.S. alone is equivalent to **38,000, eighteen-wheel wheel trucks** delivering water weekly.

Over **2.5 billion tons of plastic** are used to produce single-use water bottles every year. This results in over 1.5 million tons of plastic waste – requiring 47 million gallons of oil every year.

Bottled water companies, water to production ratios are roughly 3 to 1; for every 3 liters of freshwater that the bottled water industry takes from the earth only 1 liter of bottled water is actually produced.

Although two-thirds of the Earth is water, only 2% is drinkable freshwater. However, 1.6% of the total 2% is locked up in polar ice-caps. According to the United Nations 17 years from now, **by 2025, over two-thirds of our world's population will not have enough water to sustain the basics of life.**

More about recycling:

Although all plastic containers bear the chasing arrows symbol with a number in the middle, suggesting that all such products are recyclable, it is only 1s and 2s that can be. There is no market for bottles numbered 3 through 7. Most of the products which are manufactured from what is recycled, cannot be recycled a second time. Therefore, what you set out at your curb is only one generation away from a landfill. Recycling PET is similar to the polyethylenes. Bottles may be color sorted and are ground up and washed. Unlike polyethylene, PET sinks in the wash water while the plastic caps and labels are floated off. The clean flake is dried and often repelletized. PVC bottles are hard to tell apart from PET bottles, but one stray PVC bottle in a melt of 10,000 PET bottles can ruin the entire batch.

Equipment to sort plastics is being developed, but currently most recyclers are still sorting plastics by hand (by the impoverished and exploited in developing countries) which is hard and ugly work. It is also expensive and time consuming. Plastics also are bulky and cumbersome to collect. In short, they take up a lot of space in recycling trucks. Although in theory all plastic is recyclable, market forces, transportation costs and handling constraints often make recycling plastic prohibitively expensive. This is a tax burden being unfairly being placed upon the citizens of municipalities.

Currently only about 3.5% of all plastics generated is recycled, compared to 34% of paper, 22% of glass and 30% of metals. At this time, plastics recycling only minimally reduce the amount of virgin resources used to make plastics. Recycling papers, glass and metal, materials that are easily recycled more than once, saves far more energy and resources than are saved with plastics recycling. The recycling rate for all PET (polyethylene terephthalate) bottles, which represent 44 percent of total plastic bottle production, dropped to 25 percent. PET soda bottles, which represent one fourth of all plastic bottles produced, and nearly two thirds of all PET bottles, dropped to 36 percent last year. Plastic bottle recycling has not kept pace with the dramatic increases in virgin resin PET sales, particularly for PET bottles. Most of the increase in

virgin resin sales has been for single-serve PET soda bottles (under 24 oz) that now make up 60 percent of soda bottle market share.

When glass, paper and cans are recycled, they become similar products which (theoretically) can be used and recycled over and over again. With plastics recycling, however, there is usually only a single re-use. Some soda bottles make it to a recycler who must scramble to find a buyer, and often ends up selling the bottles at a loss to an entrepreneur who makes carpeting or traffic strips, anything but new bottles. And what is the plastic bottling industry doing to create a stronger recycling market for its product? Nothing.

Precycling' Catches On With Consumers:

Among the early-adopter segment of eco-conscious consumers, The Intelligence Group has observed a new trend called "precycling" and believes it will grow.

Consumers who precycle aren't just content with throwing cans and bottles in the recycle bin and letting waste management sort it out. With increasing consumer interest in sustainable living, those engaged in precycling aim to avoid products that create more superfluous stuff. This could mean everything from buying bulk in order to avoid excess packaging to reusing everything from water bottles to shopping bags (the latter of which has caught on with retailers and the public at large).

In its May *Cassandra Report*, The Intelligence Group found that 45% of trendsetters and 14% of mainstream consumers have "cut down on bottled water purchases" in the past six months, while 49% and 16% respectively have "cut down on use of plastic bags" during the same period.

Precycling evolved out of a trend the market research and consulting firm spotted in 2007, which it called "wasted." This is when it noticed excess was emerging as a dirty word. People were looking for ways to pare down packaging and/or repurpose it, for starters. As examples, think Pom Wonderful's reusable glassware and Chaco footwear's program that offers customers a 20% discount when they send in used but clean shoes, which are donated to developing countries.

It is becoming a more popular viewpoint that recycling cans, bottles, paper and such is an antiquated misuse of energy, so precyclers remove themselves from junk mail lists, read paper-based media online and even carry around "precycling kits" consisting of cloth napkins and silverware—anything to reduce waste and not contribute to the recycling bin.

"It's not just about how you dispose of [products and packaging] anymore," said Melissa Lavigne, director of marketing for The Intelligence Group, which is a division of CAA. "It's about being conscious about products you buy in the first place. That's the idea behind precycling."

Of course, precycling isn't replacing recycling completely, especially in its more abstract forms. Consumers are all for donating or reselling their electronic gadgets, for instance, thanks to eBay and other Web resources. Lavigne said, "We asked people how many think of the resale value when they purchase a product, and 49% said they do."

Many state that the solution is to ensure maximum recycling of the single use water bottles. The true solution is to not produce them in the first place. Since the beginning of life on earth as we know it – human life has been sustained with no dependence on bottled water. In fact, bottled water is the single biggest scam ever put over on the public on an enormous global scale. Consider what Jeff Caso, a Nestle executive has to say about their bottled water products; "We sell water, so we have to be clever."

Cory Morningstar

Council of Canadians | President | London Chapter



Bottled Water –Municipal Examples

Across Canada and the United States municipalities have taken action on bottled water. Here are a just a few examples of municipal actions that limit or end the use of bottled water and promote the consumption of tap water.

Canada:

- St. John's, Newfoundland: City Council banned the use of city money for the purpose of providing bottled water on city property, including during city-hosted events.
- Charlottetown, Prince Edward Island: City Council made the decision to stop purchasing bottled water.
- London, Ontario: City Council passed a resolution that banned the provision and sale of bottled water on city owned and operated property. The resolution also included provisions for a public awareness campaign and an assessment of tap water availability in these locations.
- *Altona, Manitoba: Municipality* decided to get rid of water coolers and bottled water in its offices
- Region of Metro Vancouver, British Columbia: Council voted to launch a public campaign to support tap water and to encourage local municipalities to phase out the availability of bottled water in civic centres and install more water fountains.
- U.S. Conference of Mayors passed a resolution encouraging mayors to phase out city spending on bottled water and to promote the importance of municipal water.

Key Statistics:

- 33 Canadian municipalities from 7 provinces have passed motions to restrict bottled water
- 31 Canadian colleges and universities have implemented bottled water free zones

CASE STUDY: CITY OF TORONTO

In December 2008 the City of Toronto passed a comprehensive bottled water motion that banned the sale or distribution of bottled water and provided alternatives for the provision of accessible tap water. Here are the details of the City of Toronto's approach to bottled water:

- Ban the sale or distribution of bottled water at Civic Centres immediately.
- Direct staff from all City Departments to work together to develop and implement a program that bans the sale and distribution of bottled water at all remaining City facilities, including in vending machines.
- Direct staff from all City Departments to improve accessibility to tap water at all City facilities.
- Direct staff to complete the comprehensive ban and improved tap water access by December 31, 2011.
- Launch a public awareness campaign that promotes the consumption of tap water as safe, high quality and convenient alternative to bottled water.
- Ensure that portable outdoor water trucks/trailers are available for outdoor city hosted and sponsored events.

For More Information visit, www.insidethebottle.org.



Take the Plunge: Bottled Water Action Options for Municipalities

Phase out the sale and distribution of bottled water in City facilities

- Prohibit the use of municipal government funds to purchase or distribute bottled water. Why not start with City Hall (Council meetings, bottled water available in department offices) and develop a strategy to phase out bottled water in city facilities and sponsored events
- Begin dialogue with vendors in city owned and leased space towards ending the sale of bottled water
- Remove bottled water sold in vending machines in city owned and leased space (develop a provision regarding bottled water for upcoming agreement renewals)

Providing and promoting alternatives to bottled water

- Establish a Municipal policy that mandates a cross-departmental team to audit the viability of switching to bottle-less water dispensers in city owned and leased spaces.
- Provide access to tap water in city owned and leased spaces by maintaining, reinstating and installing new water fountains.
- Commit to providing water dispensing units (stationary or removable, such as water trucks that connect to fire hydrants) at Municipal organized and sponsored special events.
- Start a tap water awareness campaign which encourages tap water consumption in municipal buildings. Work towards extending this awareness campaign to the broader public of the community

Help combat the growing number of PET plastic beverage containers found in landfills

- Implement or expand a municipal level bottle bill (also known as a container deposit system) or advocate for a provincial or state bill to include polyethylene terephthalate (PET) plastic beverage containers. Bottle bills increase recycling rates and help reduce the number of these bottles in landfills

'Right-to-know' policies

- Ensure that residents can access information about companies using municipal tap water or groundwater in the area (where jurisdictions apply) including the number of water bottlers in the municipality, company names, amount of water extracted and rates charged on a daily basis
- Beverage exclusivity contracts and proposals for the sale of bottled water in public institutions need to be subject to 'right-to-know' policies

Foster accountability

- Develop and implement policies that enhance accountability including transparency and public consultation around the approval of the use of water for water bottling
- Consider increasing charges for sourcing tap water for water bottling purposes to correspond with the significant private profits being made using a public resource; use this revenue to contribute to the costs of sustaining and retrofitting municipal water systems and water conservation measures

For More Information visit www.insidethebottle.org.



NESTLÉ WATERS CANADA

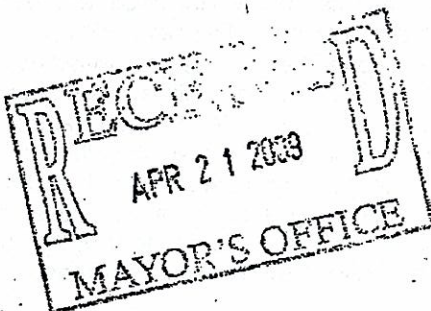
101 Brock Road South, Guelph, Ontario N1H 6H9 TEL 519-763-9462 · FAX 519-763-8156

(34) NA
7/28/08

DISTRIBUTED TO:

April 3, 2009

His Worship Mayor Peter J. Kelly
Mayor
Halifax Regional Municipality
P.o. Box 1749
1841 Argyle Street
Halifax, NS B3J 3A5



CAD: _____

CLERK:

COUNCILLORS' OFFICE: _____

DATE: Apr. 21/09

Dear His Worship Mayor Peter J. Kelly,

The purpose of my writing is to follow-up on my letter to you of December 3, 2008, regarding the environmental stewardship and health benefits associated with bottled water. (Attached)

Over the last nine months, more than 36 municipalities and school boards across Canada have rejected resolutions to ban the sale of bottled water in their facilities. Some have opted to use municipal tap water in pitchers during Council meetings and at all other internal staff meetings, which we fully support. During our discussions with municipal leaders across Canada, we have advocated for that common sense approach where potable municipal water exists.

Contrary to recent media reports, just 11 municipalities and two school boards have banned the sale of bottled water on their properties over the last three years.

However, rather than focus on bottled water, several thousand local governments have quite rightly determined that repairing aging water and sewer infrastructure, improving on the delivery of basic municipal services and keeping property taxes low are more important priorities.

We were disappointed when the Board of Directors of the Federation of Canadian Municipalities recently urged its members to ban the sale of bottled water on civic facilities. We weren't consulted. The livelihoods of the 13,000 Canadians employed in our sector weren't considered. The millions of dollars we pay annually in taxes, including water taking fees, and philanthropic and emergency assistance were ignored. Fortunately, the resolution was not unanimously supported by the Board.

Here are the facts about bottled water:

Bottled Water and Health:

- Most Canadians don't drink bottled water instead of tap water. According to independent research firm Probe Research, 70% of Canadians drink both. They drink tap water at home and they drink bottled water out-of-home to support their busy, on-the-go lifestyles -- and do so largely for convenience and good health. About 1% of municipal water is actually consumed by Canadians. If the bottled water industry was to disappear tomorrow, there will be no noticeable increase in the consumption of municipal water;
- About 70% of Canadians said if bottled water wasn't available, they'd consume less healthy alternatives, also according to Probe Research. Similar studies conducted amongst US consumers by Penn, Schoen & Berland Associates pegged the number at 51%;

- Health Canada recently identified obesity as the most critical, emerging health issue facing Canadians. About 30% of Canadians born after the year 2000 are obese, susceptible to diabetes and are at risk of being the first generation whose life expectancy may not exceed their parents. Hence, Health Canada recommends drinking water as a key and recommended component of a healthy lifestyle;
- "We do have concerns about the possible unintended consequences of removing the sale of bottled water in City-operated facilities where other nutritionally-deficient bottled drinks can remain to be offered for sale. If bottled water is not available, and access to municipal drinking water fountains is limited, then the public may opt for other drinks with higher levels of sugar, no nutritive value and a high acid content. Both the sugar content and the acidity of these beverages can have a negative health impact on the person's oral health and levels of nutrition." -- James Reffle, Director, Environmental Health and Chronic Disease Prevention Services, Middlesex-London Health Unit.

Bottled Water and the Environment:

- According to the provincial stewards responsible, about 60% of plastic beverage containers, including plastic water bottles, are recycled. Plastic beverage containers, including water bottles account for one-fifth of 1% of the waste stream. If the bottled water industry was to disappear tomorrow, there would be no appreciable reduction in the amount of refuse going to landfill;
- Plastic water bottles account for 40% of all plastic beverage containers, according to independent consumer research firm A.C. Nielsen. Plastic beverage containers account for 60% of all plastic containers used for food packaging purposes. Unlike many food packaging containers, plastic beverage containers are made of PET, are 100% recyclable and are the third most valuable commodity in the recycling stream;
- About 97% of Canadians have access to recycling – and 93% of those programs offer plastics recycling. All residential recycling programs in Canada are a minimum 50% funded by Canadian bottled water producers and their partners in other industry sectors. In a 2008 Leger Marketing study, 96% of Canadian bottled water drinkers indicated they recycle their plastic water bottles;
- According to Environment Canada, the Canadian bottled water industry uses just .02% of permitted water in Canada compared to thermal power generation (64%), manufacturing (14%), municipalities (12%), agriculture (9%) and mining (1%).

Should you have any questions, require access to our research on bottled water or desire to discuss improving recycling methodologies through such initiatives as public spaces recycling, please contact me at your earliest convenience by telephone at 1 888 565-1445, Ext. 6422 or via email at gail.cosman@waters.nestle.com.

Sincerely,



Gail Cosman
President

TORONTO STAR

Should city ban bottled water?

NO: Loss of choice, convenience and revenue must be considered

DOUG HOLYDAY
COUNCILLOR FOR WARD 3, ETOBICOKE CENTRE

When the board of directors for the Federation of Canadian Municipalities met last week in Victoria, representatives from municipalities across Canada (including seven councillors and one staff person from Toronto) dealt with, as their key item, a motion that could best be described as an attempt at being politically correct: encouraging municipalities to phase out the sale of bottled water in city facilities.

One would have thought that under the present circumstances their time would have been better spent dealing with the current recession and looking for ways that municipalities could help stimulate the economy.

This is tokenism at its worst and it is just a drop in the bucket when dealing with real environmental problems. The amount of plastic going to landfill as a result of water

bottles is truly minimal compared to the overall amount of plastic from other sources.

Our efforts would be better spent improving our litter collection, increasing the number of products recycled and reused, and trying to encourage the reduction of excess packaging.

Most of the water and other beverages currently sold in our city buildings come from machines that are there for the convenience and choice of our residents and employees. The ban of bottled water will remove this choice.

Not everyone carries their own plastic water container with them, and if they wish to purchase a portable beverage to take with them to the game or meeting or the CNE grounds, the chances are good that they will be forced to make a less healthy choice than water if this ban is implemented.

One Toronto councillor has already put forward an idea, for which he will be seeking council approval, to have ice machines installed throughout Toronto City Hall and thermal containers made available to employees for fresh water at their desks.

Consideration must be given to the costs of installation and maintenance of these ice machines in terms of their energy consumption and carbon footprint. Further, the cost of upgrading, installing and maintaining additional drinking fountains throughout city facilities would be another financial consideration.

If these ideas were implemented at all city facilities in Toronto, the cost would be alarming. Next we can expect to hear that more inspectors (plastic bottle police) will be necessary to enforce the ban.

The Canadian Bottled Water Association currently is a successful partner with municipalities in Quebec to reduce the number of plastic containers and other recyclables going to landfill. It also has indicated its interest in initiating this program in Ontario if requested to do so.

In the way of due diligence, municipalities should also seek the advice of their own health units to ensure that water is available to all and that the quality is up to standard. They should consult with the public and industry stakeholders regarding the loss of consumer choice from water to other beverages. When considering this type of policy, factors such as loss of convenience, loss of choice, increased costs and a loss of revenue should be taken into account.

The war on bottled water aside, it will be interesting to learn if our delegation brings any new worthwhile ideas back from the Victoria





NESTLÉ WATERS CANADA

101 Brock Road South, Guelph, Ontario N1H 6H9 TEL 519-763-9462 FAX 519-763-8156

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December 3, 2008

His Worship Mayor Peter J. Kelly
Mayor
Halifax Regional Municipality
P.O. Box 1749
1841 Argyle Street
Halifax, NS B3J 3A5

Dear His Worship Mayor Peter J. Kelly,

The purpose of my writing is to offer our considerable industry knowledge to you, your Council and your staff and to also request participation in any future discussions related to the continued sale of bottled water in your facilities, should such a matter be raised as an issue in your community.

In our position as Canada's largest manufacturer and distributor of bottled water, any possibility of a ban of this most healthful product is troubling to us. We believe Canadians have the right to select and consume the beverage of their choice, particularly one featuring the health and wellness attributes that water does.

Bottled water is proving to be particularly helpful at a time when the incidence of obesity and diabetes are on a significant increase amongst Canadians, particularly those born after 2000. More than 30 percent of all Canadians are overweight, obese and susceptible to diabetes. Those born after 2000 may be the first generation of Canadians who don't outlive their parents. They need the continued encouragement of municipalities, our industry and the media if we hope to blunt the advance of obesity and diabetes.

Should concerns be expressed about plastic beverage container recycling and litter, we may have a solution for you to consider. We and our industry partners recently entered into a \$7.2 million, three-year agreement with the Government of Quebec and municipalities across that province to collect and recycle plastic beverage containers and other recyclable materials in public spaces. The pilot program that triggered this agreement resulted in, on average, an 85 percent participation rate amongst consumers and businesses. We would be interested in talking to you about the feasibility of introducing a pilot program in your facilities. It is important to note that bottled water makes up about 40 percent of all beverages sold in plastic containers in Canada. On average, about 60 percent of plastic water bottles are recovered through municipal recycling programs.

FAKED to Clerk
Apr. 21/09

I have attached a brief document that I am certain will assist you in your future discussions with colleagues and constituents about bottled water. If you require additional copies, please have your staff contact John Challinor II, our Director of Corporate Affairs, by telephone at 1-888 565-1445, Ext. 6441 or via email at john.challinor@waters.nestle.com.

Should you have any further comments, questions or concerns, please feel free to contact me by telephone at 1 888 565-1445, Ext. 6422 or via email at gail.cosman@waters.nestle.com.

Sincerely,



Gail Cosman
President



In the Know



Your guide to bottled water and Nestlé Waters Canada

WHO WE ARE

Nestlé Waters Canada, a division of Nestlé Waters North America, is the leading bottled water company in Canada. Our family of well-known brands includes Nestlé® Pure Life® Natural Spring Water and Montclair® Natural Spring Water, as well as international bottled water brands such as Perrier®, S. Pellegrino® and Acqua Panna®. We are affiliated with Nestlé Waters, based in Paris, the bottled water subsidiary of the Swiss company Nestlé, S.A.

Nestlé Waters Canada currently operates facilities in Puslinch, Ontario; Laval, Quebec; Hope, British Columbia; and Chilliwack, British Columbia. We employ more than 500 associates across Canada.

Your Health

According to the Dietitians of Canada, the human body needs 8 – 12 cups of liquids a day to stay well hydrated¹. With no calories, carbohydrates, caffeine or artificial additives, bottled water is the natural choice for a growing number of active, health-conscious consumers.

In recent years, Canadian consumers, and consumers around the world, have chosen bottled water as a safe and accessible healthy beverage alternative to sweetened drinks in record numbers. Currently, 63% of Canadians say that they are trying to increase their water consumption as part of a healthy lifestyle³. In fact, 95% of current bottled water drinkers switched from other packaged beverages to bottled water⁴.

At Nestlé Waters Canada, we are proud to provide high quality beverage products to meet this significant and growing demand.

Water Use

It may come as a surprise but bottled water actually requires significantly less water to produce than most other beverages, making it a water source-friendly beverage.

Product	Water to Produce
Nestlé Waters Canada Spring water (1 litre)	1.5 litres
Cola soft drink (1 litre)	3 litres
Beer (1 litre)	42 litres

Source: Eshleman, K., *Drinking Water Research Foundation study summary, Coca-Cola Company, Environmental Protection Agency (EPA)*

COUNTING CALORIES		
Average calories for a 12-ounce beverage:		
	Calories	Teaspoons of Sugar
Bottled water	0	0
Sports drinks	110	6
Sweetened teas	130	7
Lemonade	140	9
Soft drinks	150	10
Apple juice	165	10
Fruit punch/* drinks	180	11

While bottled water manufacturers are an obvious user of water, the total extraction of water by Canadian-based water bottling companies is actually very small. Commercial bottled water production in Ontario accounts for less than 0.0014% of all water used by other permitted users including commercial, agricultural, industrial and recreational⁵.

¹ Dietitians of Canada, *Beat the Heat with Lots of Fluids*, August 11, 2006. <http://www.dietitians.ca/resources/resourcesearch.asp?in=view&contentid=6898> (October 10, 2007)

² <http://www.hookedonjuice.com/> (October 10, 2007)

³ ACNielsen PanelTrack Health & Wellness Survey 2006

⁴ Neilson Homescan 2006

⁵ Ontario, Ministry of the Environment, 2007

How much water do bottled water producers use compared to others? (Permits issued by the Ontario Ministry of the Environment as of May 2007)

Industry	PERMITS	
	Total Permits	Total Permitted Taking (million cubic metres per day)
Agriculture	2,944	7.59
Water Supply*	1,196	18.36
Commercial**	691	2.12
Miscellaneous***	612	792.81
Industrial****	514	515.03
Dewatering/Dewatering Construction	345	18.57
Recreational	120	3.04
Remediation	90	0.18
Construction	32	0.72
Bottled Water	23	0.02
Institutional****	14	0.01

- * Includes municipal, communal and campgrounds water supply
- ** Includes aquaculture, golf course irrigation, mall/businesses, snowmaking, other
- *** Includes dams & reservoirs, heat pumps, pumping tests, wildlife conservation, other
- **** Includes aggregate washing, brewing & soft drinks, cooling water, food processing, manufacturing, pipeline testing, power production, other
Hospitals, schools, other

Source: Ontario Ministry of the Environment

ENVIRONMENTAL EXCELLENCE

At Nestlé Waters Canada, we recognize that water is essential to our ecology and sustaining life in all its forms. That is why painstaking care is taken to select sources that are high-quality, abundant and readily replenished. We monitor the water levels and conditions at our sources, and we use state-of-the-art quality practices in our bottling processes to ensure a safe and natural beverage.

Earth-Friendly Facilities

Mindful of the environment and natural resources, Nestlé Waters Canada is a leader in conserving natural resources and minimizing waste. In 2006, we invested \$2.5 million in new technology that made our Puslinch bottling facility 10% more water efficient. We hope to increase our water efficiency by another 20% in 2008. We are continuously working to find new and innovative ways to make our Canadian facilities more efficient.

Reducing our Impact

Bottled water containers in general use less plastic than carbonated soft drinks or other plastic beverage containers. At Nestlé Waters Canada, we are committed to finding new and innovative ways to reduce our packaging. For example, in the last five years, we have reduced the plastic content in our packaging by approximately 30% and our corrugate use by 65%.

Our "Eco-Shape" bottle, available in 500 millilitres, has reduced the amount of plastic in our bottles by 15%. The bottle feels different to the consumer, but we believe they will appreciate the lower plastic resin content. This new bottle design is for all of our brands in North America and will save approximately 30 million kilograms of plastic resin a year.

In addition to reducing the environmental impact of our bottles, we constantly look for ways to reduce the environmental impact of our activities. We have started to produce our plastic bottles onsite,

reducing the kilometres traveled by our trucks. Our new \$15 million warehouse expansion, expected to begin in 2008, will reduce the number of trucks traveling to and from our facility by 1,500 per year.

1/2 LITRE SPRING WATER BOTTLE WEIGHT REDUCTION		
2002	2004	2007
17.2 grams	15.3 grams	12.3 grams

Reusing Materials

When possible, Nestlé Waters Canada's facilities reduce waste by reusing items such as corrugate, wooden pallets and shipping containers.

Recycling Focused

All of our packaging is 100% recyclable and our corrugated trays are made from 100% recycled fibre. Nestlé Waters Canada promotes the recycling of our bottles. We also actively support long-term research into new environmentally focused packaging technologies such as biodegradable bottles.

COMMUNITY KNOWLEDGE QUESTIONS

Why should I drink bottled water?

We believe that bottled water is a healthy beverage choice, and we are proud to provide Canadians with a high quality product that supports a healthy lifestyle.

Over the last five years, many beverages including soft drinks, sports drinks and juices have experienced a slowdown in their sales growth. During the same time period, the demand for bottled water has increased as Canadians indicate their preference for a healthy bottled beverage.

How much bottled water are Canadians drinking?

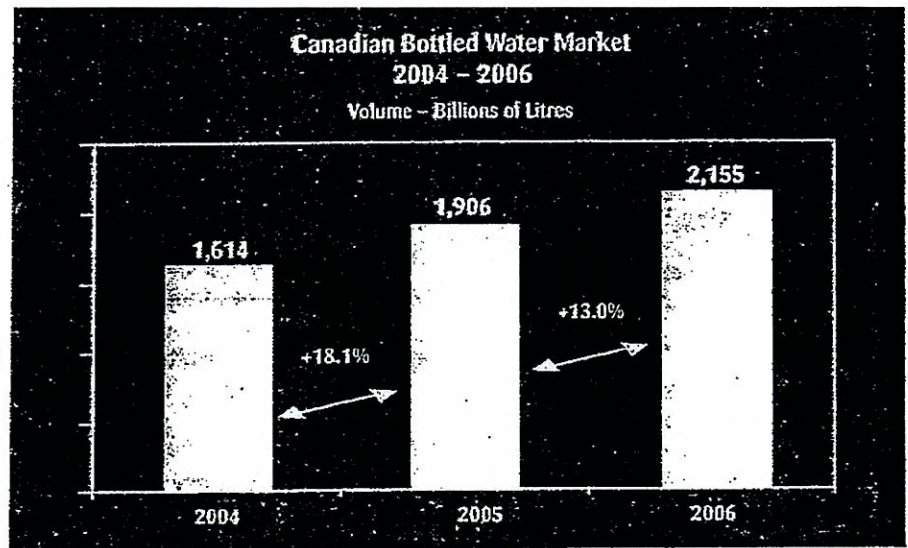
The Canadian bottled water industry has been growing rapidly over the past decade, moving the product into the mainstream⁶. Bottled water has become a staple for Canadian consumers with 52% choosing it for its portability and taste⁷.

CANADA'S THIRST FOR BOTTLED WATER	
Beverage	Volume of Market Share
Carbonated Soft Drinks	15.1%
Coffee	14.3%
Milk	11.5%
Tea	8.8%
Beer	9.5%
Fruit Beverages	8.6%
Bottled Water	9.1%
All Others	23.1%

Source: Beverage Marketing Corporation, 2006

Do bottled water companies use a lot of water?

While bottled water is an obvious use of groundwater, the amount of water extracted by Nestlé Waters Canada is actually very small when compared with other uses.



Source: Beverage Marketing Corporation 2006

At Nestlé Waters Canada, we know that every drop counts and we are proud of our efficient water use. For example, to produce 1 litre of Nestlé Waters Canada bottled water brands, only 1.5 litres of water are required. This includes water used by equipment and in-line sanitation.

Will you use up the water and leave?

Our sources are vital to our business, so it only makes sense for us to do everything we can to protect them. We plan to bottle water, at a sustainable rate, well into the future. Properly managed, sources are renewable indefinitely. Protecting these resources is not only the fiscally responsible way to operate, but also the right thing to do.

Nestlé Waters Canada researches historical and geological records and only selects water pumping sites that nature can naturally replenish. Recharge patterns are critical in determining the amount of water a source can safely yield, and Nestlé Waters Canada is committed to meticulously managing our sources – now and in the future.

How do you monitor the environmental impact of the bottling plant?

We monitor the water level of our production wells on a continuous basis and regularly collect data from on-site and off-site monitoring wells. We also monitor water levels and temperatures of the creeks near our facilities.

Our program, which includes both surface and groundwater monitoring locations, exceeds the requirements of our individual permits.

We report our monitoring results quarterly to the Ontario Ministry of the Environment. Monitoring reports related to our activities in Puslinch and Erin, Ontario, are available from the Ontario Ministry of the Environment.

AMOUNT OF WATER TO MAKE/PROCESS	
Product	Water to Produce
1 litre Nestlé Waters Canada	1.5 litres
1 slice of brown bread	28 litres
1 can of fruit or vegetables	35 litres
1 slice of white bread	40 litres
1 medium sized orange (to grow and prepare it for market)	53 litres
1 kilogram of paper	300 litres
1 new car (including tires)	148,000 litres
1 ton of steel	215,000 litres

Source: Environment Canada, Freshwater Website: Did you know?

⁶ http://www.finewaters.com/Bottled_Water/Canada/ (October 10, 2007)

⁷ Statistics Canada, Households and the Environment Survey 2006

MEET WITH US FOR A FREE CONSULTATION

At Nestlé Waters Canada, we believe that corporate responsibility is more than just good business – it's a bond we share with the communities where we live and serve. Our commitment to being a good neighbour comes in various forms including disaster relief and support of local community programs.

Nestlé Waters Canada is proud to support environmental, community, health and fitness and educational programs and events across Canada. We routinely work with a variety of national and regional organizations including:

Unicef Canada

United Way of Canada

Second Harvest Food Bank

Habitat for Humanity Canada

Girl Guides of Canada

The Foundation for Families
(Canadian Tire)

Kids Help Phone

Friends of Mill Creek

Puslinch Fire Department

Table pour la récupération
hors foyer

Hope Volunteer
Search and Rescue

British Columbia Ambulance
Service Flood Relief

Chilliwack Initiation
Hockey Tournament

Waste Reduction Week

Nestlé Waters Canada welcomes questions from the public. Canadians can contact Gail Cosman, President of Nestlé Waters Canada, directly at comments_for_the_president@waters.nestle.com. Gail personally responds to all inquiries.

How do you monitor the quality of your bottled water?

Nestlé Waters Canada takes a multi-barrier approach to water safety. We subject all of our finished products and our source water to daily microbiological analysis that exceeds the microbiological requirements as outlined in the Safe Drinking Water Act. Water samples are also sent to a third party independent lab for analysis every week. On a daily basis we conduct 1,700 quality and 60 quantity tests.

Is the Canadian bottled water industry regulated?

Yes. Bottled water is extensively and strictly regulated under the Food and Drugs Act and Regulations as a food product. The Food and Drugs Act sets identity standards, provides a basis for labelling requirements and establishes the safety parameters for bottled water and all other food products. Manufacturers and importers of bottled water are inspected and monitored by the Canadian Food Inspection Agency (CFIA) to help ensure that the products are safe and wholesome⁹.

How much do you pay for the water you take?

In Ontario, we currently pay a \$3,000 application fee for our Permit to take Water, but do not pay for the water itself. In the future, we will pay \$3.71 per million litres extracted to the Province of Ontario. Nestlé Waters Canada fully supports the concept of paying our fair share for water usage along with other water users.

Water is a shared resource. Why should Nestlé Waters Canada be allowed to bottle this valuable natural resource?

Canadian consumers are choosing bottled water as a healthy beverage alternative in record numbers.

At Nestlé Waters Canada, we believe that bottled water manufacturers have an important role to play in offering consumers a healthy, portable and convenient alternative to other bottled beverages. We are proud to provide high quality beverage products to meet this significant and growing demand.

I've seen bottles of Nestlé Pure Life in the U.S. and other countries around the world. Are you shipping our water around the world?

Nestlé Pure Life is a global brand produced locally and close to the consumer. Nestlé Pure Life is produced around the globe, from local water sources, in countries as widespread as China, South Africa, Mexico, Canada and the U.S.

In Canada, for example, 98% of the water extracted at our Puslinch, Ontario, facility goes to Ontario and Quebec, ensuring that the vast majority of water stays within the Great Lakes/St. Lawrence water basin. The other 2% of the water is distributed within Canada and the northeast United States.

⁹ <http://www.inspection.gc.ca/english/issu/concern/specif/botwate.shtml> (November 13, 2007)

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comments_for_the_president@waters.nestle.com
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Nestlé Waters Canada
is a proud sponsor of
Waste Reduction Week
in Canada





MYTH: Bottled Water is a recent marketing phenomenon

THE FACTS:

- The water bottling and distribution business is one of the oldest forms of commerce in the world.
- The origins of bottled water can be traced back to 10,000 B.C., where early man was transporting and supplying water from natural sources in primitive vessels and skins to their dwellings.
- Canadians have been purchasing spring water in bottles made of glass, plastic and other materials for more than 125 years (Montclair).

MYTH: The bottled water industry doesn't care about recycling

THE FACTS:

- Per household, Canadians discard about 500 pounds of newsprint per year, but only 20 pounds of plastic containers, including beverage, household and personal care products.¹
- Studies show that recycling plastic bottles into new products saves 50% to 60% of the energy that would be required to make the same product from raw materials.² PET water bottles are 100% recyclable.
- Plastic water bottles are the third most recycled product in Canada, behind newspapers and aluminum. They are also the third most valuable item in a recycling program and, when recycled, are used to make playground equipment, automobile parts, carpeting, fleece clothing, sleeping bags, shoes, luggage, other plastic containers, etc.³
- Plastic water bottles account for about 40% of all plastic beverage containers used in Canada, behind soft drink containers.⁴
- According to Stewardship Ontario, plastic beverage containers, including plastic water bottles, account for 0.5% of the total waste stream in Ontario and plastic water bottles account for only 0.2%. If the industry disappeared tomorrow, there would be no appreciable decrease in the volume of refuse going to landfill.
- Almost all Canadians who drink bottled water say they recycle the bottles. In a 2008 report by Leger Marketing, 96% of Canadian bottled water drinkers said they recycle their plastic water bottles.
- 97% of Canadians have access to a municipal recycling program and 90% of these programs offer plastics recycling.⁵ All of these programs are partially funded by Nestlé Waters Canada and its industry partners.⁶
- The recovery rate for plastic averages 60%, but varies between 55 and 80% nationally, depending on the efficiency of a given municipal recycling program.⁷
- Nestlé Waters Canada and its industry partners recently entered into a \$7.2 million, three-year agreement with the Government of Quebec and municipalities across that province to collect and recycle plastic beverage containers and other recyclable materials in public spaces. The program is capturing an estimated 85 percent of recyclables in public spaces, including plastic, glass, aluminum and paper, according to program management Gaia Environmental. As a result of its public education and mass communications support activities, the program is also having a halo effect on the province's existing curbside program, resulting in increased participation in that program. The Company and its industry partners plan to roll out similar programs across Canada, specifically focusing on British Columbia, Alberta and Ontario. A pilot program is scheduled to begin in Sarnia, Ontario in May 2009.

MYTH: The bottled water industry doesn't care about the environment

THE FACTS:

- By reducing the size of its packaging over the last ten years by 30%, Nestlé Waters North America has reduced the amount of energy it uses by 30% annually and the amount of greenhouse gas emissions it produces by 22% annually over that time.
- Nestlé Waters North America's 12.5-gram 500 ml Eco-Shape PET-based bottle will save 65 million pounds of resin in 2008 across the Nestlé world, reducing its current bottle's lifecycle CO₂ emissions by 8% over the previous bottle and

¹ The Benefits of Plastic Bottles, Environment and Plastics Industry Council.
http://www.cpia.ca/files/files/files_Benefits_of_plastic_Bottles.pdf.

² The Benefits of Plastic Bottles, Environment and Plastics Industry Council.
http://www.cpia.ca/files/files/files_Benefits_of_plastic_Bottles.pdf.

³ Stewardship Ontario, 2007.

⁴ A.C.Nielsen, February 2009.

⁵ Statistics Canada, Households and the Environment Survey, 2006.

⁶ Stewardship Ontario. <http://www.stewardshipontario.ca/bluebox/index.htm>.

⁷ Encorp Pacific, October 2008.

by more than 30% over a typical 591 ml soft drink bottle. The Company manufactures its own bottles at each of its bottling facilities, saving the energy required to ship truckloads of empty bottles into its plants.

- Nestlé Waters Canada has reduced corrugate use by 88,000 tons over the last five year period, which is equivalent to saving 528,000 trees. Another 15% reduction is planned for 2009.
- On a global scale, Nestlé Waters S.A. uses just 0.03% of worldwide oil production (or just three hours worth of extraction) to meet its annual requirements for plastic bottle manufacturing.

MYTH: The bottled water industry doesn't care about the health of Canadians

THE FACTS:

- Drinking water is a key and recommended component of a healthy lifestyle, according to Health Canada, complemented by proper food consumption and regular exercise. According to the Dietitians of Canada, the human body needs 8 – 12 cups of liquids a day to stay well hydrated.⁸
- Water plays a key role for health and wellness in today's on-the-go society, particularly in an environment where 30% of those born after the year 2000 are obese, susceptible to diabetes and at risk of being the first generation not to outlive their parents.⁹
- "In Canada, bottled water is considered to be a food and is regulated under the Food and Drugs Act. Under the Act and its regulations, all bottled water offered for sale in Canada must be safe for people to drink. In addition, the companies that bottle water must comply with quality standards, good manufacturing practices, and labeling requirements."¹⁰
- "No matter what source it comes from, all bottled water sold in Canada is inspected and treated during the manufacturing process to ensure that it meets Canada's requirements for safety and quality."¹¹
- In 2007, both Health Canada and the Ontario Ministry of Health identified obesity as the most critical, emerging health issue facing Canadians.¹²
- Water is a safe, portable and convenient beverage and a healthy alternative to soft drinks and other sugar-based, high-calorie products also found in plastic containers.
- More than 60% of Canadians drink bottled water every day – and 75% of them consume it because it is a portable, accessible and healthy choice.¹³ According to a May 2008 study by independent Canadian research firm Probe Research Inc., about 70% of Canadians said if bottled water wasn't available, they'd consume less healthy alternatives. Similar research conducted in July 2007 amongst US consumers by Penn, Schoen & Berland Associates pegged the number at 51%.
- Currently, 63% of Canadians say that they are trying to increase their water consumption as part of a healthy lifestyle.¹⁴

MYTH: The bottled water industry is anti-tap

THE FACTS:

- Bottled water cannot replace tap water. Everyone deserves access to a safe, reliable and affordable supply of drinking water. We see our competition as other bottled beverages, not tap water.
- According to Agriculture and Agri-Food Canada: "Bottled water competes with a variety of other cold beverages, including carbonated soft drinks, milk, juices, soya beverages, energy drinks, and sport drinks and to a lesser extent with hot drinks such as coffee, tea and hot chocolate, and low alcohol wine coolers and ciders."¹⁵
- Maintaining Canada's municipal water and sewer infrastructure is vitally important for all consumers, including Nestlé Waters Canada. As users of Canada's municipal water and sewer system (except to source its water), Nestlé Waters

⁸ Dietitians of Canada, Beat the Heat with Lots of Fluids, August 11, 2006.

⁹ Statistics Canada, National Population Health Survey on Obesity, April 2005

¹⁰ Health Canada – It's Your Health – The safety of Bottled Water (<http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/food-aliment/bottled-embouteillee-eng.php>) published April 2009

¹¹ Health Canada – It's Your Health – The safety of Bottled Water (<http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/food-aliment/bottled-embouteillee-eng.php>) published April 2009

¹² The Honourable Tony Clement, Minister of Health, Government of Canada, February 15, 2007; The Honourable George Smitherman, Minister of Health, Province of Ontario, August 16, 2007

¹³ Independent survey conducted in May 2008 by Probe Research Inc.

¹⁴ ACNielsen PanelTrack Health & Wellness Survey 2006.

¹⁵ Agriculture and Agri-Food Canada, The Canadian Bottled Water Industry. <http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1171644581795&lang=eng>

Canada and its employees support increased investment in this vital infrastructure by all levels of government so that each and every Canadian citizen has access to a safe and secure supply of tap water.

- Nestlé Waters Canada is not interested in engaging in a bottled water-versus-tap-water argument. In Nestlé Waters Canada's view, drinking bottled water or tap water is not an either-or choice – and 70% of Canadians agree. They drink both.¹⁶
- Canadians do not spend money on bottled water at the expense of tap water. In fact, a study conducted in October 2006 by A.C. Nielsen indicated that 95% of the movement to bottled water is due to a shift from other beverages, most notably soft drinks, tea and milk.
- About 64% of Canadians drink bottled water out-of-home.¹⁷ "Away-from-home" generation accounts for about 63% of all PET beverage containers.¹⁸
- Bottled water is simply not tap water in a bottle. Nestlé Waters Canada uses underground sources on private property. According to a February 2009 AC Nielsen report, 92% of Canadian bottled water comes from spring water sources on private property.

MYTH: The bottled water industry is depleting Canada's water supply.

THE FACTS:

- The earth's hydrologic cycle naturally replenishes what Nestlé Waters Canada bottles and uses to bottle its spring waters. *The renewable supply is what falls from the sky and runs off in rivers, often passing through lakes as it moves to the sea. Some goes underground, replenishing aquifers that can be tapped by wells. These flows are renewed every year and count as the water supply.*¹⁹
- The bottled water industry is a net importer of water into the Great Lakes region. According to a 1999 International Joint Commission (IJC) report on bottled water, for every 1 litre of bottled water exported out of the region, there were 9 litres imported into the Great Lakes region. An update from the Ontario Ministry of Natural Resources states that in 2005, for every 1 litre exported, 14 litres were imported.
- According to the Ontario Sewer & Watermain Construction Association "The underground pipes carrying water to residents across Ontario are so old and leaky that 20 to 40% of all the treated water goes into the ground before it gets to your taps. For the City of Toronto, even a conservative estimate of 25% represents a loss of more than 120 million cubic meters of water a year – enough to fill more than 50,000 Olympic-sized swimming pools [...] It is estimated that this massive leakage costs Ontario ratepayers up to a billion dollars annually."²⁰
- The bottled water industry in Ontario uses as much water as ten golf courses in Ontario – a province where there are more than 700 golf courses.²¹
- Commercial bottled water production in Ontario accounts for less than 0.0014% of all water used by other permitted users including commercial, agricultural, industrial and recreational.²²
- The Canadian bottled water industry uses just .02% of permitted water in Canada²³ compared to thermal power generation (64%), manufacturing (14%), municipalities (12%), agriculture (9%) and mining (1%).²⁴
- About 97% of water drawn by bottled water companies is bottled.²⁵
- It takes 1.4 litres of water to produce one litre of Nestlé Pure Life in Canada.²⁶
- According to Environment Canada²⁷:
 - It takes 39 090 gallons (about 148 000 litres) of water to manufacture a new car, including new tires.

¹⁶ A Clearer Perspective, Probe Research Inc., May 2008.

¹⁷ Probe Research, May 2008.

¹⁸ An Overview of Plastic Bottle Recycling in Canada. http://www.cpia.ca/files/files/files_plastic_bottle_recovery.pdf.

¹⁹ John B. Sprague, Excerpt from "Eau Canada" by Karen Bakker, page 20 second paragraph.

²⁰ Ontario Sewer & Watermain Construction Association. "Leaks in Water Systems May be a Major Cause of Water Shortages to Residents." OSWCA. 4 July 2007.

http://74.125.95.132/search?q=cache:H4tQqLBnMhcJ:www.oswca.org/public/news_and_information/media_room/news_releases/%3Fitem%3D6+Ontario+Sewer+and+Watermain+Construction+Association+Toronto+25&hl=en&ct=clnk&cd=2&gl=ca.

²¹ Canadian Bottled Water Association. <http://www.cbwa.ca/en/faq.htm#9>.

²² Ontario Ministry of the Environment, 2007.

²³ Environment Canada.

²⁴ Flushing the Future? Examining Urban Water Use in Canada. http://www.waterdsm.org/pdf/report1_full.pdf.

²⁵ Nestlé Waters North America, 2008.

²⁶ Nestlé Waters North America

²⁷ Environment Canada, How Do We Use It? http://www.ec.gc.ca/water/en/infofacts/e_use.htm

- It takes 62 600 gallons of water to produce one ton of steel. That's about 215 000 litres of water to produce one metric ton of steel.
 - It takes 9.3 gallons (about 35 litres) of water to process one can of fruit or vegetables.
 - It takes nearly 14 gallons (about 53 litres) of water to grow a medium-sized orange (4.6 ounces/130 grams) and to prepare it, in a packing plant, for market.
 - It takes 48.3 gallons (about 183 litres) of water to produce one eight-ounce glass of milk.
 - It takes about 45% more water to make a slice of white bread (10.6 gallons/40 litres) than a slice of brown bread (7.3 gallons/28 litres).
- A litre of bottled water sells for about 38 cents. A litre of regular unleaded gasoline sells for 87 cents.²⁸

MYTH: Bottled water companies cause damaging environmental impacts on individual watersheds by removing large amounts of water. The bottling process drains freshwater resources. For example, Nestlé Waters Canada's extraction of 3.6 million litres per day in Aberfoyle, Ontario, is causing a reversal of groundwater flow to the Mill Creek.

THE FACTS:

- Nestlé Waters Canada current permit in Aberfoyle, Ontario, is for 2,500 litres per minute. Operating under the assumption that their plant is at full capacity, 60 minutes of each hour, 24 hours a day, this would translate into production of 3.6 million litres per day. However, like any manufacturing facility, Nestlé operates far less than 24 hours a day or 60 minutes an hour. Nestlé Waters Canada is currently using about 60% of the approved volume of permitted water to be taken.
- None of Nestlé Waters Canada's tests have indicated any adverse effect on the levels of Mill Creek. As with tap water, the earth's hydrologic cycle naturally replenishes the water Nestlé Waters Canada bottles.²⁹
- Bottled water companies have a vested interest to manage their spring and water sources sustainability, responsibly and efficiently in order to operate well into the future.

MYTH: Banning bottled water in public facilities does not violate one's freedom of choice. We should not have to purchase water that does not go through the same testing as tap water in public places.

THE FACTS:

- Limiting consumers' access to a safe, healthy beverage alternative out-of-home limits their freedom of choice.
- Bottled water cannot replace tap water. Everyone deserves access to a safe, reliable and affordable supply of drinking water. We see our competition as other bottled beverages, not tap water.
- Bottled water is held to the same scrutiny as tap water. According to Health Canada: "Consumers should be aware that bottled water is as safe to consume as tap water from a microbiological quality and chemical safety standpoint."³⁰ Bottled water is regulated as a packaged food product by Health Canada and the Canadian Food Inspection Agency through the Food and Drugs Act.
- Nestlé Waters Canada customers have never suffered an illness due to the consumption of its products and its competitors' customers have never reported illnesses due to their bottled water consumption, according to the Canadian Bottled Water Association.
- According to the Canadian Food Inspection Agency: Quality standards for bottled and municipal waters are similar. Both bottled and municipal waters that meet or exceed their required health and safety standards are considered to be safe. No waterborne disease outbreaks have been associated with drinking bottled water in Canada.³¹
- "The Canadian Food Inspection Agency (CFIA) regularly inspects domestic bottled water manufacturers, and samples and analyses both domestic and foreign products to ensure that bottled water sold in Canada meets the requirements of Division 12 of the Food and Drug Regulations and is safe for human consumption. Some provincial

²⁸ A.C. Nielson, November 2008.

²⁹ Nestlé Waters Canada Corporate Affairs Department, FAQ Document, 14 Jan 2009. John B. Sprague, Excerpt from "Eau Canada" by Karen Bakker, page 20 second paragraph.

³⁰ Health Canada, Food and Nutrition, Questions and Answers on Bottled Water. http://www.hc-sc.gc.ca/fn-an/secureit/facts-faits/faqs_bottle_water-eau_embouteillee-eng.php

³¹ Canadian Food Inspection Agency, Fact Sheet, Food Safety Facts on Bottled Water. <http://www.inspection.gc.ca/english/fssa/concen/specif/bottwate.shtml>

and municipal agencies also conduct surveillance of bottled waters. In addition, manufacturers that are members of bottled water associations must follow additional specific requirements to ensure the quality of their products."³²

- The Canadian Bottled Water Association (www.cbwa.ca) holds all its members to very high product standards that exceed those of the federal and provincial governments. For example, Nestlé Waters Canada quality assurance staff test its products at least 1,700 times each day at its Aberfoyle plant, and meet or exceed all requirements of Health Canada and other governing bodies.
- Testing is also conducted via surprise inspections by the Canadian Food Inspection Agency, Health Canada, the Canadian Bottled Water Association and NSF International. NSF International, an independent and highly-regarded public health and food safety inspection agency. NSF is a World Health Organization Collaborating Centre for Food and Water Safety and Indoor Environment.
- Nestlé Waters Canada subjects its finished products and source water to microbiological analysis every day that exceeds the microbiological requirements outlined in the Safe Drinking Water Act, an Ontario statute. Nestlé Waters Canada is required to test for 160 compounds in both source and finished product for:
 - Daily – coliform, E-coli
 - Weekly – coliform, E-coli
 - Quarterly – chemicals
 - Annually – metals, chemicals and minerals
- Nestlé Waters Canada consistently meets or exceeds requirements for water quality, good manufacturing processes and clear, consistent labeling.

MYTH: Unlike tap water, bottled water is not produced locally.

THE FACTS:

- The bottled water industry proudly employs approximately 11,000 people in Ontario alone who work at local plants, bottling local water. It employs 13,000 across Canada.
- Approximately 98% of the water bottled at Nestlé Waters Canada Aberfoyle bottling facility is distributed in Ontario and Quebec and stays within the Great Lakes/St. Lawrence water basin.

MYTH: Bottled water bans are a quickly growing movement. Canadians may have access to recycling but they don't use it - rejecting bottled water is the only way to truly eliminate impacts on our landfills.

THE FACTS:

- PET bottles are 100% recyclable. They are also safe to use, as they don't contain BPA.³³
- According to Stewardship Ontario, plastic beverage containers, including plastic water bottles, account for 0.5% of the total waste stream in Ontario. Plastic water bottles for only 0.2%.
- Almost all Canadians who drink bottled water say they recycle the bottles. In a 2008 report by Leger Marketing, 96% of Canadian bottled water drinkers said they recycle their plastic water bottles. Bottled water drinkers in the Prairies said they recycled the least at 87%. In Ontario and Alberta, almost all (98%) of bottled water drinkers said they recycled.
- "Ontario's Waste Diversion Act requires all companies that introduce packaging and printed material into Ontario's consumer marketplace ("Stewards") to share in paying 50% of the funding of Ontario's municipal Blue Box waste diversion programs."³⁴
- Most Canadians, who have access to recycling, use it. While recycling rates vary across Canada, improving access to recycling facilities (especially in multi-family dwellings and public spaces) will improve recovery rates. Recovery rates are especially high in single family dwellings.

³² Health Canada, Food and Nutrition, Questions and Answers on Bottled Water. http://www.hc-sc.gc.ca/fn-an/securit/facts-faits/faqs_bottle_water-eau_embouteillee-eng.php

³³ Government of Canada, Chemical Substances: http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/bisphenol-a_fs-fr_e.html, Oct. 2008.

³⁴ Stewardship Ontario. <http://www.stewardshipontario.ca/bluebox/index.htm>.

- A Toronto 2005 single family housing waste audit conducted over four seasons found an 87.8% recycling rate for PET Beverage Containers. A Toronto 2007 multi-family housing waste audit conducted over four seasons found a 37.1% recycling rate for PET Beverage Containers.
- A Halton Region 2007 single family housing waste audit conducted over four seasons found a 78% recycling rate for PET Beverage Containers
- A Hamilton 2006 single family housing waste audit conducted over three seasons found an 83.5% recycling rate for PET Beverage Containers. A fourth season (Fall 2006) was undertaken with a different sort methodology that separates alcoholic beverage PET from non-alcoholic beverage PET and this identified a recycling rate of 88.8% for non-alcoholic beverage PET. *Please note that from fall 2006 forward all Stewardship Ontario Municipal waste audits used this new methodology.*
- A Durham Region 2005 single family housing waste audit conducted over four seasons found a 75.1% recycling rate for PET Beverage Containers. *(Based on Waste Audits as reported by Stewardship Ontario: http://www.stewardshipontario.ca/bluebox/eefund/projects/audits/waste_audit_sf.htm)*
- Industry partners are in discussion with a number of municipalities to implement public spaces recycling programs, funded in part by the industry. Such a pilot program in Quebec resulted in, on average, an 85% participation rate amongst consumers and businesses.³⁵
- Approximately 67 municipalities and school boards across Canada have or are considering bans on bottled water – 36 have rejected the notion, 13 have approved the idea in various forms and 18 are considering their options. Most municipalities and school boards across Canada have rightly determined that there are more important matters to consider, like properly maintaining their water and sewer infrastructure and making a meaningful and lasting impact on the efficient and conservative use of water.³⁶

MYTH: Challenging bottled water will improve the public system and ensure clean drinking water standards for all communities across the country.

THE FACTS:

- Consumers do not spend money on bottled water at the expense of tap water. The majority of Canadians (70%³⁷) drink a combination of bottled and tap water. They drink tap water at home and bottled water out-of-home to support their busy, on-the-go lifestyles.

There are a number of initiatives Canadians can focus on to help preserve, protect and strengthen our water systems, that are more effective than targeting bottled water:

- Call on government to make water and sewer infrastructure development and maintenance a priority;
- Make all residential, commercial and industrial water takers pay their fair share of the real cost of water consumption;
- Address the inefficient use of water by municipalities, agriculture and industries;
- Require treatment of wastewater before it is returned to rivers, lakes and oceans;
- Invest in related public education and communications about water conservation and protection.

For further information contact:

John Challinor II
 Director of Corporate Affairs
 Nestlé Waters Canada
 1-888-565-1445, ext. 6441
 (519) 767-6441
john.challinor@waters.nestle.com



³⁵ Gaia Environment Inc., February 2007.

³⁶ Corporate Affairs Department, Nestlé Waters Canada, March 2009

³⁷ A Clearer Perspective, Probe Research Inc., June 2008



NESTLÉ WATERS CANADA
101 Brock Road South, Guelph, Ontario N1H 6H9 TEL 519-763-9462 FAX 519-763-8156

March 9, 2009

Mr. Brock Carlton
Chief Executive Officer
Federation of Canadian Municipalities
24 Clarence Street
Ottawa, Ontario
K1N 5P3

Dear Brock;

The purpose of my writing is to respectfully request the opportunity to have bottled water industry representatives appear before your Board of Directors at its earliest convenience to make a presentation about the industry's progress related to environmental stewardship – and respond to any questions, comments or concerns you and your Board may have.

The genesis of this outreach is a recent Federation of Canadian Municipalities resolution regarding bottled water, where some mis-information about our industry was communicated in the resolution and, beyond that, an unfortunate call-to-action was advised about our products.

Contrary to what the resolution states, the facts about bottled water are as follows:

“Whereas bottled water consumes significant amounts of non-renewable fossil fuels to extract, package and transport water creating unnecessary air quality and climate change impacts.”

The bottled water available to 40 percent of the Canadian population comes from within the Great Lakes Basin, so shipment by air doesn't occur. Bottled water produced by Coke and Pepsi is bottled in Mississauga and Brampton. Bottled water produced by Nestlé Waters Canada is bottled in Aberfoyle. There are bottling plants located in Quebec and across Western Canada to serve those areas of the country. There probably isn't another mass-produced packaged food product used by Canadians that is in as close proximity to them as bottled water is. Nestlé Waters Canada recently mapped its carbon footprint and determined that the bottle represents 55 percent of its greenhouse gas emissions. It has reduced the amount of plastic it uses in that bottle by 30 percent since 2000. Bottled water has the smallest carbon footprint of any consumer beverage, whether measured by water volume, plastics/oil usage or greenhouse gas emissions.

"Whereas it takes about three litres of water to manufacture a one litre plastic bottle of water."

This is incorrect. According to Environment Canada, it takes 1.5 litres of water to produce one litre of bottled water. By comparison, it takes 3 litres of water to produce one litre of soft drinks; it takes 28 litres of water to produce one slice of brown bread; it takes 42 litres of water to produce one litre of beer; it takes 53 litres of water to grow and market an orange; and it takes 183 litres of water to produce one 8-ounce glass of milk. Water is a fundamental requirement for the processing, manufacture and distribution of all food consumed by human beings.

"Whereas bottled water companies use municipal water and groundwater sources when a growing percentage of Canadian municipalities have faced water shortages in recent years."

According to Environment Canada, the Canadian bottled water industry uses just .02 percent of permitted water in Canada compared to thermal power generation (64 percent), manufacturing (14 percent), municipalities (12 percent), agriculture (9 percent) and mining (1 percent). According to A.C. Nielsen, more than 90 percent of bottled water comes from spring sources on private property. The remainder comes from municipal sources. The Canadian bottled water industry has never been cited by any provincial or federal environmental agency as being the source of any shortages of municipal water supply.

"Whereas although bottled water creates a container that can be recycled, between 40% and 80% of empty bottles end up as litter and/or are placed directly into the garbage and take up unnecessary space in landfills."

This is incorrect. According to the provincial stewardship agencies responsible, the recovery rate for plastic beverage containers averaged 60 percent across Canada in 2007, but varied between 55 and 93 percent provincially. A 2005 single family housing waste audit conducted over four seasons in Toronto found an 87.8 percent recycling rate for PET beverage containers. Plastic water bottles make up just 40 percent of the total volume of plastic beverage containers used by the beverage industry. Most plastic beverage containers contain soft drinks and sweetened juices. Plastic water bottles account for about one-fifth of one percent of the municipal solid waste stream in Canada. If the bottled water industry was to disappear tomorrow, there would be no appreciable reduction in the amount of refuse going to landfill.

“Whereas tap water is safe, healthy, highly regulated and accessible to residents, employers, employees and visitors to Canadian municipalities and substantially more sustainable than bottled water.”

This is incorrect. Bottled water is held to the same scrutiny as tap water. By law, Health Canada regulations for bottled water must be as strong and protective of public health as Ontario Ministry of Environment regulations for tap water. Bottled water is regulated as a packaged food product by Health Canada through the Food and Drug Act. With respect to regulation, the Regional Municipality of Waterloo, for example, reported on September 9, 2008, that it did 10,000 tests on its water supply in 2007. Nestlé Waters Canada performs more than 1,700 tests on its water supply daily at its Aberfoyle plant or more in one week than Waterloo Region does in one year. A copy of our testing activities is available upon request. Testing is also conducted via surprise inspections by the Canadian Food Inspection Agency, Health Canada, the Canadian Bottled Water Association and NSF. Nestlé Waters Canada takes a multi-barrier approach to water safety. The Company subjects its finished products and source water to microbiological analysis every day that exceeds the microbiological requirements outlined in the Safe Water Drinking Act, which governs both municipal tap water and bottled water. The Company is required to test for 160 compounds in both source and finished product for coliform, E-coli (daily), coliform, E-coli (weekly), chemicals (quarterly) and metals, chemicals and minerals (annually). **Water samples are also sent to a third party independent lab for analysis every week. Basic chemical and physical analysis of bottled water is completed daily. Annually, we conduct a full spectrum analysis on each water source for primary inorganics, secondary inorganics, radiologicals, volatile organic compounds, organics, disinfection byproducts, pesticides, herbicides, physical contaminants as well as several other potential chemical contaminants. In addition to the tests identified above, there are many on-line quality checks performed by our operators on an hourly basis to ensure the chemical, microbiological and physical safety of the finished goods produced at our plants.** Our testing levels meet or exceed all requirements of Health Canada and other governing bodies. The annual monitoring reports are conditions of our permits and are submitted to the province and other public agencies. As such, they become public documents upon receipt.

“Whereas some municipalities have enacted bylaws to restrict the sale and purchase of water bottles within their own operations.”

Thirty-six municipalities and school boards across Canada have formally rejected calls for bans on bottled water, while just 13 local governments have approved same, to date. But, rather than focus on bottled water, several thousand local governments have quite rightly determined that repairing aging water and sewer infrastructure, improving on the delivery of basic municipal services and keeping property taxes low are more important priorities -- and most Canadians agree. In a survey conducted last Fall by Leger

Marketing, a majority of Canadian taxpayers said they are opposed to bans on bottled water.

-4-

Brock, we view municipalities across Canada as important partners in environmental sustainability, health and wellness and emergency support – and the vast majority of them view us the same way. Today, we and our industry partners fund a minimum of 50 percent of the cost of municipal recycling programs across Canada. At our industry's initiative and expense, we are in the process of implementing a pilot public spaces recycling program in Sarnia modelled on the successful program we introduced in Quebec in June 2008.

In 2008, Nestlé Waters Canada was a minor sponsor of the annual FCM Conference. We are currently reviewing what our participation level will be this year.

I have attached some related background information about our Company and our industry that I trust you will find insightful.

In conclusion, as we have for the last 25 years, we are only interested in continuing to work constructively with Canadian municipalities, rather than allow that strong relationship to erode because of isolated mis-information, mis-understandings and mis-communications.

Brock, please let me know if a presentation to the Board or a Committee of the Board is desired and/or possible by contacting me via Canada Post, email at john.challinor@waters.nestle.com or by telephone at 1 888 565-1445, Ext. 6441.

Sincerely,

John B. Challinor II APR
Director of Corporate Affairs

cc: Elizabeth Griswold, Executive Director, Canadian Bottled Water Association
Jean Perrault, President, FCM
Justin Sherwood, President, Refreshments Canada

Safety	
<p>Water is a critical element to human life. With that, the safety of our water sources is very important. Whether water is supplied from a bottle of water or from a tap or fountain, the safety elements surrounding that water are very important.</p>	
<p>Bottled Water Industry Contrary to claims that the Bottled Water Industry is subject to solely the infrequent inspections of the Canadian Food Inspection Agency, Nestle Waters Canada takes a multi-barrier approach to water safety. Subjecting all finished products and source water to daily microbiological analysis. Water samples are sent to an independent lab for analysis weekly. The daily analysis conducts 1700 quality and 60 quantity tests. Testing meets or exceeds all requirements of Health Canada and other governing bodies. The annual monitoring reports are conditions of their permits and are submitted to public agencies.</p>	<p>Municipal Water Proponents According to the Council for Canadians Five Reasons to Ban Bottled Water: "Bottled Water is regulated as a food product under the Canadian Food Inspection Agency. As such, water bottling plants are inspected on average only once every three years... Municipal tap water is tested continuously - both during and after treatment"</p>
<p>Staff Comments Health Canada has produced an April 2009 publication calls It's Your Health: The Safety of Bottled Water. Summarily, the report indicates that Bottled Water is a safe product for Canadians. Halifax Regional Water Commission performs a very rigorous testing regime on the water that it manages and supplies - and residents can also be very comforted by the safety of the water quality that HRWC provides. The challenge related to safety that we see at HRM is:</p> <ul style="list-style-type: none"> • Wells supporting our Rural Facilities. Particularly of note is the presence of arsenic in Nova Scotia. Additionally choliforms are a safety concern as well. • The quality of the facility infrastructure of the HRM facility to ensure that the quality of the water entering the facility from the HRWC pipe is as good when it enters the building as when it leaves the tap or fountain. <p>HRM has a rural well testing and remediation program for our rural facilities to ensure that the water is potable, and where it is not a remedy (ie filtration equipment or treatment system) is provided. We do not currently have a water quality testing program for our urban facilities.</p>	

Health

According to mayoclinic.com, water makes up approximately 60 percent of our body composition. Water provides the following functions: moistening tissues (such as the eyes, nose, mouth), protects body organs, prevents constipation, dissolves minerals and nutrients to be able to be accessible to the body, regulated body temperature, lubricates joints, assists the liver and kidneys, and carries nutrients and oxygen to our cells. Water is critical to human health and functioning. Whether the source be bottled water or municipal tap water, consumption of water is a healthy and recommended choice for drinking. Water consumption is critical for people working in the heat or performing strenuous activity, as sweating and heat exposure can cause dehydration and the ill effects that accompany it. Further, as part of our Occupational Health and Safety Heat Stress Response Plan, the Municipality is responsible to provide water to outside workers.

Bottled Water Industry

According to statements from Health Services Officials provided by Nestle (Ian Gemmill, Medical Officer - Kingston Public Health and James Reffle, Director of Environmental Health, Middlesex-London), health leaders are concerned that a ban on bottled water would encourage the consumption of less nutritional alternatives.

Municipal Water Proponents

According to Spinning the Bottle, Taking Industry Spin on bottled water from The Council for Canadians, They say that An increasing number of people are consciously choosing to avoid soft drinks. A recent study by the Euromonitor International reports a growing tendency for consumers, particularly baby boomers, to avoid carbonated beverages due to health concerns. They are not likely to turn to these beverages if bottled water becomes unavailable. Anyone looking for a drink can easily refill reusable bottles at taps or public fountains.

Staff Comments

Whether it be from bottle or tap, water is essential for human health. HRM Staff have extreme requirements met by bottled water for our outside workers and fire fighters. We went through hundreds of cases of water when Fire Services fought the fires in Porters Lake last year and Herring Cove this year. Providing potable water to staff is often a requirement of HRM as an employer. Under our Heat Management policies, bottled water is provided to outside workers to prevent dehydration.

Another element related to Health is the mineral content of water. Often a person drinking water from a new source may experience upset stomach. Bottled water may provide consistent mineral content (when travelling in particular, or hosting visitors). Often when you travel south, you drink bottled water in fear of upset stomach. Generally, it isn't that there are germs or bacteria in the water, it is the different mineral content that causes the stomach upset.

Quality of Life

Bottled water has become a symbol of good health. You see celebrities and sports stars carrying their bottle of water and sipping from it. It has become a practical manner for a person to get their healthy daily requirements of water.

Bottled Water Industry

63% of Canadians say that they are trying to increase their water consumption as part of a healthy lifestyle. More than 60% of Canadians drink bottled water every day, and 75% of them consume it because it is a portable, accessible and healthy choice. Water is a safe, portable and convenient beverage and a healthy alternative to soft drinks and other sugar based, high calorie products also found in plastic containers. Bottled water is a choice that citizens have to access a healthy product.

Municipal Water Proponents

The Council of Canadians reports that according to the Canadian Bottled Water Association, 1/4 of bottled water consumed by Canadians comes from municipal tap sources. 20 percent of our municipalities have faced water shortages in recent years. No matter where the water comes from, the bottling process still drains freshwater resources at a time when Environment Canada warns of a looming freshwater crisis. The Public should have the choice to access free, clean, safe drinking water.

Staff Comments

"Choice" is a key consideration when reviewing quality of life elements of bottled water. With one side expressing the desire to have the choice to get an easily transportable option for bottled water, and the other side expressing the desire to ensure access to free, clean drinking water. At HRM Facilities, we do not fully offer the choice for free, clean drinking water (ie through a fountain or bottle refilling station, or kitchen facility) to all visitors and staff. An emerging trend for HRM Business Units in providing recognition gifts to employees recently has been the offering of water bottles. This trend is helping staff make an environmental choice to use the fountains or municipal tap water at our facilities. Dalhousie University student Gillian Pritchard did a Water Fountain Assessment Report for their organizations review. The report used the following criteria when assessing Water Fountains: Location, Wheelchair Accessibility, Type of Fountain, Water Pressure, Taste, Temperature, Appearance, and if it has a bottle filling gooseneck. This report would be an excellent template for HRM staff to utilize to perform a facilities assessment at HRM.

Accessibility

Accessibility to clean, potable water is something that in Nova Scotia we are able to generally take for granted. We have access to many sources and suppliers of bottled water (coming from multiple sources ranging from Asia, Europe, Ontario, Quebec and Nova Scotia) and a very high quality municipal water system managed by Halifax Regional Water Commission.

Bottled Water Industry

According to Nestle's The Facts About Bottled Water: "Bottled water cannot replace tap water. Everyone deserves access to a safe, reliable and affordable supply of drinking water. We see our competition as other bottled beverages, not tap water".

Municipal Water Proponents

According to the Blue Planet Project, over 1 billion people do not have access to clean drinking water and 1 million children die each year of diseases caused by unsafe water and sanitation. In 2002, the UN Committee on Economic, Social, and Cultural Rights recognized that the right to water is a prerequisite for all other rights. Economic Accessibility is challenged by bottled water. Restricting supply of water to pay \$1 or \$2 per bottle from a vending machine prevents access to many people to a fundamental human need and right.

Staff Comments

Aside from economic accessibility, as enlightened by the Dalhousie student work, Wheelchair accessibility is an important element when deliberating on a ban on bottled water and the various alternatives. There are numerous wheelchair friendly fountain designs that can be considered when a water fountain is purchased.

Additionally, accessibility to a clean source of drinking water at recreation facilities brings this issue to front. Until recently, the Halifax Forum offered bottled water through the vending machines, but there was not a drinking fountain for users to access water. The only water access was via the sinks in the washrooms. The Halifax Forum experience is an excellent example for council's deliberation on bottled water. They have installed a \$1,700 drinking fountain recently, however are against a vending machine ban of bottled water - as sales of bottled water for that association provide approximately \$10,000 of revenue annually. The question of choice and accessibility arise again here, should citizens have the choice of buying bottled water? Should they have the choice of accessing free, clean drinking water? Should they have the choice for both? Should their choices be made for them? What are the costs of providing or eliminating those choices.

Climate Change

The impact of the choice of how people meet their drinking water requirements has an impact on climate change.

Bottled Water Industry

Nestle Waters Canada is a leader in conserving natural resources and minimizing waste. In 2006, they invested \$2.5 million in new technology that made their Puslinch facility 10% more water efficient. It claims that it has reduced their packaging by 30% over the past ten years, reduced energy consumption by 30% and GHG emissions 22% annually. Nestle uses only 0.03% of worldwide oil production to meet its annual bottling requirements.

Municipal Water Proponents

The Polaris Institute, in the Municipal Backgrounder for Bottled Water, states there is no green solution to bottled water. 96-162 million barrels of oil is consumed annually to produce, transport, and dispose of bottled water. Bottled water is 2,000 times more energy intensive than tap water. The Bow River Keeper estimates that the manufacturing and transport of a one kilogram bottle of Fiji water consumes 26.88 kilograms of water, 0.849 kilograms of fossil fuel, and emits 562 grams of greenhouse gases.

Staff Comments

While not being able to provide a precise calculation of greenhouse gas emissions or fuel consumption in the variety of choices related to drinking water, it is common sense to determine that: Municipal Tap Water has the lowest impact on climate change, followed by cooler bottles and packaged bottles sourced in Valley, NS and trucked to Pictou for bottling and then distributed in HRM, followed by packaged bottles sourced in Quebec or Ontario and bottled there, and then transported and distributed in HRM, followed by bottled water sourced in Europe or Asia, bottled there and then transported and distributed in HRM.

Environmental Impacts

Where a community sources their water has a number of environmental impacts. Ranging from the environmental sustainability of the source, to the impact of extraction and bottling operations has, to waste implications.

Bottled Water Industry

Nestle refutes claims that their operations are causing reversing effects on groundwater resources. They claim that the earth's hydrologic cycle naturally replenishes the water that Nestle Canada bottles.

Nestle also points out that while 1 litre of Bottled Spring Water takes about 1.5 litres of water to create, a litre of Cola take about 3 litres, a litre of Beer takes 42 litres, a slice of white bread 40 litres, an orange takes 53 litres, etc. They claim that their sources are vital to their business so it only makes sense for them to protect them. They also point out that their consumption is a sliver of water consumed in Canada.

Municipal Water Proponents

According to the Wellington Water Watchers, a citizens coalition in Guelph, Ontario, the Nestle bottling operation's taking of 3.6 million litres per day is causing a reversal of groundwater flow to the Mill Creek.

Staff Comments

Sustainability of the source is an important element for consideration of where the HRM wishes to source our drinking water. HRWC can meet our municipal requirements in the most sustainable and environmental manner.

In follow up of the specific report and refutation reference, HRM staff was not able to verify either sides claims, however contacted the Nova Scotia Department of Environment to learn how these sort of operations are permitted in Nova Scotia, and followed up with a local environmental group to determine if similar environmental claims are present for the Nova Scotian bottling source. We learned that any operation extracting more than 23,000 litres per day (whether it be for bottling water or some other manufacturing plant) must obtain a permit from the Nova Scotia Department of Environment. A prerequisite to the permitting process is the engagement of a professional hydrologist to study the source and the operation and determine the environmental impact that would be associated. Following approval of the extraction permit, operators provide the Department of Environment with daily records of extractions. The permit and study is reviewed every 10 years. Upon contacting the Salmon River Association and Ecology Action Centre, the extraction of water from the Valley, NS source has not created any detected negative impacts.

Fortunately, with a strong Solid Waste Management program in HRM, we have a very high rate of diversion on water bottles. SEMO staff have not endeavoured to expand further on the waste management impacts of bottled water. The SWAC has provided direction in the accompanying memo from their interest.

However, one thing should be specifically noted, that while a high number of water bottled are diverted from landfill, the water bottles made for bottled water are 100% virgin material - they are not recycled plastic. We have encountered confusion on that point.

Social Impacts

Two-thirds of the Earth is water, however, only 2% of the freshwater is drinkable and 1.6% of the 2% is locked up in the polar ice caps. According to the United Nations, by 2025, over two thirds of our worlds population will not have enough water to sustain the basics of life. Security, protection, and stewardship of our significant, albeit finite, resources has social implications.

Bottled Water Industry

Nestle Waters Canada points out that they are a responsible corporate citizen, supporting the following organizations: Unicef, United Way, Habitat for Humanity, Girl Guides, Kids Help Phone, Food Banks, etc.

AC Nielsen study indicates that 95% of the movement to bottled water is due to a shift from other beverages, most notably soft drinks, tea and milk.

Commercial bottled water production in Ontario accounts for less than 0.0014% of all water used by other permitted users including commercial, agricultural, industrial, and recreational.

Municipal Water Proponents

The Council for Canadians states that water is a human right and vital to our health and livelihoods and expresses great concern that in the absence of a national water policy, including specifically addressing bulk water exports, that operations such as water bottling corporations poses a great threat to our resource.

Staff Comments

While a national water policy is not in our municipal responsibility, through Halifax Regional Water Commission, the municipality manages the infrastructure related to water treatment and delivery. Additionally, the municipality has the capacity to determine whether to provide access to municipal water in those public facilities and whether to provide access to bottled water for sale.

stern_williams

Stern-Williams

(Quotations are available upon request)

(Return to previous page)

Stern Williams Dimensional Information

Model 7000-32 & 7100-32

NOTE: All dimensions subject to manufacturing variance of plus or minus 1/4" (6 mm)

Stern-Williams makes every effort to keep its website and printed materials current. However, the drawings and dimensions shown throughout the Stern-Williams website are subject to change due to technology, materials and/or users needs. Therefore it is suggested that you contact Stern-Williams by phone, email or a representative prior to starting a project, to insure that you have the very latest information about our products and their dimensions.

We thank you for your use of our products and we in turn promise to provide you with the very best products and information about those products.

Stern-Williams Co., Inc.
P.O. Box 8004
Shawnee Mission, KS 66208

www.sternwilliams.com
Phone: 913.362.5635
Fax: 913.362.6689

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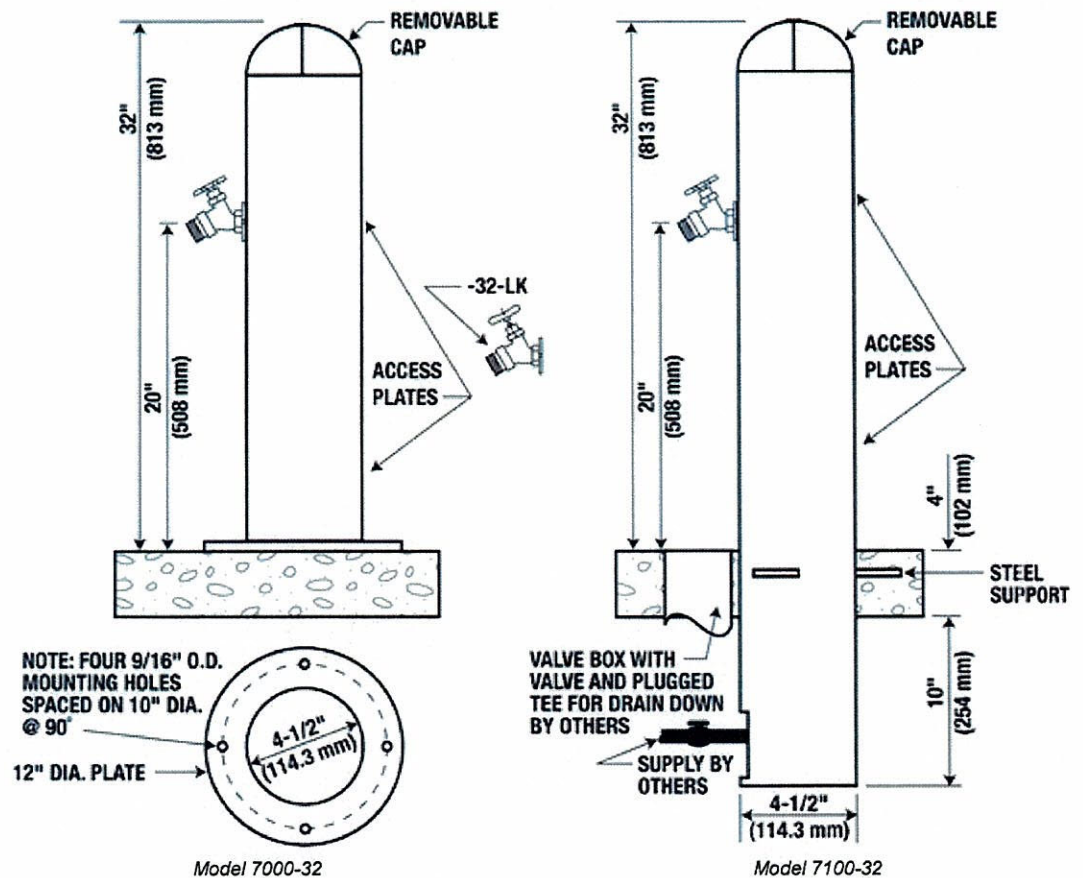


Table 1
City Hall - 1841 Argyle St, Halifax, NS

Potable Water Analytical Results - General Chemistry and Bacteria (mg/L)

Sample ID Date	1ST FLOOR KITCHEN 1-May-09		2ND FLOOR DEPUTY CEO 1-May-09		3RD FLOOR CITY MGR OFFICE 1-May-09		3RD FLOOR MAYORS OFFICE 1-May-09		4TH FLOOR KITCHEN 1-May-09		DWQG 2007
Sodium	14	13	13	0.4	0.4	0.4	0.4	0.4	14	14	2007
Potassium	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	ns
Calcium	4.7	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.7	4.7	ns
Magnesium	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	ns
Alkalinity	18	20	20	19	19	19	19	19	16	16	ns
Sulphate	8	8	8	8	8	8	8	8	8	8	5000
Chloride	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	2500
Fluoride	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1.5*
Reactive Silica	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	ns
Ortho Phosphate	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	ns
Phosphorus	0.07	0.06	0.06	0.07	0.07	0.07	0.06	0.06	0.06	0.06	ns
Nitrate + Nitrite (as N)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	4.5*
Nitrate (as N)	<0.07	<0.04	<0.04	<0.07	<0.07	<0.07	<0.06	<0.06	<0.06	<0.06	ns
Nitrite (as N)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ns
Ammonia (as N)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	157
Colour	96	96	96	96	96	96	96	96	95	95	1.0**
Turbidity	7.36	7.36	7.36	7.36	7.36	7.36	7.36	7.36	7.36	7.36	ns
pH	14	12	12	13	13	13	13	13	13	13	8.5-9.5*
Hardness (as CaCO3)	19	20	20	20	20	20	19	19	19	19	ns
Bicarbonate (as CaCO3)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ns
Carbonate (as CaCO3)	52	52	52	51	51	51	52	52	52	52	500*
TDS (Calculated)	-2.25	-2.26	-2.26	-2.33	-2.33	-2.33	-2.26	-2.26	-2.27	-2.27	ns
Langlier Index @ 4C	1.8	1.8	1.8	1.3	1.3	1.3	2.1	2.1	1.8	1.8	ns
TOC	A	A	A	A	A	A	A	A	A	A	0/100 mL*
E. coli	A	A	A	A	A	A	A	A	A	A	0/100 mL*
Total Coliform	A	A	A	A	A	A	A	A	A	A	0/100 mL*

Notes:

- 1 - Maximum Acceptable Concentration
 - 2 - Aesthetic Objective
 - 3 - There is no numerical guideline for hardness. Public acceptance of hardness varies considerably. Generally, hardness levels between 80 and 100 mg/L are considered acceptable; levels greater than 200 mg/L are considered poor but can be tolerated; those in excess of 500 mg/L are normally considered unacceptable. (DWQG, 2008)
 - 4 - Based on conventional treatment (0.3NTU) slow sand or diatomaceous earth filtration (1.0NTU) membrane filtration (0.1NTU); intended for groundwater supplies with surface water influent. Should not exceed 1.0 NTU. mg/L - milligrams per litre
 - < - less than analytical detection limit indicated
 - ns - no standard listed
 - A - Absent
 - P - Present
- Exceeds DWQG: CCME Canadian Guidelines for Water, Drinking Water Quality

Table 2
City Hall - 1841 Argyle St., Halifax, NS

Potable Water Analytical Results - Total Metals (mg/L)

Sample ID Date	1ST FLOOR KITCHEN 1-May-09	2ND FLOOR DEPUTY GEO 1-May-09	3RD FLOOR CITY MGR OFFICE 1-May-09	3RD FLOOR MAYORS OFFICE 1-May-09	4TH FLOOR KITCHEN 1-May-09	DWQG
Aluminum	0.110	0.097	0.099	0.065	0.06	0.1*
Antimony	<0.002	<0.002	<0.002	<0.002	<0.002	0.008*
Arsenic	<0.002	<0.002	<0.002	<0.002	<0.002	0.01*
Barium	0.005	0.005	0.005	0.005	0.005	1*
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	ns
Bismuth	<0.002	<0.002	<0.002	<0.002	<0.002	ns
Boron	<0.005	<0.005	<0.005	<0.005	<0.005	5*
Cadmium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.005*
Chromium	<0.002	<0.002	<0.002	<0.002	<0.002	0.05*
Cobalt	<0.001	<0.001	<0.001	<0.001	<0.001	ns
Copper	0.026	0.05	0.027	0.022	0.047	ns
Iron	<0.050	<0.050	<0.050	<0.050	<0.050	25
Lead	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.3*
Manganese	0.006	0.006	0.006	0.006	0.006	0.01*
Molybdenum	<0.002	<0.002	<0.002	<0.002	<0.002	0.05*
Nickel	<0.002	<0.002	<0.002	<0.002	<0.002	ns
Selenium	<0.002	<0.002	<0.002	<0.002	<0.002	ns
Silver	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.01*
Strontium	0.010	0.009	0.01	0.008	0.01	ns
Thallium	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	ns
Tin	<0.002	<0.002	<0.002	<0.002	<0.002	ns
Titanium	<0.002	<0.002	<0.002	<0.002	<0.002	ns
Uranium	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	ns
Vanadium	<0.002	<0.002	<0.002	<0.002	<0.002	0.02*
Zinc	0.077	0.089	0.075	0.088	0.072	5*

Notes:
1 - Maximum Acceptable Concentration
2 - Aesthetic Objective
mg/L - milligram per litre
< - less than analytical detection limit
na - no standard listed
Exceeds DWQG; CCME Canadian Guidelines for Water, Drinking Water Quality

CORE BUILDINGS - POTABLE WATER

Description	Street
Acadia Centre Building	636 Sackville Drive
Alderney Gate Building	40 Alderney Drive
Beechville Lakeside Timberlea Building	1492 St. Margarets Bay Road
Bengal Lancers Building	1690 Bell Road
Black Point School Building	Highway #3, 37 Gilbert Lane
Bloomfield Centre Commons Building	2786 Agricola Street
Bloomfield Centre Fielding Building	2786 Agricola Street
Bloomfield Centre Main Building	2786 Agricola Street
Boutilier's Point School Building	20 Boutilier's Point Road
Bowles Arena Building	15 Ragus Road
Caledonia Rd Greenhouse #1 Building	38 Caledonia Road
Camphill Cemetery Storage Building	Jubilee Road
Captain William Spry Centre Building	10 Kidston Road
Central Commons Pavillion Building	5816 Cogswell Street
Chocolate Lake Comm Ctr Building	14 Purcell's Cove Road
Citadel High Community Centre Building	1955 Trollope Street
Cole Harbour Activity Centre Building	1213 Cole Harbour Road
Transportation & Public Works	3790 MacKintosh Street
Dartmouth City Hall Building	90 Alderney Drive
Dartmouth Ferry Terminal Building	88 Alderney Drive
Dartmouth Non-Profit Housing Building	47 Wentworth Street
David P McKinnon Building	1975 Gottingen Street
Devonshire Arena Building	3395 Devonshire Avenue
Duke Tower, Scotia Square Building	5251 Duke Street
Eric Spicer Building	21 Mount Hope Avenue
Facility Ops Storage Building	9 Theakston Avenue
Fairbanks Centre Building	54 Locks Road
Fairview Cemetery Building	3590 Kempt Road
Fall River Recreation Centre Building	3182 Highway #2
Findlay Community Centre Building	26 Elliott Street
Fire Fleet Maintenance Building	196 Waverley Road
FS#02 University Avenue Building	5988 University Avenue
FS#03 West Street Building	5663 West Street
FS#04 Lady Hammond Road Building	5830 Lady Hammond Road
FS#05 Bayers Road Building	7090 Bayers Road
FS#06 Herring Cove Building	245 Herring Cove Road
FS#07 Knightsridge Building	45 Knightsridge Drive
FS#08 Bedford Building	15 Convoy Run
FS#09 Metropolitan Avenue Building	1 Metropolitan Avenue
FS#10 Millwood Building	1156 Sackville Drive
FS#11 Patton Road Building	479 Patton Road
FS#12 Highfield Park Building	45 Highfield Park Drive
FS#13 King Street Building	86 King Street
FS#14 Walker Street Building	39 Walker Street

FS#15 Pleasant Street Building	331 Pleasant Street
FS#16 Eastern Passage Building	1807 Caldwell Road
FS#17 Cole Harbour Road Building	1150 Cole Harbour Road
FS#18 Main Street Building	690 Main Street
George Dixon Recreation Ctr Building	2501 Gottingen Street
Gordon Snow Ctr/FS45 Fall River Building	1359 Fall River Road
Gray Arena Building	15 Monique Avenue
Halifax City Hall Building	1841 Argyle Street
Halifax Ferry Terminal Building	5077 George Street
Hfx Commons Washroom Structure Building	5816 Cunard St
HRM Parks Depot Building	62 Caledonia Road
Jackson Road Greenhouse Building	35 Jackson Road
Kyber Arts Building	1588 Barrington Street
Lakecrest Free School Building	46 Lakecrest Drive
Larry O'Connell Playground Building	6691 Fourth Street
LeBrun Centre Building	36 Holland Avenue
Metro Transit Depot Building	200 Ilsley Avenue
Municipal Operations Building Unit 12	81 Ilsley Avenue, Unit 12
Needham Centre Building	3372 Devonshire Avenue
North Preston Recreation Centre Building	44 Simmonds Road
North Woodside Community Centre Building	230 Pleasant Street
Northbrook Centre Building	2 Chapman Street
Northcliffe Recreation Centre Building	111 Clayton Park Drive
Old Bedford Fire Station Building	1247 Bedford Highway
Point Pleasant Park Canteen Building	5718 Point Pleasant Drive
Point Pleasant Park Depot Building	5718 Point Pleasant Drive
Point Pleasant Park Restaurant Building	5718 Point Pleasant Drive
Point Pleasant Park Stonehouse Building	5718 Point Pleasant Drive
Police / Fire Office Building	11 Windmill Road
Public Gardens Brick House Building	1606 Bell Road
Public Gardens Greenhouse #1 Building	5711 Sackville Street
Public Gardens Greenhouse #2 Building	0 Sackville Street
Public Gardens Greenhouse #3 Building	0 Sackville Street
Public Gardens Greenhouse #5 Building	0 Spring Garden Road
Public Gardens Horticulturl Hal Building	0 Spring Garden Road
Records Storage Building Unit 09	81 Ilsley Avenue, Unit 09
Records Storage Building Unit 11	81 Ilsley Avenue, Unit 11
Richmond Family Court Building	3380 Devonshire Avenue
Rockingham Community Centre Building	199 Bedford Highway
RPO Facility Ops Workshop Building	142 Bedford Highway
RPO Parks Depot - Bell Road Building	1680 Bell Road
Sackville Heights Community Ctr Building	45 Connelly Road
Sir Sandford Fleming Canteen Building	240 Dingle Road
Sir Sandford Fleming Electrical Building	240 Dingle Road
Sir Sandford Fleming Outdoor Building	68 Park Hill Road
Sir Sandford Fleming Storage Building	240 Dingle Road

Sir Sandford Fleming Workshed Building	240 Dingle Road
St. Andrews Centre Building	6955 Bayers Road
St. Mary's Boat Club Building	1641 Fairfield Road
St. Mary's Lawn Bowling Building	0 Fairfield Road
Teachery/Museum/Residence Building	9 Spring Street
Village Plaza Building: Liby/CS/Fitness	7900 Highway #7
Wanderers Grnds Seniors Centre Building	5753 - 5755 Sackville Street
Wanderers Grounds Club/Storage Building	0 Bell Road
Woodside Ferry Terminal Building	9 Atlantic Street
Works Depot MacKintosh St Building	3825 MacKintosh Street
Works Depot Oakmount Building	171 Oakmount Drive
Works Depot Turner Dr Building	11 Turner Drive
Youth Live St Marg Warehouse Building	1300 St. Margaret's Bay Road



Health Canada Santé Canada

Your health and safety... our priority.

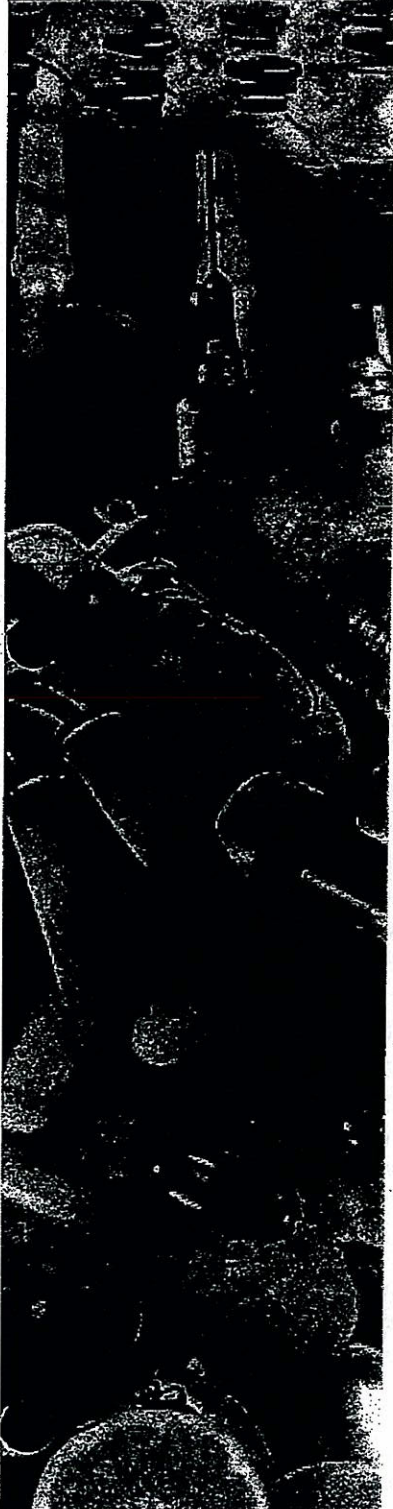
Votre santé et votre sécurité... notre priorité.

The Safety of Bottled Water

Original

April 2009

IT'S YOUR HEALTH



The Safety of Bottled Water

The Issue

There has been an increase in the Canadian consumption of bottled water in recent years. Illness caused by bottled water is very rare in Canada, because the water is treated, disinfected, and monitored to make sure it does not contain harmful microorganisms or chemicals. However, to maintain the safety of bottled water, you must also handle and store it properly.

Background

Bottled water is water sold to consumers in sealed glass or plastic containers. In Canada, bottled water is considered to be a food and is regulated under the Food and Drugs Act. Under the Act and its regulations, all bottled water offered for sale in Canada must be safe for people to drink. In addition, the companies that bottle water must comply with quality standards, good manufacturing practices, and labelling requirements.

Bottled water labelled as "mineral" or "spring" water, is potable water (fit for human consumption) that comes from an underground source. It cannot come from a public water supply. Other types

of bottled water may be manufactured from public sources, including tap water and well water. No matter what source it comes from, all bottled water sold in Canada is inspected and treated during the manufacturing process to ensure that it meets Canada's requirements for safety and quality.

Benefits of Bottled Water

The benefits associated with bottled water depend on your personal preferences. Some people choose bottled water because it is handy; they can just grab it and go. It is also a convenient way to store large amounts of water for emergency purposes. (Public Safety Canada recommends storing enough water to supply your family for at least 72 hours as part of your basic emergency kit. This means 2 litres of water per person per day for drinking, plus water for pets. You can also store an additional 2 litres of water per person per day, for cooking and cleaning.)

Others may choose bottled water because they prefer the taste when compared with water from other sources (e.g., tap water, well water). Some people think that bottled water is safer than tap water, but there is no evidence

Canada

to support this. The quality standards for bottled and municipal waters in Canada are similar. All bottled and municipal waters that meet or exceed the required health and safety standards are considered to be safe.

Risks associated with Bottled Water

Bottled water sold in Canada has generally been found to be of good quality and is not considered to pose any health hazard. To date, there have been no reports of outbreaks of illness related to bottled water in Canada.

Health Canada is aware of reports appearing on the Internet expressing concern that harmful chemicals may leach into the water if plastic water bottles are left in vehicles exposed to summer heat. However, there is no scientific evidence to support such concerns. Studies conducted on plastic water bottles, even under extreme temperatures, have failed to find that chemicals are produced at levels that would pose a health risk to anyone who drinks the water in question.

Some consumers have also expressed concern about the small white particles that often appear in bottled water that has been frozen and then thawed. These particles are minerals that separated from the water when it went through the extreme temperature change. They are not harmful to human health.

However, the safety of bottled water may be adversely affected by improper handling and storage. For example, it is possible for bottled water to become contaminated with bacteria when the mouths and hands of consumers come into contact with

the bottle opening. These bacteria could then multiply rapidly, especially if the bottle is not refrigerated. The steps outlined below can help minimize risks related to buying, handling, and storing bottled water.

Minimizing Your Risk

When buying bottled water

- Examine the inside and outside of the bottle before you buy it. Avoid bottles that have a broken seal, and report any tampering to the store manager and health officials. Also, make sure the water is clear and has no material floating in it.
- Check the label for the "best-before" date. Most Canadian manufacturers of bottled water indicate that the product has a shelf-life of one to two years.

Handling / using bottled water

- Do not share bottles (i.e., do not have more than one person drink directly from the bottle), as this may introduce bacteria into the water. Pour the water into clean cups or glasses, if more than one person is using the bottle.
- Refrigerate the bottle after you open it (or right after you buy it, if possible). Like other foods, bottled water contains low numbers of harmless bacteria. However, these bacteria can multiply rapidly at room temperature. Refrigerating the bottle helps to maintain low levels of bacteria.
- Always practice good hygiene. Wash your hands frequently with soap and warm water, especially after bathroom breaks or after handling animals. This will help

prevent the contamination of foods, including bottled water.

- Keep in mind that the plastic containers holding single-serve bottled water were designed to be used only once. Avoid refilling them. Where possible, recycle these bottles.

Storing bottled water (unopened)

- It is best to refrigerate bottled water, but if this is not possible, store it in a cool, clean, dark place, such as the basement. Keep it away from heat and sunlight. Also, keep it away from any household solvents (e.g., paint-thinners, cleaners, etc.) Over time, solvents can get into the air and then leach through the plastic bottle into the water.
- When storing large amounts of water for emergency purposes, be sure to rotate or replace the inventory to ensure that no bottle is stored beyond its "best-before" date.

The Government's Role

Health Canada sets policies and standards governing the safety and quality of all food sold in Canada. As part of this role, Health Canada works with other government agencies and the Canadian Bottled Water Association to ensure that bottled water sold to Canadian consumers is safe to drink and of high quality. Health Canada also reviews the safety of materials used in food packaging, including the plastic used as containers for bottled water sold in Canada.

The Canadian Food Inspection Agency (CFIA) enforces the policies and standards set by Health Canada



Health Canada
Santé Canada

Your health and
safety... our priority.

Votre santé et votre
sécurité... notre priorité.

The Safety of Bottled Water

Original

April 2009

IT'S YOUR HEALTH

and ensures that necessary warnings are released quickly to the Canadian public.

You can also call toll free at
1-866-225-0709
or TTY at 1-800-267-1245*

Need More Info?

See the following:

Questions and Answers on Bottled Water (Health Canada), at:
www.hc-sc.gc.ca/fn-an/securit/acts-faits/faqs_bottle_water-eau_embouteillee_e.html

In addition to giving safety tips, this article defines different types of bottled waters and explains the purpose of different treatments systems for bottled water. It also goes into detail about the safety of water coolers.

Food Safety Facts on Bottled Water (Canadian Food Inspection Agency), at:
www.inspection.gc.ca/english/fssa/concen/specif/bottwate.shtml

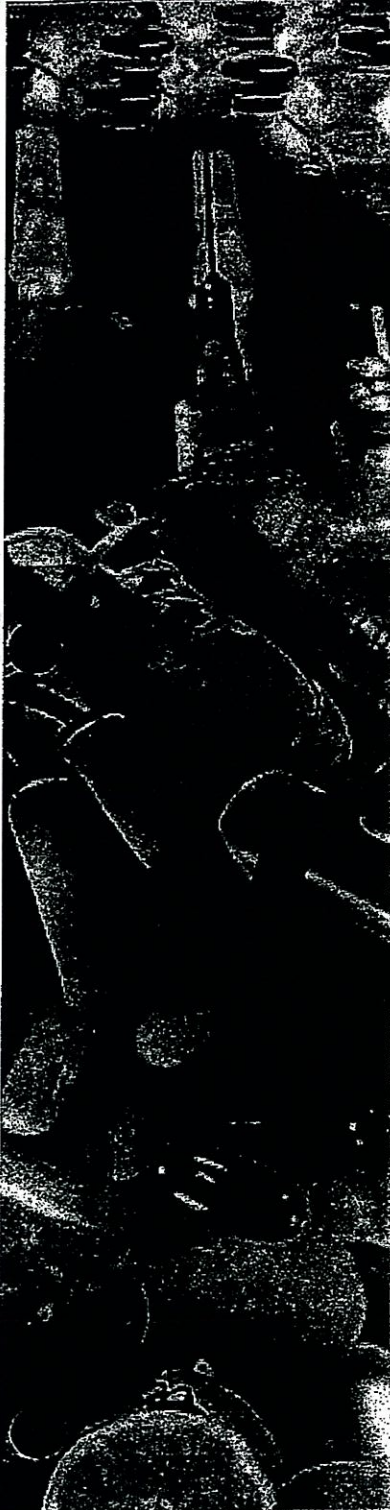
Canadian Bottled Water Association, at
www.cbwa.ca/

For information about the safety of drinking water (i.e., tap water), go to Health Canada's Water Quality Web section, at:
www.hc-sc.gc.ca/ewh-semt/water-eau/index_e.html

For additional articles on health and safety issues go to the It's Your Health Web section, at:
www.healthcanada.gc.ca/iyh

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Canada





VOTRE SANTÉ ET VOUS

Innocuité de l'eau embouteillée

Enjeu

L'eau embouteillée gagne en popularité depuis quelques années au Canada. Les maladies causées par l'eau embouteillée sont très rares au pays, car l'eau est traitée, désinfectée et fait l'objet d'un suivi pour s'assurer qu'elle ne contient ni microorganismes ni produits chimiques nocifs. L'eau embouteillée doit être manipulée et entreposée adéquatement pour en assurer l'innocuité.

Contexte

L'eau embouteillée se vend en contenants scellés de verre ou de plastique. Considéré comme un aliment au Canada, l'eau embouteillée est assujettie à la Loi sur les aliments et drogues. En vertu de la Loi et de son règlement, toute eau embouteillée qui se vend au Canada doit être sans danger pour l'humain. L'embouteilleur doit se conformer aux normes de qualités, adopter de bonnes pratiques de production et respecter les exigences d'étiquetage.

L'eau minérale ou de source est une eau potable (propre à la consommation humaine) provenant d'une source souterraine. Elle ne peut provenir d'un service public. D'autres types d'eau embouteillée peuvent provenir des réseaux publics, y compris l'eau du robinet et l'eau de puits. Peu importe la source, toute eau embouteillée qui se vend au Canada est inspectée et traitée en cours de production afin d'assurer qu'elle est

conforme aux exigences d'innocuité et de qualité.

Avantages de l'eau embouteillée

Les avantages de l'eau embouteillée dépendent de vos préférences personnelles. Certains choisissent l'eau embouteillée parce qu'elle est pratique ; il suffit de prendre la bouteille et de la payer. C'est aussi un moyen pratique de faire des réserves en cas d'urgence. (Sécurité publique Canada recommande d'inclure à votre trousse d'urgence une quantité d'eau suffisante pour subvenir au besoin de la famille pendant au moins 72 heures, soit deux litres d'eau par personne par jour, plus la quantité nécessaire pour vos animaux domestiques. Vous pouvez aussi prévoir deux litres supplémentaires par personne par jour, pour la cuisine et le nettoyage.)

Certains préfèrent le goût de l'eau embouteillée à celui de l'eau provenant d'autres sources (robinet, eau de puits). Certains estiment que l'eau embouteillée est plus sûre que l'eau du robinet, mais aucune preuve ne corrobore cette croyance. Au Canada, les normes de qualité qui s'appliquent à l'eau embouteillée et à l'eau municipale sont similaires. Toute eau embouteillée ou municipale qui satisfait aux normes de santé et de sécurité obligatoires ou les excèdent est considérée comme sûre.

Risques associés à l'eau embouteillée

En général, l'eau embouteillée qui se vend au Canada est jugée de bonne qualité et n'est pas considérée comme présentant un quelconque danger pour la santé. À ce jour, aucun cas de maladies liées à la consommation d'eau embouteillée n'a été signalé au Canada.

Santé Canada est au courant des rapports publiés sur Internet à l'effet que des produits chimiques dangereux peuvent se dissoudre dans l'eau si la bouteille de plastique est laissée dans un véhicule par temps chaud. Toutefois, aucune preuve scientifique ne corrobore cette allégation. Des tests réalisés sur des bouteilles d'eau en plastique indiquent que la quantité de substances chimiques produite, même à des températures extrêmes, ne pose pas de risque pour la santé.

Certains s'inquiètent des petites particules blanches qu'on voit souvent dans l'eau embouteillée qu'on a congelée puis décongelée. Il s'agit de minéraux qui se sont séparés de l'eau à la suite d'un changement de température extrême. Ils sont sans danger pour l'humain.

Toutefois, si l'eau embouteillée est manipulée ou entreposée de façon inadéquate, elle peut poser un risque. Il se peut, par exemple, que l'eau embouteillée soit contaminée par des bactéries lorsque le goulot entre en contact avec la bouche ou les mains. Ces bactéries peuvent proliférer, surtout si la bouteille n'est pas réfrigérée. Les conseils ci-dessous peuvent s'avérer utiles pour réduire les risques liés à l'achat, à la manutention et à l'entreposage d'eau embouteillée.

Réduire les risques

À l'achat d'eau embouteillée

- Examinez l'intérieur et l'extérieur de la bouteille avant l'achat. Évitez les bouteilles dont le sceau est brisé, et signalez toute altération au gérant du magasin ou aux représentants de la santé. Assurez-vous que l'eau est

claire et ne contient aucune matière en suspension.

- Vérifier la date de péremption sur l'étiquette. La plupart des producteurs canadiens d'eau embouteillée indiquent une durée de conservation d'un à deux ans.

Manutention et consommation d'eau embouteillée

- Ne partagez pas les bouteilles (ne soyez pas plusieurs personnes à boire directement à la même bouteille), car cela peut introduire des bactéries dans l'eau. Versez plutôt l'eau dans des gobelets ou des verres propres, si plus d'une personne se partage l'eau.
- Réfrigérez la bouteille après l'avoir ouverte (ou immédiatement après l'avoir achetée, si possible). À l'instar d'autres aliments, l'eau embouteillée contient un faible taux de bactéries inoffensives. Cependant, ces bactéries peuvent proliférer à la température ambiante. Réfrigérer la bouteille contribue à éviter toute prolifération bactérienne.
- Maintenez toujours une bonne hygiène. Lavez-vous les mains fréquemment avec de l'eau tiède et du savon, surtout après avoir utilisé les toilettes ou manipulé des animaux. Cela contribuera à prévenir la contamination des aliments, y compris l'eau embouteillée.
- N'oubliez pas que le contenant de plastique renfermant l'eau embouteillée est conçu pour un usage unique. Ne le remplissez pas de nouveau. Recyclez la bouteille si c'est possible.

Entreposage de l'eau embouteillée (bouteille non ouverte)

- Il est préférable de réfrigérer l'eau embouteillée, mais si ce n'est pas possible, mettez-la au frais, dans un endroit propre et sombre, tel que le sous-sol. Évitez la chaleur et les rayons du soleil. Tenez la bouteille éloignée des solvants domestiques

(diluants pour peinture, produits nettoyants, etc.) Au fil du temps, les solvants peuvent devenir volatils et contaminer l'eau en passant à travers le plastique de la bouteille.

- Lorsque vous entreposez une grande quantité d'eau pour les urgences, assurez-vous d'effectuer une rotation pour éviter de dépasser la date de péremption.

Rôle du gouvernement

Santé Canada établit les politiques et les normes qui régissent la sécurité et la qualité de tous les aliments qui se vendent au pays. Son rôle l'amène à collaborer avec d'autres organismes gouvernementaux et l'Association canadienne des eaux embouteillées pour s'assurer que cette eau est sans danger pour les Canadiens et de bonne qualité. Santé Canada surveille aussi l'innocuité des matériaux utilisés pour l'emballage des aliments, y compris le plastique utilisé comme contenant pour l'eau embouteillée qui se vend au Canada.

L'Agence canadienne d'inspection des aliments (ACIA) se charge de faire appliquer les politiques et les normes de Santé Canada et s'assure que les avertissements nécessaires sont communiqués rapidement à la population canadienne.

Vous désirez vous renseigner davantage ?

Veillez consulter les sites suivants :

Questions et réponses sur l'eau embouteillée (Santé Canada) : www.hc-sc.gc.ca/fn-an/securit/facts-faits/faqs_bottle_water-eau_embouteillee_fra.html

Au-delà des conseils de sécurité, cet article décrit différents types d'eau embouteillée et explique la raison d'être des différents systèmes de traitement de l'eau embouteillée. On y explique aussi en détail les mesures de sécurité relatives aux fontaines réfrigérantes.



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Votre santé et votre
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safety... our priority.

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VOTRE SANTÉ ET VOUS



Salubrité des aliments : eau embouteillée
(Agence canadienne d'inspection des
aliments) :

[www.inspection.gc.ca/francais/fssa/
concen/specif/bottwate.shtml](http://www.inspection.gc.ca/francais/fssa/concen/specif/bottwate.shtml)

Agence canadienne des eaux
embouteillées : <http://www.cbwa.ca/>

Pour vous renseigner sur l'innocuité de
l'eau potable (eau du robinet), veuillez
consulter le site

[www.hc-sc.gc.ca/ewh-semt/water-eau/
index_fra.html](http://www.hc-sc.gc.ca/ewh-semt/water-eau/index_fra.html) de Santé Canada.

Pour consulter d'autres articles relatifs à la
santé et la sécurité, rendez-vous à la
section Votre santé et vous
www.santecanada.gc.ca/vsv

Vous pouvez aussi appeler sans frais au
1-866-225-0709
ou au 1-800-267-1245*
(pour malentendants).

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