

AGENDA



ENVIRONMENTAL ADVISORY COMMITTEE

THE CORPORATION OF THE CITY OF MISSISSAUGA

TUESDAY, SEPTEMBER 10, 2013 – 9 A.M.

COUNCIL CHAMBER

SECOND FLOOR, CIVIC CENTRE

300 CITY CENTRE DRIVE, MISSISSAUGA, ONTARIO, L5B 3C1

www.mississauga.ca

Members

Councillor George Carlson, Ward 11 (CHAIR)
Michael DeWit, Citizen Member (VICE-CHAIR)
Councillor Jim Tovey, Ward 1
Councillor Frank Dale, Ward 4
Dr. Brad Bass, Citizen Member
Elaine Hanson, Sheridan College, Office for Sustainability
Lucas Krist, Peel Environmental Youth Alliance
Lea Ann Mallett, Citizen Member
Val Otori, Citizen Member
Maureen Ricker, Citizen Member
Carl Rodgers, Citizen Member
Lucia Salvati, University of Toronto Mississauga

Agency Liaison

Stephanie Crocker, EcoSource

CONTACT PERSON: Mumtaz Alikhan, Legislative Coordinator
Office of the City Clerk, Telephone: 905-615-3200, ext. 5425; Fax 905-615-4181
Mumtaz.Alikhan@mississauga.ca

CALL TO ORDERAPPROVAL OF AGENDADECLARATIONS OF DIRECT (OR INDIRECT) PECUNIARY INTERESTPRESENTATIONS/DEPUTATIONS

- A. Mark Howard, Project Lead, Credit River Parks Strategy, to provide an information update regarding the Credit River Parks Strategy
- B. Dan McDermott, Chapter Director, Sierra Club Ontario, on the addition of publicly owned lands of the Credit River Valley to the Greenbelt
- C. Kiruthiha Kulendiren, member of MIRANET's EAC Sub-Committee and as both resident of Mississauga and President of the Lisgar Residents' Association, on the Credit River Valley and the Provincial Urban River Valley designation in the Greenbelt.

MATTERS TO BE CONSIDERED

- 1. Approval of Minutes of Previous Meeting

Minutes of the meeting held June 4, 2013.

- 2. Draft Motion regarding Stormwater Flooding

Memo dated September 3, 2013 from Crystal Greer, City Clerk, regarding Notice of Motion presented by Councillor Chris Fonseca to the Standing Committee on Environmental Issues and Sustainable Development of the Federation of Canadian Municipalities (FCM) for consideration by its Board in November

RECOMMEND APPROVAL

- 3. Feed-in Tariff

Memorandum dated August 26, 2013 from Mary Bracken, Environmental Specialist, Environment Division, with respect to Rooftop Solar Projects in Mississauga being offered Small Feed-in Tariff (FIT) contracts and next FIT application period.

RECOMMEND RECEIPT

4. Doors Open 2013

Memorandum dated August 26, 2013 from Mary Bracken, Environmental Specialist, Environment Division, with respect to Doors Open 2013.

RECOMMEND RECEIPT

5. Plastic Sampling in the Great Lakes

Memorandum dated August 26, 2013 from Brenda Osborne, Director, Environment Division, with respect to Plastic Sampling in the Great Lakes.

RECOMMEND RECEIPT

6. 2014 EAC Meeting Dates

Memorandum dated September 3, 2013 from Mumtaz Alikhan, Legislative Co-ordinator, Legislative Services Division, with respect to EAC meeting dates in 2014.

RECOMMEND RECEIPT

7. Let your Green Show Update

Verbal Update by Andrea J. McLeod, Environmental Specialist, Environment Division.

RECOMMEND RECEIPT

8. Municipal Ban on the Use of Bottled Water at Government Administrative Offices

Presentation referred by Council at its meeting held July 3, 2013.

RECOMMEND RECEIPT

9. Upcoming Agenda Items and Environmental Advisory Committee (EAC) Role

Chart from Environment staff with respect to upcoming agenda items and Environmental Advisory Committee (EAC) role.

RECOMMEND RECEIPT

10. Status of Outstanding Issues from the Environmental Advisory Committee (EAC)

Chart dated September 3, 2014, 2013 from Mumtaz Alikhan, Legislative Coordinator, Environmental Advisory Committee, with respect to the status of outstanding issues from the Environmental Advisory Committee.

RECOMMEND RECEIPTINFORMATION ITEMS

DATE OF NEXT MEETING – Tuesday, October 1, 2013 at 9 a.m., Council Chamber

OTHER BUSINESSADJOURNMENT



MINUTES

ENVIRONMENTAL ADVISORY COMMITTEE

THE CORPORATION OF THE CITY OF MISSISSAUGA

TUESDAY, JUNE 4, 2013 – 9 A.M.

COUNCIL CHAMBER

SECOND FLOOR, CIVIC CENTRE

300 CITY CENTRE DRIVE, MISSISSAUGA, ONTARIO, L5B 3C1

www.mississauga.ca

MEMBERS/AGENCY LIAISONS

PRESENT:

Councillor George Carlson, Ward 11 (CHAIR)
Councillor Frank Dale, Ward 4
Lucas Krist, Peel Environmental Youth Alliance
Lea Ann Mallett, Citizen Member
Rahul Mehta, EcoSource
Val Otori, Citizen Member (arrived at 9:16 a.m.)
Maureen Ricker, Citizen Member
Lucia Salvati, University of Toronto Mississauga
Diana Yoon, Peel Environmental Youth Alliance

MEMBERS/AGENCY LIAISONS

ABSENT:

Michael DeWit, Citizen Member (VICE-CHAIR)
Councillor Jim Tovey, Ward 1 (Other Municipal Business)
Dr. Brad Bass, Citizen Member
Stephanie Crocker, EcoSource
Elaine Hanson, Sheridan College, Office for Sustainability
Carl Rodgers, Citizen Member

STAFF PRESENT:

Mary Bracken, Environmental Specialist
Jessika Corkum-Gorrill, Natural Areas and One Million Trees
Project Coordinator
Julius Lindsay, Community Energy Specialist
Brenda Osborne, Director, Environment
Olav Sibille, Planner, Long Term Planning, and Project Lead,
Natural Heritage & Urban Forest Strategy
Lisa Urbani, Environmental Research Assistant

CONTACT PERSON: Julie Lavertu, Legislative Coordinator

Office of the City Clerk, Telephone: 905-615-3200, ext. 5471; Fax 905-615-4181

Julie.Lavertu@mississauga.ca

NOTE: The Committee changed the order of the Agenda during the meeting. These Minutes reflect the order of the meeting.

CALL TO ORDER – 9:08 a.m.

APPROVAL OF AGENDA

Approved (F. Dale)

The Chair thanked Mr. Krist and Ms. Yoon for their work on the Committee as Peel Environmental Youth Alliance (PEYA) representatives, noting that it is their last meeting. Mr. Krist said that PEYA will be appointing seven new executive members shortly at their Annual General Meeting who will appoint new PEYA representatives on the Committee. Mr. Krist and Ms. Yoon briefly discussed their post-secondary plans.

DECLARATIONS OF DIRECT (OR INDIRECT) PECUNIARY INTEREST – Nil

PRESENTATIONS/DEPUTATIONS

- A. Item 3 Olav Sibille, Planner, Long Term Planning, and Project Lead, Natural Heritage & Urban Forest Strategy, Mirek Sharp, North South Environmental, and Lead Consultant, Natural Heritage & Urban Forest Strategy, and Margot Ursic, Beacon Environmental, and Lead Consultant, Urban Forest Management Plan, with respect to an update on the Natural Heritage & Urban Forest Strategy (NH&UFS) and upcoming public consultation.

Mr. Sibille briefly discussed the NH&UFS and upcoming public and stakeholder consultations. Mr. Sharp and Ms. Ursic gave a PowerPoint presentation, dated June 4, 2013 and entitled “Natural Heritage & Urban Forest Strategy (NH&UFS) DRAFT DIRECTION,” and discussed the project’s status update, visualizing the Strategy, the Strategy’s draft vision, guiding principles, objectives, and targets, and 30 NH&UFS strategies within four topics (namely, planning, management, engagement, and tracking).

Ms. Ohori arrived at 9:16 a.m.

Committee members raised various issues including:

- The NH&UFS and its importance, integrated and holistic approach towards public and private lands, partnerships, educational value, reevaluation of targets and the overall Strategy over the long term (e.g., the maximum percentage of NHs), and the possibility of planting fruit-producing trees to address local food issues;
- The NH&UFS vis-à-vis possible linkages with hydro corridors and schools to increase trees, tree canopies, and NH in these areas;
- Boulevard trees and their overall condition throughout the City, the importance of

- providing residents, schools, businesses, and others with information regarding how to care for their boulevard trees, and the possibility of the City adopting a policy to ban Norway maples and similar trees from being planted in the City;
- Council's foresight to protect and purchase various woodlots, lands, and forests in the City, including Riverwood, which is often called the City's "Central Park";
 - The City's tree planting strategies and challenges over the years, the resurgence and value of planting native trees in recent years, and the number of trees that have been planted throughout the City in various areas to date;
 - Strategies to maintain the City's various meadowlands, grasslands, and shrub lands for their overall natural value, bird species, and habitat diversity;
 - The NH&UFS's broad scale, depth, and comprehensiveness and the possibility of focusing or prioritizing its strategies so that it is impactful and less overwhelming;
 - The extent of the tree canopy in northeast Mississauga near Matheson Boulevard East and Explorer Drive;
 - The possibility of the City engaging in partnerships and/or a pilot project with large companies (e.g., Pepsi, Target, etc.) and commercial tenants on the NH&UFS to obtain their support, stewardship, and leadership of the issue; and
 - Clarification on strategy 20 (specifically, leverage the City's website and social media) vis-à-vis a possible video, the importance of incorporating information regarding how to properly maintain boulevard trees in a possible video, and the value of targeting the video to key audiences like children, youth, and adults.

Dan McDermott, Director, Ontario Chapter, Sierra Club Ontario, discussed the NH&UFS, the greenbelt, and a previous Council Resolution regarding greenbelt additions in the City vis-à-vis the NH&UFS. In response to the Chair, Mr. McDermott said that Sierra Club Ontario could provide a letter or report to the Committee on this matter, but added that it may be most useful for staff to review the previous Council Resolution regarding the greenbelt and to explore possible linkages with the NH&UFS. Kristina Jackson, Chapter Coordinator, Sierra Club Ontario, discussed the NH&UFS vis-à-vis the greenbelt and river valleys (e.g., the Credit River Valley), asked for clarification on the current status and draft targets for watercourses and vegetation on public and private lands, and expressed enthusiasm regarding an upcoming stakeholder input session on June 18, 2013.

Mr. Sharp, Ms. Ursic, Ms. Corkum-Gorrill, and Mr. Sibille answered the above-noted comments and questions from the Committee, Mr. McDermott, and Ms. Jackson.

The Committee dealt with Item 3 at this time.

3. Update on the Natural Heritage & Urban Forest Strategy (NH&UFS) and Upcoming Public Consultation

Memorandum dated May 23, 2013 from David Marcucci, Manager, Park Planning, Community Services Department, with respect to an update on the Natural Heritage & Urban Forest Strategy (NH&UFS) and upcoming public consultation.

Recommendation
EAC-0025-2013

1. That the PowerPoint presentation, dated June 4, 2013 and entitled "Natural Heritage & Urban Forest Strategy (NH&UFS) DRAFT DIRECTION," by Mirek Sharp, North South Environmental, and Lead Consultant, NH&UFS, and Margot Ursic, Beacon Environmental, and Lead Consultant, Urban Forest Management Plan, to the Environmental Advisory Committee on June 4, 2013 be received; and
2. That the Memorandum dated May 23, 2013 from David Marcucci, Manager, Park Planning, Community Services Department, entitled "Update on the Natural Heritage & Urban Forest Strategy (NH&UFS) and Upcoming Public Consultation," be received.

Received (L. Krist)

- B. Item 2 Julius Lindsay, Community Energy Specialist, with respect to the "Greening Our Fleet" Program analysis.

Mr. Lindsay gave a PowerPoint presentation, dated June 4, 2013 and entitled "Green Fleet Program Analysis," and discussed key definitions, background information about the Program, right-sizing totals, greenhouse gas reductions, new vehicles added to the fleet, biodiesel, financial impacts, and options to consider for the Program's next stage.

Committee members raised various issues including:

- The use of biodiesel vis-à-vis the reduction in repair costs on diesel engines;
- The types of vehicles driven by the City's employees, the source of the biodiesel used in the City's vehicles, and the status and type of driver training for the City's employees to ensure that vehicles are driven in a fuel-efficient manner; and
- The initial challenges and work of staff to implement the Program throughout the City and the Program's overall importance.

Mr. Lindsay answered the Committee's above-noted comments and questions.

The Committee dealt with Item 2 at this time.

2. "Greening Our Fleet" Program Analysis

Corporate Report dated May 24, 2013 from the Commissioner of Community Services with respect to the "Greening Our Fleet" Program analysis.

Recommendation

EAC-0026-2013

1. That the PowerPoint presentation, dated June 4, 2013 and entitled "Green Fleet Program Analysis," by Julius Lindsay, Community Energy Specialist, to the Environmental Advisory Committee on June 4, 2013 be received; and
2. That the Corporate Report dated May 24, 2013 from the Commissioner of Community Services entitled "Greening Our Fleet" Program Analysis" be received.

Received (F. Dale)

MATTERS CONSIDERED1. Approval of Minutes of Previous Meeting

Minutes of the meeting held May 7, 2013.

Approved (D. Yoon)

4. Upcoming Agenda Items and Environmental Advisory Committee (EAC) Role

Chart from Environment staff with respect to upcoming agenda items and Environmental Advisory Committee (EAC) role.

Recommendation

EAC-0027-2013

That the chart from Environment staff, with respect to upcoming agenda items and Environmental Advisory Committee (EAC) role, be received.

Received (L. A. Mallett)

5. Status of Outstanding Issues from the Environmental Advisory Committee (EAC)

Chart dated June 4, 2013 from Julie Lavertu, Legislative Coordinator, Environmental Advisory Committee, with respect to the status of outstanding issues from the Environmental Advisory Committee.

Recommendation

EAC-0028-2013

That the chart dated June 4, 2013 from Julie Lavertu, Legislative Coordinator, Environmental Advisory Committee, with respect to the status of outstanding issues from the Environmental Advisory Committee, be received.

Received (M. Ricker)

INFORMATION ITEMS – Nil

DATE OF NEXT MEETING – Tuesday, September 3, 2013 at 9 a.m., Council Chamber

OTHER BUSINESS

Free Guided Nature Walk and Talk on Mississauga's Natural Capital by Sierra Club Ontario on Thursday, June 13, 2013 at Jack Darling Park and Rattray Marsh

Ms. Osborne discussed the above-noted upcoming event and said that Ms. Lavertu would send an email message to Committee members with additional information.

Credit River Parks Strategy Update

Ms. Osborne read an update on the above-noted matter from Mark Howard, Project Lead, Credit River Parks Strategy, and Planner, Long Term Planning, Park Planning Section, and said that Ms. Lavertu would email it to the Committee for their information and that Mr. Howard would be pleased to answer any questions from Committee members via email. In response to the Chair, Ms. Osborne said that Mr. Howard would not be making another deputation to the Committee on the above-noted matter, as he has made a number of deputations on this topic to the Committee in the past, and that a Corporate Report would be proceeding to General Committee for consideration on June 26, 2013.

2012 Report on Living Green Brochure

Ms. Bracken discussed and distributed the above-noted brochure to the Committee for their information. She noted that this brochure would be distributed at events, that Committee members could request additional copies for events and their contacts, and that this is the only printed promotional piece for the Living Green Master Plan as the City is striving to be as environmentally conscious and responsible as possible.

Summer Reading Suggestions

Ms. Ohori requested summer reading suggestions with an environment bent from her fellow Committee members and Environment staff.

City of Brampton's Natural Heritage Strategy Stakeholder Workshop

Ms. Ohori discussed the above-noted event which she attended on behalf of the Committee. She discussed the event's overall value and said that she would prepare a summary and share it with Committee members in the near future. Ms. Ohori said that a meeting for the Region of Peel's Environmental Advisory Committees would be organized in the future and that she had joined the organizing committee on this matter.

ADJOURNMENT – 10:18 a.m. (D. Yoon)

Memorandum



TO: Chair and Members of Environmental Advisory Committee

FROM: Crystal Greer, Director of Legislative Services/City Clerk

DATE: September 3, 2013

SUBJECT: **Draft Motion regarding Stormwater Flooding**

At the request of Councillor Chris Fonseca, attached for your consideration is a draft motion regarding stormwater flooding.

Councillor Fonseca has presented this as a Notice of Motion to the Standing Committee on Environmental Issues and Sustainable Development of the Federation of Canadian Municipalities (FCM) for consideration by its Board in November.

A handwritten signature in cursive script that reads "Crystal Greer".

Crystal Greer
Director of Legislative Services/City Clerk

Cc: Councillor Fonseca

WHEREAS Canada is seeing a dramatic increase in extreme weather events;

AND WHEREAS there are very few, if any, stormwater systems in Canada able to withstand the intensity of the storms occurring across Canada on a more frequently basis such as (Toronto August 2005, Mississauga August 2009, Winnipeg April 2011, Calgary June 2013, and West-Central GTA July 2013);

AND WHEREAS the Greater Toronto Area alone has had five extreme weather events over the last decade with rain intensity greater than the 100 year design storm;

AND WHEREAS before 1990, only three Canadian disasters exceeded \$500 million in damages, in the past decade alone, nine surpassed that amount;

AND WHEREAS in the first 6 months of 2013, Canada has experienced two weather related disaster events estimated to be responsible for damages in excess of \$1 billion with only one half of the damages covered by insurance;

AND WHEREAS weather-related water damages are now the leading cause of property losses and the highest percentage of residential insurance claims;

AND WHEREAS Canada is the only G8 country where people cannot buy insurance for overland flooding;

NOW THEREFORE BE IT RESOLVED that the Federation of Canadian Municipalities urge the federal government to: establish a permanent natural disaster relief fund; work with the responsible Ministers of each Province to mandate insurance companies to offer residential flood insurance, or in the alternative provide such coverage; and provide sustainable funding for infrastructure to address residential and business flooding;

AND FURTHER that the Federation of Canadian Municipalities and the Association of Municipalities of Ontario request similar endorsement of all their members in good standing;

AND FURTHER that this resolution be forwarded, for immediate attention and action to: the Prime Minister of Canada, the Right Honourable Stephen J. Harper, as well as Canada's Minister of Finance, the Honourable James M. Flaherty, and all local members of Parliament.

Memorandum



TO: Environmental Advisory Committee
Meeting Date: September 10, 2013

FROM: Mary Bracken, Environmental Specialist, Environment Division, Community Services Department

DATE: August 26, 2013

SUBJECT: **Rooftop Solar Projects in Mississauga Being Offered Small Feed-in Tariff (FIT) Contracts and Next FIT Application Period**

On July 3, 2013, the Ontario Power Authority (OPA) offered 951 new Small Feed-in Tariff (FIT) renewable energy contracts. Twenty-seven (27) of those contracts were offered to locations in Mississauga, all for rooftop solar projects. Attachment 1 contains a map, showing the locations of the applications in Mississauga offered Small FIT contracts by the OPA.

Background

On December 12, 2012, City of Mississauga Council passed a resolution supporting the construction and operation of rooftop solar projects anywhere in the City of Mississauga, including but not limited to rooftop solar projects on City-owned buildings. A copy of the resolution is contained in Attachment 2. The sole purpose of the resolution was to enable participants in the FIT program to receive priority points. The Council support resolution is valid for one year and will expire on December 12, 2013.

The Council support resolution was provided for 246 projects in the City of Mississauga during the Small FIT application period between December 14, 2012 and January 18, 2013. Small FIT includes projects producing 10 kilowatts (kW) to 500 kW of power. During this period, applications were also submitted to the FIT program for five rooftop solar projects on City-owned properties where the City was acting as a landlord for a solar developer.

Approved Applications

Of the 951 renewable energy contracts offered by the OPA, over 98 percent of the successful applications had a supporting municipal council resolution. A complete list of contracts offered by the OPA can be found at <http://fit.powerauthority.on.ca/newsroom/july-3-2013-program-update>. Of the 27 applications in Mississauga which were offered Small FIT contracts, 26 had the Council support resolution. The one project without a Council support resolution had not requested the resolution from the City.

Most of the 27 applications are for industrial and commercial properties, except two projects on secondary school properties. The 951 renewable energy contracts offered in Ontario represents 146.5 megawatts (MW) or 146,500 kW of power. Once built, the 27 rooftop solar projects in Mississauga may generate 4,464 kW of power which represents three percent of the power generated by the projects offered contracts in Ontario.

The five applications submitted for properties owned by the City of Mississauga, where the City was acting as a landlord for a solar developer, were not offered contracts, but will re-apply during the next application period.

Applicants that have been offered contracts will now continue with the process of executing contracts. The OPA requires that rooftop solar projects reach commercial operation within 18 months from the time the contract is executed. Building permits will be required to be issued prior to installation of the rooftop solar projects.

Next Application Period

The next application period for Small FIT projects is scheduled to open in fall 2013. The exact date has not been released.

As the date for the next application period has not been announced, and the existing Council support resolution will expire on December 12, 2013, it is recommended that a new resolution be passed by Council which will be valid for one year. The new resolution, as proposed in Attachment 3, uses the same wording as the previous Council support resolution. This will ensure that a Council support resolution is available for the next application period even if the FIT application period is postponed.

The same process for issuing the resolution will be used, whereby applicants must complete a form, which includes a checklist of criteria relating to visibility, noise, glare, ice, safety and emergencies. If the checklist shows that the project addresses the criteria to the City's satisfaction, the Council support resolution will be provided to the applicant.

During the next application period for Small FIT projects, five applications for properties owned by the City of Mississauga, where the City is acting as a landlord for a solar developer, will be submitted. They will qualify for at least four priority points: two priority points for having a Council support resolution; and two points for the project being located on City of Mississauga property.

Changes to FIT Program

On June 12, 2013, the Minister of Energy provided a directive to the OPA regarding the FIT program. Of note are the following:

- The application period scheduled for fall 2013 is for up to 70 MW of Small FIT projects plus 53.5 MW of unused capacity from the previous application period for a total of 123.5 MW.
- For the fall 2013 application period, 24 MW will be set aside for projects with greater than 50 percent equity participation from the municipality or public sector entities.
- The OPA will launch a pilot program for rooftop solar projects on un-constructed buildings in fall 2013.

- Starting in 2014, the OPA will award up to 150 MW of Small FIT contracts each year for four years.
- Each year for the four years, 50 MW will be set aside for Small FIT projects with greater than 50 percent equity participation from the municipality or public sector entities.
- When evaluating the applications, the OPA will give two priority points to projects that have a local municipal council support resolution (same number of points as the last application period).
- Two priority points will be given to projects in which a municipality or public sector entity is a project host (on municipal or public sector properties).
- Three priority points will be given to projects where a municipality or public sector entity has a minimum 15 percent equity interest.

Next Steps

On September 11, 2013, General Committee of Council will consider a report, which contains the above information and the following recommendation:

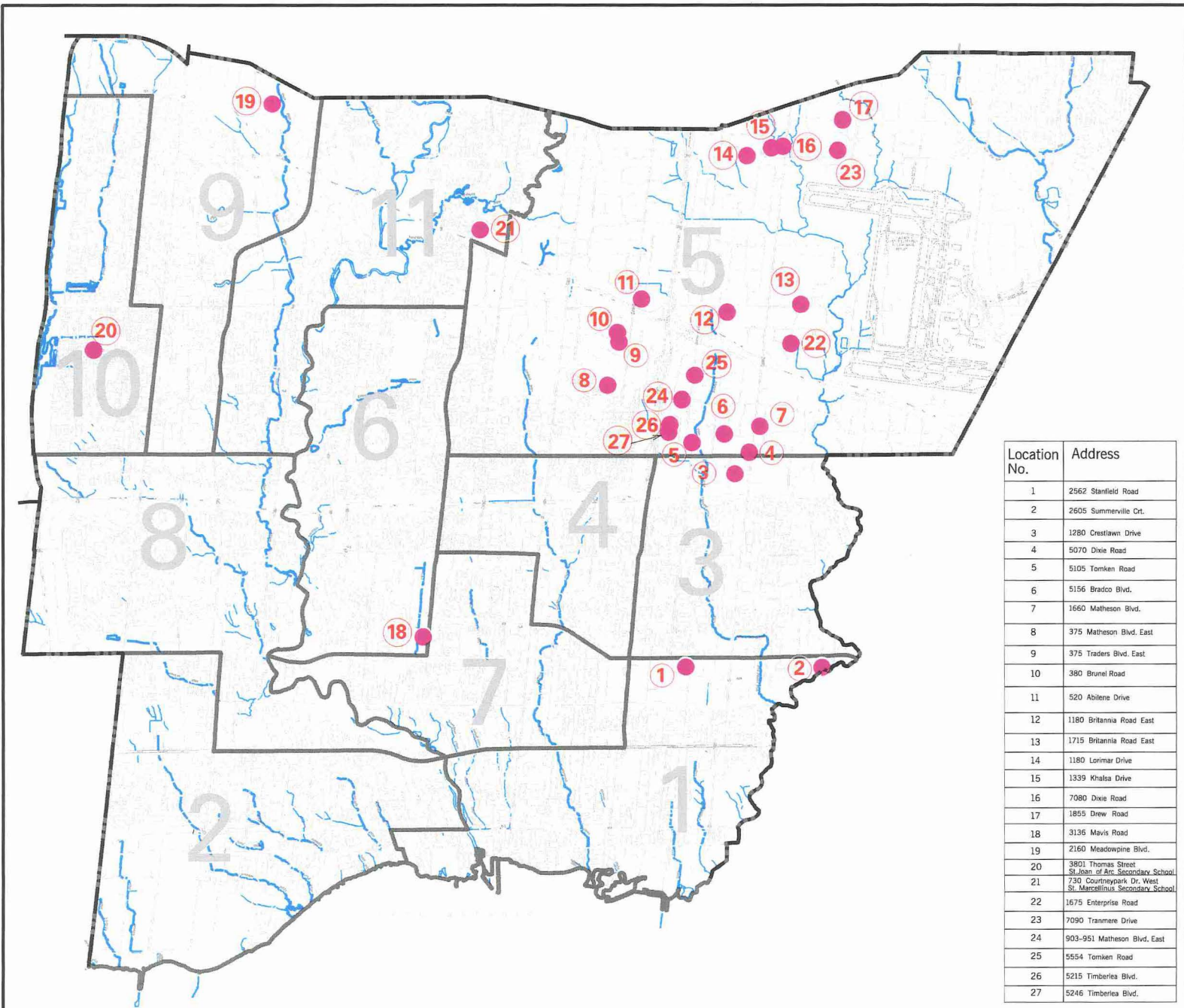
That Council rescind Resolution 0292-2012 and pass a resolution supporting rooftop solar projects in Mississauga as outlined in the Corporate Report titled "Rooftop Solar Projects in Mississauga Offered Small Feed-in Tariff (FIT) Contracts and Next FIT Application Period" dated August 26, 2013 from the Commissioner of Community Services.

Staff will continue to monitor the FIT program, prepare for the next application period and report to the Environmental Advisory Committee and Council on a regular basis.

M Bracken

Mary Bracken
Environmental Specialist
Environment Division
Community Services Department

- | | |
|---------------|-------------------------------------------------------------------------------------------------------------------------------|
| Attachment 1: | Map of Rooftop Solar Projects in Mississauga Offered Small Feed-in Tariff Contracts by the Ontario Power Authority, July 2013 |
| Attachment 2: | RESOLUTION 0292-2012 adopted by the Council of The Corporation of the City of Mississauga at its meeting on December 12, 2012 |
| Attachment 3: | Motion for City of Mississauga Council Support Resolution for Rooftop Solar Generation Projects |



ROOFTOP SOLAR PROJECTS

OFFERED SMALL FEED-IN TARIFF CONTRACTS BY THE ONTARIO POWER AUTHORITY, JULY 2013





RESOLUTION 0292-2012
adopted by the Council of
The Corporation of the City of Mississauga
at its meeting on December 12, 2012

0292-2012 Moved by: George Carlson

Seconded by: Pat Saito

WHEREAS the Province's Feed-in Tariff (FIT) Program encourages the construction and operation of rooftop solar generation projects ("Rooftop Solar Projects");

AND WHEREAS one or more Rooftop Solar Projects may be constructed and operated in the City of Mississauga;

AND WHEREAS, pursuant to the rules governing the FIT Program (the "FIT Rules"), applications whose Rooftop Solar Projects receive the formal support of local municipalities will be awarded priority points, which may result in these applicants being offered a FIT contract by the Province prior to other persons applying for FIT contracts;

AND WHEREAS the *Green Energy Act, 2009*, S.O. 2009, c.12, as amended, stipulates that a municipal Official Plan and Zoning By-law does not apply to a renewable energy undertaking;

AND WHEREAS the *Building Code Act, 1992*, S.O. 1992, c.23, as amended, applies to renewable energy projects and, as such, each Rooftop Solar Project will require a building permit issued by the City of Mississauga Planning and Building Department;

AND WHEREAS, pursuant to the *Ontario Heritage Act*, R.S.O. 1990, c.0.18, as amended, each Rooftop Solar Project that is proposed to be located on a property listed on the City of Mississauga's Heritage Register or designated as a heritage property will require a Heritage Permit from the City of Mississauga prior to work commencing on such properties;

NOW THEREFORE BE IT RESOLVED THAT:

The Council of the City of Mississauga supports the construction and operation of Rooftop Solar Projects anywhere in the City of Mississauga, including but not limited to Rooftop Solar Projects on City-owned buildings;

And further, that this Resolution's sole purpose is to enable the participants in the FIT Program to receive priority points under the FIT Program, and that this Resolution may not be used for the purpose of any other form of municipal approval in relation to a FIT application or a Rooftop Solar Project or for any other purpose;

And further, that resolution 0170-2012 and resolution 0219-2012 be repealed;

And further, that Council support shall lapse twelve (12) months after its adoption by Council.

Motion for
CITY OF MISSISSAUGA COUNCIL SUPPORT RESOLUTION
FOR ROOFTOP SOLAR GENERATION PROJECTS

WHEREAS the Province's Feed-in Tariff (FIT) Program encourages the construction and operation of rooftop solar generation projects ("Rooftop Solar Projects");

AND WHEREAS one or more Rooftop Solar Projects may be constructed and operated in the City of Mississauga;

AND WHEREAS, pursuant to the rules governing the FIT Program (the "FIT Rules"), applications whose Rooftop Solar Projects receive the formal support of local municipalities will be awarded priority points, which may result in these applicants being offered a FIT contract by the Province prior to other persons applying for FIT contracts;

AND WHEREAS the *Green Energy Act, 2009*, S.O. 2009, c.12, as amended, stipulates that a municipal Official Plan and Zoning By-law does not apply to a renewable energy undertaking;

AND WHEREAS the *Building Code Act, 1992*, S.O. 1992, c.23, as amended, applies to renewable energy projects and, as such, each Rooftop Solar Project will require a building permit issued by the City of Mississauga Planning and Building Department;

AND WHEREAS, pursuant to the *Ontario Heritage Act*, R.S.O. 1990, c.0.18, as amended, each Rooftop Solar Project that is proposed to be located on a property listed on the City of Mississauga's Heritage Register or designated as a heritage property will require a Heritage Permit from the City of Mississauga prior to work commencing on such properties;

NOW THEREFORE BE IT RESOLVED THAT Council supports the construction and operation of Rooftop Solar Projects anywhere in the City of Mississauga, including but not limited to Rooftop Solar Projects on City-owned buildings;

AND FURTHER, that this Resolution's sole purpose is to enable the participants in the FIT Program to receive priority points under the FIT Program, and that this Resolution may not be used for the purpose of any other form of municipal approval in relation to a FIT application or a Rooftop Solar Project or for any other purpose;

AND FURTHER, that resolution 0292-2012 be rescinded;

AND FURTHER, that Council support shall lapse twelve (12) months after its adoption by Council.

Memorandum



TO: Environmental Advisory Committee
Meeting Date: September 10, 2013

FROM: Mary Bracken, Environmental Specialist, Environment Division, Community Services Department

DATE: August 26, 2013

SUBJECT: **Doors Open 2013**

Doors Open is an Ontario-wide free event with over 200 communities opening their doors and giving visitors the opportunity to discover some unique and intriguing sites. This year is the 10th annual Doors Open in Mississauga, which will be held on **Saturday, September 28, 2013** from 10:00 a.m. to 4:00 p.m. Doors Open 2013 will highlight artistic practices in support of the national Culture Days celebrations by offering performances and/or exhibiting venues of local arts and heritage groups.

Doors Open Mississauga will also be highlighting innovative green/sustainable best practices, including Leadership in Energy and Environmental Design (LEED) and Low Impact Development. Of the 44 locations participating in Doors Open Mississauga, 10 have green/sustainable features and will be identified in the Doors Open booklet with a green symbol:

1. Loyalty One
2. Peel Regional Paramedic Services
3. Sheridan School of Business
4. The International Centre/SOFA: Source of Furniture and Accessories
5. University of Toronto Mississauga Hazel McCallion Academic Learning Centre
6. University of Toronto Mississauga Instructional Centre
7. University of Toronto Mississauga Terrence Donnelly Health Sciences Complex
8. Whole Foods Market Square One
9. Lakeside Park
10. O'Connor Park

In addition, visitors will be encouraged to leave their cars behind and take transit, cycle or walk to their destinations.

MP Bracken

Mary Bracken
Environmental Specialist
Environment Division
Community Services Department

Memorandum



TO: Environmental Advisory Committee
Meeting Date: September 10, 2013

FROM: Brenda E. Osborne, Director, Environment Division, Community Services
Department

DATE: August 9, 2013

SUBJECT: Plastic Sampling in the Great Lakes

On Saturday, July 20, 2013, a number of Members of Council, Environmental Advisory Committee members and invited guests attended a presentation by Dr. Sherri Mason on plastic pollution found in the Great Lakes. The presentation and discussion took place between 9:00 a.m. and 12:30 p.m. in the John Holland Room at Port Credit Memorial Arena.

The following people attended Dr. Sherri Mason's presentation: Councillor Jim Tovey (Ward 1); Councillor Pat Mullin (Ward 2); Dr. Shazad Mohammed, SUNY Fredonia, School of Business; Ruwanthi Halwala, Intern, International Holistic Tourism Education Centre; Julia Morton-Marr, Founding President, International Holistic Tourism Education Centre (via Skype); Kate Hayes, Manager, Ecosystem Restoration, Credit Valley Conservation; Dr. Brad Bass, Environmental Advisory Committee; Elaine Hanson, Environmental Advisory Committee; and Brenda Osborne, Director, Environment Division, City of Mississauga.

Background

At the request of Councillor Jim Tovey, staff arranged a meeting with Dr. Sherri (Sam) Mason, a SUNY Fredonia Chemistry Professor who graciously agreed to present her research findings in Mississauga between sampling expeditions on the St. Lawrence Seaway/Lake Ontario.

Dr. Mason's research group is at the forefront of research on plastic pollution within freshwater ecosystems in general, and within the Great Lakes more specifically. In collaboration with The 5 Gyres Institute, Dr. Mason is leading the first survey of plastics pollution within the open-waters of the Great Lakes.

Research Findings

Given the abundance of plastics known to exist in the world's oceans, it is not surprising that Dr. Mason's sampling has found plastic particles in the Great Lakes. What is surprising, is that some of her team's sampling shows extremely high counts of "micro-plastics" (0.355-0.999 millimeters (0.014-0.039 inches)), with most of those falling into the 'pellet' category. This pellet category includes plastic micro-beads found in exfoliators, toothpaste, etc. Natural alternatives to plastic micro-beads exist and are found in some of the more natural product brands. These "micro-plastics" are not likely filtered out by wastewater treatment facilities.

To-date, Dr. Mason's research team has surveyed Lakes Superior, Huron, Michigan, Erie and Ontario, with Lake Ontario data yet to be analyzed and compiled. Sampling is surface, random and only a very high-level representation of actual volumes and distribution. It does not include plastics found on the lake bottom.

A copy of Dr. Mason's slide presentation is attached.

Next Steps

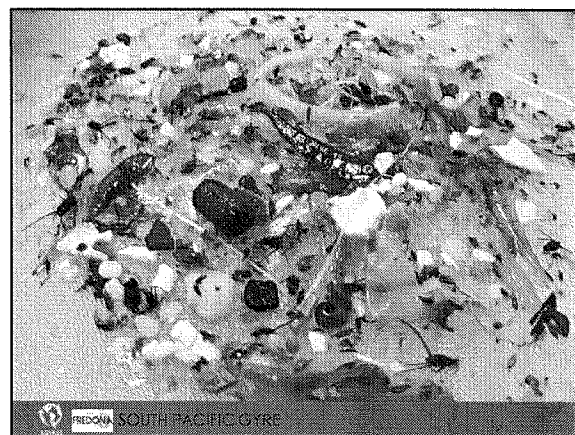
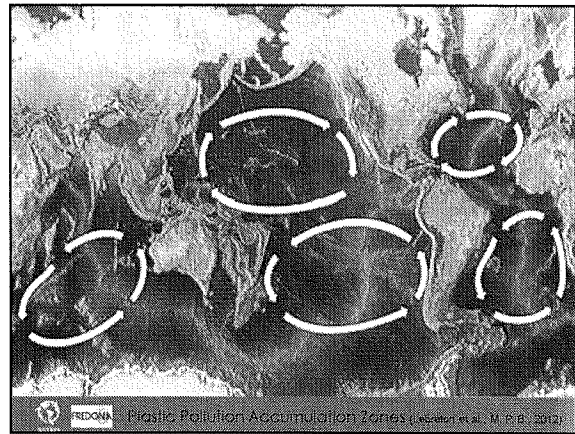
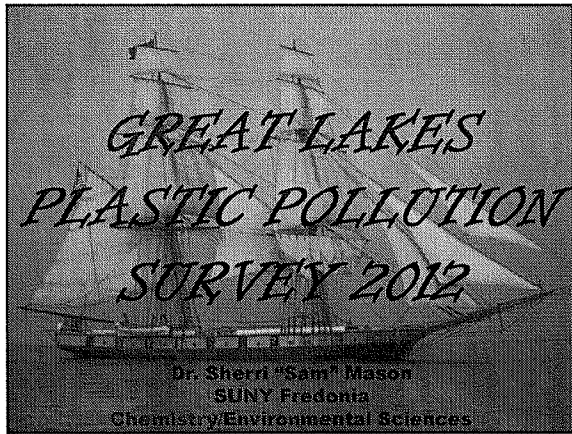
Dr. Mason is continually promoting her work by accepting speaking engagements and media interviews. Those aware of her work are also helping spread the word to others for direct interest and potential links to other related research. Credit Valley Conservation plans to promote the results of this research through the Lake Ontario Integrated Shoreline Strategy (LOISS) as well as incorporate it into work related to the Integrated Watershed Restoration Strategy.

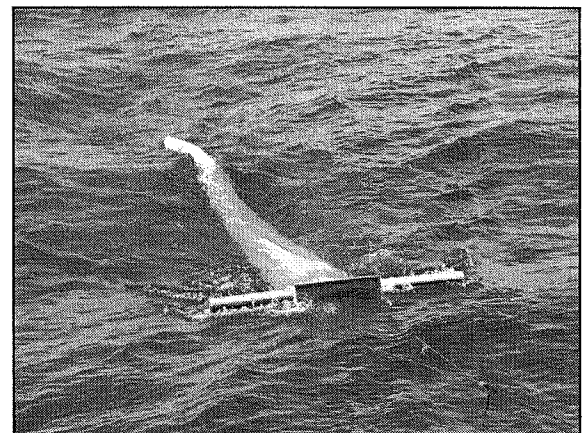
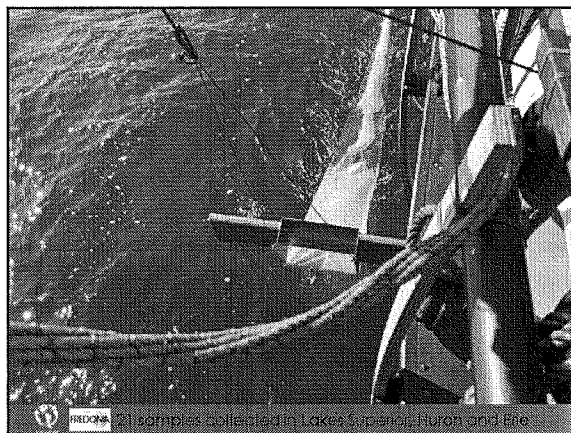
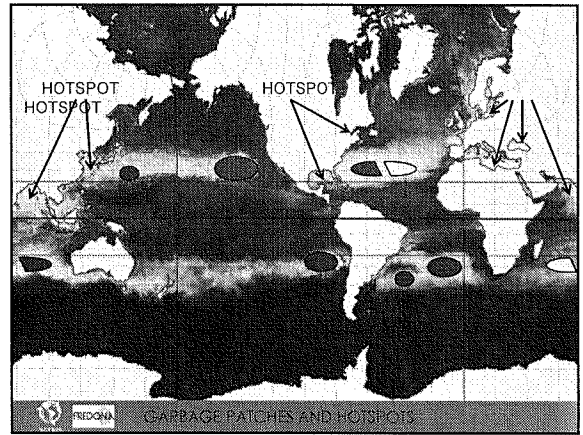
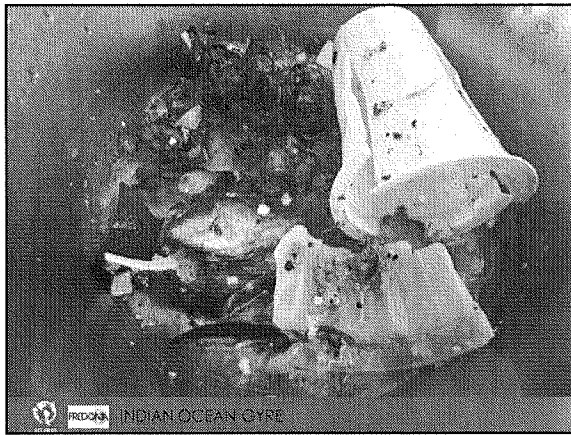
City staff will continue to monitor and promote Dr. Mason's research including promoting her as a speaker at the next Great Lakes and St. Lawrence Cities Initiative (GLSLCI) conference (June 2014).

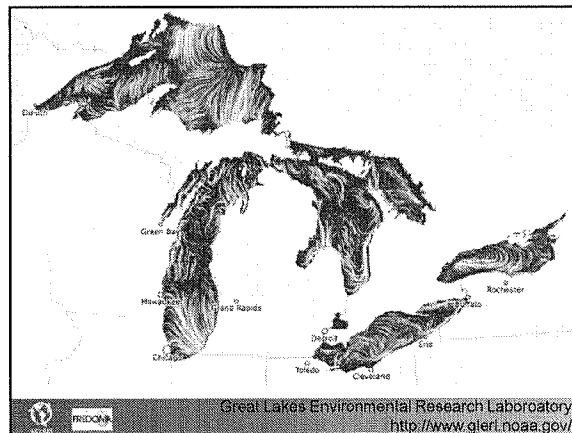
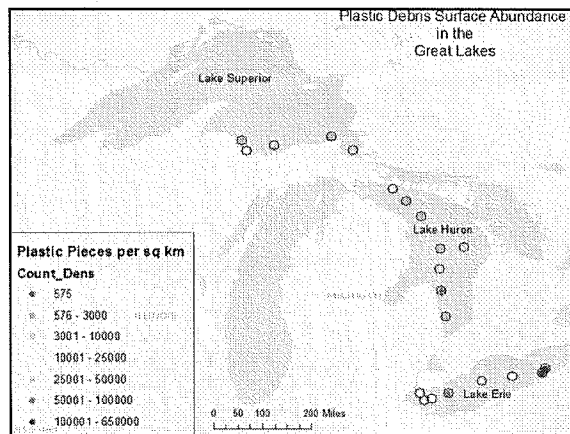
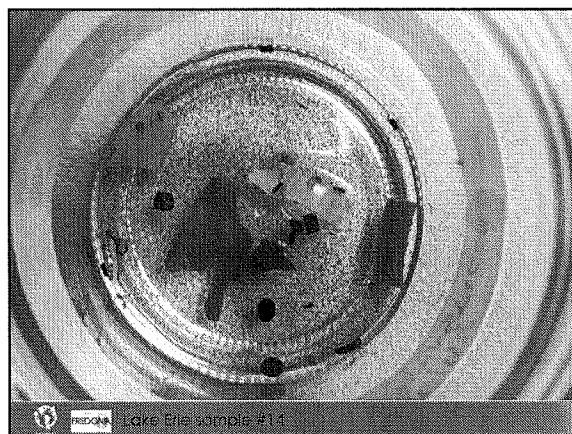
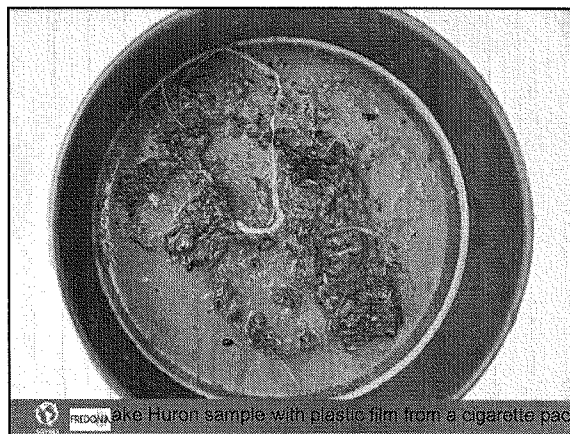
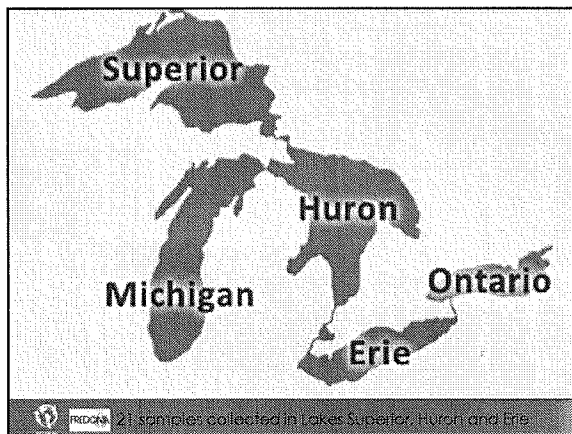


Brenda E. Osborne
Director, Environment Division
Community Services Department

Encl.

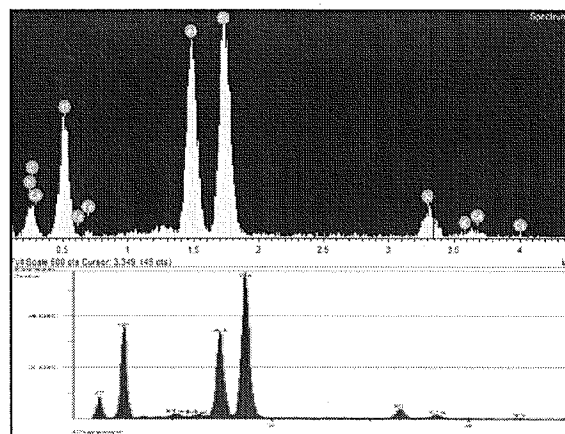
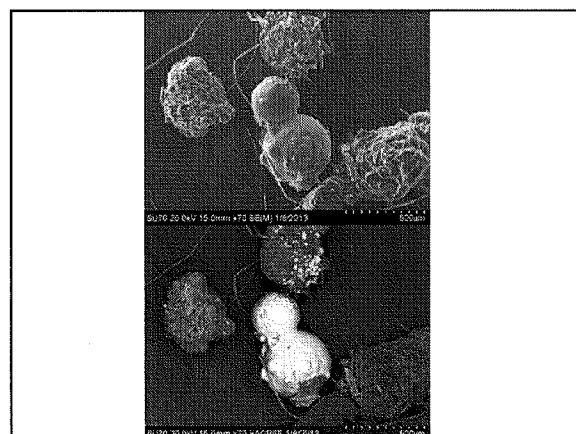
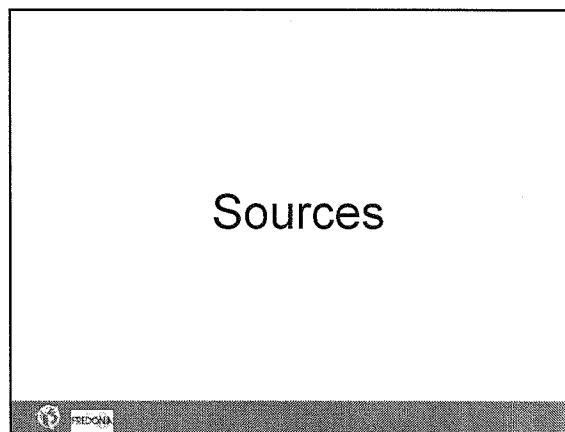
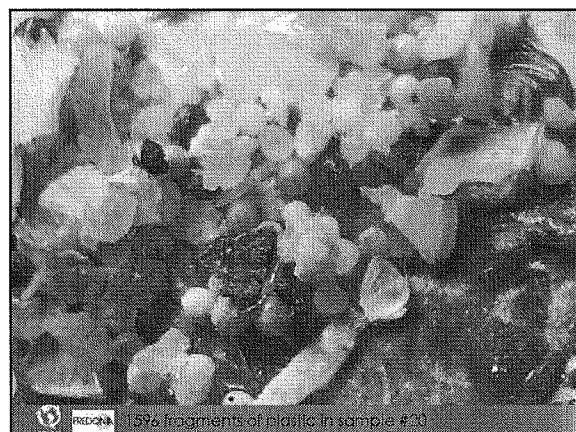
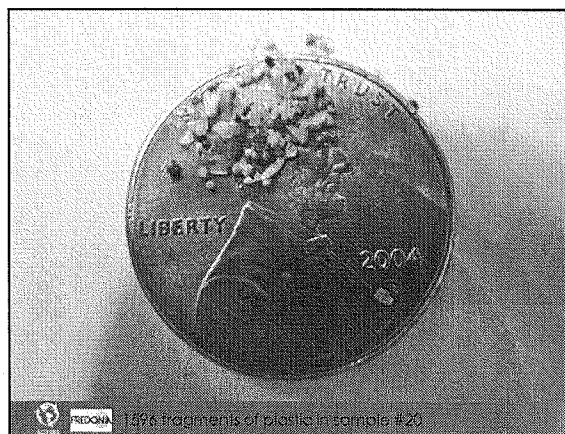
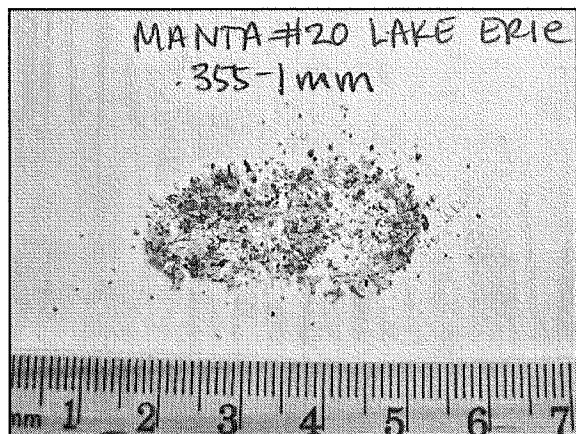


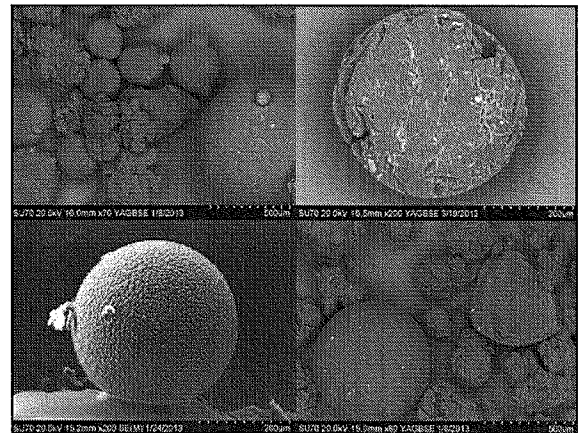
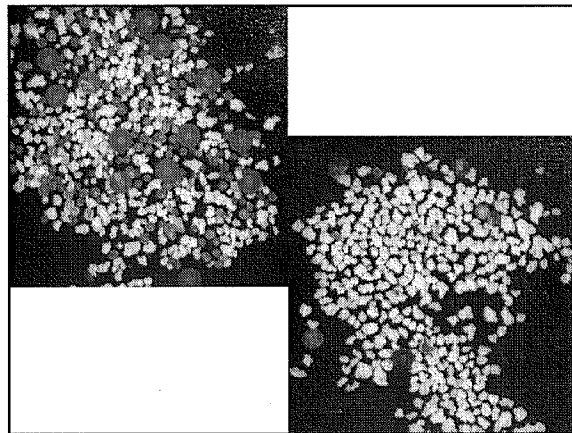
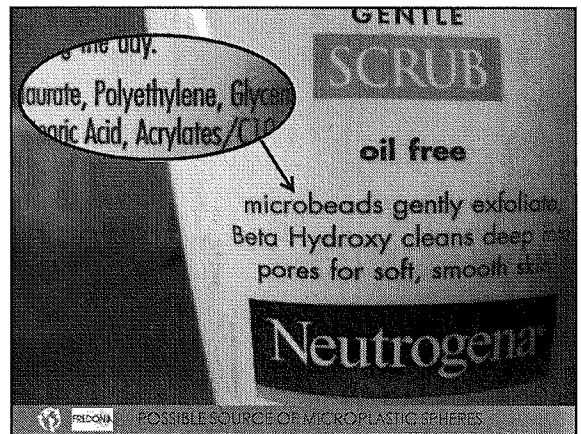
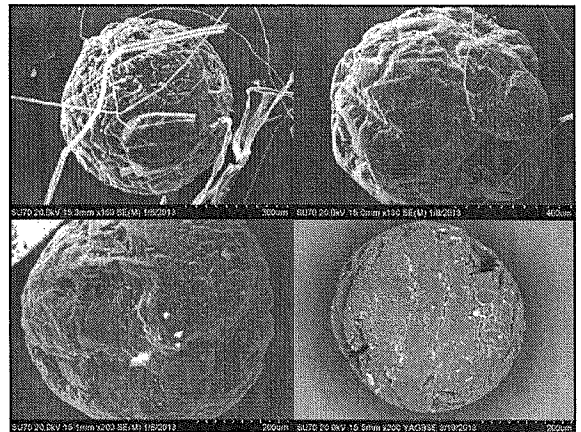
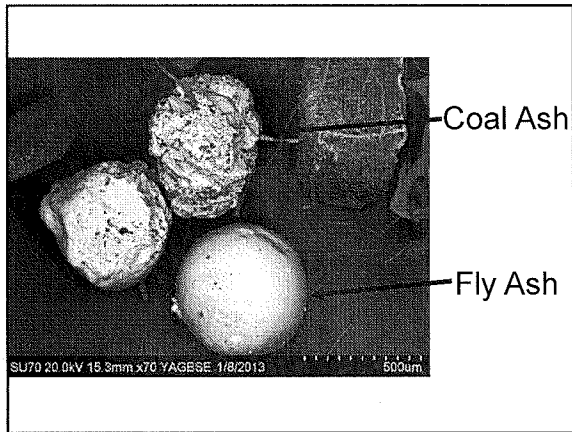




	Great Lakes			NASG		
	0.355— 0.999mm	1.000— 4.749mm	> 4.75mm	0.355— 0.999mm	1.000— 4.749mm	> 4.75mm
Fragment	247,106.5	123,906.2	11,219.8	21,385.9	28,127.8	3,502.4
Film	3,943.5	1,332.2	4,006.1	95	743.4	688.3
Foam	54,340.9	18,208.4	1,810.5	5	40.4	12.9
Pellet	430,029.8	5,614.1	420.9	53	40.4	12.9
Line	1,128.9	2,571.9	449.0	253	1,308.3	2,077.5
count/km ²	736,749.6	151,632.9	17,906.3	21,745.4	31,010.4	6,281.3
% of total	81%	17%	2%	37%	52%	11%

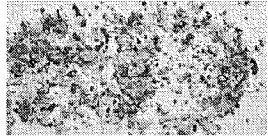
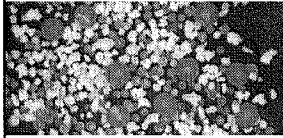
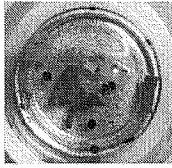
REDONIA 2012 GREAT LAKES EXPEDITION



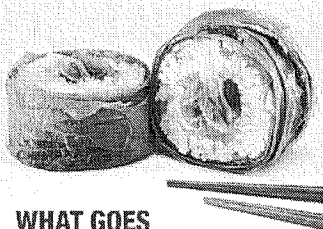
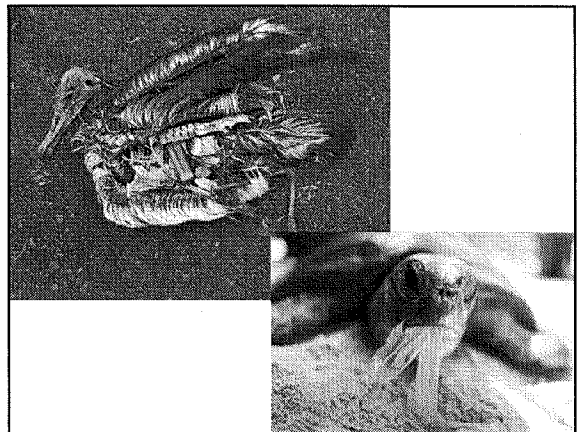
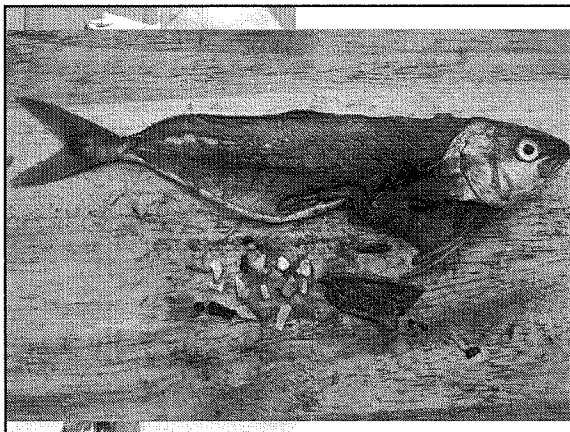


Sources

- Coal (Fly) Ash
 - ~20% within 8 of 21 samples
- Consumer Products
 - Photodegradation of larger plastic items
 - Exfoliating Microbeads



Impact



**WHAT GOES
IN THE OCEAN
GOES IN YOU.**

RECENT STUDIES ESTIMATE THAT FROM OFF THE WEST COAST INDUSTRY
OVER 12,000 TONS OF PLASTIC A YEAR. FIND OUT HOW YOU CAN HELP
TURN THE TIDE ON PLASTIC POLLUTION AT WWW.SURFRIDER.ORG



Solutions





Solutions

- Change what you buy
- Shake the Habit (of plastic bags)
- Ban the Bottle
- Bring your own utensils
- Don't Take it To-Go (or at least not in plastic)
- Don't Litter, Save the Critters
- Change the Laws
 - Bag/Bottle Fees
 - Extended Corporate Responsibility



5GYRES

Marcus Eriksen, PhD
5 Gyres Institute
Los Angeles, CA
marcus@5gyres.org
323-395-1843

This expedition was
funded by:

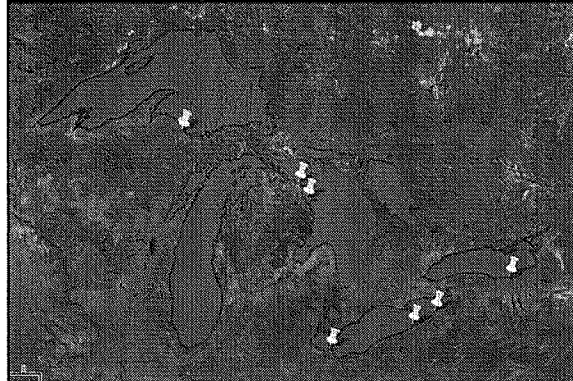


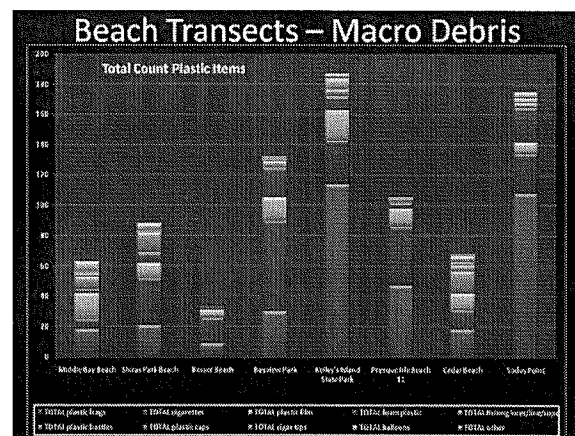
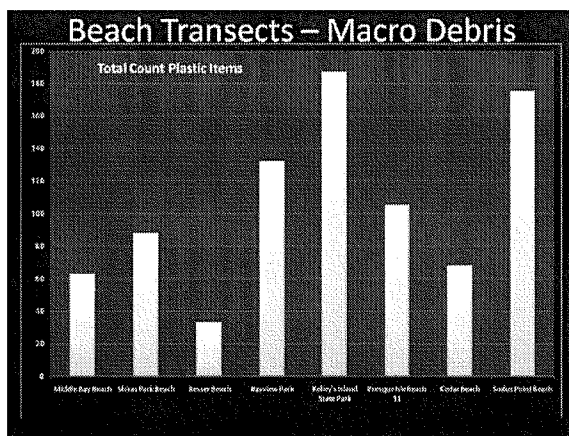
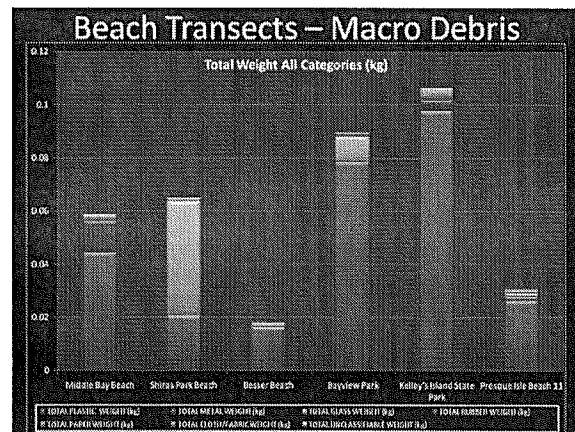
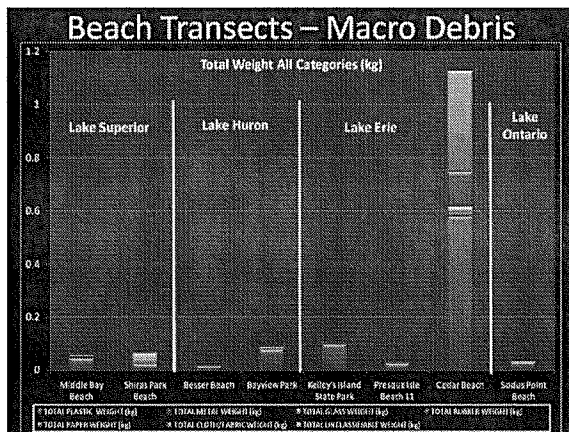
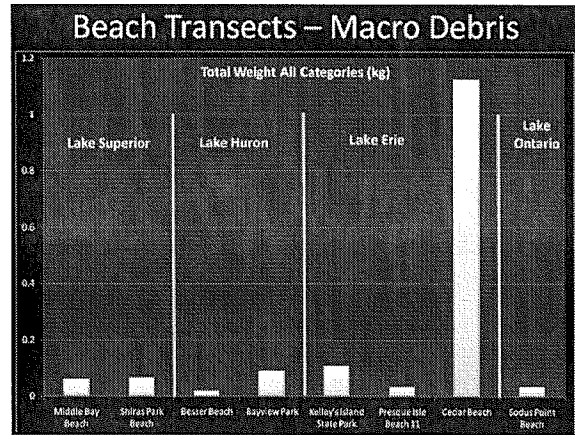
"Sam" Sherri A. Mason, Ph. D.
Associate Professor of Chemistry
SUNY Fredonia
Fredonia, NY

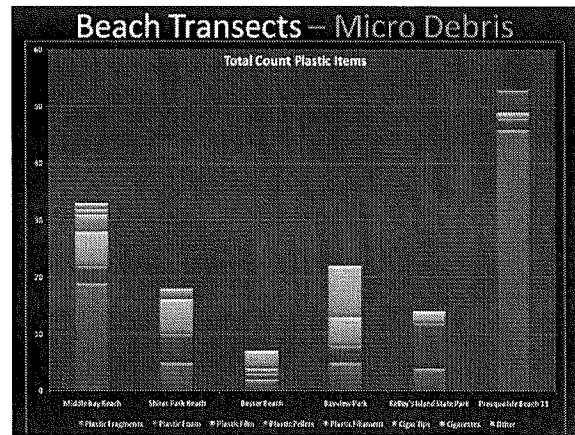
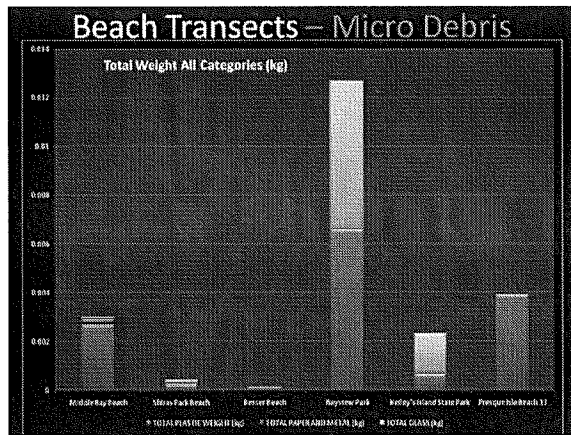


Beach Surveys

Great Lakes Beach Transect Locations







NEXT STEPS:

GREAT LAKES EXPEDITION 2013

Memorandum



TO: Chair and Members, Environmental Advisory Committee

FROM: Mumtaz Alikhan, Legislative Coordinator,
Environmental Advisory Committee

DATE: September 3, 2013

SUBJECT: 2014 Environmental Advisory Committee Meeting Dates

Please be advised that the following Environmental Advisory Committee (EAC) meeting dates have been scheduled for 2014. Meetings will be held at 9 a.m. in the Council Chamber located on the 2nd floor of the Mississauga Civic Centre, 300 City Centre Drive, Mississauga, Ontario, L5B 3C1. There are 3 exceptions when the Council Chamber is unavailable as highlighted below:

- Tuesday, January 7
- *Tuesday, February 4* – **Committee Room A, 2nd Floor, Civic Centre**
- Tuesday, March 4
- Tuesday, April 1
- Tuesday, May 6
- *Tuesday, June 10* – **Committee Room A, 2nd Floor, Civic Centre**
- Tuesday, September 9
- *Tuesday, November 4* – **Committee Room A, 2nd Floor, Civic Centre**
- Tuesday, December 2

Due to municipal elections, there will be no meeting in October, 2014.

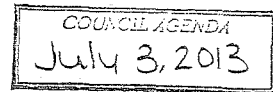
Please inform me in advance of meetings if you will be absent or late so that quorum issues can be anticipated and dealt with accordingly.

Mumtaz Alikhan
Legislative Coordinator, Environmental Advisory Committee
Corporate Services Department, Legislative Services Division
300 City Centre Drive, 2nd Floor, Mississauga, ON, L5B 3C1
Telephone: 905-615-3200, ext. 5425; Fax: 905-615-4181
Email: mumtaz.alikhan@mississauga.ca

City of Mississauga

Committee of Council Meeting

June 2013



Presenters: Ms. Dominika Sekula and Ms. Marsha Smith

Presentation Subject: Municipal Ban on Use of Bottled Water at Government Administrative Offices

Requests/Recommendations:

As citizens of the Region of Peel we are putting a request to its municipalities to support the regional ban of single-use plastic bottled water. Our recommendations are as follows:

- That Council ban the sale and endorse initiatives to minimize use of bottled water at all municipal administrative offices; and
- That the City of Mississauga follow through with an educational campaign to increase public awareness, and to promote the quality and accessibility of municipal tap water, as healthy and economical and as a sustainable consumer choice.

Why ban single use, personal sized plastic water bottles?

As part of their 'Unbottle It!' campaign, the Council of Canadians urged Canadian municipalities and institutions to stop the sale of single-use water bottles. Throughout the campaign, many municipal jurisdictions made a commitment to ban disposable plastic water bottles.

1. Decrease waste in the Region

- Single-use bottles create a lot of waste. Reports on how many PET bottles are captured in curbside recycling programs vary from 20% to a high of 87% in the Region of Peel. This does not account for the fact that 63% of bottles are used "away-from-home" (parks, events), where recycling services are very limited (Canadian Plastics Industry Association).
- Recycling is always the best option for disposing of empty plastic bottles; however, the cost of recycling is very high. In 2011, the gross cost to recycle and process 107,000 tonnes of recyclable material in Peel was over \$30 million dollars.



Photograph by Justin D. for Star Daily Images

2. Save taxpayer dollars

- Taxpayer money is being used for something that is already provided as a municipal service
- **Tap water is inexpensive:** The Region of Peel's residents are provided with safe, quality drinking water at a fraction of the cost of bottled beverages: a 500mL water bottle can be refilled using municipal tap water approximately 45 times for just one penny!

I-1(a)

• **Region of Peel Water Rates:**

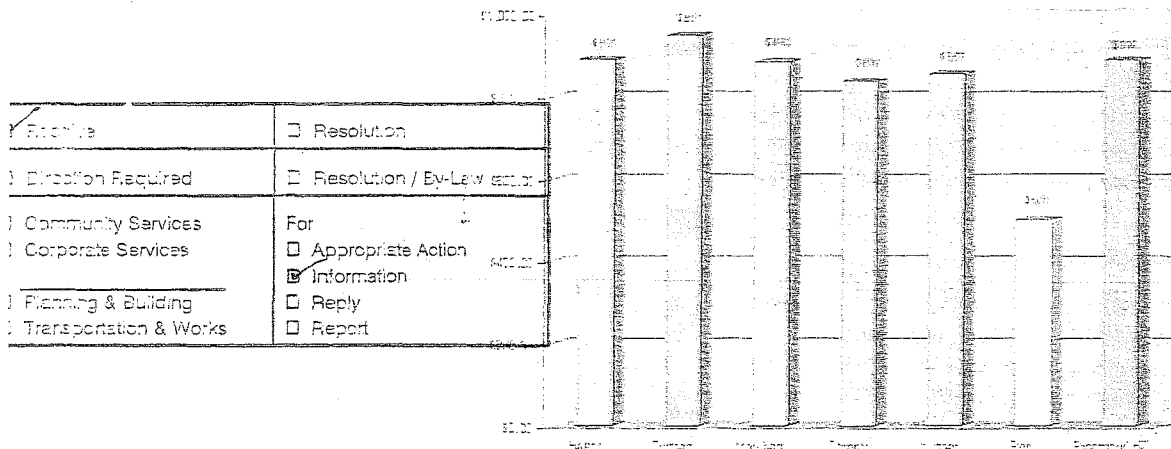
- Tap water costs just \$9.6724 per 10 m³ or 10,000L (Region of Peel, 2013)
- That works out to be \$0.00097 per L for domestic water
- At \$1 per 1L bottle: single-use bottles are 1030 x the cost of tap water
- At \$0.36 per L for bottled water: it is still 371 x the cost of municipal tap water

Water / Sewer Comparisons			
Category	2012	2013	Change
Water	\$9.1049	\$9.6724	6%
Wastewater	\$7.3768	\$7.9047	7%
Average increase			7%

Source: <http://www.peelregion.ca/pw/water/rates/waterbills/yourbill/rates.htm>

- The Region of Peel has implemented a Quality Management System for all its drinking water, which continuously tests water quality. As water and wastewater operations are debt-free in the Region, residents enjoy the lowest water rates in the GTA.

2013 Peel Combined Annual Water and Wastewater Utility Bill



Source: <http://www.peelregion.ca/pw/water/rates/waterbills/yourbill/rates.htm>

3. **Single use bottles consume non-renewable resources**

- Plastic bottles are a petroleum-based product. This means that the oil used to make them is not a renewable resource. Disposable beverage bottles (such as water bottles) are usually made from new plastics only and not recycled materials. This has a significant impact on our environment and natural resources. PET bottles can only be downcycled - turned into rugs or polyester fill, which will end up in a landfill. Nestle agrees that for those bottles which are actually captured in the recycling stream, the environmental impact of using single use bottles is only lessened by 25% by recycling.

4. Manufacture of unnecessary single use bottles uses energy and increases the Region's carbon footprint

- It takes a lot of energy to produce, transport and recycle disposable plastic bottles. Choosing tap water instead eliminates the need for all that energy and the pollution and greenhouse gases created as a result. Some greenhouse gases are responsible for climate change and the thinning of the ozone layer.
- Roughly 1.5 million tonnes of plastic are expended in the bottling of 89 billion litres of water each year around the world. Besides the sheer number of bottles produced, the energy required to manufacture and transport these bottles puts a huge strain on the earth's natural resources and releases many toxins into the environment (Region of Peel).
- Federal, provincial and municipal governments are spending billions trying to control, mitigate and adapt to climate change. This cost is borne by all Canadians.

5. Bottled water is not safer than municipal tap water and continued sale is undermining the Region of Peel's campaign to promote tap water

- There is currently no regulatory requirement in Canada that water not labeled as *mineral* or *spring water*, declare the source of the water used for their manufacture (Health Canada, 2011).
- The Region of Peel have been actively promoting their municipal tap water as a healthy, sustainable choice for residents
- Treatment of tap water in Peel uses a multi-barrier approach and is consistently monitored and tested to ensure it meets rigorous standards of the Ontario Drinking-Water Quality Standards Regulation (169-03), found under the Safe Drinking Water Act.
- The developed and implemented a Quality Management System (QMS) for all its drinking water systems in accordance with the MOE mandated Drinking Water Quality Management Standard (DWQMS).
- An interactive maps of bottle filling stations/drinking fountains can be found on the Region of Peel's website. Also, mobile apps can be downloaded onto a smartphone, i.e. Quench application that finds the nearest refill station to your current location.

References

Canadian Plastics Industry Association (CPIA), 2004. An Overview of Plastic Bottle Recycling in Canada. (www.plastics.ca)

City of Burlington Budget & Corporate Services Committee, 2010. Implementation Plan to Restrict the Sale of Bottled Water (Prepared by Lynn Robichaud)

Council of Canadians, Unbottle It! (http://canadians.org/water/issues/Unbottle_It/index.html)

Nestle Pure Life, Safety. (<http://www.nestle-purelife.us/content/safety/>)

Region of Peel, Love my Tap Water. (<http://www.peelregion.ca/pw/water/tapwater/myths-facts/>)

The Water Brothers, Quench mobile application. (<http://thewaterbrothers.ca/quench>)

I-1(c)

APPENDIX A: Ontario Jurisdictions Phasing-out the Sale of Bottled Water

(Source: City of Burlington)

Jurisdiction	Where?	Details
Town of Ajax	Municipal facilities	Town will not provide bottled water at council, committee and public meetings. Reusable beverage containers will be sold at certain city facilities with free unlimited refills for those using the containers (Sept 2008).
Town of Blue Mountains	All municipal events where tap water is available.	Water bottle sales banned where tap water available since Oct 2007.
City of Brampton	City facilities	Exploring strategies to reduce the community's reliance on bottled water and to develop a strategy that provides residents with convenient access to municipal water at city recreation facilities.
Municipality of Brockton	Administrative office	The purchase of bottled water for the administrative office will only be allowed for emergencies (Sept 2008).
Town of Caledon	Town Hall & recreation facilities	Bottled water eliminated in council chambers in 2008. Traditional water coolers have been replaced with new dispensers that rely on municipal tap water. Staff provided with refillable stainless steel carafes. Alternatives are being explored for recreation centres.
City of Guelph	City facilities	October 2008 - Increasing staff access to municipal water and phasing out sale of bottled water in City facilities.
City of Kingston	City facilities	Subject to certain exceptions, the purchase, sale or distribution of bottled water is not permitted in city facilities when easy access to tap water is present effective September 1/09.
City of London	City facilities	No bottled water at 3 city facilities (City Hall, Market Tower and A J Tyler) since September 2008. Phasing in arenas and community centres. Signage for water fountains and where to buy refillable water bottles posted in fall 2009. No bottled water at the three municipal golf courses. Phase in removal of bottled water from vending machines as contracts expire and also phasing in goose necks for water fountains. "Water bar" used at special events in Victoria Park. Selling refillable water bottles.
Marmora and Lake	City facilities	Promoting public water and banning the provision and sale of bottled water in municipal facilities.
Town of Newmarket		Council resolution to prohibit the purchase and sale of bottled water at town hall and discourage employees and residents from using disposable plastic water bottles at town hall (May 2009). Town to prom
City of Niagara Falls	City facilities	Direction to eliminate the sale of plastic beverage bottles at city owned facilities, municipal buildings and recreation facilities and parks effective May 1, 2009. Phase in with full implementation Jan 1, 2010, where possible. Replaced plastic bottles with cans and tetra paks. Selling stainless steel reusable water bottles. 2009 installed water fountains at some city facilities with the rest planned for 2010. Removing water coolers. Use Niagara Region's water truck at larger special events (has 10 spouts) and water coolers with compostable cups at small events.
Town of Oakville	Town facilities	Reviewing facilities to determine timing. Bottled water removed from town hall cafeteria. Signage near water fountains. Remove bottled water from vending machines as contracts expire. Refillable water bottles provided to staff on Staff Appreciation Day to raise awareness.
Oshawa		Removed individual servings of beverages; replaced with pitchers, carafes, and bulk containers of beverages; encourage the use of reusable cups, mugs and other containers at all meetings of Council, Committees & Sub-committees (April 2008).
Peel Region	Regional facilities	Directed to promote tap water as a healthy alternative to other beverages and to develop a policy to minimize the use of bottled water in Peel facilities and functions where practical.

I-1(d)

Richmond Hill	Town facilities	Council approved an initiative to minimize bottled water use at Town facilities and events. Plan to increase the availability and awareness of municipal water as a safe, healthy, economical and sustainable choice at all Town facilities and future events.
St Catharines	City facilities	Bottled water banned (Feb 2009) from City facilities with the exception of current agreements and for use by Fire Services and Transit (though staff must report on the use of reusable containers to replace bottled water for Fire and Transit).
Sioux Lookout	Municipal offices and building	Passed a policy to promote the use of municipal water on May 21, 2008.
City of Toronto	City facilities	Banned the sale or distribution of bottled water at the city's civic centres where contracts permit in October 2008. Phasing in other city facilities and improving accessibility to tap water at all city facilities by December 31, 2011 pending existing contracts and unique public health and safety related situations.
City of Vaughan	City facilities	Bottled water is banned from all city meetings in September 2008. Bottled water will not be sold upon the opening of the new civic centre. It will not be sold in any city owned community centre as of August 31, 2010 upon expiration of existing contract. Refrigerated drinking fountains will be installed with water bottle filling spouts in all municipal buildings. Stand-alone water coolers not connected to a municipal water supply removed by June 1, 2009 unless potable water not available. All staff provided with stainless steel refillable water bottle to promote consumption of municipal tap water.
City of Waterloo	City facilities	Feb 2009 – Staff directed to: eliminate single bottle water use during city hosted meetings at city hall, and from staff lunch and break room vending machines across the city when alternative solutions are implemented; allow single water bottle sales in publically accessible concessions, catered events and vending machines in recreation facilities; and develop standards for accessible drinking water fountains and include fountains as standard in new or retrofit facilities undertaken by the city.
Region of Waterloo	Regional facilities	Support the use of tap water by restricting the sale (i.e. cafeterias and vending machines) and provision (i.e. council, public meetings, workshops, training sessions, etc.) of bottled water at Regional facilities and functions where potable water available. Develop a public education program to inform residents of the benefits of municipal tap water.
City of Windsor	City facilities	Feb 2008 - Directed to develop a phase out policy for bottled water with the goal to eventually reduce or minimize bottled water use at city facilities.

I-1(e)

Canadian Water Bottle Bans

The jurisdictions below are currently in the process or have already committed to the ban of single use bottled water.

Municipalities / Cities

British Columbia

- Anmore
- Armstrong
- Belcarra
- Burnaby
- Central Okanagan Regional District
- Board
- City of Northern Vancouver
- Dawson Creek
- Delta
- District of Saanich
- Gibsons
- Golden
- Metro Vancouver
- Nanaimo
- Nelson
- Pitt Meadows
- Port Alberni
- Port Moody
- Saalish
- Saanich
- Squamish
- Sunshine Coast Regional District
- Board
- Vancouver
- Vernon
- Victoria
- Village of Keremeos
- White Rock

North West Territories

- Town of Hay River
- Yellowknife

Alberta

- Edmonton

Saskatchewan

- Maple Creek

Manitoba

- Altona
- Dauphin
- Town of Shoal Lake

Nunavut

- Iqaluit

Ontario

- Ajax
- Blue Mountains
- Brant County
- Brockton
- Burlington
- Callander
- Cobourg
- Cornwall
- Dufferin County
- Goderich
- Grey County
- Keswick
- Kingston
- Laurentian Hills
- London
- Marmora and Lake
- Newmarket
- Niagara Falls
- North Huron
- Oakville
- Oshawa - GTA
- Owen Sound
- Peel Region
- Penetanguishene
- Peterborough
- Sault Ste Marie

- Sioux Lookout
- St. Catherines
- Thorold
- Thunder Bay
- Tiny Township
- Toronto
- Town of Caledon
- Town of Richmond Hill
- Town of Stirling-Rawdon
- Township of Muskoka Lakes
- Tweed
- Vaughan
- Waterloo Region
- Welland
- Whitchurch-stouffville
- Windsor

Quebec

- Beaconsfield
- Gatineau
- Longueuil
- Magog
- Montréal
- Sherbrooke

Prince Edward Island

- Charlottetown

Nova Scotia

- Barrington
- Halifax Regional Municipality

Newfoundland and Labrador

- St. John's

I-1(f)

High bacteria levels found in bottled water in Canada

CTV.ca News Staff

Published Tuesday, May 25, 2010 10:45PM EDT

A Montreal laboratory is raising worries about bacteria in bottled water, noting they've found "revolting" levels that could put certain vulnerable people at risk.

Researchers from C-crest Laboratories in Montreal decided to randomly test bottled water for bacteria after a fellow employee complained of a foul taste from some bottled water and became ill.

They tested a handful of popular brands (which they did not name) and found that more than 70 per cent of the samples contained bacteria at levels that far exceed recommended limits in the U.S.

RELATED LINKS

[U.S. to ban bottled water in certain government offices](#)

[Gov't spending \\$7 million on bottled water: report](#)

[Canadian Bottled Water Association cites study for perspective on HPC bacteria in food and water](#)

[Abstract from ASM presentation: Safety in bottled water - bottled up or tapped out?](#)

[Canadian Bottled Water Association C-crest Laboratories Inc.](#)

[Health Canada FAQ on bottled water](#)

Some of the bacteria were at levels dozens of times higher than those permitted by the United States Pharmacopeia (USP).

"There were so many that at first, we couldn't count. We had to dilute the samples," Sonish Azam, one of the researchers in the study told CTV News.

Azam and her team presented their findings to the general meeting of the American Society of Microbiology in San Diego.

The types of bacteria they found were heterotrophic, a category of bacteria that includes those that survive by consuming organic matter.

Regulatory bodies such as the U.S. Food and Drug Administration, Environmental Protection Agency (EPA) and Health Canada have not set limits for the heterotrophic bacteria counts in bottled drinking water.

"Bottled water is considered to be a food product and is regulated under the Food and Drugs Act and Regulations. These regulations include requirements for microbiological quality, composition and labeling," a Health Canada spokesperson told CTV News in an email.

"Under these regulations, bottled water is required to be free of disease causing organisms. Like most foods, bottled water may contain naturally occurring bacteria which typically have little or no health significance.

"In numerous studies, heterotrophic bacteria isolated from water have been shown to be of no human health consequence."

According to the USP, no more than 500 colony forming units (cfu) per milliliter of bacteria should be present in drinking water. The C-crest team found counts in some of samples at 100 times those levels. In comparison, the average count for different tap water samples was 170 cfu/mL.

"Microbiologically speaking, tap water is purer than bottled water – most bottled water," Azam said. "We didn't know this until we conducted the research."

The researchers stress that the bacteria they found "most likely" do not cause disease, but Azam says that's still unclear. She suggests it's possible that the bacteria they found could be pathogenic and pose a risk for vulnerable populations such as the elderly, pregnant women, infants, and immunocompromised patients.

"I cannot rule out that these organisms might be harmful, but I do not know," Azam said. "But in microbiology there is a rule: guilty until proven innocent."

She says many Canadians assume bottled water is safer than tap water and might be surprised to learn how many bacteria are in their bottled water.

"Bottled water has a price tag to it, [so we assume] that must mean it is safer and you are buying safety with that money," she notes.

Michel Lavelle, of the Canadian Bottled Water Association, calls the study "unnecessarily alarming." He says commercial bottled water is not meant to be sterile, so the presence of bacteria in itself is not news.

PHOTOS



Water bottles



Sonish Azam, a microbiologist who worked on the study, speaks to CTV News at a laboratory in Montreal in this undated photo.



Researchers say some of the bacteria were at levels dozens of times higher than those permitted by the United States Pharmacopeia (USP).

"When you say the word bacteria it sounds like it is dangerous. But you eat bacteria on salad and fruits all day long. And these are the same bacteria found in the water," he told CTV News.

I-1(g)

He notes that the bacteria detected are non-coliform and non-pathogenic and don't do any harm, which is why regulators haven't set limits on these bacteria.

"They don't regulate these bacteria because they are not linked to disease," he says.

Still, Azam's team concedes that while bottled water is not expected to be free from microorganisms, they were stunned at the high levels of bacteria they found.

They were also stunned that there were no limits in Canada on levels of these microorganisms in bottled water.

"The cfu observed in this study is surprisingly very high. Therefore, it is strongly recommended to establish a limit for the heterotrophic bacteria count as well as to identify the nature of microorganisms present in the bottled water," she said.

With a report from CTV medical specialist Avis Favaro and producer Elizabeth St. Philip

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TOWN OF RICHMOND HILL

COMMITTEE OF THE WHOLE

JULY 6, 2009

SREPW.09.063

Engineering and Public Works Department
Maintenance and Operations Division

SUBJECT: Bottled Water (SREPW.09.063)

PURPOSE:

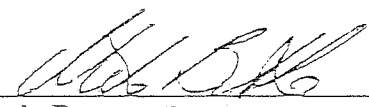
This report provides Council with information about bottled water use in relation to the Town's commitments to providing safe drinking water, protecting the natural environment, and demonstrating responsible municipal governance.

RECOMMENDATION(S):

- a) That Council endorse staff initiatives to minimize bottled water use at Town facilities and events; and,
- b) That staff be directed to promote availability and awareness of municipal water as safe, healthy, economical and as a sustainable consumer choice.

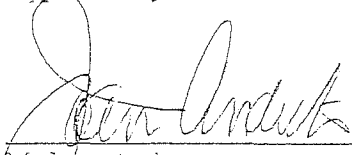
Contact: Myles O'Brien, QMS Program Coordinator, ext. 2920
George Pellarin, Manager of Roads, Water and Wastewater, ext 4426

Submitted by:



Italo Brutto, P.Eng.
Commissioner of Engineering & Public Works

Approved by:



M. Joan Anderton
Chief Administrative Officer

I-1(j)

SREPW.09.063

July 6, 2009

Page 2

BACKGROUND:

This report provides Council with information about bottled water use in relation to the Town's commitments to providing safe drinking water, protecting the natural environment, and demonstrating responsible municipal governance. It is recommended that Council support staff initiatives to minimize bottled water use at Town facilities and events, and to increase availability and awareness of Town water as a safe, healthy, economical, and sustainable choice.

1. Drinking Water provided by the Town of Richmond Hill

The Town of Richmond Hill provides potable water to residents, businesses, and visitors. This water, drawn from Lake Ontario, is continually sampled and tested at many points throughout the treatment, storage, transmission, and distribution process. Residents in Richmond Hill are billed \$1.85 for every thousand liters of tap water. Revenue from these charges helps cover the cost of operating, maintaining and renewing the water distribution and wastewater collection systems.

2. Bottled Water description and use

Bottled water is produced from both groundwater and surface water sources. Spring, artesian, and mineral water are varieties of bottled groundwater. Some common brands of bottled water, such as Dasani (Coca-Cola) and Aquafina (Pepsi), use municipal water supplies as their source. Bottled tap water that is further treated through distillation or reverse osmosis is called 'purified'.

Most bottled water consumed in Canada comes from a domestic source. Imported brands offer water from exotic or remote locations, such as France, Italy, Alaska, and Fiji.

Consumers can choose from a variety of bottle sizes when purchasing bottled water. Most single-use (disposable) bottles are made of polyethylene terephthalate (PET) plastic; more expensive brands offer glass bottles. Residents and businesses can also use and reuse 20-liter plastic and glass bottles (i.e. for water coolers) through delivery or self-service. Bottled water is widely available in public and private locations, through retailers, restaurants, cafeterias, events, vending machines, etc.

3. Availability of Tap Water and Bottled Water at Town Facilities & Events

Town buildings are generally equipped with access to tap water, through kitchen sinks and drinking water fountains. Glasses, mugs, and pitchers are often available in staff kitchens and boardrooms. Outdoor facilities typically do not have access to tap water, as water fountains in these locations were decommissioned amidst concern over water quality and public health.

Bottled water is available at Town facilities primarily through vending machines. Staff are free to bring in bottled water for personal use, and to purchase and distribute it for various events or occasions (meetings, workshops, lunches, parties, etc.). As well, bottled water can be sold or distributed at public events at Town facilities.

4. Current debate around Bottled Water

The debate around bottled water stems from several interconnected concerns:

- a. Consumer choice & taxpayer money
- b. Public health & safety
- c. Environmental impact
- d. Public vs. Private good

E-1(k)

4.1. Factors involved in the success of Bottled Water

Bottled water sales have increased rapidly in the last two decades. According to one industry study (US), the typical person consumed around 18 litres per year of bottled water in 1985; by 2006 that average had more than quadrupled to 80 litres. No other beverage saw such growth in consumption, and most in fact declined. Tap water consumption has decreased from roughly 284 l/yr in 1965 to 140 l/yr in 1985 and to 102 l/yr in 2006. (See Appendix A) In Canada, the CBC reported that per capita consumption of bottled water grew from an estimated 24.4 litres in 1999 to 60 litres in 2005. Globally, consumption rose 7.6 percent between 2002 and 2007.

a. Consumer choice

Bottled water has proven convenient and highly compatible with the busy, 'on the go' lifestyle. Its convenience is related to portability, size, ease of use, and disposability.

Bottled natural spring water does not contain the chlorine used to treat municipal water, and specially filtered or treated bottled water may be devoid of certain chemicals or minerals that can affect taste.

b. Public health & safety

Food and beverage companies promote bottled water as a healthy choice in an era of widespread obesity, as an alternative to sugary pops and juices. They have also promoted bottled water as a 'safer, cleaner' source of drinking water than the typical residential tap. Ontario was especially primed for this message after the Walkerton tragedy of 2000, in which seven people died and thousands became sick from drinking contaminated tap water.

The Y2K scare at the turn of the millennium saw urban and suburban dwellers stockpiling bottled water in case of widespread systems failures. In this sense bottled water is useful for emergency and contingency planning.

c. Environmental impact

Most municipal recycling programs accept PET plastic bottles and glass bottles. Manufacturers have made efforts to reduce the amount of plastic used in producing single-use bottled water, and have also shown support for recycling.

4.2. Factors involved in the movement against Bottled Water

a. Consumer choice & Taxpayer money

The Canadian Bottled Water Association claims the average cost of a litre of bottled water is 36 cents. Even at this price, consumers are paying almost 200 times the cost of a litre of tap water (at Richmond Hill rate of \$0.00185 per litre). Residents already pay into the infrastructure, operation, and administration of municipal systems, which are comparatively very efficient and inexpensive. As well, residential taxes are required for disposal costs of plastic bottles, whether through recycling or landfill.

Ontario's new water taking charge of \$3.71 per million litres is, for bottlers, negligible compared to industry profits (the charge amounts to less than 0.000004 cents per litre of bottled water). Bottlers that use municipal systems as their source (Dasani, Aquafina) effectively avoid much of the overall processing cost.

b. Public health & safety

There is no conclusive proof that bottled water is safer than tap water. Ontario's drinking water legislation for municipal systems is among the strictest in the world, requiring multiple safety barriers such as: system licensing, operator training and certification, laboratory accreditation, preventative maintenance, rigorous sampling, monitoring, and testing, and quality management. Bottled water is federally, provincially, and industry (voluntarily) regulated, but is not held to the same standards as tap water.

There is also disagreement as to the safety of plastics for food and beverage containment. Some studies have shown chemical leaching (e.g. antimony, lead) in plastic PET water bottles increases dramatically the longer the product sits on a shelf. Recent reports concerning Bisphenol A (BPA) in plastics have contributed to public suspicion and mistrust of their suitability for containing food and beverages.

c. Environmental Impact

Source: Bottlers draw from a variety of natural sources; some have been criticized for unsustainable levels and methods of withdrawal, incurring detrimental and irreversible impacts to local watersheds and ecosystems.

Production & Distribution: According to the Pacific Institute, worldwide bottled water production reached 100 billion litres in 2007. Environmental impacts include:

- Consumption of non-renewable fossil fuels – approximately 3 million tons of PET were used to manufacture the bottles;
- Consumption of fossil fuels (for energy) and water – over 300 billion megajoules (MJ), or 50 million barrels of oil, and 300 billion litres of water;
- Greenhouse gas emissions – manufacturing PET required for worldwide bottled water production generated 8.1 million tons of CO₂, the equivalent annual output of approximately 1.5 million passenger vehicles.

The Institute calculates that distribution of bottled water through typical means of transportation requires between 1.4 and 5.8 MJ per litre. Combined with energy inputs during production and processing, they conclude that the average litre of bottled water requires 5.6-10.2 MJ, compared to 0.005 MJ for a litre of tap water. Producing and distributing bottled water can thus require up to 2000 times the energy cost of the equivalent amount of tap water.

Disposal: Despite the prevalence of recycling programs, many plastic bottles end up in landfills (Stewardship Ontario estimates 56% of PET bottles were diverted in 2006). Plastic bottles may take hundreds of years to degrade, using substantial amounts of landfill space. Some bottles avoid landfills by entering watercourses, where they 'photo-degrade', breaking down into tiny plastic pellets harmful to marine life and the ecosystem in general.

The response from the bottled water industry is improved recycling capacity. For example, the province of Quebec and the City of Sarnia have signed sponsorship agreements with industry leader Nestle Waters for their recycling programs.

Recycling is often synonymous with everything 'green'; however, it is at root an industry-based solution that in many cases allows corporations to avoid the true cost of their production (which has largely been shifted to consumers and governments). Regardless of

cost, recycling of plastics is not a 'closed-loop': a bottle can typically be recycled once before its plastic is ready for landfill. Promoting recycling as the best option for dealing with plastic bottles helps create a false impression that unsustainable modes of production and consumption are, in fact, sustainable.

Another counter-argument from the industry is that bottled water represents a fraction of all plastic beverage bottles: any ban should target plastic bottles, not bottled water. The key difference here is that clean, safe drinking water flows through virtually all household taps; soft drinks and juices do not. Nonetheless, any discussion of the impacts of bottled water must consider the true cost of all single-use plastic bottles/containers.

d. Public vs. Private good

In May, 2000, Fortune Magazine declared, "Water promises to be to the 21st century what oil was to the 20th: the precious commodity that determines the wealth of nations". As the global demand for clean drinking water increases, so does its value as a marketable consumer product. The Council of Canadians, among others, argue strongly against the 'privatization' of water, on the grounds that clean drinking water is a basic human right. Bottled water represents one aspect of this privatization.

5. *Organizational Responses to Bottled Water Debate*

Organizations across North America, including municipal governments, schools boards, and churches, are responding to the issues in this debate (*see Appendix B*). Municipal 'bans' on bottled water, despite media suggestion, are not common. Municipal action is more typically in the form of a policy or resolution that promotes spending taxpayers' money on local tap water rather than bottled water.

- In December, 2008, the City of Toronto enacted an immediate ban on the sale or distribution of bottled water at Civic Centres, and will phase out bottled water at all remaining City facilities by 2012 (with 'due regard' for current contracts). At the same time, staff is directed to improve accessibility to tap water. These actions are aligned with the City's 70% landfill diversion plan, which includes strategies for diverting plastic bags, hot drink cups, and other disposable and often extraneous containers and packaging from landfill.
- An Association of Municipalities of Ontario (AMO) memo from February 3, 2009, highlights recent decisions to limit bottled water and encourages further municipal investigation and action on the issue. AMO supports "increasing awareness of the affordability, health and safety of municipal tap water"; "public investments in infrastructure to provide affordable clean water to municipal residents"; and encourages "stewardship of water as a valuable resource" and the reduction of plastics in municipal waste streams (*see Appendix C*)
- A Federation of Canadian Municipalities (FCM) resolution from March 7, 2009, urges all municipalities to phase out sale of bottled water at municipal facilities, and to develop awareness campaigns about positive benefits and quality of municipal water supply (*see Appendix D*)
- US Conference of Mayors voted "against spending taxpayer money to buy bottled water and in favour of phasing out regular use of bottled water for their employees and at civic functions"; several US municipalities have already pursued this course

6. Options in Response to Bottled Water Debate

6.1. No action – 'business-as-usual'

The Town does not currently have a policy concerning bottled water. Availability of bottled water in vending machines is tied to vendor contracts. Otherwise, Town staff are free to purchase, consume and offer bottled water as desired for individual use, meetings, training sessions, and events.

Benefits: Similar to the perks of bottled water itself – convenience, portability, and disposability.

Costs: All mentioned environmental costs, as well as the potential for a loss of Town credibility as a leader in responsible and sustainable governance.

6.2. Offer both bottled and tap water where feasible

This option involves no change to current bottled water availability, but an effort by the Town to increase availability and awareness of tap water at Town facilities and events. Actions to achieve such an increase include:

- Providing reusable water bottles to staff
- Providing pitchers and glasses to board rooms, lunch rooms, etc.
- Investigating options for offering Town water at outdoor events

Benefits: Increased consumer choice; promotion of Town water; decrease in consumption/disposal of plastic; demonstration of environmental leadership and responsible governance

Costs: Potentially large financial implications from above actions with no guarantee of behaviour change; some continued environmental costs

7. Promotion of Town Drinking Water

Richmond Hill currently communicates information about drinking water to residents through its website and local newspapers. The Annual Report on the Town's drinking water system is made available as per regulatory requirements, and major system changes, updates, or emergencies are communicated on an as-needed basis. However, the Town does not actively promote its tap water, particularly as a consumer choice. York Region's "Water for Tomorrow" program has worked with area municipalities for several years to promote conservation and efficiency.

As outlined in the second option (6.2), encouraging tap water and discouraging bottled water involves improving both availability and awareness of Town water. To this end, staff boardrooms at the Town's Municipal Offices and Operations Centre are being equipped with glass pitchers and tumblers. A formal and unified communications strategy should be developed alongside improvements in physical infrastructure that informs staff and public as to:

- the costs and benefits of Richmond Hill's water distribution system
- the economic and environmental impacts of tap and bottled water
- the importance of drinking water for general health and well-being
- how, where, when, and why the Town will increase availability of tap water

The following points emerge as core messages for a future communications strategy:

a. Water as a Public Good

As water is basic to human and non-human life, it should be maintained and protected as a public good. Bottled water converts this public good into a private, market-driven commodity that ultimately serves corporate, not public, interests.

b. Municipal Water Delivery as an Essential Service

The "Only Tap Water Delivers" campaign, developed by the American Water Works Association (AWWA) and Ontario Water Works Association (OWWA), provides support for municipalities seeking to promote tap water use. Its two key concepts – the *value of* and *investment in* water service and resources – focus on garnering community support for municipal water delivery as an essential service.

c. Safe Drinking Water as a Public Health Concern

Water service is valuable and essential because it is inherently tied to public health. Promotion of tap water should emphasize the importance of drinking adequate amounts of water, as well as the consistent high standards of quality maintained in our supply.

d. Tap Water as an Environmentally and Economically Sustainable Choice

The environmental implications of drinking tap water are far less than drinking bottled water. With proper investment and upkeep, municipal water systems are also more efficient and economical at supplying this public good. Choosing tap water therefore means choosing long-term sustainability over short-term convenience.

FINANCIAL/STAFFING/OTHER IMPLICATIONS:

N/A

RELATIONSHIP TO THE STRATEGIC PLAN:

Promoting the Town's municipal tap water to staff and residents aligns with the Town's vision to protect and enhance the environment by the following actions:

- Provide an integrated approach to environmental sustainability
- Reduce the amount of waste requiring landfill
- Protect the quality and quantity of our water sources

CONCLUSION:

Promoting the use of tap water at Town facilities and events will promote employee well being by providing clean and healthy alternatives to bottled water, reducing the amount of polyethylene terephthalate (PET) plastic bottles entering our waste stream and making use of the Town's highest quality water resources.

It is recommended that Council support staff initiatives to minimize bottled water use at Town facilities and events, and to increase availability and awareness of Municipal water as a safe, healthy, economical, and sustainable choice.

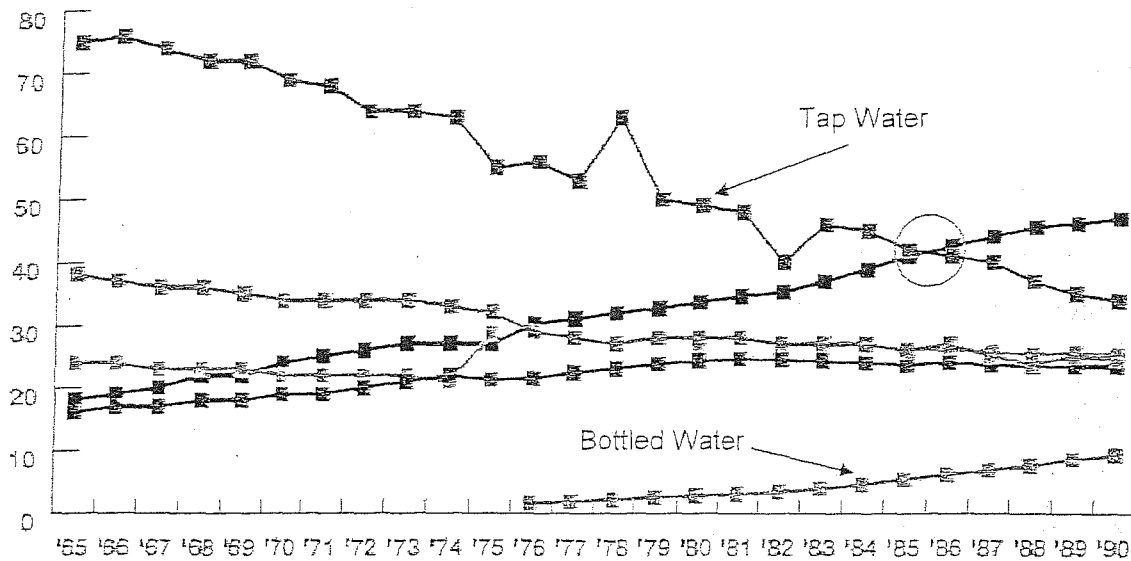
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Appendix A: Comparisons of Per Capita Beverage Consumption (US)

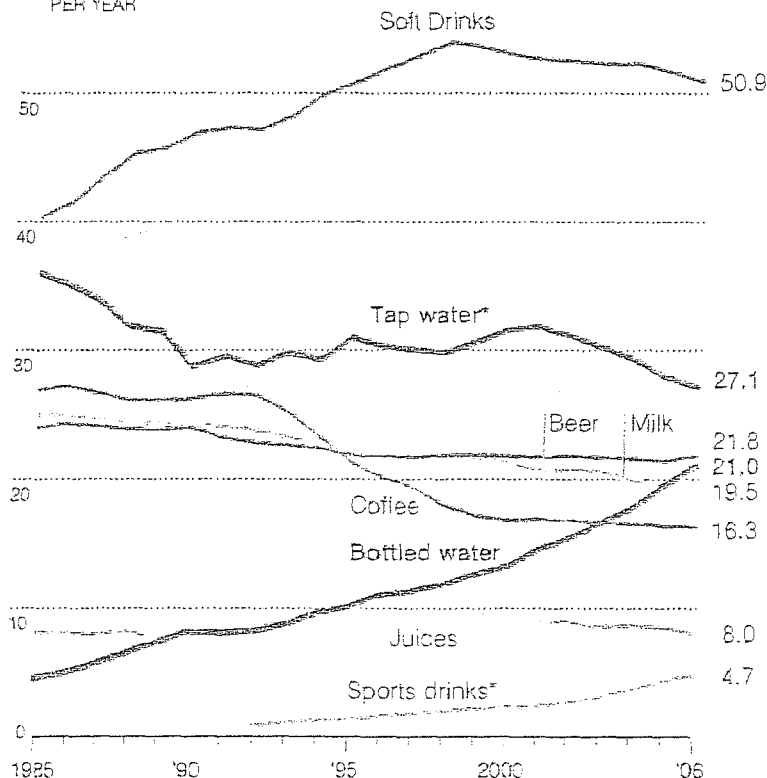
U.S. Consumption 1965 - 1990

Source: Nestle Waters North America (website)

Gallons Per Capita



Source: New York Times, July 15, 2007



*Tap water figures include small quantities of other beverages; they included sports drinks until 1992.

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Appendix B: Municipal Response to Bottled Water Debate

Jurisdiction	Action on Bottled Water
City of Toronto	Ban on sale of bottled water at City Civic Centres immediately or following the expiry of any existing contracts related to the purchase or sale of bottled water. Various City divisions are also asked to work together to develop and implement a program by December 31, 2011 that bans the sale and distribution of bottled water at all remaining City facilities, improves accessibility to tap water at all City facilities and takes into account existing contracts related to bottled water at City facilities and unique public health and safety related situations.
City of Vancouver, B.C.	Vancouver city council voted to immediately eliminate bottled water for staff and council functions and eventually take it out of city concession stands. The bottles will be phased out of all municipal facilities over the next few years. The move is meant to reduce environmental costs, cut solid waste and battle greenhouse-gas emissions.
Region of Metro Vancouver, B.C.	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.
City of London	City Council passed a bottled water motion that prohibited the sale and distribution of bottled water on city owned and operated property and provided alternatives for the provision of accessible tap water.
Region of Waterloo	Regional Municipality passed a resolution restricting the provision and sale of bottled water on regional property, except in locations where potable tap water is not available.
City of Guelph	Pursuing a marketing campaign to discourage bottled water; removing bottled water coolers from all city facilities (contracts will not be renewed); installed water fountains at City facilities; removing vending machines that sell water from all City-owned buildings; working on a portable water trailer (similar to the City of Toronto trailer)
City of 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.
City of Sault Ste. Marie	Council passed a resolution adopting a policy of not purchasing bottled water for the Civic centre; bottled water was previously provided for Council, Public or Committee meetings.
Town of the Blue Mountains	Resolution to not purchase bottled water for town events and meetings. Bottled water not to be offered at Town facilities and meetings, other than where an alternative potable water supply is not practical.
City of Charlottetown	City Council made the decision to stop purchasing bottled water.
City of St. Catharines	City Council made a decision to not purchase non-essential bottled water for city departments, meetings and events.
City of Niagara Falls	Discontinue sales of bottled water at city facilities
City of Ottawa	Considering prohibition of bottled water in City facilities, installation of water fountains, and education and outreach campaign.

I-1(r)

SREPW.09.063
July 6, 2009
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Appendix C: Association of Municipalities of Ontario (AMO) memo



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Toronto, ON M5H 3C6
Tel.: (416) 971-9856 | Fax: (416) 971-6191
E-mail: amo@amo.on.ca

EX-1

MEMBER COMMUNICATION

FYI N°: 09-002

To the attention of the Clerk and Council
February 3, 2009

FOR MORE INFORMATION CONTACT:
Craig Reid, AMO Senior Policy Advisor
(416) 971-9856 ext 334

Municipal Action on Bottled Water

Issue: Municipalities across Canada and in Ontario have recently taken action to encourage use of municipal tap water at municipal events and facilities.

Municipal councils across Canada, including 13 Ontario municipalities have taken action in recent months to limit the use of bottled water in municipal facilities, where appropriate, and to support the use of municipal tap water by residents and visitors. AMO understands that a number of other Ontario municipalities are also considering such initiatives.

Ontario councils taking action in this area include the cities of Sault Ste. Marie, London, Windsor, the Regional Municipality of Waterloo and the Town of Blue Mountains, amongst others. Across Canada, other municipalities such as St. John's, Newfoundland, Charlottetown, PEI, Altona, Manitoba, Toronto and the Region of Metro Vancouver have also taken action.

In some cases these actions have been supported through public education to increase awareness of the safety of municipal tap water, actions to increase the supply of municipal tap water at events through mobile water trucks and increase of supply of municipal tap water where necessary.

These measures complement long-standing positions taken by AMO and other municipal associations by increasing awareness of the affordability, health and safety of municipal tap water and the need for continuing public investments in infrastructure to provide affordable clean water to municipal residents. They also encourage stewardship of water as a valuable resource and help to reduce the amount of plastics in municipal waste streams.

Action:

Councils interested in investigating this issue are encouraged to contact those municipalities that have taken action.

This information is available in the Policy Issues section of the AMO website at www.amo.on.ca.

Appendix D: Federation of Canadian Municipalities (FCM) Resolution

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

Municipal Ban on the Use of Bottled Water at Government Administrative Offices

Dominika Sekula

Marsha Smith

On behalf of the Council of Canadians

Request to Council

- That it ban the use and sale of single-use plastic water bottles at all municipal administrative offices; and
- That the City of Brampton follow through with an educational campaign to increase public awareness, and to promote the quality and accessibility of municipal tap water, as healthy and economical and as a sustainable consumer choice.

Why ban single use, personal sized plastic bottles ?



1. Decrease Waste in the Region
2. Save Taxpayer Dollars
3. Decrease the City's Carbon Footprint
4. Decrease Consumption of Non-Renewable Resources
5. Promote Region of Peel Tap Water

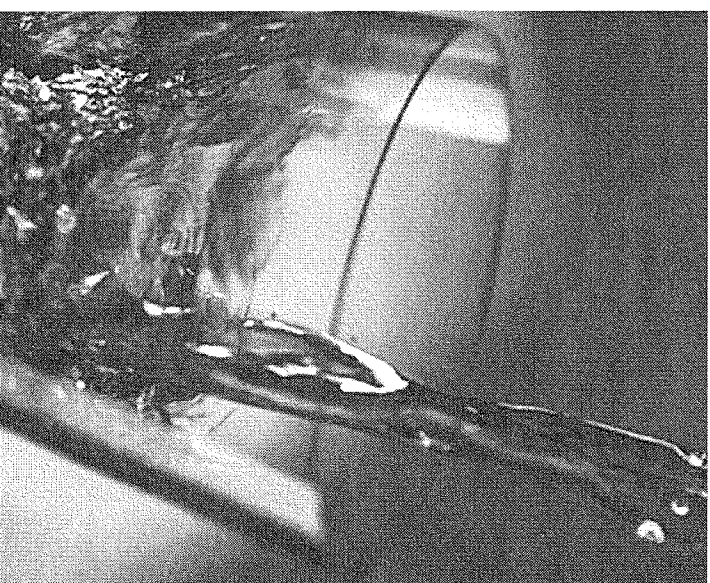
Decrease waste in the Region

- “Capture” rate
- 63% of bottles are used “away from home” (away from recycling services)
- Curbside capture: 20 to 85%
- Peel spent \$30 million dollars to recycle 107,000 tonnes of recyclable material (2011)



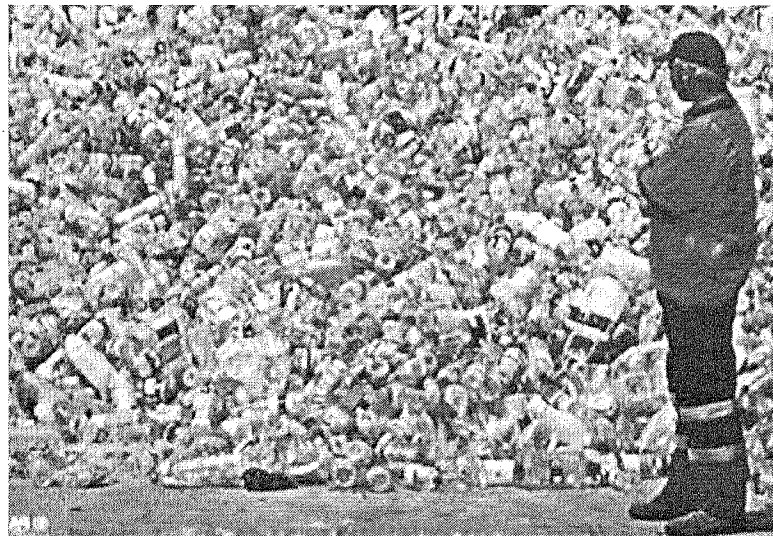
Save Taxpayer Dollars

- Tap water is already provided at cost of \$9.6724 per 10,000L (45 x 500mL for 1¢)



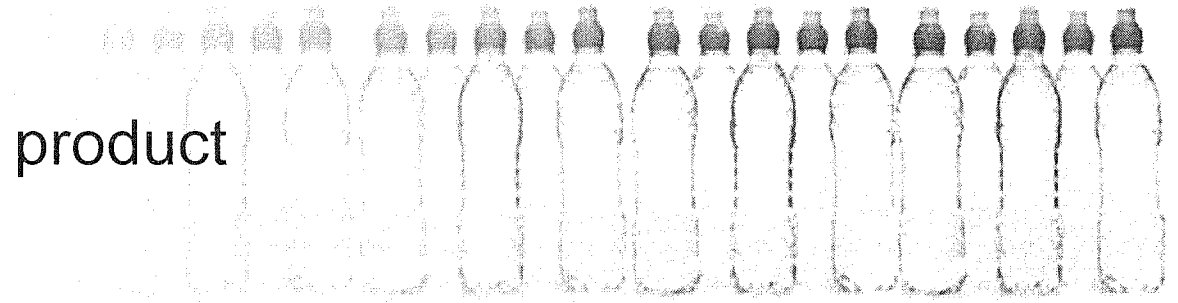
Reduction in Energy use and Municipal Carbon Footprint

- Roughly 1.5 million tonnes of plastic are used to bottle 89 billion litres of water



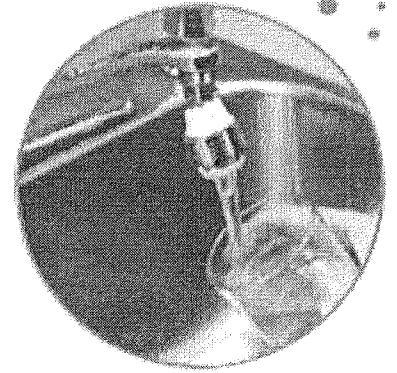
Decrease Consumption of Non-Renewable Resources

- Petroleum-based product
- New materials
- Bottles downcycled only – end up in landfill
- Nestle: reduce impact of disposable bottle by 25% by recycling.
- Millions of bottles never make it to recycling and bottles are only recycled once



Tap Water is Great

- Region of Peel water – safe, healthy and sustainable consumer choice
- Peel monitors water quality
- Compliance with Ontario Drinking-Water Quality Standards Regulation (169-03)

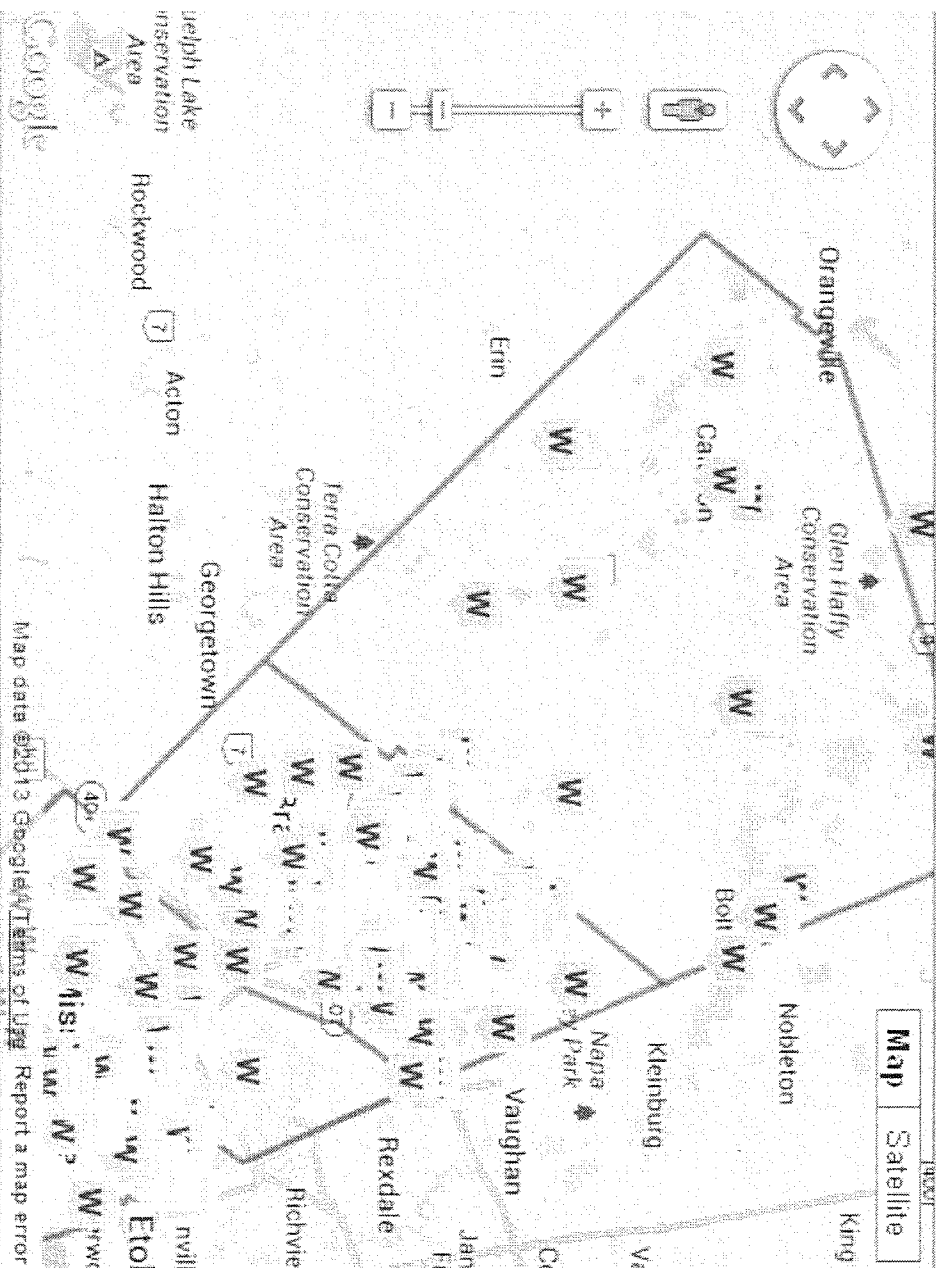


love my
tap Water

Brew

Enter location

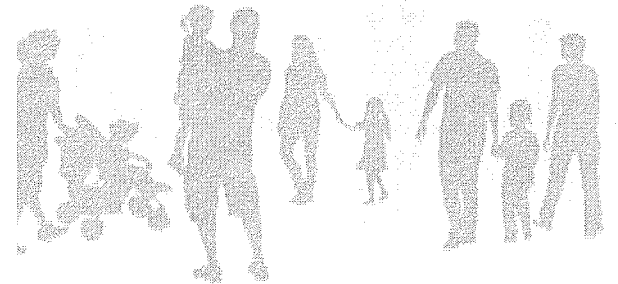
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Federation of Canadian Municipalities

- 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.

Canada's
**GREENEST
CITIES**
TOMORROW



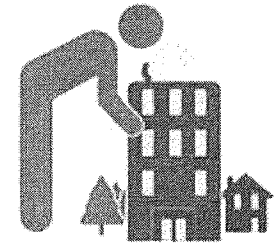
Case study: Toronto

- December 2008, City Council approved a water bottle ban to take effect in January 2012. The ban, which affects most of Toronto's parks and park facilities, prohibits the sale and distribution of water bottles in all Civic Centres, City facilities and parks.
- Exceptions made for public health and safety related situations, previous lease agreements and authorized special events in City facilities.
- The water bottle ban will support the City's broader waste diversion goals, reduce litter in our parks and lower waste disposal costs for the City.

City of Toronto

- Parks, Forestry & Recreation was asked by City Council to identify specific sites that require an exemption from the ban. The final list of exempted parks and park facilities was based on the following criteria for exemption:
 1. Location does not have potable water
 2. Location does not have functioning water fountains
 3. Location does not have sufficient water fountains or taps for the number of users
 4. Location has existing leases or agreements with vendors who sell bottled water.

City of Vaughan



Blue Communities Project

- Ban on sale of unflavoured bottled water in municipal facilities (2009)
- Currently considering becoming a “Blue Community”:
 - A municipality can become a Blue Community by:
 1. recognizing water as a human right;
 2. promoting publicly financed, owned and operated water and wastewater services; and
 3. banning the sale of bottled water in public facilities and at municipal events.

Thank You

Dear Council Members

We thank you for your time



Upcoming Agenda Items and Environmental Advisory Committee (EAC) Role

Legend: Potential Role for EAC	
Comments (Provide feedback for consideration.)	Leadership (Participate in event or lead external group participation.)
Community Engagement (Champion LGMP awareness campaign, promote Living Green blog, etc.)	Receive (For information.)
Direction (Provide direction to staff.)	Recommendation (To General Committee.)
Deputation (Present to General Committee, Council, other.)	Sub-committee (To further develop or research initiative.)

Year Quarter	Item	Description	Potential EAC Role
2013 Q4	Oakville-Clarkson Air Zone Management Advisory Committee	Update on the Oakville-Clarkson Air Zone Management Advisory Committee (OCAZMAC).	Receive
	Let Your Green Show	Campaign update.	Receive
	QUEST 2013	QUEST Conference Update.	Receive
	Drive-Throughs	An update on drive-throughs.	Recommendation
	Bottled Water	Referred to EAC by Council at its July 3, 2013 meeting.	Recommendation
	Our Municipality Can Help Stop Climate Change	Update subsequent to the March 5, 2013 Environmental Advisory Committee meeting.	Recommendation

Other Anticipated Items	
Item	Description
Nuisance Weed and Tall Grass Control By-law	The City's Nuisance Weed and Tall Grass Control By-law is scheduled to be revised as per the LGMP.
Green Development Strategy (GDS)	An update on GDS implementation.
Waste Management	An update on various waste-related initiatives.
Corporate Energy Conservation Plans	The new Provincial <i>Green Energy Act</i> (2009) requires municipalities to provide corporate energy conservation plans for all municipally owned and operated buildings and to report annually on actual performance against plans.
Stormwater Quality Control Strategy Update	Update of the City's strategy for managing and improving the quality of stormwater runoff.
Public Art Project	Update on public art project along Burnhamthorpe Rd.

STATUS OF OUTSTANDING ISSUES FROM THE ENVIRONMENTAL ADVISORY COMMITTEE (EAC)

Prepared by Mumtaz Alikhan, Legislative Coordinator, for the September 10 2013 EAC Agenda

EAC MEETING FIRST DISCUSSED	ISSUE	EAC RECOMMENDATION/DIRECTION	STATUS
Feb/12	Transportation Strategy Presentation	Michael DeWit, Vice-Chair, indicated that a presentation on the transportation strategy would be beneficial to the Committee.	May 1/12 EAC Meeting Update: Ms. Osborne added that she did not have a specific timeline for the transportation strategy at this time.
Sept/12	Potential Ban of Plastic Shopping Bags in Mississauga	EAC-0039-2012 1. That the Corporate Report dated July 26, 2012 from the Commissioner of Community Services, entitled "Potential Ban of Plastic Shopping Bags in Mississauga," be received; and 2. That the Environmental Advisory Committee recommends that the potential ban of plastic shopping bags in Mississauga be referred to the Region of Peel's Waste Management Committee for further research and recommendations to the Region of Peel's Regional Council and the City of Mississauga's Council.	
Dec/12	Urban Design Awards	Councillor Tovey noted that the Urban Design Awards should include green building and Ms. Bracken noted that the categories and criteria would have to be strengthened. It was suggested that a report could be written to make a recommendation with respect to creating a green award in Urban Design.	May 7/13 EAC Meeting Update: In response to Councillor Tovey, Ms. Osborne said that Ms. Bracken is working with Planning and Building Department staff to establish a green development award complementary and linked to the existing Awards and that it may be announced this fall, but will not begin until 2014.

EAC MEETING FIRST DISCUSSED	ISSUE	EAC RECOMMENDATION/DIRECTION	STATUS
Dec/12	Environmental Advisory Committee November 2012 Off-Site Meeting Summary	<p>EAC-0068-2012</p> <ol style="list-style-type: none"> 1. That the Memorandum, dated November 26, 2012 from Brenda Osborne, Director, Environment Division with respect to the off-site meeting held on November 24, 2012; be received; and 2. That staff work with the Environmental Advisory Committee to develop a recognition program and a community environmental grants program. 	<p>May 7/13 EAC Meeting Update:</p> <p>Ms. McLeod gave an update, noting that this matter was discussed at the Committee's December 2012 meeting. She said that three existing award programs were reviewed and associated organizations were consulted regarding the Committee's recommendation. Ms. McLeod said that modifying the current award processes or adding a new "Living Green" award is not advisable for various reasons. She noted that Streetscape Mississauga has renamed the Alternative Gardens class of their contest the "Mississauga Living Green Ecogardens" class. Ms. McLeod said that the Committee could help promote the existing award programs and, beginning in 2014, host an annual celebration and networking event in the spring to coincide with the annual reporting out of the Living Green Master Plan.</p>
Feb/13	Stormwater Financing Study (Phase 1)	<p>EAC-0003-2013</p> <ol style="list-style-type: none"> 1. That the PowerPoint presentation by Lincoln Kan, Manager, Environmental Services, entitled "Stormwater Financing Study (Phase 1)," to the Environmental Advisory Committee on February 5, 2013 be received; and 2. That staff be directed to prepare an update regarding the Stormwater Financing Study (Phase 1) for consideration at a future Environmental Advisory Committee meeting. 	
Mar/13	Our Municipality Can Help Stop Climate Change	<p>EAC-0011-2013</p> <p>That the email message dated February 1, 2013 from Danish Sarwar, Ward 5 resident, with respect to how our municipality can help stop climate change, be received and referred to staff for further review and returned to a future Environmental Advisory Committee meeting for consideration.</p>	