



Agenda
Committee of Council
The Corporation of the City of Brampton

Date: Wednesday, September 4, 2024

Time: 9:30 a.m.

Location: Hybrid Meeting - Virtual Option & In-Person in Council Chambers – 4th Floor – City Hall

Members:

Mayor Patrick Brown (ex officio)

Regional Councillor R. Santos Wards 1 and 5

Regional Councillor P. Vicente Wards 1 and 5

Regional Councillor N. Brar Wards 2 and 6

Regional Councillor M. Palleschi Wards 2 and 6

Regional Councillor D. Keenan Wards 3 and 4

Regional Councillor M. Medeiros Wards 3 and 4

Regional Councillor P. Fortini Wards 7 and 8

City Councillor R. Power Wards 7 and 8

Regional Councillor G. Toor Wards 9 and 10

Deputy Mayor H. Singh Wards 9 and 10

For inquiries about this agenda, or to make arrangements for accessibility accommodations for persons attending (some advance notice may be required), please contact:
Sonya Pacheco, Legislative Coordinator, Telephone 905.874.2178, TTY 905.874.2130
cityclerksoffice@brampton.ca

Note: Meeting information is also available in alternate formats upon request.

1. **Call to Order**

2. **Approval of Agenda**

3. **Declarations of Interest under the Municipal Conflict of Interest Act**

4. **Consent**

The Meeting Chair will review the relevant agenda items during this section of the meeting to allow Members to identify agenda items for debate and consideration, with the balance to be approved as part of the Consent Motion given the items are generally deemed to be routine and non-controversial.

5. **Announcements**

5.1 Announcement - City of Brampton Economic Development Office Award and Recognition

Council Sponsor: Regional Councillor Toor

Denise McClure, Acting Director, Economic Development and International Relations, Office of the CAO, will make the announcement.

5.2 Announcement - City of Brampton Economic Development Office Upcoming Events

Council Sponsor: Regional Councillor Santos

Denise McClure, Acting Director, Economic Development and International Relations, Office of the CAO, will make the announcement.

6. **Public Delegations**

6.1 Possible Delegations, re: Notice of Report - Proposed Amendment to User Fee By-law 380-2003, Schedule D – Routine Disclosure

Note: Public Notice regarding this matter was published on the City's website on August 29, 2024

(See Item 12.2.1)

- 6.2 Delegation from John and Sonya Faber, Home Owners/Builders, re: Request to Waive or Reduce Cash-in-Lieu of Parkland Fee
- 6.3 Delegation from Harshdeep Singh, Karambir Singh, Harpreet Singh, Brampton Residents, re: Concerns on the Use of a Community Park for Religious Activities
- 6.4 Delegation from Atul Jani, Manish T., Ankit, Committee Members, Gita Park Cultural Group, re: Community Garba Street Festival Celebration
- 6.5 Delegation from Premal Brahmhatt, Community of Saintsbury Crescent, re: Road Closure Request - Ganesh Festival on Saintsbury Crescent - Ward 9
- 6.6 Delegation from Ethney Carter, Brampton Resident, re: Tax Increase Concerns
- 6.7 Delegation from Simmi Sekhon, Shauna Kabiya, and Adham Diabas, Community Organizers, Human Rights Activists, Brampton4Palestine, re: Anti-Palestinian Racism, Genocide in Gaza and Weapons Manufacturing in Brampton
- 6.8 Delegation from Usha Srinivasan, Founding Director, BReady Talent Platform, re: Update on BReady Talent Platform
- 6.9 Delegation from Akin Oduntan, Mayor's Brampton Business Ambassador, on behalf of the Nigerian Community, re: Flavours of Nigeria Event
- 6.10 Delegation from Sylvia Roberts, Brampton Resident, re: Timing of Contracts for Construction Work
- 6.11 Delegation from Sylvia Roberts, Brampton Resident, re: Overcrowding on Brampton Transit Buses
- 6.12 Delegation from Deji Ayowole, Vice President, and Maryam Muritala, Head of PR and Strategic Partnerships, Network of Nigerians in Canada, re: Network of Nigerians in Canada (NNC)

7. Government Relations Matters

- 7.1 Staff Update re: Government Relations Matters

To be distributed prior to the meeting

8. Economic Development Section

(Regional Councillor G. Toor, Chair; Regional Councillor R. Santos, Vice Chair)

- 8.1 Staff Presentations
- 8.2 Reports
- 8.3 Other/New Business
- 8.4 Correspondence
- 8.5 Councillors Question Period
- 8.6 Public Question Period

5 Minute Limit (regarding any decision made under this section)

During the meeting, the public may submit questions regarding recommendations made at the meeting via email to the City Clerk at cityclerksoffice@brampton.ca, to be introduced during the Public Question Period section of the meeting.

9. Corporate Services Section

(Deputy Mayor Singh, Chair; Councillor Kaur Brar, Vice Chair)

- 9.1 Staff Presentations
- 9.2 Reports
 - 9.2.1 Staff Report re: 2024 Levy By-law per Section 323 of the Municipal Act, 2001 (Annual Levy on Universities/Colleges, Correctional Institutions, and Public Hospitals)

Recommendation

- 9.2.2 Staff Report re: Response to Request for Funding Support from Ourboro Inc. and DUCA Impact Lab Social Enterprise Corp. (RM 51/2024)

Recommendation

- 9.2.3 Staff Report re: Request to Begin Procurement – For the Supply of Mobile Devices and Services

Recommendation

- 9.2.4 Staff Report re: Agreements Executed by Administrative Authority for April 1, 2024 to June 30, 2024

To be received

- 9.3 Other/New Business

- 9.3.1 Discussion re: Planning Matters in Mature Neighbourhoods

Referred from the Council Meeting of July 10, 2024 pursuant to Resolution C142-2024.

- 9.4 Correspondence

- 9.5 Councillors Question Period

- 9.6 Public Question Period

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10. Public Works and Engineering Section

(Councillor Vicente, Chair; Councillor Keenan, Vice Chair)

- 10.1 Staff Presentations

- 10.1.1 Staff Presentation re: Etobicoke Creek Watershed Plan Update

Presenters: Pam Cooper, Manager, Environmental Planning, Environment and Development Engineering, Planning, Building and Growth Management, and Namrata Shrestha, Senior Manager, Watershed Planning and Reporting, Toronto and Region Conservation Authority (TRCA)

To be received

(See Item 10.2.1)

- 10.1.2 Staff Presentation re: Centre for Community Energy Transformation (CCET) Update
- Presenter: Pam Cooper, Manager, Environmental Planning, Environment and Development Engineering, Planning, Building and Growth Management
- To be received*
- (See Item 10.2.2)
- 10.2 Reports
- 10.2.1 Staff Report re: Etobicoke Creek Watershed Plan Update
- Recommendation*
- (See Item 10.1.1)
- 10.2.2 Staff Report re: Centre for Community Energy Transformation (CCET) Update
- Recommendation*
- (See Item 10.1.2)
- 10.2.3 Staff Report re: Request to Begin Procurement – Material Testing and Geotechnical Investigation Services on an as and when required basis for a three (3) year period plus two-year (1 + 1) option years - Citywide
- Recommendation*
- 10.2.4 Staff Report re: Budget Amendment and Request to Begin Procurement for Demolition of the Former Ontario Provincial Police Administration Building – Ward 4
- Recommendation*
- 10.2.5 Staff Report re: Request to Begin Procurement for Preventative and Demand Maintenance Services for Locksmith, Door Hardware, Automatic Sliders, and Low Energy Doors at Various City Locations for a Three-Year (3) Period - All Wards
- Recommendation*
- 10.3 Other/New Business
- 10.3.1 Minutes - Brampton School Traffic Safety Council - June 6, 2024

To be approved

10.3.2 Minutes - Environment Advisory Committee - August 6, 2024

To be approved

10.3.3 Discussion Item at the request of Regional Councillor Medeiros re: Recent Flooding in Relation to Weather Incidents

10.4 Correspondence

10.5 Councillors Question Period

10.6 Public Question Period

5 Minute Limit (regarding any decision made under this section)

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11. Community Services Section

(Councillor Santos, Chair; Councillor Kaur Brar, Vice Chair)

11.1 Staff Presentations

11.2 Reports

11.3 Other/New Business

11.4 Correspondence

11.5 Councillors Question Period

11.6 Public Question Period

5 Minute Limit (regarding any decision made under this section)

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12. Legislative Services Section

(Councillor Santos, Chair; Councillor Palleschi, Vice Chair)

12.1 Staff Presentations

12.2 Reports

12.2.1 Staff Report re: Updating User Fee By-law 380-2003 - Routine Disclosure

Recommendation

(See Item 6.1)

12.3 Other/New Business

12.3.1 Discussion Item at the request of Regional Councillor Santos re: Update on the Implementation of the Residential Rental Licensing (RRL) Pilot Program

12.4 Correspondence

12.5 Councillors Question Period

12.6 Public Question Period

5 Minute Limit (regarding any decision made under this section)

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13. Referred Matters List

Note: In accordance with the Procedure By-law and Council Resolution, the Referred Matters List will be published quarterly on a meeting agenda for reference and consideration. A copy of the current Referred Matters List for Council and its committees, including original and updated reporting dates, is publicly available on the City's website.

Current number of referred matters as of the last Council meeting (July 10, 2024) = 53

14. Public Question Period

15 Minute Limit (regarding any decision made at this meeting)

During the meeting, the public may submit questions regarding recommendations made at the meeting via email to the City Clerk at cityclerksoffice@brampton.ca, to be introduced during the Public Question Period section of the meeting.

15. Closed Session

Note: A separate package regarding these agenda items are distributed to Members of Council and senior staff only.

15.1 Rent Review - Ward 3

Open Meeting exception under Section 239 (2) (k) of the Municipal Act, 2001:

A position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board.

15.2 Brampton Transit – Zero Emission Bus Trials Update

Open Meeting exception under Section 239 (2) (h) of the Municipal Act, 2001:

Information explicitly supplied in confidence to the municipality or local board by Canada, a province or territory or a Crown agency of any of them.

15.3 Tenant Rent Review - Ward 3

Open Meeting exception under Section 239 (2) (c) and (k) of the Municipal Act, 2001:

A proposed or pending acquisition or disposition of land by the municipality or local board; and, a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board.

15.4 Litigation Update - Ward 3

Open Meeting exception under Section 239 (2) (e), (f) and (k) of the Municipal Act, 2001:

Litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board; advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and, a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board.

16. Adjournment

Next Regular Meeting: Wednesday, September 18, 2024

Announcement Request

For Office Use Only:
Meeting Name:
Meeting Date:

Please complete this form for your request to make an Announcement at a future Council Meeting. An announcement can relate to an event of interest to the general public. Your request must include the name of the Member of Council sponsoring the Announcement. Once this completed form is received by the City Clerk's Office, you will be contacted to confirm your placement on the appropriate agenda. **Announcements are limited two (2) minutes at the meeting.**

Attention: City Clerk's Office, City of Brampton, 2 Wellington Street West, Brampton ON L6Y 4R2

Email: cityclerksoffice@brampton.ca Telephone: (905) 874-2100 Fax: (905) 874-2119

Meeting: City Council Planning and Development Committee
 Committee of Council Other Committee:

Attendance: In-person Remote

Meeting Date Requested:

Name of Individual(s):

Position/Title:

Organization/Person being represented:

Full Address for Contact:

Telephone:

Email:

Event or Subject Name/Title/ Date/Time/Location:	City of Brampton Economic Development Office Award and Recognition
Additional Information:	The Economic Development Office received the Bronze Award for Excellence in Economic Development from the International Economic Development Council and was named one of the Top 20 Locations to Invest by Site Selection Magazine.
Name of Member of Council Sponsoring this Announcement:	Councillor Toor

A formal presentation will accompany my Announcement: Yes No

Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf)
 Picture File (.jpg) Video File (.mp4) Other:

Additional printed information/materials will be distributed with my Announcement: Yes No Attached

Note: Persons are requested to provide to the City Clerk's Office **well in advance of the meeting date:**

- (i) all background material and/or presentations for publication with the meeting agenda and /or distribution at the meeting, and
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Name of Individual(s):

Position/Title:

Organization/Person being represented:

Full Address for Contact:

Telephone:

Email:

Event or Subject Name/Title/ Date/Time/Location:	<input type="text" value="City of Brampton Economic Development Office Upcoming Events"/>
Additional Information:	<input type="text"/>
Name of Member of Council Sponsoring this Announcement:	<input type="text" value="Councillor Santos"/>

A formal presentation will accompany my Announcement: Yes No

Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf)
 Picture File (.jpg) Video File (.mp4) Other:

Additional printed information/materials will be distributed with my Announcement: Yes No Attached

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Economic Development Upcoming Events

Committee of Council

September 4, 2024

September / October 2024

2nd Annual Food & Beverage Processing Summit

September 13, 2024

Millenium Gardens Banquet Centre

Chapter 50: Golden Jubilee Luncheon

September 24, 2024

Alderlea House

CM&E Ontario Women in Manufacturing Forum

September 25, 2024

Terrace on the Green

Shaping the Future with Technology

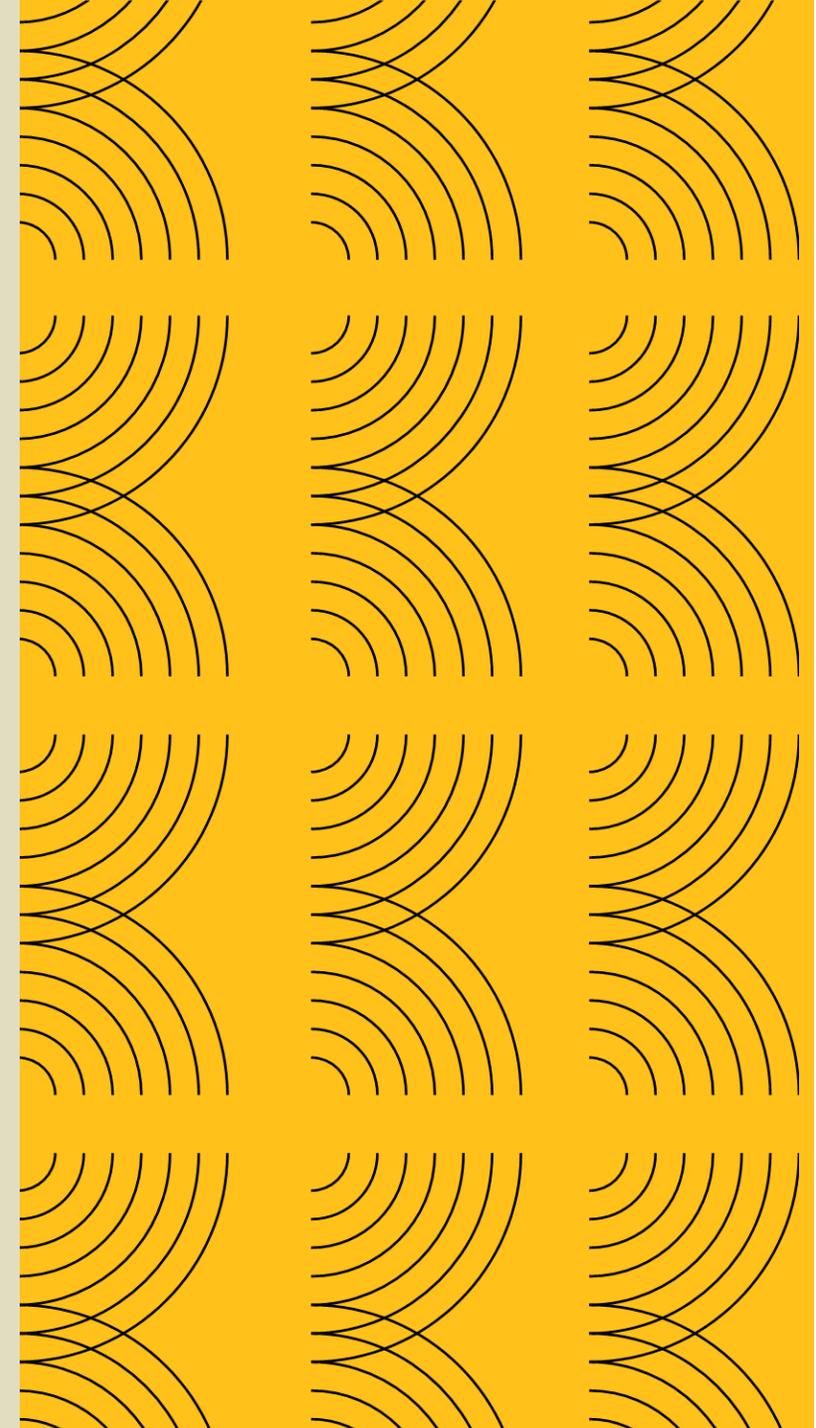
Hannover Messe & Project Arrow Roadshow

October 11, 2024

Rose Theatre

Small Business Month

October 2024



Delegation Request

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Meeting Date Requested: Agenda Item (if applicable):

Name of Individual(s):

Position/Title:

Organization/Person being represented:

Full Address for Contact: Telephone:
 Email:

Subject Matter to be Discussed: We are building a new home for our family at [REDACTED], Brampton On. Along With Development Fees and Permit Fees we have been required to pay over \$45,000 for "Cash in Lieu of Parkland" We are not developers and would like to discuss the fairness of this fee.

Request to Council/Committee: We request to have the "Cash in Lieu of Parkland" fee waived and reimbursed or reduced. The property was miss valued at 900,000. We had a 3rd party asses the land at 550,000 We were not given the option to donate the 5% of land for parkland instead of paying the fee.

Attendance: In-person Remote
 A formal presentation will accompany my delegation: Yes No
 Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf) Video File (.mp4) Other:

Additional information/materials will be distributed with my delegation: Yes No Attached

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Meeting Date Requested: Agenda Item (if applicable):

Name of Individual(s):

Position/Title:

Organization/Person being represented:

Full Address for Contact: Telephone:
 Email:

Subject Matter to be Discussed:	The neighbourhood park is being widely used for propagating Religion, resulting in people coming from outside the area ; The residents staying around the neighbourhood are not even asked for approvals regarding the events happening ; Risk of property damage and thefts in the neighbourhood
Request to Council/Committee:	Community Park should not be used for Religious activities ; 70% Approval process to be implemented from the residents staying around the park ;

Attendance: In-person Remote
 A formal presentation will accompany my delegation: Yes No
 Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf) Video File (.mp4) Other:

Additional information/materials will be distributed with my delegation: Yes No Attached

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Meeting Date Requested: Agenda Item (if applicable):

Name of Individual(s):

Position/Title:

Organization/Person being represented:

Full Address for Contact: Telephone:
 Email:

Subject Matter to be Discussed:	Community Garba Street Festival celebration at 1. workgreen park way 2. Rivermont & merrimac Dr
Request to Council/Committee:	Approve the permit for 2 days program

Attendance: In-person Remote
 A formal presentation will accompany my delegation: Yes No
 Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf) Video File (.mp4) Other:

Additional information/materials will be distributed with my delegation: Yes No Attached

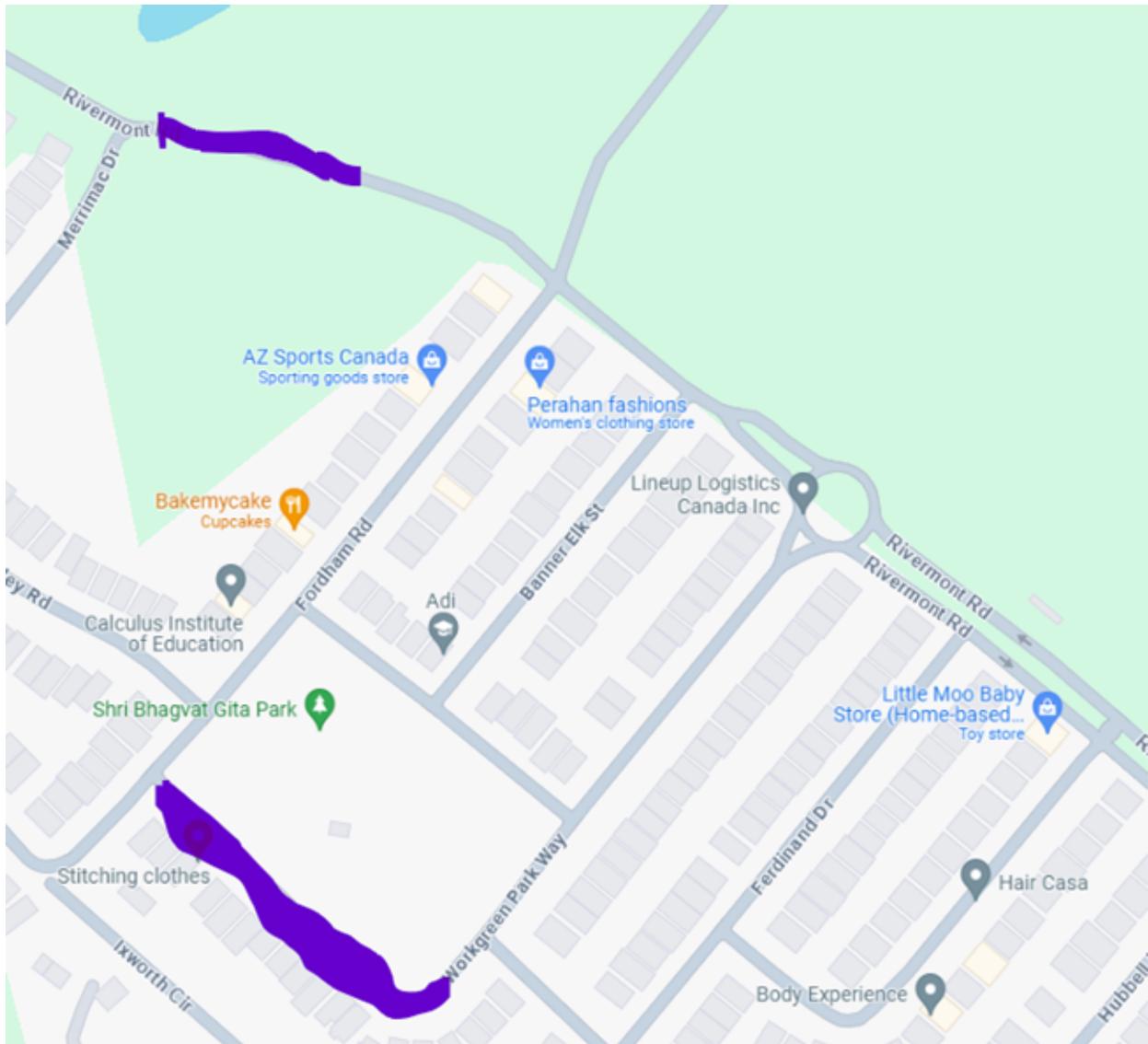
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Meeting Date Requested: Agenda Item (if applicable):

Name of Individual(s):

Position/Title:

Organization/Person being represented:

Full Address for Contact: Telephone:
 Email:

Subject Matter to be Discussed:

Request to Council/Committee:

Attendance: In-person Remote
 A formal presentation will accompany my delegation: Yes No
 Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf) Video File (.mp4) Other:

Additional information/materials will be distributed with my delegation: Yes No Attached

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Meeting: City Council Planning and Development Committee
 Committee of Council Other Committee:

Meeting Date Requested: Agenda Item (if applicable):

Name of Individual(s): *Carter Ethney*

Position/Title:

Organization/Person being represented:

Full Address for Contact: Telephone:
Email:

Subject Matter to be Discussed: *Concern re: Tax increase*

Request to Council/Committee:

Attendance: In-person Remote
A formal presentation will accompany my delegation: Yes No
Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf) Other:
 Picture File (.jpg) Video File (.mp4)

Additional information/materials will be distributed with my delegation: Yes No Attached

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Meeting Date Requested: Agenda Item (if applicable):

Name of Individual(s):

Position/Title:

Organization/Person being represented:

Full Address for Contact: Telephone:
 Email:

Subject Matter to be Discussed:	Anti-Palestinian Racism, Genocide in Gaza, Weapons Manufacturing in Brampton
Request to Council/Committee:	Rethink Roshel Partnership in Brampton

Attendance: In-person Remote
 A formal presentation will accompany my delegation: Yes No
 Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf) Video File (.mp4) Other:

Additional information/materials will be distributed with my delegation: Yes No Attached

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WE CHARGE ROSHEL WITH

GENOCIDE

GENOCIDE IS MANUFACTURED HERE BY ROSHEL INC. AT 255 BISCAYNE CRES, BRAMPTON, ON

Roshel Inc. manufactures and provides the Israeli military with shipments of light armored vehicles (LAVS) which are used to commit a catalogue of violations in the occupied West Bank and occupied East Jerusalem, including extrajudicial executions, torture (even against children), suppression of freedom of expression/association including through government surveillance, and excessive use of force against peaceful protesters.

VIOLATES DOMESTIC LAW

Roshel allegedly committed "illegal acts" and violated anti-corruption laws to secure a sole-sourced, \$92-million contract with the federal government for armoured vehicles producing charges of "corruption and bribery" with the Department of National Defence. Roshel and its president were also sued \$1.5 million by the former vice-president of the company for wrongful or constructive dismissal.

EMPLOYS IDF SOLDIERS

Roman Shimonov, the founder and CEO of Roshel Inc, served in the Israeli Armed Forces and employs a team of other ex IDF soldiers. Demitry Faler, the Vice President of Roshel, is an Israeli who served in the Israeli Ministry of Defence as an Avionics manager. Zeev Braiman, Roshel's Production Manager, is an Israeli who served as an Avionics Technician in the Israeli Air Forces. Braiman then worked for Israeli drone-maker Elbit Systems and Israeli Aerospace Industries, each of which has deep ties to Israel's military.

PARTNERS WITH ISRAEL

Roshel advertises their partnership with Israeli Aerospace Industries (IAI), an Israeli state-owned weapons giant.

VIOLATES INTERNATIONAL LAW

Despite renowned human rights organizations and United Nations experts demanding all states immediately stop the transfer of weapons, parts, and ammunition to Israel to stop the ongoing genocide in Gaza, Roshel sought to export 30 armoured vehicles to Israel as recently as March, 2024.

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ARMS EMBARGO ON ISRAEL NOW!

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ROSHEL HAS BLOOD ON THEIR HANDS

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The Trudeau government authorized at least \$28.5 million in new military export permits to Israel during the first two months of the regime's brutal genocide on Gaza. By trading arms with Israel, Canada is giving direct military support for Israel's genocide, thereby violating the Genocide Convention and Arms Trade Treaty.

We can and must halt the flow of the weapons that have killed approximately 186,000 Palestinians, the money fuelling the bombings, and the impunity and false legitimacy granted to the occupation.

DEMANDS

1.STOP WEAPONS EXPORTS TO ISRAEL

2.END PARTNERSHIPS WITH ISRAELI WEAPONS MANUFACTURERS

3. REVOKE EXISTING PERMITS FOR ARMS EXPORTS & STOP APPROVAL OF FUTURE ARMS EXPORT PERMITS

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@BRAMPTON4CEASEFIRE



@BRAMPTON4PALESTINE

LEARN MORE AND TAKE ACTION



@BRAMPTON4CEASEFIRE



@BRAMPTON4PALESTINE

LEARN MORE AND TAKE ACTION



ARMS EMBARGO ON ISRAEL NOW!

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STOP

ARMING

ISRAEL

STOP

ARMING

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Tell Canada to impose an immediate two-way **arms embargo on Israel.**

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Brampton for Ceasefire is a group of your neighbours who have come together to demand our MPs represent our voices by opposing the genocide in Gaza and ending Canadian complicity.

Scan our QR code to learn more:



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BRAMPTON WEAPONS MANUFACTURERS

Human rights organizations such as Amnesty International, Human Rights Watch and many UN experts are among the many groups that condemned Israel's escalating attacks against Palestinian civil society in the occupied West Bank and called on all States to immediately halt the transfer of weapons, parts, and ammunition to Israel to stop the ongoing genocide in Gaza. Some of these companies include:

ROSHEL INC.

255 Biscayne Crescent, Brampton, ON L6W 4R2

- Roman Shimonov, the founder and CEO of Roshel Inc, who has served in the Israeli Armed Forces and employs many other ex IDF soldiers, has provided the Israeli military with shipments of light armored vehicles (LAVS) which are used to commit a catalogue of violations in the West Bank and East Jerusalem, including extrajudicial executions and other unlawful killings, using ill treatment and torture (even against children), suppression of freedom of expression/association including through government surveillance, and excessive use of force against peaceful protesters. As reported by Amnesty International and the Guardian on numerous occasions but most notably in 2016, June 2021 and January 2014.

HORSTMAN CANADA INC.

110 East Dr, Brampton, ON L6T 1C1

- Horstman Canada is a combat vehicle company that manufactures engines and transmission systems for Israel's main battle tanks and armored personnel carriers.

CURTISS-WRIGHT SURFACE TECHNOLOGIES.

105 Alfred Kuehne Blvd, Brampton, ON L6T 4K3

- An aerospace company that supports Lockheed Martin's F-35 program, providing equipment connected to the handling of armaments and missiles on these fighter jets. They also provide electronics to Apache helicopters. Curtiss-Wright was listed by Lockheed Martin in 2019 as one of the Canadian companies contributing to the F-35 program. Israel's fleets of F-35 fighter jets and Apache helicopters are being used in the assault on Gaza.

Southwest United Canada / PGC Aerospace.

85 Stafford Dr, Brampton, ON L6W 1L3

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Delegation Request

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Meeting Date:

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Attention: City Clerk's Office, City of Brampton, 2 Wellington Street West, Brampton ON L6Y 4R2
 Email: cityclerksoffice@brampton.ca Telephone: (905) 874-2100 Fax: (905) 874-2119

Meeting: City Council Planning and Development Committee
 Committee of Council Other Committee:

Meeting Date Requested: Agenda Item (if applicable):

Name of Individual(s):

Position/Title:

Organization/Person being represented:

Full Address for Contact: Telephone:
 Email:

Subject Matter to be Discussed:

Request to Council/Committee:

Attendance: In-person Remote
 A formal presentation will accompany my delegation: Yes No
 Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf) Video File (.mp4) Other:

Additional information/materials will be distributed with my delegation: Yes No Attached

Note: Delegates are requested to provide to the City Clerk's Office **well in advance of the meeting date:**

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Name of Individual(s):

Position/Title:

Organization/Person being represented:

Full Address for Contact: Telephone:
 Email:

Subject Matter to be Discussed: To give the success report of the outcome of the event, "Flavours of Nigeria"
 Also, the Nigerian Community in Brampton want to express their profound gratitude to the Mayor, Councilors, Staffs of Economic Development & Facility dept, for their tremendous support.

Request to Council/Committee: Request that City to support the Crossroads of Culture - Flavours of Nigeria event annually in all areas and financially.

Attendance: In-person Remote
 A formal presentation will accompany my delegation: Yes No
 Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf) Video File (.mp4) Other:

Additional information/materials will be distributed with my delegation: Yes No Attached

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Meeting Date Requested: Agenda Item (if applicable):

Name of Individual(s):

Position/Title:

Organization/Person being represented:

Full Address for Contact: Telephone:
 Email:

Subject Matter to be Discussed:	Timing of contracts for construction work
Action Requested:	Work on approving contracts earlier in the year so construction can start at the beginning of the season

A formal presentation will accompany my delegation: Yes No
 Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf)
 Picture File (.jpg) Video File (.avi, .mpg) Other:

Additional printed information/materials will be distributed with my delegation: Yes No Attached

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Position/Title:

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Full Address for Contact: Telephone:
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Subject Matter to be Discussed:	Overcrowding on Brampton Transit buses
Action Requested:	

A formal presentation will accompany my delegation: Yes No
 Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf)
 Picture File (.jpg) Video File (.avi, .mpg) Other:

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Position/Title:

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Full Address for Contact: Telephone:
 Email:

Subject Matter to be Discussed:	1. Introducing NNC 2. Notice of/Invite to NNC@5 on Sep 15, 2024 3. Chronicle of NNC
Request to Council/Committee:	1. Accept delegation 2. Accept invitation 3. Group photo and gift presentation

Attendance: In-person Remote
 A formal presentation will accompany my delegation: Yes No
 Presentation format: PowerPoint File (.ppt) Adobe File or equivalent (.pdf) Video File (.mp4) Other:

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Report
Staff Report
 The Corporation of the City of Brampton
 9/4/2024

Date: 2024-06-27

Subject: **2024 Levy By-law per Section 323 of the Municipal Act, 2001 (Annual Levy on Universities/Colleges, Correctional Institutions, and Public Hospitals)**

Contact: Nash Damer, Treasurer, Finance

Report number: Corporate Support Services-2024-631

RECOMMENDATIONS:

1. That the report from Kamila Janus, Tax Policy Analyst, Finance to the Committee of Council Meeting of September 4, 2024, re: **2024 Levy By-law per Section 323 of the Municipal Act, 2001 (Annual Levy on Universities/Colleges, Correctional Institutions, and Public Hospitals)**, be received and;
2. That a By-law be passed for the annual levy on Universities/Colleges, Correctional Institutions, Public Hospitals for the year 2024 as per Section 323 of the *Municipal Act, 2001*.

OVERVIEW:

- **An annual By-law is required to levy an amount on Universities or Colleges, Correctional Institutions and Public Hospitals pursuant to Section 323 of the *Municipal Act, 2001*. The levy remains at \$75.00 per occupant or bed, the same rate that has been in effect since 1987.**

BACKGROUND:

The purpose of the accompanying By-law is to levy an amount based on the number of full-time students enrolled, residents placed and provincially rated beds on each of Sheridan College – Davis Campus, Algoma University – Brampton, Roy McMurtry Youth Centre, Sault College – Brampton, St. Clair College – ACE Acumen Academy - Brampton and William Osler (Brampton - Civic Site). The number of full-time students enrolled, residents placed and provincially rated beds is supplied to the City by the Ministry of Municipal Affairs and Housing per “Capacity of Institutions Information” letter (Appendix A). The current rate prescribed by the Province, \$75 per full-time student enrolled, resident placed and provincially rated bed, has been unchanged since 1987.

CURRENT SITUATION:

The City is required to share the levy with the Region of Peel. The sharing percentage is calculated using the commercial class municipal tax base. For 2024, the sharing ratio is 51.36505% to the City and 48.63495% to the Region of Peel. The total levy is \$1,244,475 and the City will retain \$639,225. The Region will receive \$605,250.

The table below sets out the number of occupants/beds and resulting levies as supplied by the Ministry of Municipal Affairs and the Ministry of Housing.

Name	# of Occupants	\$75 per Occupant / Bed	Levy
Algoma University - Brampton	4668	\$75	\$350,100
Roy McMurtry Youth Centre	192	\$75	\$14,400
Sault College - Brampton	995	\$75	\$74,625
Sheridan College- Davis Campus	8703	\$75	\$652,725
St. Clair College – ACE Acumen Academy - Brampton	1358	\$75	\$101,850
William Osler (Brampton - Civic Site)	677	\$75	\$50,775
TOTAL			\$1,244,475

CORPORATE IMPLICATIONS:**Financial Implications:**

As required by the *Municipal Act, 2001*, a By-law is necessary to accompany this report. As such, the City's Legal Services Department will be solicited to review and approve the accompanying By-law. The approval of this report and By-law is necessary to support the budget requirements of the City and the Region of Peel.

STRATEGIC FOCUS AREA:

This report supports the strategic focus area of government and leadership, focusing on service excellence with equity, innovation, efficiency, effectiveness, accountability, and transparency.

CONCLUSION:

Subject to approval of the attached By-law, invoices will be prepared and sent to each of the aforementioned institutions. The Standard Operating Procedure for the collection of General Accounts Receivable establishes the payment terms per organization type. Other levels of government are given 90 days before interest will be charged as per user fee By-law 380-2003. Therefore, the due date for payment will be December 10, 2024.

Authored by:

Reviewed by:

Kamila Janus
Tax Policy Analyst,
Finance

Nash Damer
Treasurer,
Finance

Approved by:

Approved by:

Alex Milojevic
Commissioner,
Corporate Support Services

Marlon Kallideen
Chief Administrative Officer

Attachments:

- Attachment 1 – Ministry of Municipal Affairs and Housing "Capacity of Institutions Information" Letter
- Attachment 2 – 2024 By-law for Annual Levy on Universities/Colleges, Correctional Institutions, and Public Hospitals

Ministry of
Municipal Affairs
and Housing

Ministère des
Affaires municipales
et du Logement

Municipal Programs and
Analytics Branch
777 Bay Street, 16th Floor
Toronto ON M7A 2J3
Telephone: 416 585-7296

Direction des programmes municipaux
et de l'analytique
777, rue Bay, 16^e étage
Toronto ON M7A 2J3
Téléphone : 416 585-7296



June 24, 2024

Sent by email: nash.damer@brampton.ca
yvonne.kwiecien@brampton.ca

Nash Damer
Director of Finance / Treasurer
City of Brampton

Dear Nash Damer:

Re: Capacity of Institutions Information for the year 2023

I am pleased to provide you with updated capacity of institution(s) information in your municipality provided to us by the particular ministry designated for each institution.

In accordance with the current regulations, your municipality may levy an amount up to \$75 per rated capacity designated for each institution listed below. The levy amount is provided in the right-hand column.

<u>Institution</u>	<u>Capacity</u>	<u>Levy Amount</u>
Algoma University - Brampton	4668	\$350,100
Roy McMurtry Youth Centre	192	\$14,400
Sault College - Brampton	995	\$74,625
Sheridan College - Davis Campus	8703	\$652,725
St. Clair College - ACE Acumen Academy - Brampton	1358	\$101,850
William Osler (Brampton - Civic Site)	677	\$50,775

The appropriate tax bill should be sent directly to each institution for payment. Please note that in accordance with Section 323 of the Municipal Act, institutions do not have to remit payment until July 1, 2024.

Should you have any question regarding the information provided, please do not hesitate to contact Kyla Simpson at kyla.simpson@ontario.ca or at 437-232-6736.

Yours sincerely,

A handwritten signature in black ink that reads "Helen Collins".

Helen Collins
Director
Municipal Programs and Analytics Branch
Ministry of Municipal Affairs and Housing



THE CORPORATION OF THE CITY OF BRAMPTON

BY-LAW

Number _____ - 2024

To Levy an annual amount on Sheridan College – Davis Campus, on Roy McMurtry Youth Centre, on Sault College – Brampton, on the William Osler Health Centre (Brampton – Civic Site), St. Clair College – ACE Acumen Academy - Brampton and on Algoma University - Brampton for the Year 2024

WHEREAS pursuant to Section 323 (1) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, (the “Municipal Act, 2001”), a local municipality may by by-law levy upon a university designated by the Minister of Training, Colleges and Universities or a college of applied arts and technology which is situate in the municipality, an annual tax not exceeding the prescribed amount for each full-time student enrolled in such university or college in the year preceding the year of levy, as determined by the Minister of Training, Colleges and Universities;

AND WHEREAS pursuant to Section 323 (2) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, (the “Municipal Act, 2001”), a local municipality may by by-law levy upon a correctional institution designated by the Minister of Community Safety and Correctional Services, or a training school, or youth custody facility designated under subsection 85(2) of the *Youth Criminal Justice Act (Canada)* and designated by the Minister Community and Social Services which is situate in the municipality, an annual amount not exceeding the prescribed amount for each resident placed in such institution, school or facility as determined by the Minister of Community Safety and Correctional Services or the Minister of Community and Social Services, as the case may be;

AND WHEREAS pursuant to Section 323 (3) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, (the “Municipal Act, 2001”) a local municipality may by by-law levy upon a public hospital or a provincial mental health facility designated by the Minister of Health and Long-Term Care which is situate in the municipality, an annual amount not exceeding the prescribed amount for each provincially rated bed in such public hospital or provincial mental health facility, as determined by the Minister of Health and Long-Term Care;

AND WHEREAS, pursuant to Ontario Regulation 384/98, as amended, made under the *Municipal Act, 2001*, the prescribed amount for the purpose of Section 323 of the Act is \$75.00 per full-time student, per resident or per rated bed, per year;

AND WHEREAS City Council has, in the past years, levied the maximum allowable amount on these institutions;

AND WHEREAS City Council considers it desirable to continue to levy the maximum allowable amount on these institutions;

NOW THEREFORE the Council of The Corporation of the City of Brampton ENACTS as follows:

1. There will be levied upon Sheridan College – Davis Campus, in the City of Brampton, for 2024 a tax of \$75.00 for each of the 8,703 full-time students enrolled in the college, the annual amount levied being \$652,725.00.
2. There will be levied upon Algoma University – Brampton, for 2024 a tax of \$75.00 for each of the 4,668 full-time students enrolled in the university, the annual amount levied being \$350,100.00.
3. There will be levied upon Sault College - Brampton for 2024 an amount of \$75.00 for each of the 995 full-time students enrolled in the college, the annual amount levied being \$74,625.00.
4. There will be levied upon St. Clair College – ACE Acumen Academy - Brampton for 2024 an amount of \$75.00 for each of the 1358 full-time students enrolled in the college, the annual amount levied being \$101,850.00
5. There will be levied upon Roy McMurtry Youth Centre for 2024 an amount of \$75.00 for each of the 192 residents placed in the institution, the annual amount levied being \$14,400.00.
6. There will be levied upon William Osler (Brampton – Civic Site) for 2024 an amount of \$75.00 for each of the 677 rated beds in the hospital, the annual amount levied being \$50,775.00.
7. That the said amounts shall be due by December 10th, 2024.

ENACTED and PASSED this 11th day of September, 2024

Approved as to form.
 ____ / ____ / ____

 Legal

Patrick Brown, Mayor

Approved as to content.
 ____ / ____ / ____

 Treasurer

Genevieve Scharback, City Clerk



Report
Staff Report
 The Corporation of the City of Brampton
 9/4/2024

Date: 2024-08-21

Subject: **Response to Request for Funding Support from Ourboro Inc. and DUCA Impact Lab Social Enterprise Corp.**

Contact: Nash Damer, Treasurer, Finance

Report number: Corporate Support Services-2024-685

RECOMMENDATIONS:

1. That the report from Maja Kuzmanov, Sr. Manager Accounting Services/Deputy Treasurer, Finance to the Committee of Council of September 4, 2024, re: **Response to Request for Funding Support from Ourboro Inc. and DUCA Impact Lab Social Enterprise Corp.**, be received.
2. Council deny the request for a \$5 million grant to DUCA Impact Lab Social Enterprise Corp.

OVERVIEW:

- **At the July 10, 2024, City Council meeting, a representative from Ourboro Inc. and DUCA Impact Lab Social Enterprise Corp. (a not-for-profit entity) delegated to Council requesting a \$5 million grant as part of a shared equity program to assist Brampton residents with down-payment costs on the purchase of their first homes.**
- **The grant would be provided to DUCA Impact Lab Social Enterprise Corp. and would be used to provide a guaranteed credit facility to Ourboro Inc.**
- **Ourboro Inc. is a for profit corporation that provides equity capital to first-time homebuyers to be used for the down payment.**
- **Council referred Finance staff to review the delegation's request and report back at the September 4, 2024, Committee of Council meeting (C148-2024).**
- **The requested grant can not be funded from the federal Housing Accelerator Fund (HAF) as it does not increase the available housing supply, which is core requirement of the HAF.**

- **Should Council decide to proceed with the requested grant, the City will have to find an alternate funding source.**
- **Due to Legislative requirements and provisions of the Municipal Act, the City can not share in any potential return Ourboro achieves as a result of its shared equity program.**
- **Staff recommend that Council deny the request for a \$5 million grant to DUCA Impact Lab Social Enterprise Corp.**

BACKGROUND:

At the July 10, 2024, City Council meeting, representative from Ourboro Inc. and DUCA Impact Lab Social Enterprise Corp. delegated to Council requesting a \$5 million grant as part of a shared equity program for the residents of Brampton.

Through a shared equity program, Ourboro Inc. and the homebuyer would invest in a home through the down payment, in exchange for a share in the future value of the home.

The City grant would be given to DUCA Impact Lab Social Enterprise Corp. (a not-for-profit corporation) and would be used to provide a guaranteed credit facility to Ourboro Inc. Ourboro Inc. would then use the funds to invest alongside first-time homebuyers in the City of Brampton.

The delegation was referred to staff for review and report back at the September 4, 2024, Committee of Council meeting (C148-2024).

Ourboro Inc. is a for profit corporation that provides equity capital to homebuyers to be used for down payment. Ourboro Inc. co-owns the property alongside buyers for up to 30 years. Ourboro Inc. would then share in the property's appreciation or depreciation when it is eventually sold.

As part of the proposal, capital would be deployed by Ourboro Inc. only to first-time home buyers within the boundaries of the City of Brampton. Co-owners can sell the home anytime during the co-ownership period.

In 2023, CMHC provided a \$5 million loan to Ourboro Inc. through a Shared Equity Mortgage Providers Fund. Since then, CMHC ceased any further contributions to Ourboro Inc. and is currently no longer engaged with CMHC.

CURRENT SITUATION:

The City received a request from Ourboro Inc. and DUCA Impact Lab Social Enterprise Corp. for a \$5 million grant.

Unlike Ourboro Inc., the City would not be benefiting from appreciation in property values or receiving any other financial return.

In addition, there would not be any direct impact on increasing housing supply.

Notwithstanding potential social benefits to approximately 30 Brampton households that would be initially part of this program, there are no benefits to the City of Brampton.

In addition, in the event a relevant body were to determine that despite the grant to DUCA Impact Lab Social Enterprise Corp., this is an assistance to a for-profit commercial enterprise (Ourboro Inc.), it would be a violation of the anti-bonusing provisions of section 106 of the Municipal Act.

Consequently, staff recommend that Council deny the request for \$5 million grant to DUCA Impact Lab Social Enterprise Corp.

CORPORATE IMPLICATIONS:

Financial Implications:

The requested grant cannot be funded from the federal Housing Accelerator Fund (HAF) as it does not increase the available housing supply, which is core requirement of the HAF.

Therefore, should Council decide to provide the requested grant to DUCA Impact Lab Social Enterprise Corp., in the amount of \$5 million, it would be funded through the Legacy Reserve Fund.

Consequently, there would be investment income loss from the Legacy Reserve Fund, estimated at an annual amount of \$157,000 or a tax levy equivalent of 0.01%.

Purchasing Implications:

Due to the for-profit nature of Ourboro Inc., notwithstanding DUCA Impact Lab Social Enterprise Corp non-profit partnership with Ourboro Inc., best practices from a procurement perspective would suggest that the City conduct a process that tests the market for the best proposal.

STRATEGIC FOCUS AREA:

This report fulfils the Government & Leadership focus area through strict adherence to effective financial management policies and supports sustainable financial revenues.

CONCLUSION:

Representative from Ourboro Inc. and DUCA Impact Lab Social Enterprise Corp. delegated to Council in July 2024, requesting a \$5 million grant as part of a shared equity program to assist residents of Brampton with down-payment costs on the purchase of their first home. The delegation was referred to staff for review and report back to the September 4, 2024, Committee of Council meeting (C148-2024).

There is no financial benefit to the City and no direct impact on increasing housing supply, and therefore, staff recommend that Council deny the request for a \$5 million grant to DUCA Impact Lab Social Enterprise Corp.

Authored by:

Reviewed by:

Maja Kuzmanov,
Sr. Manager Accounting
Services/Deputy Treasurer

Nash Damer,
Treasurer
Finance

Approved by:

Approved by:

Alex Milojevic,
Commissioner
Corporate Support Services

Marlon Kallideen,
Chief Administrative Officer



Report
Staff Report
 The Corporation of the City of Brampton
 9/4/2024

Date: 2024-08-12

Subject: **Request to Begin Procurement – For the Supply of Mobile Devices and Services - All Wards**

Contact: Medhanie Tekeste, Chief Information Officer, Information Technology

Report number: Corporate Support Services-2024-664

RECOMMENDATIONS:

1. That the report from Jennifer Ellis, Sr. Manager, IT Client Services, Information Technology to the Committee of Council Meeting of September 4th, 2024, re: **Request to Begin Procurement – For the Supply of Mobile Devices and Services**, be received.
2. That the Purchasing Agent be authorized to commence the procurement of Mobile Devices and Services for a Six (6) Year Period.

OVERVIEW:

- **The City’s current contract for Mobile Devices and Services expired on July 31, 2024.**
- **The purpose of this report is to obtain authorization to begin procurement for Mobile Devices and Services for a Six (6) Year Period with Two (2) Additional Two (2) Year Renewal Options.**
- **The recommendation is to directly engage Rogers Communications Partnership and Bell Mobility Inc. using the Province of Ontario’s (Ministry of Government and Consumer Services Tender 18677). The Province of Ontario conducted a public competitive procurement process resulting in significant cost savings.**

BACKGROUND:

In 2014, the City awarded a contract to Rogers Communications and Bell Mobility Inc. for the Supply of Mobile Devices and Services. The City leveraged the Ontario Provincial VOR (vendor of record) agreement via Council Resolution C080-2014.

The current standing agreements with Rogers Communications and Bell Mobility Inc. ended on July 31, 2024.

The Province of Ontario conducted a public procurement process, Tender – 18677 in 2024, that resulted in a new Contract with Rogers and Bell awarded August 2024. As part of the Province’s Contract, all provincial agencies, including the Ontario Broader Public Sector can use their pre-established pricing.

Information Technology (I.T) is seeking authorization to establish a Contract to acquire Mobile Devices and Services under the Province’s recently established Contract (Tender – 18677), Province of Ontario Agreement for the 6-year term for Mobile Devices and Services from Rogers and Bell.

The contract also includes the following services:

- APN service plans for Transit requirements
- APN service plans and hardware for Traffic requirements
- Fire and Emergency services
- Telephone Expense Management services
- APN Management platform services

CURRENT SITUATION:

The Province’s award allows the City to leverage the economies of scale of the agreement entered into between Rogers Communications, Bell Mobility Inc. and the Province. The City will receive large discounts on devices and services that if could not receive if procured on its own.

The Province has conducted their procurement process with the award of the Tender – 18677 to Rogers Communications and Bell Mobility Inc. for Mobile Devices and Services for a six (6) year period, with defined dates of August 1, 2024 to July 31, 2030. The province also included a provision for Two (2) Additional Two (2) Year Renewal Options.

Details related to the Provincial procurement process can be found below:

[VOR Details \(gov.on.ca\)](https://www.gov.on.ca)

The results of engaging Rogers and Bell, based on the provincial contract, provides the City a Vendor of Record for Mobile Devices and Services requirements. This will ensure the City has access to the required technology and services at the best price.

CORPORATE IMPLICATIONS:

Purchasing Implications:

A public procurement process was conducted by the Province of Ontario that established Vendor of Record arrangements with Rogers Communications and Bell Mobility Inc. Municipalities, as Non-Ontario Public Sector Entities, have been granted access to utilize these arrangements.

Purchase approval to establish a Contract will be obtained in accordance with the Purchasing By-law.

Financial Implications:

This procurement will be funded from various operating cost centers throughout the City. The Goods and Services Inventory account 720000.001 will be used for the purpose of the procurement, and as services are rendered, expenses will be charged to the respective cost centers. Staff will ensure that sufficient funds are requested through subsequent budget submissions for future years of the contract and will be presented to the Mayor for his consideration.

STRATEGIC FOCUS AREA:

This report achieves Council Priority of Government & Leadership, focusing on service excellence with equity, innovation, efficiency, effectiveness, accountability and transparency. This report aligns with the 2040 Vision by streamlining service delivery and effectively managing municipal assets as a well-run city.

CONCLUSION:

It is recommended that the Purchasing Agent be authorized to begin procurement for Mobile Devices and Services as described in this report.

Authored by:

Reviewed by:

Jennifer Ellis
Sr. Manger, IT Client Services
Information Technology

Medhanie Tekeste
Chief Information Officer
Information Technology

Approved by:

Alex Milojevic
Commissioner,
Corporate Support Services



Report
Staff Report
 The Corporation of the City of Brampton
 9/4/2024

Date: 2024-08-26

Subject: **Agreements Executed by Administrative Authority for April 1, 2024, to June 30, 2024,**

Contact: Bennett Kim, Real Estate Coordinator, Realty Services

Report number: CAO's Office-2024-589

RECOMMENDATIONS:

1. That the report from Bennett Kim, Real Estate Coordinator, Realty Services to the Committee of Council Meeting of September 4, 2024, re: **Agreements Executed by Administrative Authority for April 1, 2024, to June 30, 2024**, be received.

OVERVIEW:

- **By Administrative Authority By-law 216-2017, as amended, authority is delegated to department heads to execute certain real estate agreements.**
- **In order to keep City Council informed about the agreements executed by administrative authority, Realty Services provides City Council with a summary of executed agreements, attached to this report as Appendix A – Summary of Real Estate Agreements executed by Administrative Authority.**
- **This report provides information on Real Estate Agreements executed by administrative authority for the period from April 1, 2024, to June 30, 2024. This summary does not include agreements arising as a condition of development (site plan/subdivision/consent) approval.**
- **There is no financial impact resulting from the adoption of the recommendations in this report.**

BACKGROUND:

In accordance with the Administrative Authority By-law, authority is delegated to department heads to execute certain real estate agreements. Authority is granted for routine, non-controversial agreements up to specified dollar amounts.

Realty Services reports to Council on a quarterly basis, on the Real Estate Activities authorized by the Administrative Authority attached to this report as Appendix A – Summary of Real Estate Agreements executed under the Administrative Authority.

Staff are providing an Information Report to Committee of Council for all agreements completed and executed under the Administrative Authority By-law for the period from April 1, 2024, to June 30, 2024.

CORPORATE IMPLICATIONS:

Financial Implications:

There is no financial impact resulting from the adoption of the recommendations in this report.

STRATEGIC FOCUS AREA:

This report fulfills the strategic focus area of Government and Leadership by being accountable and transparent to Council by reporting all agreements that were fully executed under the Administrative Authority By-law # 216-2017, as amended, for the second quarter in 2024. This report provides elevated performance and service standards, through reporting for each quarter.

CONCLUSION:

This report summarizes Realty Services’ reporting on real estate agreements that were fully executed under the Administrative Authority By-law # 216-2017, as amended, for the period from April 1, 2024, to June 30, 2024.

Authored by:

Reviewed by:

Bennett Kim
Real Estate Coordinator,
Realty Services
Approved by:

Rajat Gulati
Senior Manager, Realty Services

Submitted by:

Marlon Kallideen,
Chief Administrative Officer

Marlon Kallideen,
Chief Administrative Officer

Attachments:

- Appendix A – Summary of Real Estate Agreements Executed by Administrative Authority, April 1, 2024, to June 30, 2024

Realty Transactions: April 1, 2024 - June 30, 2024

File No.	Approved By:	Ward	Project	Transaction	Financial Implication for Term
Acquisition - April 1, 2024 - June 30, 2024					
Ar-08-114,Ar-08-117 and Ar-08-118	Commissioner Public Works & Engineering	1	Agreement of Purchase and Sale with Credit Valley Conservation Authority, 0 McLaughlin Rd N, 521 & 545 Williams Parkway, permanent. Term: Not Applicable	Agreement of Purchase and Sale	Nil
L16.COB.N.2	Heidi Dempster, General Manager of Transit	1	Transit Lunch Rm - Office 1 Nelson Street, Suite 12B Term: July 1, 2024-June 30, 2025	Lease Extension and Amending Agreement	\$28,514.25
PE-24-101	Commissioner of Public Works & Engineering	8	Agreement of Purchase and Sale Permanent Easement with Alectra Utilities Corporation, 0 Goreway Drive, permanent. Term: Not Applicable	Agreement of Purchase and Sale	Nil

Realty Transactions: April 1, 2024 - June 30, 2024

File No.	Approved By:	Ward	Project	Transaction	Financial Implication for Term
Dispositions: April 1, 2024 - June 30, 2024					
L16COBY.2.	Commissioner of Public Works and Engineering	7	151 Central Park Drive Knightsbridge Park Term: June 19, 2024 - October 31, 2026	Crane Swing Agreement	N/A
PM01W04E	Commissioner of Public Works & Engineering	1	Permanent Easement with Redwalk Brampton Inc. on Mill Street Right of Way. Term: Not Applicable.	Agreement of Purchase and Sale	\$9,735.00
L16C.19.2	Commissioner, Community Services	3	Star Dairy Bar 8520 Creditview Road Term: June 1, 2023-September 30, 2024	Licence Agreement	\$10,200
L16M.15	Chief Administrative Officer	1	Dolcezza Custom Cakes 71 Main Street North Term: March 1, 2024-February 28, 2025	Lease Agreement	\$23,256.00
L16R.1.3	Commissioner, Legislative Services	4	Licence Agreement at 500 Ray Lawson Boulevard, Brampton, Ontario - Mike Gout and City of Brampton Term: Aug 1, 2022- July 31, 2024	Licence Agreement	year 1: \$8,760.00 year 2: \$15,550.00
PTE-24-100	General Manager Transit	10	Permission to Enter with the Regional Municipality of Peel, Mayfield-50 Commuter Lot, Term: May 1, 2024, to April 30, 2027.	Permission to Enter	Nil

Realty Transactions: April 1, 2024 - June 30, 2024

File No.	Approved By:	Ward	Project	Transaction	Financial Implication for Term
Dispositions: April 1, 2024 - June 30, 2024					
CTE-23-108	Commissioner Community Services	7	Consent to Enter Agreement with Toronto and Region Conservation Authority, Chrysanthemum Valley, Term: May 1, 2024 to December 31, 2025.	Consent to Enter Agreement	Nil
CTE-23-101	Commissioner of Community Services	7	Consent to Enter Agreement with Toronto and Region Conservation Authority, 43 Crawley Park, Term: July 1, 2024 to Dec 31, 2024.	Consent to Enter Agreement	Nil
CTE -24-123	Commissioner of Community Services.	1	885 Bovaird Dr. CTE with PD COMMERICAL LAKELANDS INC Term: May 17, 2024-Dec 31,2025	Consent to Enter Agreement	Nil
L16COB.W.2	Commissioner, Community Services	3	Evacuation Licence Agreement (1) - Terry Miller Recreation Centre - 1295 Williams Parkway, Brampton, Ontario - City of Brampton and The Governing Council of The Salvation Army in Canada O/A Noah's Ark Daycare Term May 1, 2024 to April 30, 2027	Licence Agreement	N/A
<i>Note (1): Licence granted for the temporary access/accommodation to the licensee in the event of a disaster</i>					
L16Y4	Commissioner, Community Services	3	Licence Agreement - Bill Davis Memorial - Peel Arts Gallery, Museum and Archive - City of Brampton and Region of Peel Term: April 30, 2024 to April 30, 2064	Licence Agreement	N/A

Realty Transactions: April 1, 2024 - June 30, 2024

File No.	Approved By:	Ward	Project	Transaction	Financial Implication for Term
Dispositions: April 1, 2024 - June 30, 2024					
L16A.1.1	Commissioner, Community Services	3	Lease Agreement - 55 Avondale Blvd - 758 Squadron Royal Canadian Air Cadets and the City of Brampton Term: Sept 1, 2023 to Aug 25, 2025	Lease Agreement	Year 1 - \$6,697.44 Year 2 - \$6,831.39
L16G82	Commissioner, Community Services	10	Licence Renewal and Amending Agreement - 10100 The Gore Road - Telecommunications Tower Operation - City of Brampton and Bell Mobility Term Oct. 1, 2025 to Oct. 30, 2030	Licence Renewal and Amending Agreement	year 1: \$24,289.77, year 2: \$24,775.57, year 3: \$25,271.08, year 4: \$25,776.50
L16H.10.1	Chief Administrative Officer	3	Licence Agreement with Noor Auto Trade Inc. for Parking space at 9 Hansen Road South Term: June 1, 2024 To: May 31, 2025	Licence Agreement	\$61,000 + HST

Date: 2024-07-31

Subject: **Etobicoke Creek Watershed Plan Update**

Contact: Pam Cooper, Manager, Environmental Planning, Environment and Development Engineering Division

Report number: Planning, Bld & Growth Mgt-2024-651

RECOMMENDATIONS:

1. That the presentation from Pam Cooper, Manager, Environmental Planning, Environment and Development Engineering Division to the Committee of Council Meeting of September 4, 2024, re: **Etobicoke Creek Watershed Plan Update**, be received.

Attachment:

- Etobicoke Creek Watershed Plan Presentation

Etobicoke Creek Watershed Plan Overview

City of Brampton, Committee of Council

September 4, 2024

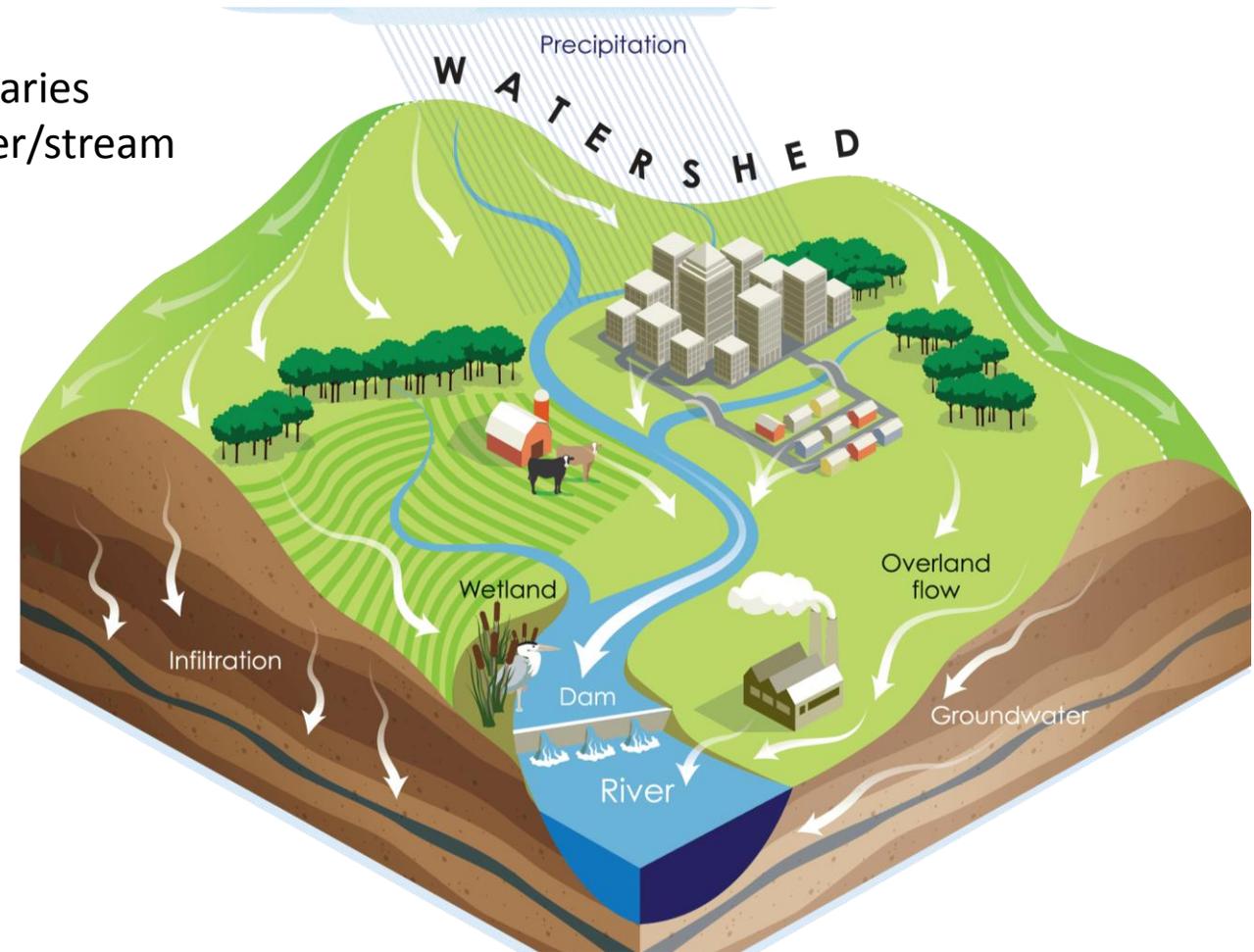


What is a watershed?

- Land area that is drained by a river or creek and its tributaries
- Tributaries are smaller streams that feed into a larger river/stream

What are some benefits of healthy watersheds?

- Support ecosystems and biodiversity
- Reduce flood and erosion risks
- Provide clean drinking water and water for agriculture, industry, and homes
- Improve climate resiliency



Integrated Watershed Planning

- Provides a systematic framework as per provincial guidance:
 1. Assesses current and potential future conditions of the watershed
 2. Identifies measures and actions to protect, restore, and enhance watershed health and build resiliency to land use and climate changes
- Informs various TRCA and municipal initiatives including land use and infrastructure planning, ecosystem restoration and management, land management, low impact development and green infrastructure implementation, and climate adaptation planning
- Provincial plans and policies require municipalities to complete watershed plans, in partnership with Conservation Authorities



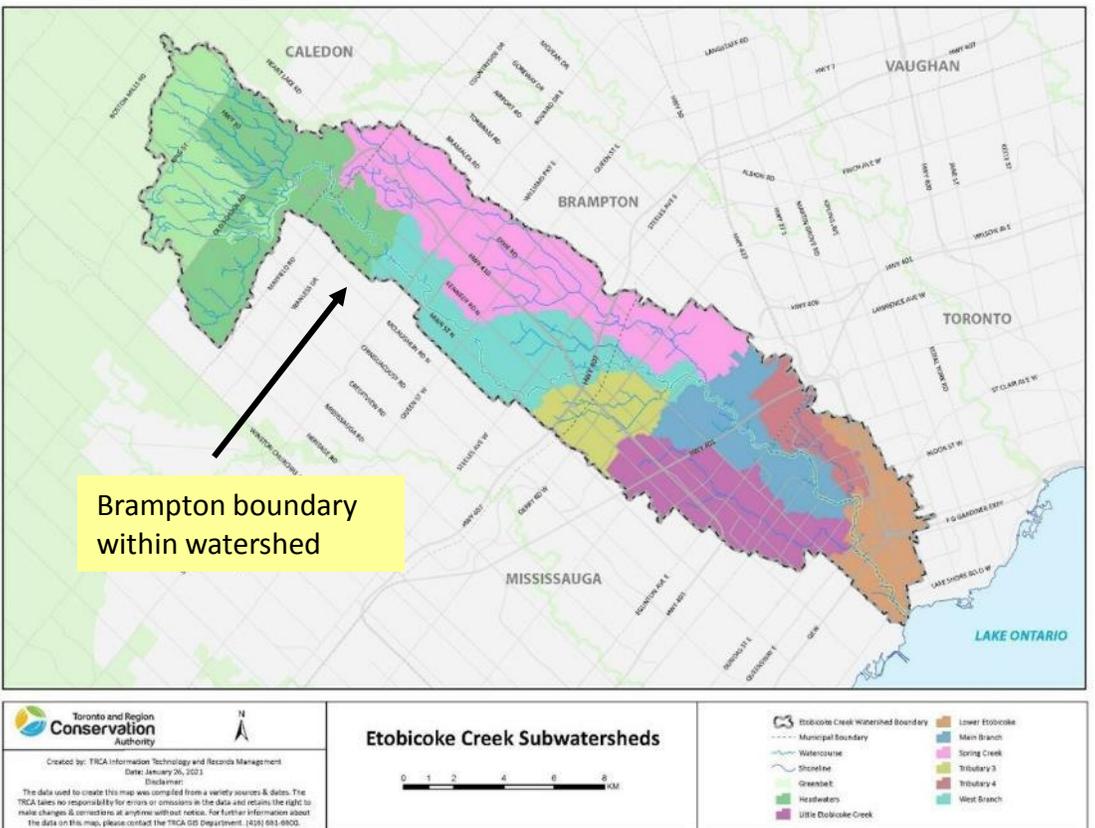
Etobicoke Creek Watershed Plan

Watershed Vision

Etobicoke Creek watershed is protected and restored to a cleaner, healthier, and more natural state, to sustain its waterways, ecosystems, and human communities.

Watershed: 22,404 ha - 60% urban, 28% rural, 12% natural

Brampton: 7432 ha (~33% of watershed) - 24% urban, 5% rural, 4% natural

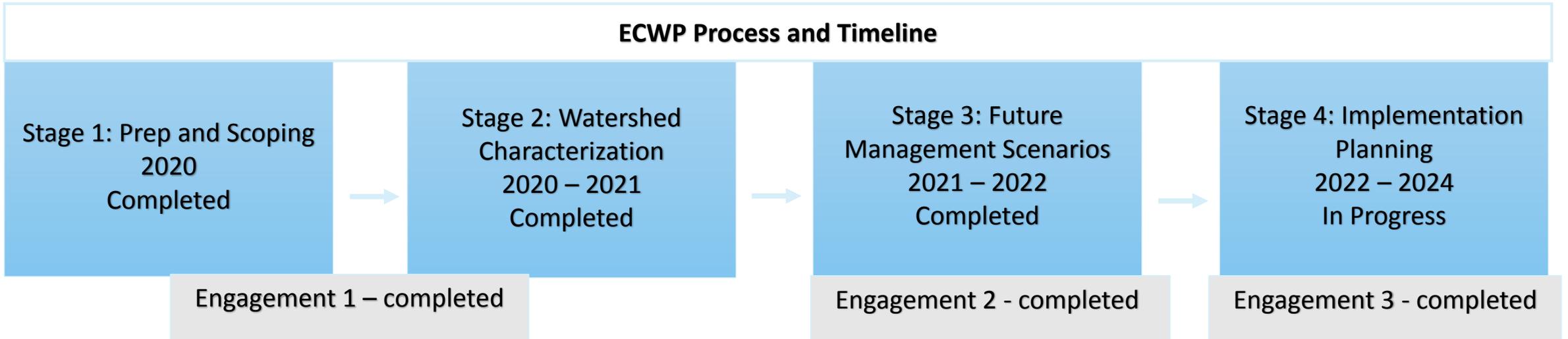


Etobicoke Creek Watershed Plan

Multi-year collaborative process between:

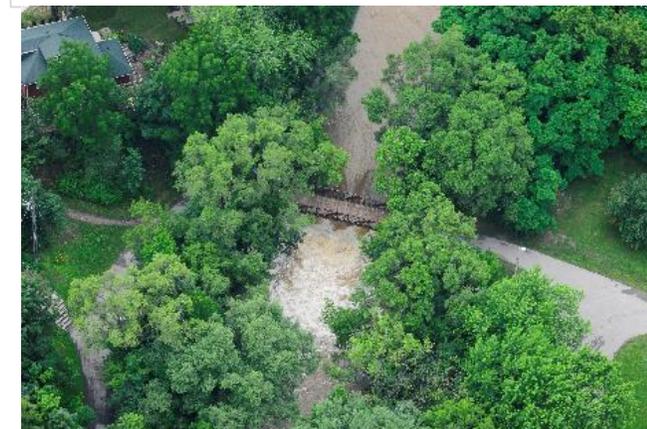
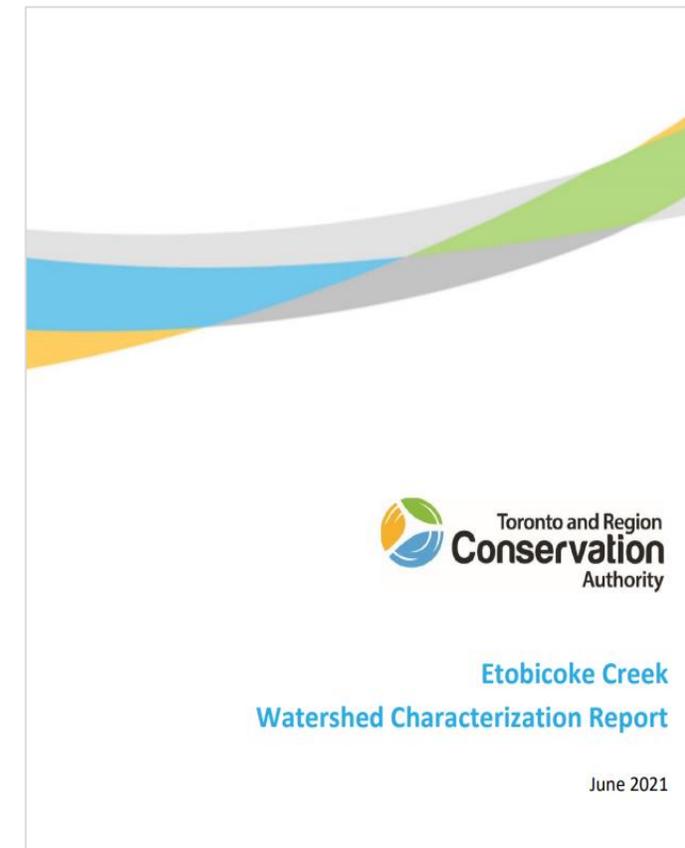
TRCA, City of Toronto, Region of Peel, City of Mississauga, City of Brampton, Town of Caledon, Mississaugas of the Credit First Nation, and the Greater Toronto Airports Authority.

ECWP Process and Timeline



Key Findings: Watershed Characterization

Key Components	Watershed Characterization Key Findings
Water Resources	<ul style="list-style-type: none"> • Aquatic ecosystem is sensitive & poor aquatic habitat • High amount of runoff and in-stream barriers which prevent the movement of species
Natural Heritage & Urban Forest	<ul style="list-style-type: none"> • Low natural cover and urban forest canopy cover • Degraded terrestrial habitat quality
Water Quality	<ul style="list-style-type: none"> • Surface water quality is generally poor compared to other TRCA watersheds • Contaminants of concern include chlorides, Phosphorus, E.coli bacteria, and metals (copper & zinc)
Natural Hazards	<ul style="list-style-type: none"> • Six Flood Vulnerable Clusters (two in Brampton) • Medium/high erosion sensitivity



Key Findings: Future Management Scenarios

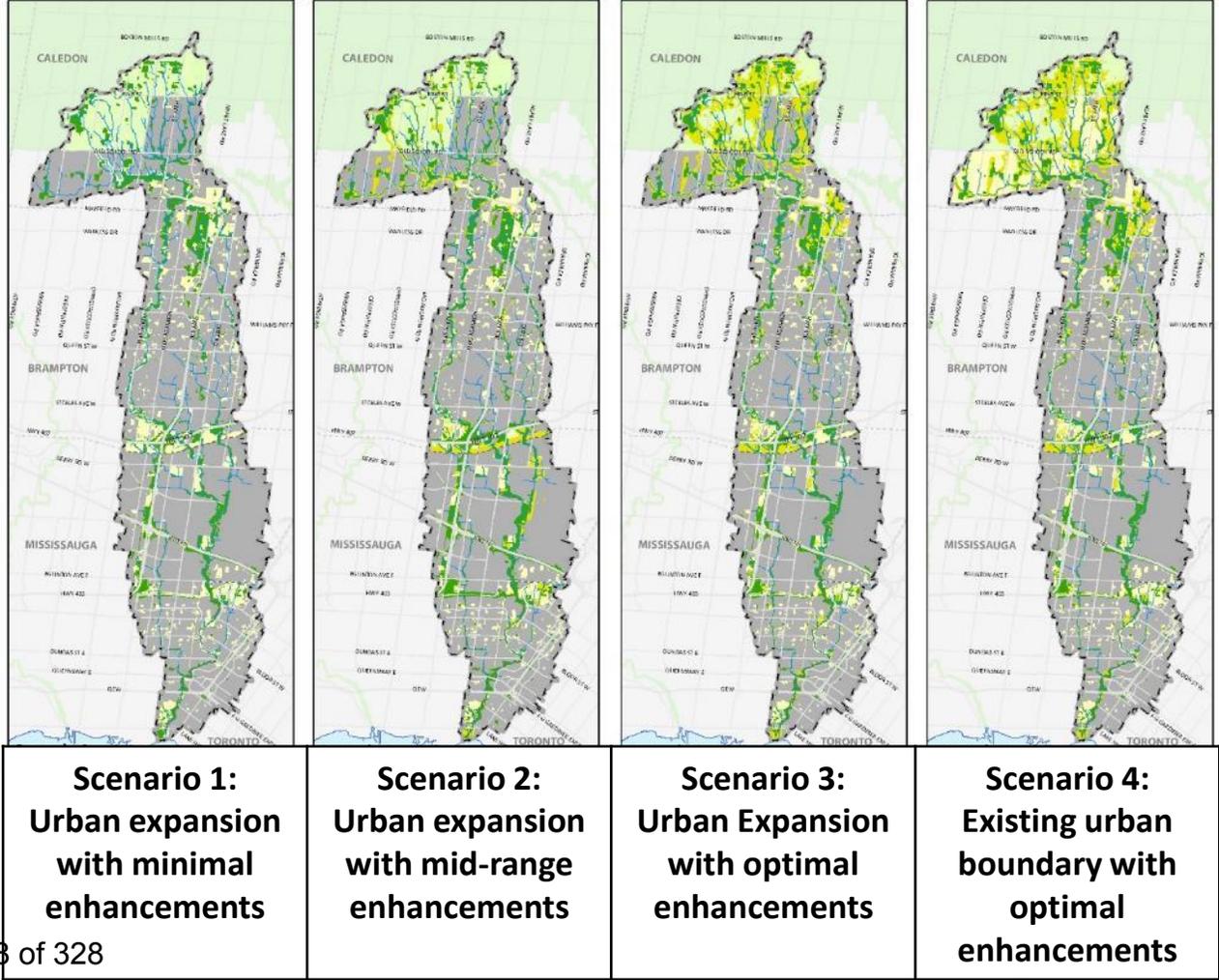
- Urbanization and climate changes negatively affected all four components of watershed health.
- However, the increasing levels of natural cover enhancements and stormwater management seem to help mitigate these impacts and increase climate resiliency.



Alfred Kuehne:
Before (2010)



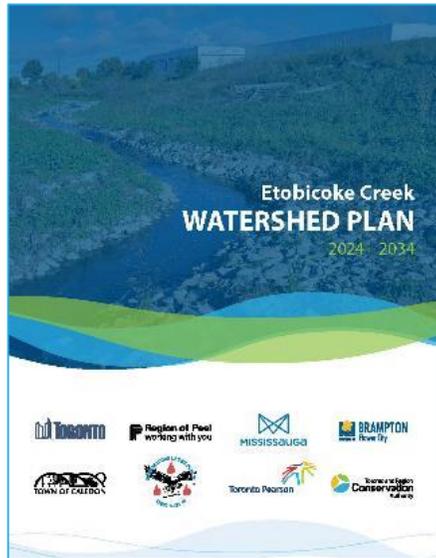
Alfred Kuehne:
After (2019)



ECWP Management Framework

ECWP Alignment with City of Brampton's Policies, Plans, Strategies, and Programs

- Brampton Plan (City Council adopted November 2023)
- Lake Enhancement Strategy (adopted 2021)
- Our 2040 Energy Transition: Community Energy and Emissions Reduction Plan (adopted 2020)
- Brampton Eco Park Strategy (adopted 2019)
- Brampton One Million Trees Program (adopted 2019)
- Natural Heritage and Environmental Management Strategy (adopted 2015)
- Brampton Grow Green Environmental Master Plan (adopted 2014, refresh 2020)



Management Framework Components

3 Goals

8 Objectives

10 Indicators

36 Management Actions

Overview of Management Framework

GOAL 1

Land Use

Achieve sustainable land use and infrastructure development patterns to improve watershed conditions and enhance climate resiliency.

OBJECTIVE 1

Minimize the impacts of human land uses through the adoption and implementation of sustainability policies, low impact development (LID), and green infrastructure.

Indicator:

Complete LID or green infrastructure projects in the recommended areas that would benefit most from LID or green infrastructure implementation ([Map 1](#)).

OBJECTIVE 2

Retrofit, upgrade, and install stormwater infrastructure using best available technologies to reduce the impacts of untreated runoff entering receiving waters.

Indicator:

Evaluate improvements to stormwater management across the watershed through municipal tracking and reporting on stormwater assets, drainage areas (i.e. sewersheds), and service levels.

OBJECTIVE 3

Reduce the risks associated with natural hazards through enhanced flood and erosion mitigation.

Indicators:

Flooding: implement risk reduction measures in 50% of Flood Vulnerable Clusters.

Erosion: continue monitoring and remediating infrastructure hazard sites for participating municipal partners, implementing the assessment and maintenance of erosion control asset systems.

OBJECTIVE 4

Encourage the use of agricultural best management practices to minimize agricultural runoff and improve rural land stewardship.

Indicator:

Track the number of landowners that implement best management practices.



GOAL 2

Water Resource System

Protect, enhance, and restore the areas and features that comprise the Water Resource System (including aquatic habitat) for ecosystem resilience and sustainability.

OBJECTIVE 1

Implement appropriate policies and programs that identify, protect, enhance, and restore the areas and features that comprise the Water Resource System.

Indicator:

Complete restoration projects at 75% of identified priority aquatic sites ([Maps 3A and 3B](#)).

OBJECTIVE 2

Improve aquatic habitat connectivity and reduce the impacts of pollutants on aquatic health.

Indicator:

Maintain, or improve, aquatic health rankings.



GOAL 3

Natural Heritage System and Urban Forest

Protect, enhance, and restore the Natural Heritage System and urban forest within the watershed to improve ecosystem resilience and sustainability.

OBJECTIVE 1

Improve the quality and quantity of the Natural Heritage System through ecosystem and biodiversity protection, enhancement, and restoration.

Indicators:

Habitat Quantity: increase total natural cover in the watershed.

Habitat Quality: maintain, or improve, terrestrial ecosystem quality rankings.

OBJECTIVE 2

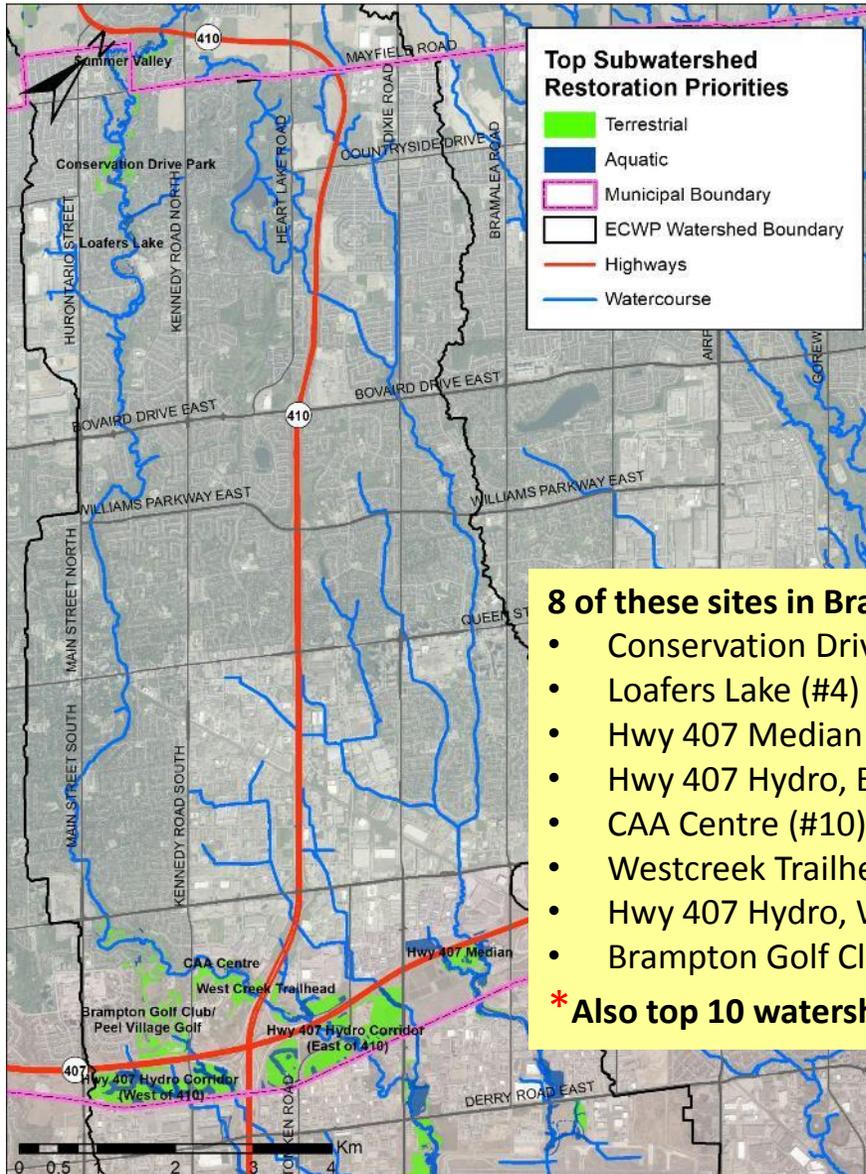
Increase urban forest canopy cover throughout the watershed to improve social and environmental well-being.

Indicator:

Increase canopy cover in the watershed to achieve a minimum target of 16%.



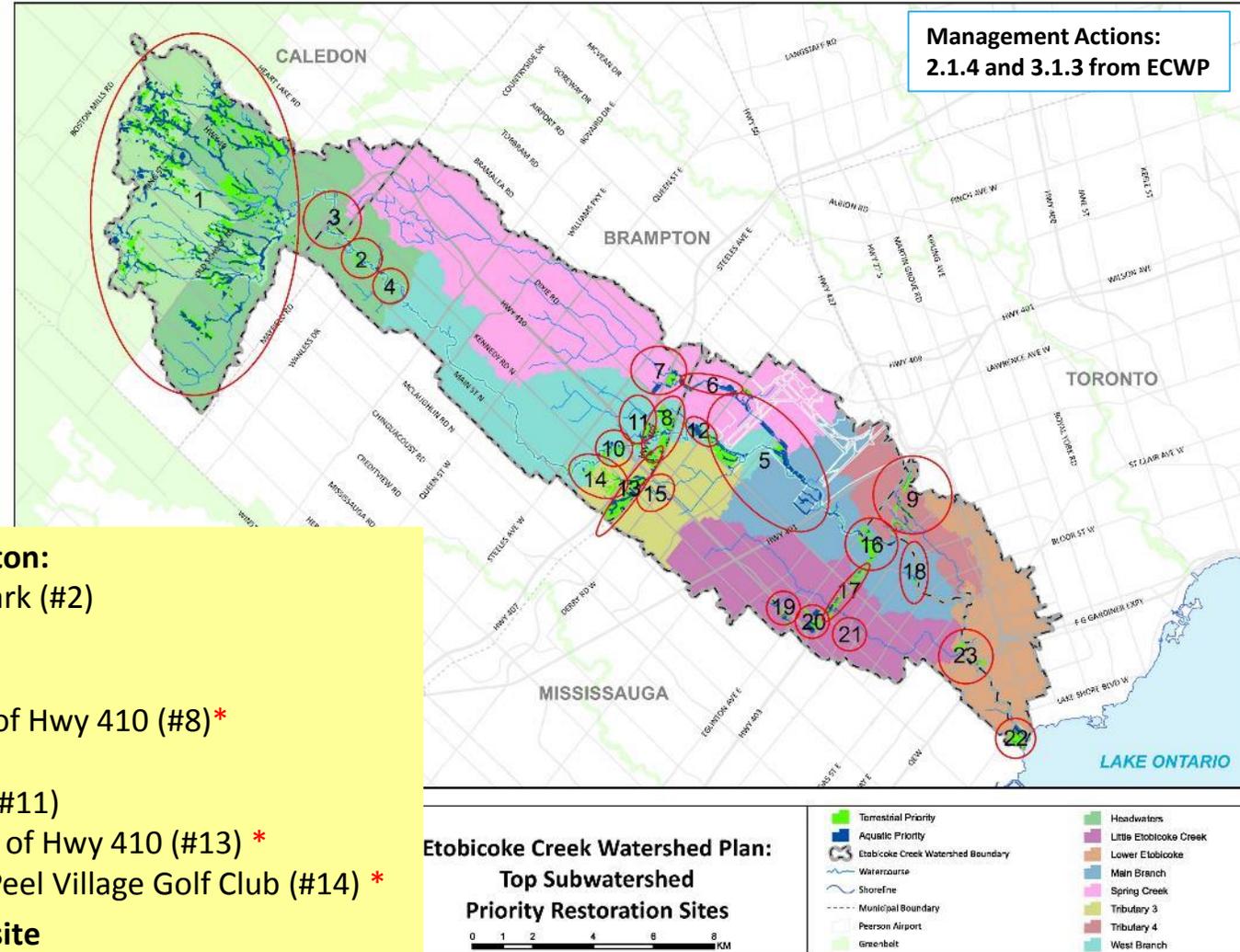
ECWP Priority Areas – Priority Restoration Sites



8 of these sites in Brampton:

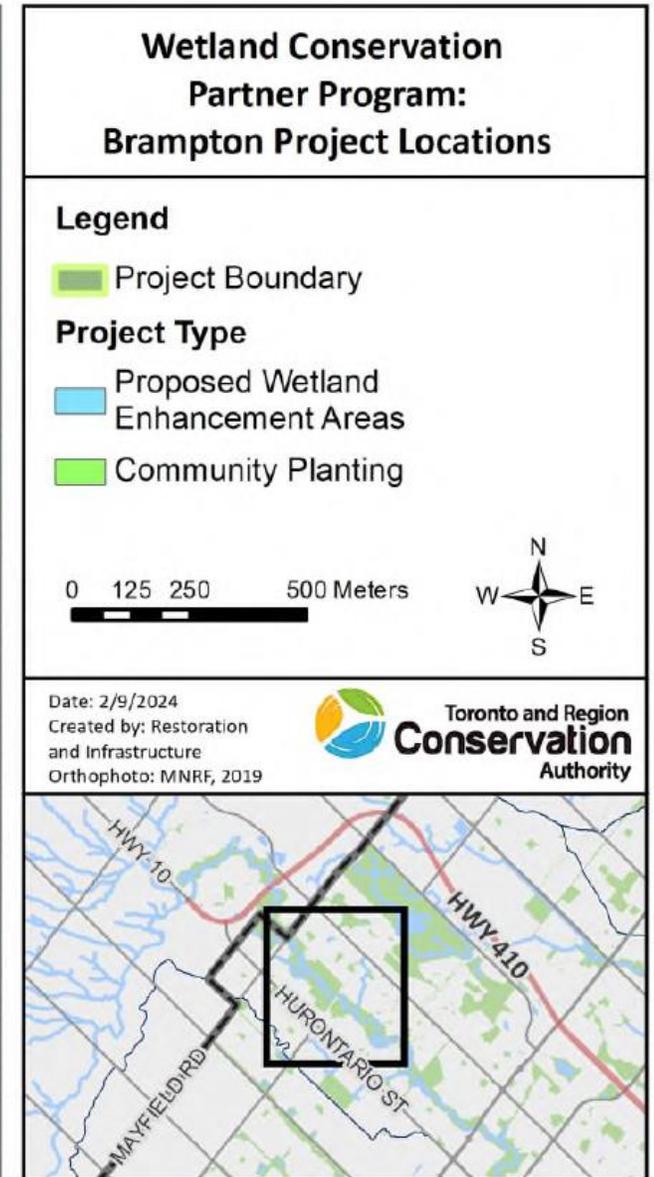
- Conservation Drive Park (#2)
- Loafers Lake (#4)
- Hwy 407 Median (#7)
- Hwy 407 Hydro, East of Hwy 410 (#8)*
- CAA Centre (#10) *
- Westcreek Trailhead (#11)
- Hwy 407 Hydro, West of Hwy 410 (#13) *
- Brampton Golf Club/Peel Village Golf Club (#14) *

* Also top 10 watershed site

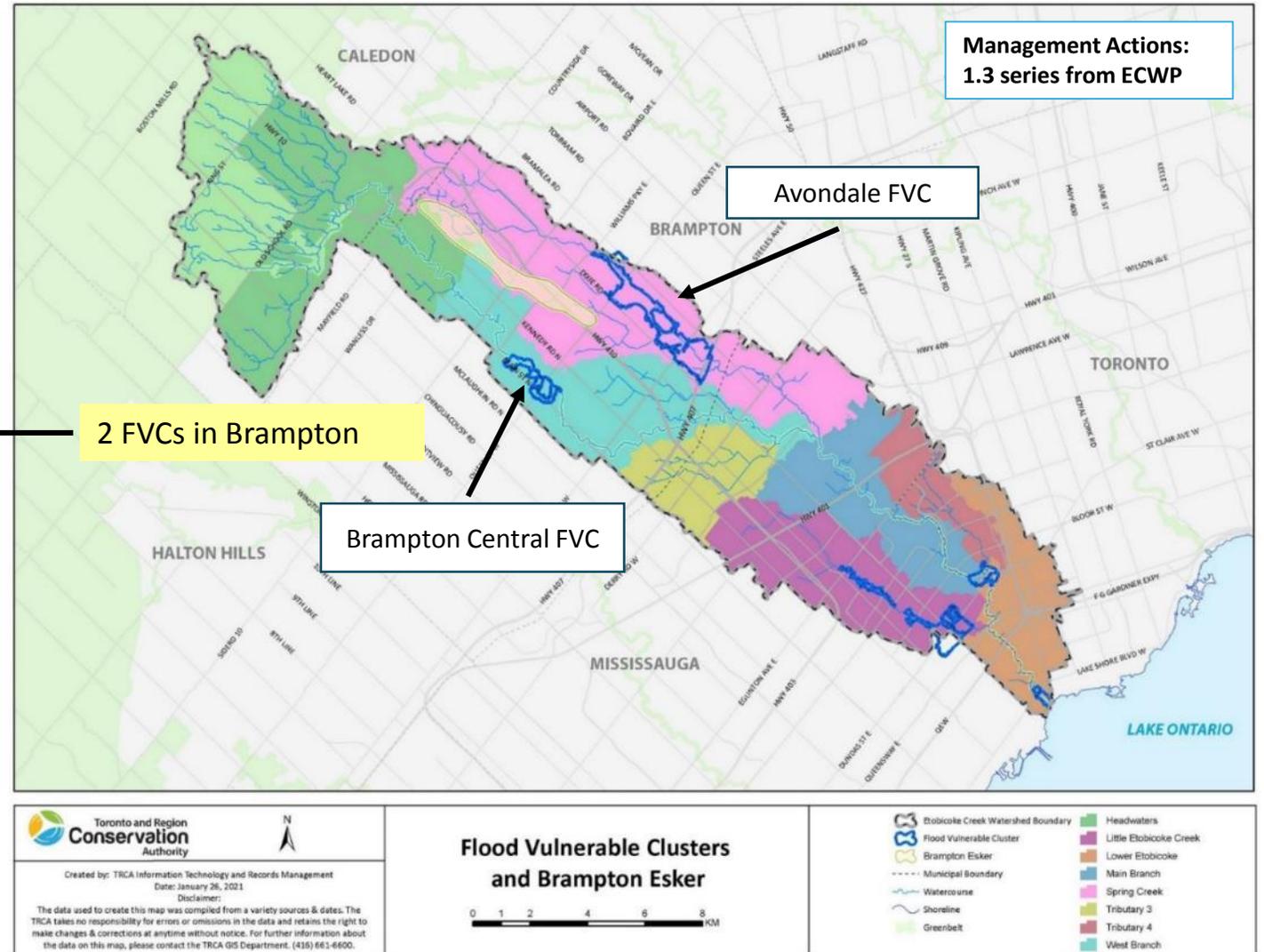
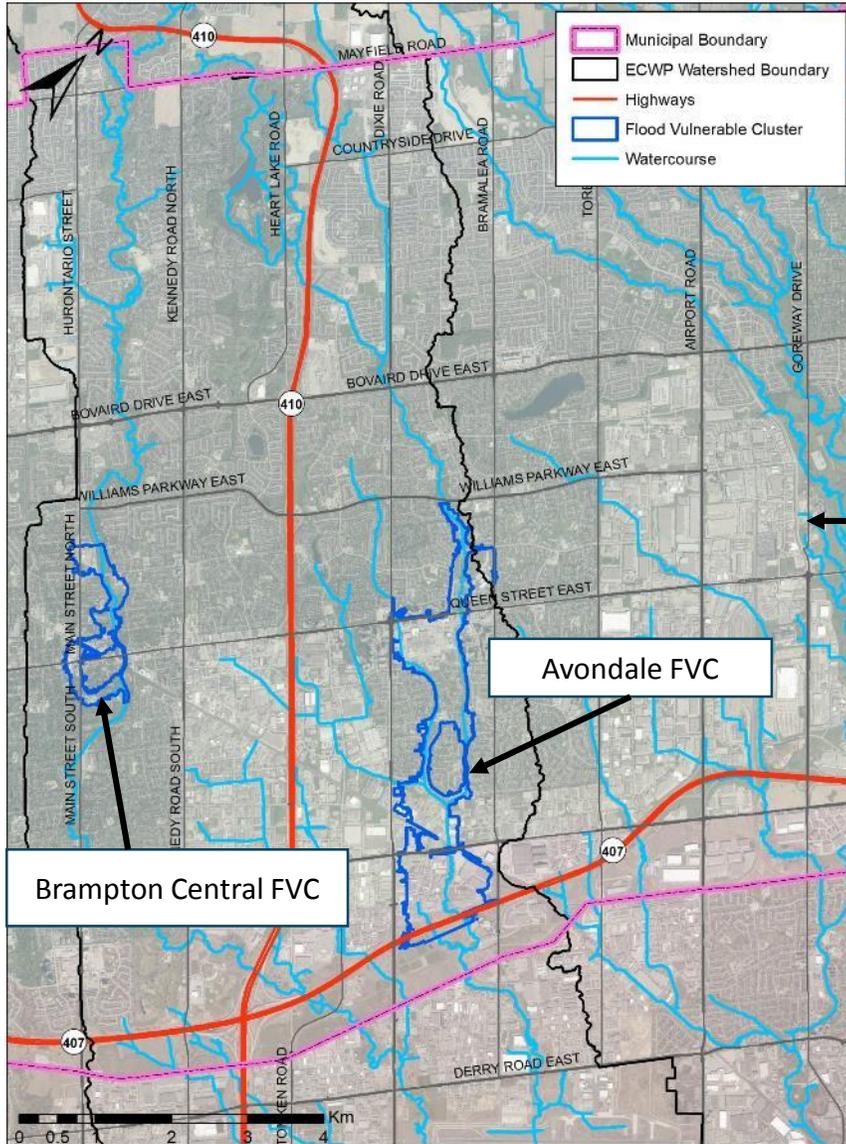


ECWP Priority Areas – Loafers Lake and Conservation Dr.

- Funding is supported by the Government of Ontario's Wetland Conservation Partnership Program
- March 2024, the City of Brampton was awarded \$2.5 million for the Etobicoke Creek Wetlands Enhancement Project
- Enhancements as outlined in Brampton's Lake Enhancement Strategy, including improved shoreline and wetland habitat, viewing platforms, a bio-swale, and trail realignment
- Over 6,500 native trees, shrubs, and aquatic plants will be planted within the project area



ECWP Priority Areas – Flood Vulnerable Areas



ECWP Next Steps

- TRCA will be seeking approval/endorsement of ECWP from the Town of Caledon in Fall 2024; already received approval/endorsement from Peel, Toronto, and Mississauga earlier in 2024
- Recommending Council endorse the ECWP and support on-going implementation of the watershed plan
- Obtain final approval from TRCA's Board of Directors and release final ECWP – Fall 2024
- Establish ECWP Implementation Steering Committee and implementation tracking mechanisms/tools – Q4 2024 / Q1 2025
- ECWP Implementation – 2024-2034

ECWP Links

- [Project webpage](#)
- [Updated ECWP](#)
- [Online interactive ECWP](#)
- [Engagement Summary 3](#)



Thank you!

Date: 2024-08-12

Subject: **Centre for Community Energy Transformation (CCET) Update**

Contact: Pam Cooper, Manager, Environmental Planning, Environment and Development Engineering Division

Report number: Planning, Bld & Growth Mgt-2024-663

RECOMMENDATIONS:

1. That the presentation from Pam Cooper, Manager, Environmental Planning, Environment and Development Engineering Division to the Committee of Council Meeting of September 4, 2024, re: **Centre for Community Energy Transformation**, be received.

Attachments:

- Centre for Community Energy Transformation (CCET) Update Presentation

Centre for Community Energy Transformation Update

Presentation for Committee of Council

September 4, 2024



Climate Emergency



Source: Insauga 2022



source: The Pointer 2019



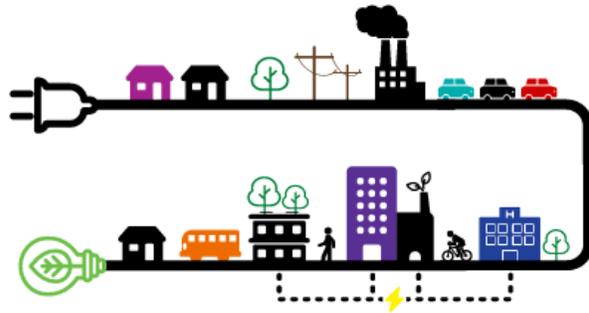
source: X 2024



source: Global News 2013

OUR 2040 ENERGY TRANSITION

Community Energy and Emissions
Reduction Plan



Community Task Force

Garforth International Inc
Energy Productive Solutions

Sheridan

Get
Creative

 BRAMPTON

Community Energy & Emissions Reduction Plan

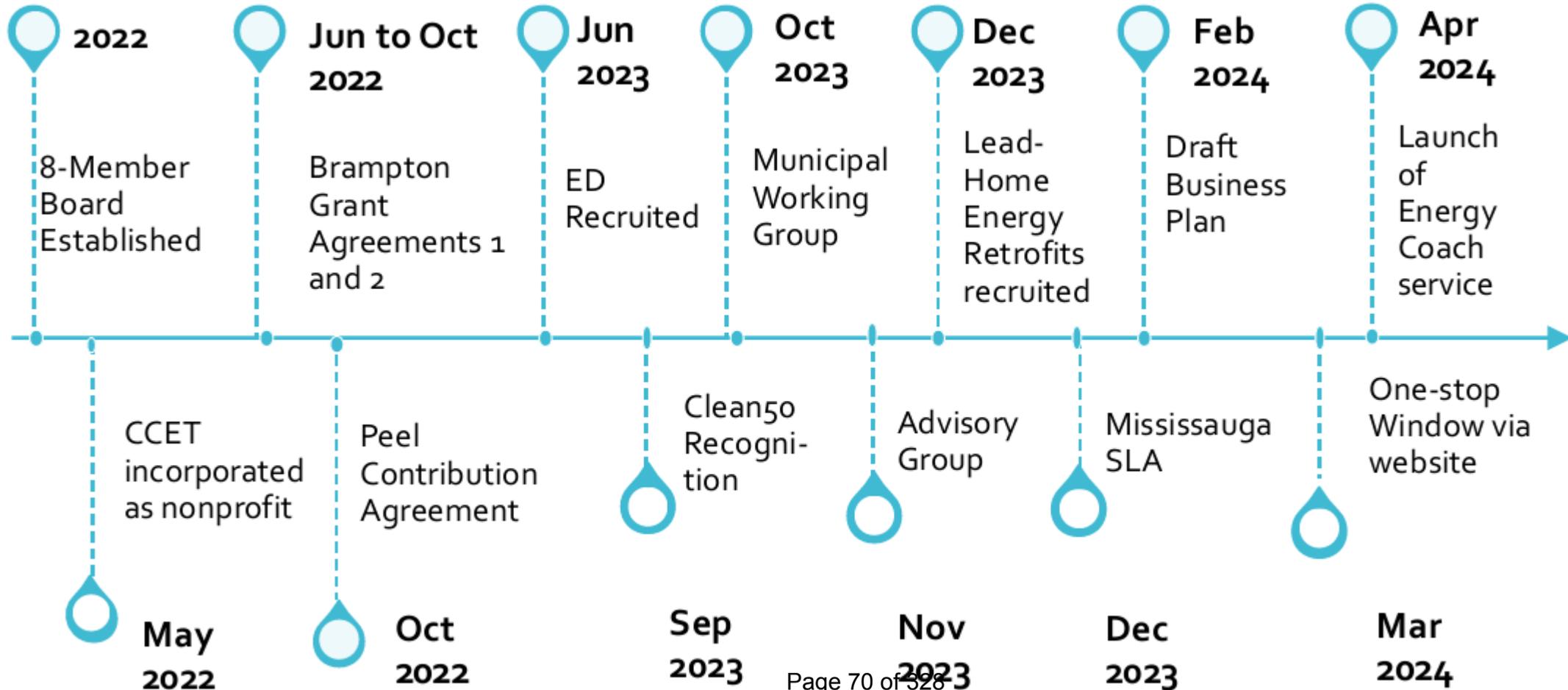
- Collective challenge
 - 2030: ↓ GHG emissions 30% below 2016 levels
 - 2040: ↓ GHG emissions 50% below 2016 levels
- Priority Project: establish a Community Organization to lead the development and Implementation of select priority projects
- Council endorsed in 2020

Centre for Community Energy Transformation (CCET)

- Current climate emergency and energy transformation is beyond ability of one community sector to address
- CCET is the way to address this gap to facilitate our necessary collective actions
- Bring the 2040 Vision to life by continuing to support its first catalytic action
- Council endorsed establishment of CCET in 2020
- Brampton agreed to provide funding for costs to incorporate as a non-profit/costs for first year of operation
- Not-for-profit community organization
- Providing an update at the end of first Service Level Agreement



CCET Progress



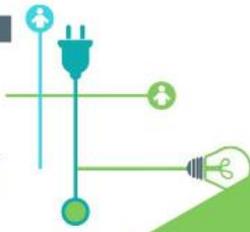
CCET Funding

- ✓ CW030-2022 re-allocated \$300,000 in existing capital funds from the Environmental Master Plan budget to the costs to establish CCET and costs for first year of operations
- ✓ Service Level Agreement
- ✓ Region of Peel \$100,000
- ✓ City of Mississauga \$100,000
- ✓ Additional SLAs currently in discussion with Peel, Mississauga and Caledon (2025-2027)
- ✓ Evaluating various foundations and Federal/Provincial government grants for additional funding



CCET

Centre for Community
Energy Transformation



Low Carbon District Energy Forum

Help Shape the Energy Future
Tues. Nov 5th, 9am-5pm

Get Started with a FREE Energy Saving Kit

If you meet the income qualifications, we'll send you a free energy saving kit.

[SIGN UP HERE](#)

Handy at Home?

Many quick fixes you can do today at little, or no cost. They may provide you with immediate comfort and cost savings.

Check out these DIY Tips!

[QUICK FIX DIY TIPS](#)

The Energy Savings Begin With a Call

By providing your coach with your utility information, heating and cooling systems, and household habits, we'll be able to suggest the most beneficial upgrades to ensure the greatest energy and cost savings.

[SIGN UP FOR YOUR COACHING HERE](#)



Ontario Geothermal Association
2024 OGA Conference Sponsor

energytransform.ca

CCET Business Plan

- Focus on priority actions:
 - **Home Retrofit Program, District Energy, ICI Efficiency, Outreach and Engagement**
- Aligns with Priority Projects in the CEERP
- Residential Energy Retrofit Program: increasing awareness of home energy retrofits by attending community events, establishing partnerships with other organizations, preparing applications to secure program funding, conducting further research into program options, launched an energy coach service and a one-stop window
- District Energy: Heritage Heights Secondary Plan, Downtown Brampton Secondary Plan, Low Carbon District Energy Forum



Recommendations

- City of Brampton enter into a Service Level Agreement (SLA) with the not-for-profit Centre for Community Energy Transformation (CCET), for operations related to establishing a home energy retrofit program and integrating district energy
- Commissioner, Planning, Building & Growth Management be authorized to negotiate the SLA with the CCET Board and be delegated the authority to execute the SLA with the CCET on such terms and conditions as the Commissioner, Planning, Building & Growth Management approves and, in a form, satisfactory to the City Solicitor or designate
- City of Brampton support CCET in the investigation of opportunities to work with and enter into SLAs with other agencies and organizations to provide energy planning services.



Federal Programs



Utilities & Provincial Programs



Loans & Financing



Rebates & Incentives



Income Qualified FREE Programs

Thank you

Pam Cooper, Manager, Environmental Planning



What is a Home Retrofit

[Learn More](#)



DIY Tips and Easy
Retrofits

[Learn More](#)



Do you Need Financial
Help?

[Learn More](#)



District Energy For
Businesses

[Learn More](#)



Report
Staff Report
 The Corporation of the City of Brampton
 9/4/2024

Date: 2024-07-24

Subject: **Recommendation Report - Etobicoke Creek Watershed Plan Update**

Contact: Pam Cooper, Manager, Environmental Planning, Environment & Development Engineering

Report number: Planning, Bld & Growth Mgt-2024-638

RECOMMENDATIONS:

1. That the report from Pam Cooper, Manager, Environmental Planning, Environment and Development Engineering Division to the Committee of Council Meeting of September 4, 2024, re: **Recommendation Report - Etobicoke Creek Watershed Plan Update**, be received;
2. That the Etobicoke Creek Watershed Plan attached as Attachment 1 to this report be endorsed.

OVERVIEW:

- **Watershed planning is a requirement of Provincial plans and policies and helps identify ways to protect, enhance and restore watershed health to ensure resilient ecosystems and safe communities over the long term.**
- **The last watershed plan for Etobicoke Creek was completed in 2002. Development of a new watershed plan started in 2020 and was completed in 2024. This new Etobicoke Creek Watershed Plan (ECWP) was developed using the latest available science and data to inform future municipal land use and infrastructure planning decisions, however, the ECWP is not a land use plan and does not make land use and infrastructure planning decisions.**
- **The ECWP will also help inform other municipal initiatives aimed at improving watershed health and safety, such as:**
 - **sustainability and climate change adaptation planning,**
 - **green space securement and management,**
 - **ecosystem restoration and management,**
 - **best practices for low impact development and green infrastructure implementation,**

- **stormwater management planning and retrofit, flood and erosion remediation,**
- **urban revitalization initiatives.**

- **The ECWP and its management actions align with City of Brampton policies, programs, and studies, including Brampton’s new Brampton Plan, Lake Enhancement Strategy and Environmental Master Plan.**
- **Work is already underway at a Priority Restoration site (Loafers Lake and Conservation Drive Park) due to \$2.5 million for the Etobicoke Creek Wetlands Enhancement Project from the Government of Ontario's Wetland Conservation Partnership Program. Enhancements include improved shoreline and wetland habitat, viewing platforms, a bio-swale, trail realignment and planting over 6,500 native trees and shrubs.**
- **Following endorsement/approval from participating municipal Councils, the ECWP will be finalized after approval by TRCA’s Board of Directors (anticipated in Fall 2024).**

BACKGROUND:

Watershed planning is a requirement of Provincial plans and policies. The last watershed plan for Etobicoke Creek was completed in 2002. An update of implementation priorities, incorporating new information, was completed in 2010. Watershed Characterization for a new watershed plan started in 2020.

Watersheds

A watershed refers to an area that is drained by a river and its tributaries. Healthy watersheds provide numerous ecosystem services and benefits, such as flood and erosion protection, clean water, biodiversity, climate resiliency, and recreational opportunities. These services and benefits are critical to sustaining healthy and resilient ecosystems and safer human communities over the long term.

The purpose of a watershed plan is to help understand current and potential future watershed conditions at the larger scale, and identify strategic measures and actions to protect, enhance, and restore watershed health and build resiliency to land use and climate changes. Watershed planning accounts for both the natural system and human system and helps inform sustainable land use and infrastructure planning decision-making and climate adaptation planning.

Provincial policy recognizes watershed planning as the most ecologically meaningful scale for integrated and long-term planning. Watershed planning is required by Provincial plans and policies (Provincial Policy Statement, Growth Plan, and Greenbelt

Plan) which require that watershed planning be undertaken to identify and protect natural resources and areas and to protect the quantity and quality of water resources.

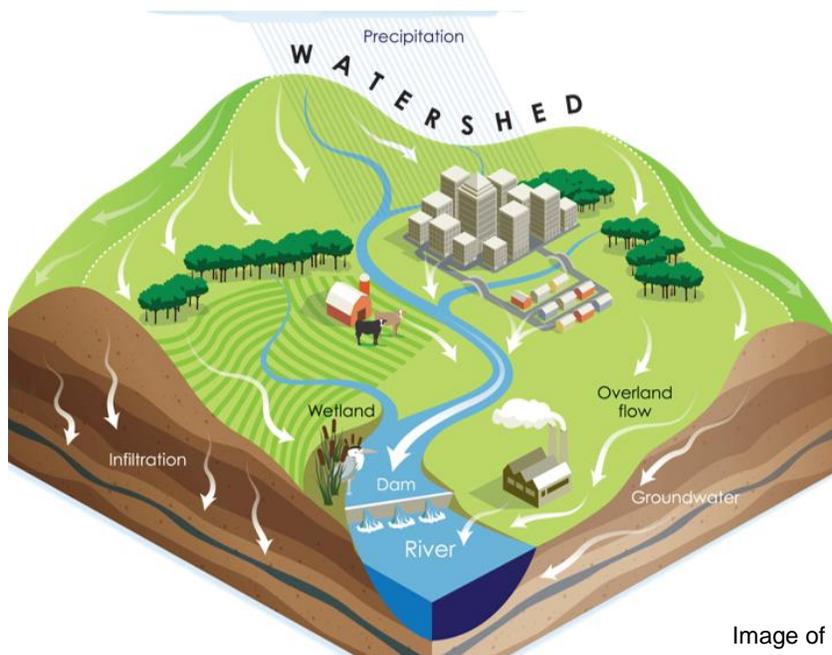


Image of a Watershed

Watershed plans are not land use plans and do not make land use planning decisions. However, the data, scientific analysis, modelling, scenario evaluation, and management actions/priorities generated through a watershed planning process are used by municipalities to help inform future land use and infrastructure planning decisions.

Watershed plans can also be an excellent resource for municipalities to inform:

- sustainability and climate change adaptation planning;
- green space securement and management;
- ecosystem restoration and management;
- best practices for low impact development/green infrastructure implementation;
- stormwater management planning and retrofit, flood and erosion remediation;
- urban revitalization initiatives.

Etobicoke Creek Watershed Plan (ECWP)

Etobicoke Creek is a heavily urbanized watershed and:

- has eight subwatersheds at the western end of TRCA's jurisdiction;
- is approximately 22,404 hectares in size;
- its headwaters originate in the Greenbelt in the Town of Caledon, before flowing south through the City of Brampton and City of Mississauga, and ultimately entering Lake Ontario in the City of Toronto;

- Brampton contains 33.2% of the watershed area (23.8% of the total watershed urban area, 5.1% of the total watershed rural area, and 4.3% of the total watershed natural area).

One important role that the ECWP plays is to ensure that growth decisions occurring in the upstream communities, such as in the Headwaters of the Etobicoke Creek watershed, do not adversely affect downstream communities including in the City of Brampton.

The development of the Etobicoke Creek Watershed Plan (ECWP) was a collaborative effort that started in 2020 with the formation of a Steering Committee, which included staff from TRCA, the City of Toronto, Region of Peel, City of Mississauga, City of Brampton, Town of Caledon, Mississaugas of the Credit First Nation, and the Greater Toronto Airports Authority.

City of Brampton staff (Environmental Planning, Environmental Engineering, Stormwater Programs, Planning, Building, and Growth Management Department) were integral members of the Steering Committee and provided input into development of the ECWP throughout the watershed planning process. Credit Valley Conservation was also engaged to ensure consistency in watershed planning approaches between the two conservation authorities. Other First Nations and Indigenous communities, watershed stakeholders, and members of the public were also engaged and involved through the watershed plan development process.

The development of the ECWP involved the following three key stages:

Stage 1 Watershed Characterization (2020-2021)	understand current watershed conditions and trends over the last 20 years, such as habitat quality and quantity, sensitive species, surface and groundwater quality and quantity conditions, and flooding and erosion issues. This stage culminated in the release of a Watershed Characterization Report in June 2021.
Stage 2 Future Management Scenarios (2021- 2022)	examine different potential future land use scenarios and the impacts of climate change (where possible) to understand how watershed conditions may change over time. A Future Management Scenario Analysis Report was released in July 2022. This report contains detailed information on the various scenarios analyzed and presents the findings from extensive watershed modelling and technical analyses for each technical component. The information contained in both the Characterization and Future Management Scenario Analysis Reports was used to inform the next stage of the watershed planning process.
Stage 3 Implementation Planning (2022- 2024)	developed a realistic management framework with priority actions to protect, enhance, and restore watershed health, and led to the development of the draft ECWP document. The management framework and draft ECWP were developed with extensive input and review by TRCA's internal Technical Committee and the ECWP Steering Committee. Information on the inventory, monitoring, and evaluation required to track implementation progress and watershed conditions was also included in the watershed plan.

The draft ECWP was released in Summer 2023 for a 60-day public review period (from August 1 to September 29, 2023). TRCA, with input from the Steering Committee, considered all the input and feedback received on the draft ECWP and have now updated the watershed plan to address the comments received.

CURRENT SITUATION:

Etobicoke Creek Watershed Plan Overview

The ECWP (Attachment 1) is divided into nine sections. A summary of each section is provided below. In addition, the ECWP includes a section on 'The Land and Water' which was developed in collaboration with Mississaugas of the Credit First Nation and includes information on the treaties within the watershed, the history of the land, and the Mississaugas' relationship to water.

Section	Summary
Introduction and Background	overview of the rationale and policy basis for watershed planning, the local context and considerations, and details of engagement
Water Resource and Natural Heritage Systems	key components of each system and provides an overview of how these two integrated systems provide essential ecosystem services
Existing Watershed Conditions	<p>current watershed conditions for four key watershed components, including the Water Resource System, Natural Heritage System and Urban Forest, Water Quality, and Natural Hazards, and a comparison of trends over the last 20 years. The findings show that the key issues in the Etobicoke Creek watershed that will need to be addressed to improve watershed health include:</p> <ul style="list-style-type: none"> • Water Resource System: aquatic habitat conditions are poor, and the watershed has a high amount of runoff and in-stream barriers that affect aquatic ecosystem health. • Natural Heritage System and Urban Forest: there is a low amount of natural cover and habitat quality is generally 'poor'. The remaining natural cover is highly vulnerable to the effects of climate change. • Water Quality: surface water quality is generally poor compared to other TRCA watersheds. • Natural Hazards: the watershed can be categorized as medium/high erosion sensitivity and has six Flood Vulnerable Clusters (two in Brampton, three in Mississauga, and one in Toronto).
Future Watershed Conditions	four potential future management scenarios assessed to help understand how watershed conditions may change in the future. This included examining the impacts of different levels of land use change, climate change (where possible), and the benefits of watershed enhancements on watershed health. Watershed enhancements included improvements to natural cover, urban forest canopy cover, and stormwater management practices, such as low impact development measures. Generally, the scenario analysis determined that as urbanization increases and the climate changes, there will be negative impacts to all four watershed components, which affects watershed health and resilience. However, the watershed

	enhancements help mitigate these impacts and contribute to a safer, healthier, and more resilient watershed
Management Framework	what needs to be done to protect, enhance, and restore the health of the watershed. The management framework includes eight objectives, 10 indicators, and 36 management actions under three main goals related to: 1) Land Use; 2) Water Resource System; and 3) Natural Heritage System and Urban Forest.
Implementation, Monitoring and Evaluation	overview of the process to be used for implementation, tracking, and reporting of the ECWP. This includes identifying resources and funding required for implementation. Additionally, this section provides information on the inventory, monitoring, and analysis that will take place to evaluate watershed health over time and inform adaptive management
Maps, Glossary, References, and Appendices	supporting resources in the form of key maps showing priority areas to help focus implementation, a glossary of terms, references, and two appendices with supporting information.

Engagement

The development of the ECWP has been a collaborative process with TRCA, the municipalities within the watershed, Mississaugas of the Credit First Nation, and the Greater Toronto Airports Authority. Engagement with Credit Valley Conservation, other First Nations and Indigenous communities, watershed stakeholders, and the public has taken place throughout the watershed plan development process.

The purpose of this engagement was to receive input and feedback on the watershed plan and to raise awareness about key issues in the watershed. Engagement has occurred using a variety of methods and activities to ensure the greatest degree of engagement possible. This included regular updates to the [ECWP project webpage](#), social media posts, and seeking input using online interactive tools.

TRCA also sent out direct notifications at key milestone points to First Nations and Indigenous communities, local and regional Councillors whose wards have boundaries within the watershed, TRCA Board members, Regional Watershed Alliance members, webpage subscribers, and watershed stakeholders, residents and the public on the project stakeholder list.

Watershed stakeholders who were directly engaged throughout ECWP development included Building Industry and Land Development Association (BILD) and other developers in the watershed, community groups and resident associations, golf courses, major private landowners, and non-governmental organizations. In addition, TRCA also completed a series of targeted engagement sessions from 2020 to 2023, including four webinars, five open houses, and one watershed tour.

Key engagement activities that have taken place over the course of development of the ECWP include:

- **Dedicated project website:** 10,622 visits (January 2021 - March 2024)

- **Project specific email:** continuously maintained and monitored since 2020
- **Project webpage/email subscribers:** 35 subscribers
- **Project stakeholder list:** 83 stakeholders
- **Fall 2020 online engagement survey** related to issues of concern/watershed vision: 50 responses
- **Spring 2022 online engagement survey** related to results of characterization and scenario analysis and soliciting feedback on the management framework: 145 responses
- **Spring 2022 open houses and webinars:** three public open houses in May 2022 held in Mississauga, Brampton, and Caledon (20 attendees total); two virtual webinars in May 2022 (30 participants total)
- **Summer 2023 open houses and webinars for draft ECWP:** two public open houses in September 2023 held in Mississauga and Brampton (21 participants); two virtual webinars in September 2023 (18 participants); approximately 420 watershed stakeholders, residents, and the public directly engaged during draft ECWP public review period (excluding social media/media campaign)
- **[Online interactive ECWP](#):** 1221 views since publication in July 2023
- **Fall 2023 watershed tour:** hosted by TRCA on October 17, 2023 for TRCA Board members, municipal Councillors, municipal senior leadership staff, and ECWP Steering Committee members (31 participants)

Engagement Summary Reports were prepared throughout the watershed planning process to document feedback from watershed stakeholders and the public, and are publicly available on the [project webpage](#). The most recent report ([Engagement Summary 3](#)) outlines all comments received on the draft ECWP and responses as well as a summary of the key changes made to the ECWP based on engagement feedback.

ECWP Alignment with City of Brampton Policies, Programs, and Studies

The ECWP and its management actions align with the Council adopted Brampton Plan and are complemented by other City of Brampton policies, programs, and studies including:

- Lake Enhancement Strategy (adopted 2021)
- Our 2040 Energy Transition: Community Energy and Emissions Reduction Plan (adopted 2020)
- Brampton Eco Park Strategy (adopted 2019)
- Brampton One Million Trees Program (adopted 2019)
- Natural Heritage and Environmental Management Strategy (adopted 2015)
- Brampton Grow Green Environmental Master Plan (adopted 2014, refresh 2020)

Implementation

Once final approvals and endorsements of the Etobicoke Creek Watershed Plan have been obtained in 2024 from municipal Councils and from TRCA's Board of Directors,

implementation of the watershed plan will begin. The Etobicoke Creek Watershed Plan is intended to be in effect for 10 years from when it is finalized and approved.

There are 8 sub-watershed priority restoration sites that lie within Brampton and 4 of these are also part of the top 10 priority restoration sites for the entire watershed. This includes Loafers Lake and Conservation Drive Park. The City of Brampton was awarded \$2.5 million for the Etobicoke Creek Wetlands Enhancement Project from the Government of Ontario's Wetland Conservation Partnership Program. Work is already underway on enhancements as outlined in Brampton's Lake Enhancement Strategy, including improved shoreline and wetland habitat, viewing platforms, a bio-swale, and trail realignment. Over 6,500 native tree, shrubs and aquatic plants will be planted within the project area.

CORPORATE IMPLICATIONS:

Financial Implications:

There are no financial implications resulting from endorsement and support of the ECWP.

The City of Brampton will support implementation of the ECWP through existing and planned municipal plans, processes, guidelines, strategies, and initiatives. The City will also collaborate with TRCA to explore opportunities for implementation such as funding/grants.

Other Implications:

There are no other corporate implications associated with the recommendations in this report.

STRATEGIC FOCUS AREA:

The information in this report directly fulfills the "Environmental Resilience and Sustainability" Strategic Focus Area, in particular "Increasing Parkland, Trees and Naturalized Areas."

It also contributes to the "Health & Well-Being" Strategic Focus Area of "Improving Safety" by helping to decrease flood risk and also the "Culture & Diversity" Strategic Focus Area of "Supporting Indigenous Heritage and Culture" as the ECWP includes a section on 'The Land and Water' which was developed in collaboration with Mississaugas of the Credit First Nation and includes information on the treaties within the watershed, the history of the land, and the Mississaugas' relationship to water

CONCLUSION:

Through the implementation of the Etobicoke Creek Watershed Plan, Brampton and all

stakeholders can contribute to a healthier, more sustainable, and more resilient watershed that can provide long-term benefits to all residents. The work undertaken is used to help inform future land use and infrastructure planning decisions. Watershed plans can also inform and continue to build resiliency in Brampton's sustainability and climate change adaptation planning and initiatives.

The ECWP is intended to be in effect for 10 years from when it is finalized and approved (2024-2034). Collaborative and comprehensive implementation, tracking, and reporting of all aspects of the watershed plan will occur to fully realize the vision for the watershed and to improve watershed health and ensure safe and sustainable waterways, ecosystems, and human communities.

Authored by:

Reviewed by:

Pam Cooper, Manager,
Environmental Planning,
Environment & Development
Engineering Division

Michael Heralall, Director,
Environment & Development Engineering
Division

Approved by:

Approved by:

Steve Ganesh, Commissioner,
Planning, Building & Growth
Management

Marlon Kallideen
Chief Administrative Officer

Attachments:

- Attachment 1 – Etobicoke Creek Watershed Plan

Etobicoke Creek WATERSHED PLAN

2024 - 2034



The Land and Water

Etobicoke Creek Watershed is covered by Treaty 13 (Toronto Purchase), Treaty 14 (Head of the Lake Purchase), and Treaty 19 (Ajétance Purchase) signed with the Mississaugas of the Credit. The land in the watershed is the territory of the Mississaugas of the Credit, and the traditional territory of the Haudenosaunee and the Wendat peoples, and is now home to many diverse First Nations, Inuit, and Métis peoples. Treaties 13 and 14 reserved Etobicoke Creek as a fishery for the Mississaugas of the Credit.

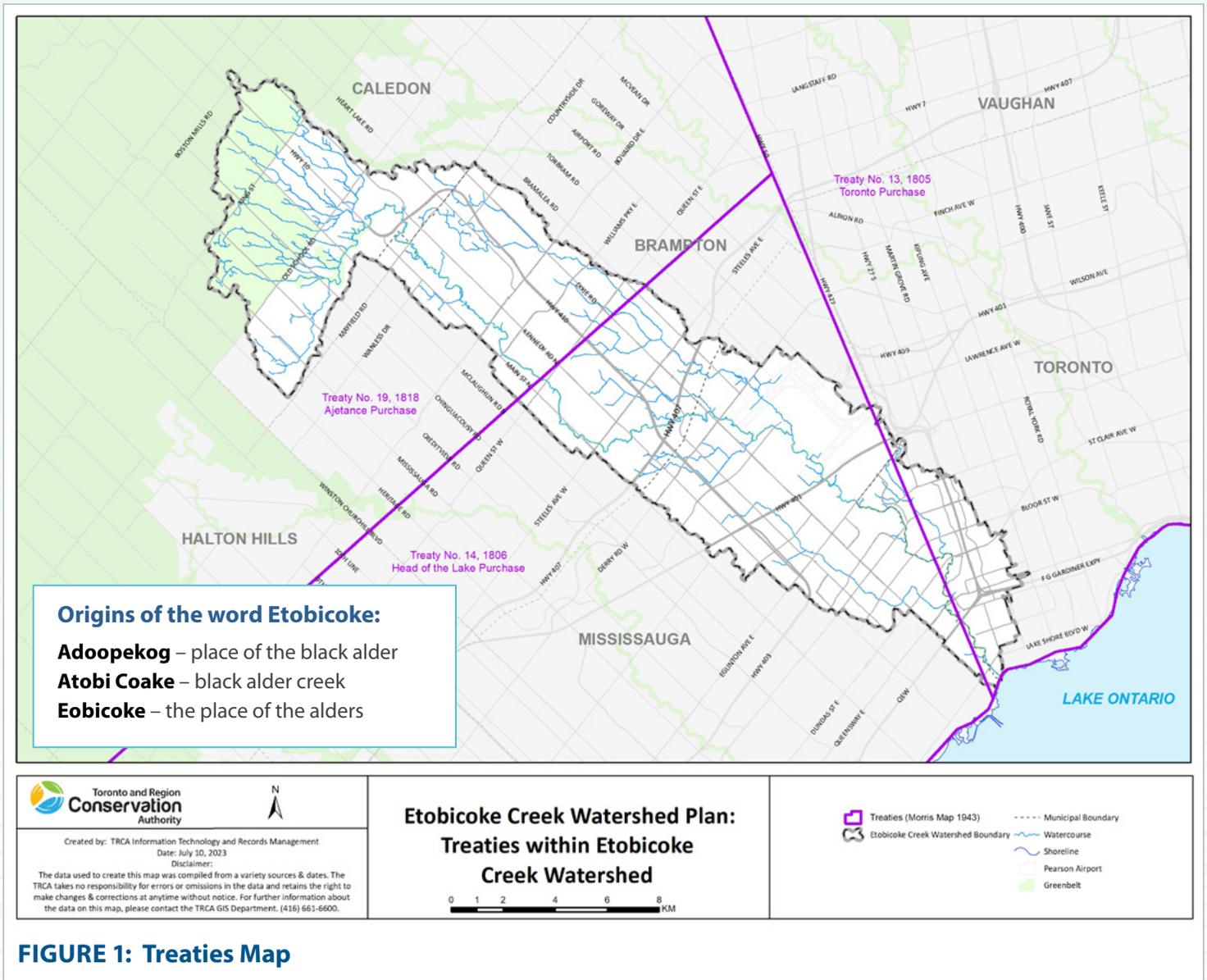


FIGURE 1: Treaties Map

The Mississauga peoples used the land around Etobicoke Creek seasonally and as a salmon fishery before being displaced by settlers. This led to a collapse of the traditional economy.

The Mississaugas’ relationship to water is embedded in their creation story, its teaching, and prophecies.

This story, Kiinwi Debaadjmowin, tells us that everything is interconnected as intricate systems. This interconnectedness is explained in the first seven fires of creation. Creation birthed life through the projection of first thought and heartbeat. The seven fires grew in succession – the stars, the sun, the moon, movement, seeds of life, Earth, and human beings.

The Land and Water

Rediscovering and reconnecting with cultural and spiritual relations to water



Regulating water policies, processes, and decisions

Reclaiming our Treaty and Aboriginal title water rights

FIGURE 2:
Mississaugas of the Credit First Nation Water Framework Principles for Reconciliation



Executive Summary

A watershed is an area that is drained by a river and its tributaries. Healthy watersheds provide numerous ecosystem services such as supporting biodiversity, providing clean drinking water, reducing flood and erosion hazards, protecting the quality and quantity of water, and improving climate resiliency. Due to the importance of healthy watersheds, they merit collaborative efforts to ensure their long-term sustainability.

Ontario's provincial planning framework recognizes that watershed planning is important to inform land use and infrastructure planning decisions. The purpose of a watershed plan is to understand current and potential future watershed conditions, and identify measures to protect, enhance, and restore watershed health. Watershed planning integrates natural systems into land use and infrastructure decision-making, and climate adaptation planning. It helps identify natural features and areas to protect and develop mitigation measures to minimize the impacts of various land use types and climate change.

The development of this watershed plan has been a collaborative effort between Toronto and Region Conservation Authority (TRCA), the City of Toronto, Region of Peel, City of Mississauga, City of Brampton,

Town of Caledon, Mississaugas of the Credit First Nation (MCFN), and the Greater Toronto Airports Authority (GTAA). Additional First Nations and Indigenous communities, stakeholders, and members of the public have been involved throughout the watershed planning process. Reflecting the collective input, a vision for the watershed was developed at the beginning of the watershed planning process which guided the development of the Etobicoke Creek Watershed Plan.

WATERSHED VISION:

Etobicoke Creek watershed is protected and restored to a cleaner, healthier, and more natural state, to sustain its waterways, ecosystems, and human communities.

Etobicoke Creek is a heavily urbanized watershed with eight subwatersheds at the western end of TRCA's jurisdiction. Urbanization and climate change continue to be major stressors for the health and resiliency of the watershed. This watershed plan recognizes these challenges and identifies actions to protect, enhance, and restore the health of the Etobicoke Creek watershed.

The Etobicoke Creek Watershed Plan focused on assessing four main components that are important for watershed health and identifies priorities for improving them:

Water Resource System

(i.e. aquatic habitat, in-stream barriers, and groundwater conditions)

Natural Heritage System and Urban Forest

(i.e. terrestrial habitat quantity, quality, and connectivity, tree canopy cover, and sensitive species)

Water Quality

(i.e. surface water quality)

Natural Hazards

(i.e. flooding and erosion)

The development of the Etobicoke Creek Watershed Plan was a multi-stage process that consisted of:

1 Watershed Characterization (i.e. Existing Conditions)

The key issues with the Etobicoke Creek watershed are:

- Aquatic habitat conditions are poor and the watershed has a high amount of runoff and in-stream barriers that affect aquatic ecosystem health.
- Natural cover is low, mostly of poor quality, and is vulnerable to climate changes.
- Surface water quality is generally poor compared to other TRCA watersheds.
- The watershed has six Flood Vulnerable Clusters with a total area of 508 hectares and can be categorized as medium or high erosion sensitivity.

2 Future Management Scenario Analysis (i.e. Future Conditions)

Four potential future management scenarios were assessed to understand the impacts of different levels of land uses, climate change (where possible), and watershed enhancements (e.g. improvements to natural cover, urban forest canopy, and stormwater management) on watershed health.

- **Scenario 1: Urban Expansion with Minimal Enhancements** – further urbanization in the Headwaters with no enhancements to natural cover and stormwater management.

- **Scenario 2: Urban Expansion with Mid-Range Enhancements** – further urbanization in the Headwaters with moderate enhancements to natural cover and stormwater management.
- **Scenario 3: Urban Expansion with Optimal Enhancements** – further urbanization in the Headwaters with optimal enhancements to natural cover and stormwater management.
- **Scenario 4: Existing Urban Boundary with Optimal Enhancements** – current urban boundary is maintained with optimal enhancements to natural cover and stormwater management.

These potential future management scenarios helped determine how the watershed may respond to potential future land use and climate changes (i.e. will conditions improve, stay the same, or deteriorate). Scenario analysis does not result in decisions about the type and configuration of land uses. Instead, scenario analysis helps to inform municipal planning decisions including land use and infrastructure planning decisions.

The scenario analysis results highlighted that, with changing land uses and climate, all four watershed components are negatively impacted, which affects overall watershed health. However, the watershed enhancements help mitigate these impacts and contribute to a safer, healthier, and more resilient watershed.

3 Implementation Planning

This stage involved the development of a realistic and achievable management framework with three goals, eight objectives, 10 indicators, and 36 management actions outlining how to protect, enhance, and restore watershed health and build resiliency to land use and climate changes. The management framework (including the management actions) was developed collaboratively by TRCA, the municipalities within the watershed, MCFN, and the GTAA. It is based on the results from the characterization and future management scenarios stages, and on engagement feedback.

The management framework is designed to address existing watershed issues and mitigate impacts from potential future land uses and climate changes at the watershed scale. Additional detailed site-level investigations and technical studies will be required (as appropriate and as part of subwatershed planning, environmental assessments, development and planning applications/approvals, etc.). Further studies will provide local/site level information to help inform and assess the suitability for implementation of some of the management actions (e.g. stormwater controls and the use of low impact development and green infrastructure techniques).

The management framework is focused on:

- Achieving more sustainable land use and infrastructure development patterns through the use of low impact development and green infrastructure, improved stormwater management, mitigating flood and erosion risk, and improving rural land stewardship.
- Protecting, enhancing, and restoring the Water Resource System and improving aquatic habitat connectivity.
- Protecting, enhancing, and restoring the Natural Heritage System and increasing urban forest cover.

An inventory, monitoring, and evaluation program will help track implementation progress, evaluate and report on whether watershed conditions are improving, and ensure mechanisms are in place to adjust and adapt approaches as needed.

Once final approvals and endorsements of the Etobicoke Creek Watershed Plan have been obtained in 2024 from municipal committees and Councils and from TRCA’s Board of Directors, implementation of the watershed plan will begin. The Etobicoke Creek Watershed Plan is intended to be in effect for 10 years from when it is finalized and approved. Collaborative and comprehensive implementation, tracking, and reporting of all aspects of the management framework will be essential to fully realize the vision for the watershed and to improve watershed health and ensure sustainability of its ecosystem services for current and future generations.

An **Implementation Steering Committee** consisting of TRCA, the municipalities within the watershed, MCFN, and the GTAA will be established in 2024 to guide and support implementation and will be facilitated by TRCA. The Implementation Steering Committee will work together to create a detailed implementation, tracking, and reporting plan to ensure commitment to and accountability for implementation on the part of TRCA, our municipal partners, and other stakeholders.

Through the implementation of the Etobicoke Creek Watershed Plan, all watershed partners and stakeholders can contribute to a healthier, more sustainable, and more resilient watershed that can provide long-term benefits to all residents.

Explore the online interactive Etobicoke Creek Watershed Plan and a map viewer with useful mapping layers [here](#).

FIGURE 3:
Heart Lake Aerial Image



WHAT IS A WATERSHED?

An area that is drained by a river and its tributaries. Wherever you are right now, you are in a watershed.

WATERSHEDS DELIVER IMPORTANT BENEFITS

Human – provide safe drinking water and food, and help to reduce flooding and erosion.

Economic – produce energy, and supply water for agriculture, industry and homes.

Environment – promote a healthy water cycle, and provide vital habitat for wildlife and plants.

What is the Natural Heritage System?

Consists of natural features and areas, including wetlands, forests, meadows and valleylands, that are needed to maintain biodiversity and healthy ecosystems.

How can agriculture impact a watershed?

Agricultural areas provide valuable greenspace and reduce stormwater, since precipitation can penetrate the soil. On the other hand, agricultural fields can release harmful contaminants into waterways as excess nutrients (e.g. phosphorous) and pesticides. Soil erosion from fields can increase the amount of sediment in waterways negatively affecting aquatic ecosystems.

What is the Water Resource System?

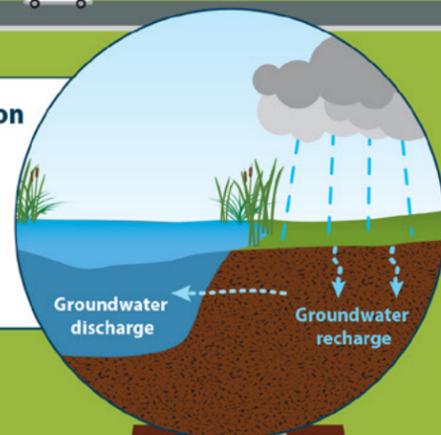
Consists of groundwater and surface water features and areas, including streams, lakes, groundwater recharge areas and springs, needed to sustain healthy aquatic and terrestrial ecosystems, and human water supply.

How can urbanization impact a watershed?

Since impervious surfaces (roads, buildings, parking lots) prevent water from penetrating into soil, stormwater runoff can carry contaminants into waterways and increase the likelihood of flooding. Infrastructure and land use development can degrade habitat, reducing the quality and quantity of natural systems and their connectivity.

Surface and Groundwater Interaction

Rain and melting snow penetrate the soil in permeable areas draining into an aquifer (i.e. groundwater recharge areas). That groundwater can then discharge at springs into streams, wetlands or other surface water features.



What causes flooding?

Rivers naturally flood with heavy rain or snowmelt, but flooding can become a problem when buildings and other structures are placed in floodplains. Climate change and urbanization can make flooding worse.

How can salt impact a watershed?

Chlorides can contaminate drinking water and negatively affect the health of aquatic species.



What is stormwater?

Rain and melting snow rushes off roofs, sidewalks and parking lots into pipes and pours into streams and lakes. Without proper stormwater control and treatment, flooding and erosion can increase, waterways can become polluted and local ecosystems can be damaged.

Benefits of the Urban Forest

All trees in a city collectively help to remove pollutants from air and water, reduce stormwater runoff, cool communities, save energy, and improve human health and well-being.

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ACRONYMS

CEW	Cumulative Effective Work
CTC	Credit Valley – Toronto and Region – Central Lake Ontario
CWQG	Canadian Water Quality Guidelines
ECWP	Etobicoke Creek Watershed Plan
ELC	Ecological Land Classification
ESGRA	Ecologically Significant Groundwater Recharge Area
FBI	Family Biotic Index
FVC	Flood Vulnerable Cluster
GTA	Greater Toronto Area
GTAA	Greater Toronto Airports Authority
HDF	Headwater Drainage Feature
IBI	Index of Biotic Integrity
LAM	Landscape Analysis Model
LID	Low Impact Development
MCFN	Mississaugas of the Credit First Nation
NHS	Natural Heritage System
PPS	Provincial Policy Statement
PWQO	Provincial Water Quality Objectives
ROP	Regional Official Plan
SGRA	Significant Groundwater Recharge Area
TOE	Time of Exceedance
TRCA	Toronto and Region Conservation Authority
TSS	Total Suspended Solids
WRS	Water Resource System



1. Introduction and Background

The Etobicoke Creek watershed is at the western end of TRCA's jurisdiction and is heavily urbanized. The watershed begins in the Greenbelt in the Town of Caledon before flowing south through the City of Brampton and City of Mississauga, and ultimately entering Lake Ontario in the City of Toronto. The watershed consists of eight subwatersheds as shown in [Figure 5](#).



The last watershed plan for Etobicoke Creek was developed in 2002, with some technical updates completed in 2010. Since then, watershed science has advanced, and provincial policies have explicitly recognized the importance of watershed planning in informing land use and infrastructure planning decisions.

This watershed plan represents a collaborative effort between TRCA, the City of Toronto, Region of Peel, City of Mississauga, City of Brampton, Town of Caledon, MCFN, and the GTAA, and outlines what needs to be done to improve the health of the Etobicoke Creek watershed and ensure the sustainability of its ecosystem services for current and future generations.

The development of the Etobicoke Creek Watershed Plan was a multi-stage process that consisted of:

- 1. Watershed Characterization (2020-2021)** – to determine current watershed conditions for four key components including the Water Resource System, Natural Heritage System and Urban Forest, Water Quality, and Natural Hazards (i.e. flooding and erosion).
- 2. Future Management Scenario Analysis (2021-2022)** – to assess potential future management scenarios to understand how watershed conditions may change including examining the impacts of different potential future land uses, varying levels of watershed enhancements (e.g. stormwater management improvements and increased natural and urban forest cover), and the implications of climate change (where possible).
- 3. Implementation Planning (2022-2024)** – to develop a realistic management framework with priority actions to protect, enhance, and restore watershed health and to ensure the long-term sustainability and resiliency of the watershed.

This watershed plan has a ten-year time frame. To fully realize the vision for the watershed plan, collaborative and comprehensive implementation by TRCA, the municipalities in the watershed, and other stakeholders of all aspects of the management framework (**outlined in Section 5 - Management Framework**) is essential.

Through regular inventory, monitoring, and evaluation, including adaptive management, the watershed plan will be updated or refined as needed on an ongoing basis.

Explore the online interactive Etobicoke Creek Watershed Plan and a map viewer with useful mapping layers [here](#).



1.1 RATIONALE AND POLICY BASIS

Watershed planning provides a comprehensive framework or road map for ensuring healthy watersheds and building resilience to land use and climate changes. Healthy watersheds provide numerous ecosystem services such as supporting biodiversity, providing clean drinking water, reducing flood and erosion hazards, protecting the quality and quantity of water, improving climate resilience, and generally contributing to community health and well-being and long-term sustainability.

Watershed planning is a vital process for understanding the current and potential future conditions of a watershed, and identifying measures to protect, enhance, and restore the health of a watershed. Watershed plans provide a comprehensive and integrated understanding of the form and function of the natural hazards, features, and areas that comprise the water resource and natural heritage systems. Although watershed plans do not make land use planning decisions, they do help to inform land use and infrastructure planning and other municipal initiatives, such as programs in greenlands acquisition, reforestation, and stormwater management retrofit. This subsection will explain the provincial policy basis for watershed planning and the roles of municipalities and TRCA in implementing the policy framework.

Provincial Watershed Planning Policy Basis

Ontario's planning policy framework recognizes the importance of watershed planning to inform land use and infrastructure decision-making. Policies in the Provincial Policy Statement, 2020 (PPS), the Growth Plan for the Greater Golden Horseshoe, 2020 (Growth Plan), and the Greenbelt Plan, 2017, provide direction related to watershed planning.

PPS policies encourage a coordinated approach to planning that recognizes the watershed as the ecologically meaningful scale for integrated and long-term planning. The PPS also emphasizes the importance of protecting, improving, and restoring the quality and quantity of water by minimizing potential negative impacts. Growth Plan and Greenbelt Plan policies also require watershed planning to be undertaken by municipalities, partnering with conservation authorities as appropriate, to support a comprehensive, integrated, and long-term approach to the protection, enhancement, or restoration of the quality and quantity of water within a watershed.

Watershed planning is also to be used to identify the Water Resource System (WRS), inform decisions on allocation of growth, and inform planning for water, wastewater, and stormwater infrastructure.

Provincial policies also recognize the importance of protecting, enhancing, and restoring the Natural Heritage System (NHS) to maintain long-term ecological and hydrologic functions. The integrated nature and importance of the natural heritage and water resource systems are discussed in greater detail in [Section 2 - Water Resource and Natural Heritage Systems](#).



The *Planning Act* requires that all decisions in respect of planning matters are consistent with the PPS and conform with applicable provincial plans.

The purpose of Ontario's *Clean Water Act, 2006* is to protect existing and future sources of drinking water. Under the Act, source protection committees are responsible for preparing source protection plans. The Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Plan applies in the Etobicoke Creek watershed. The CTC Source Protection Plan is a strategy and suite of policies developed by residents, businesses, and municipalities, which outlines how water quality and quantity for drinking water systems, not including private well owners, will be protected. The CTC Source Protection Plan includes its own set of policies that are not repeated in this watershed plan. The management actions identified in this watershed plan complement the requirements of the CTC Source Protection Plan by including the need to protect water resources, which will support clean and safe drinking water.

Finally, Ontario's planning policies recognize the importance of the Great Lakes. Etobicoke Creek flows into Lake Ontario. The various Great Lakes agreements, legislation, and policies set binational, national, and provincial commitments to protect and restore the Great Lakes. Municipalities must consider the Great Lakes Strategy, the targets and goals of the *Great Lakes Protection Act, 2015*, and any applicable Great Lakes agreements as part of watershed planning and coastal or waterfront planning initiatives. This watershed plan is intended to improve conditions in the Etobicoke Creek watershed, thereby reducing negative impacts to Lake Ontario.

Role of Municipalities

Municipalities in Ontario are organized into single-tier or two-tier systems. Upper-tier municipalities, such as the Region of Peel, are comprised of multiple lower-tier municipalities (e.g. City of Mississauga). The role of regional government is to address issues and concerns across broader geographic areas, as set out under the *Municipal Act* and other provincial legislation. The City of Toronto is a single-tier municipal government, which means it assumes all municipal responsibilities as set out under the *City of Toronto Act* and other provincial legislation.

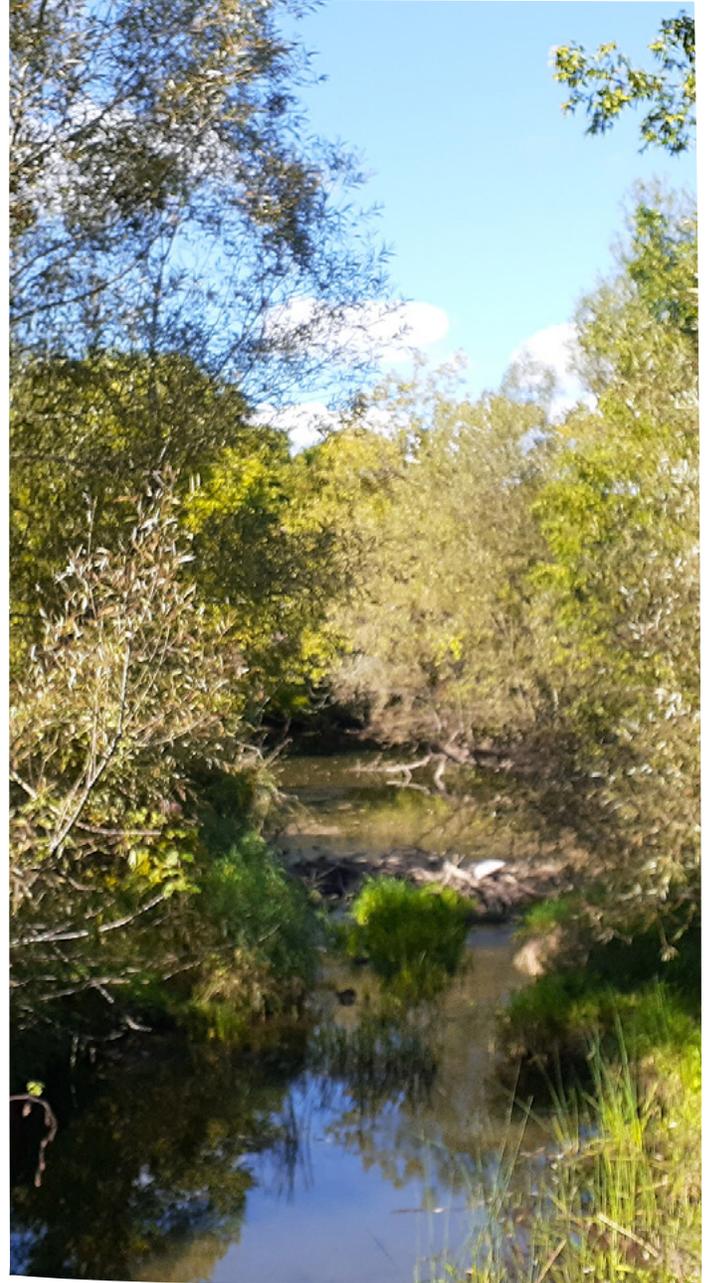
Municipalities implement the watershed planning requirements of provincial legislation, plans, and the PPS. As noted above, watershed planning helps municipalities make informed decisions on where and how to grow in a way that minimizes and/or mitigates impacts to watershed health and also informs other municipal initiatives.



Role of TRCA

Conservation Authorities (CAs) are established and governed under the *Conservation Authorities Act*. The purpose of the Act is to provide for the organization and delivery of programs and services that further the conservation, restoration, development, and management of natural resources in watersheds. While conservation authorities are not the decision-makers in land use and infrastructure planning, they play an important role by advising municipalities and infrastructure providers on matters related to natural hazards, wetlands, and source protection, and by collecting and providing scientific data on watershed management and resilience to climate change outside the plan review function. Conservation authorities also administer a development activity permit process under section 28 of the Act for conservation authority regulated areas consisting of river and stream valleys, wetlands, watercourses, and shorelines.

Through its watershed expertise, TRCA, in collaboration with its partner municipalities, MCFN, and the GTAA, has developed this watershed plan to help inform municipal growth management and various other initiatives including ecosystem restoration planning, land management/acquisition, and low impact development and green infrastructure implementation.





1.2 LOCAL CONTEXT AND CONSIDERATIONS

The Etobicoke Creek watershed is approximately 22,404 hectares in size and is the westernmost watershed in TRCA's jurisdiction. It is bordered by the Credit River watershed to the west and the Mimico Creek and Humber River watersheds to the east.

Etobicoke Creek also forms the western boundary of the Toronto Purchase (Treaty #13 in 1805) and the eastern boundary of the Head of the Lake Purchase (Treaty #14 in 1806) and lies within the Ajetance Purchase (Treaty #19 in 1818). The Toronto Purchase reserved the Mississaugas' exclusive fishing rights in Etobicoke Creek.

The Etobicoke Creek watershed is heavily urbanized (approximately 60% as of 2019) and contains a large amount of industrial and commercial land uses, including the majority of Lester B. Pearson International Airport. The only remaining rural portions of the watershed fall within the Headwaters subwatershed in the Town of Caledon. This watershed has one of the lowest amounts of natural cover in TRCA's jurisdiction.

Mouth of Etobicoke Creek

Historically, the mouth of Etobicoke Creek was a wetland providing extensive habitat along the Lake Ontario shoreline. The first engineered alteration of the lower part of the Creek was in 1929, when the sandbar across the mouth was reinforced to allow the extension of an adjacent road.

When Hurricane Hazel hit in 1954, the water level in the channel was at least four times its capacity, destroying homes and causing seven deaths. Over the next few years, municipal and provincial governments purchased the land in the flood plain, converting the area into Marie Curtis Park. By 1959, no trace of the original creek mouth remained. Today, the flood plain lands are owned by TRCA, but managed by the City of Toronto.

Brampton Esker

The Etobicoke Creek watershed is home to the only esker in TRCA's jurisdiction. An esker is a long, winding ridge of sand and gravel deposited by glacial meltwaters, which flowed through crevasses and channels within or beneath an ice sheet.

The Brampton Esker's northern end is located just to the north of Mayfield Road and runs south for approximately eight kilometres to Queen Street. It is around 1.8 km wide with its eastern edge following Highway 410. The sands and gravels of the Brampton Esker hold and purify water as it percolates downward, making the esker an important groundwater resource and the source of Spring Creek, a tributary of Etobicoke Creek.

FIGURE 6: Open House on Watershed Plan, May 2022 (Mississauga) (left)



FIGURE 7: Open House on Watershed Plan, September 2023 (Brampton) (right)



1.3 ENGAGEMENT

The development of this watershed plan commenced in early 2020 through the establishment of a Steering Committee consisting of representatives from TRCA, the City of Toronto, Region of Peel, City of Mississauga, City of Brampton, Town of Caledon, MCFN, and the GTAA. The municipal staff members on the Steering Committee were responsible for providing input and guidance throughout the development of the watershed plan on behalf of their respective municipalities (including consolidating comments from various municipal teams). Credit Valley Conservation was also involved in the Steering Committee to ensure consistency in watershed planning approaches between neighbouring watersheds.

Throughout the watershed planning process, extensive engagement took place to increase awareness of watershed planning and to solicit feedback on components of the watershed plan.

The following First Nations and Indigenous communities were engaged:

- Mississaugas of the Credit First Nation (member of the Steering Committee as the Treaty holding First Nation within the watershed)

- Williams Treaties First Nations (including Beausoleil First Nation, Chippewas of Rama First Nation, Chippewas of Georgina Island First Nation, Curve Lake First Nation, Mississaugas of Scugog Island First Nation, Hiawatha First Nation, and Alderville First Nation)
- Huron-Wendat Nation
- Six Nations of the Grand River
- Métis Nation of Ontario

Engagement also took place with various stakeholders (including Building Industry and Land Development Association and other developers in the watershed, community/resident groups, golf courses, major private landowners, non-governmental organizations, etc.), watershed residents and the general public, project webpage subscribers, municipal Councillors with ward boundaries within the watershed, Regional Watershed Alliance members, and TRCA Board members. Further engagement opportunities were leveraged through various TRCA teams such as Education and Training, Sustainable Neighborhood Action Program (SNAP), Professional Access Into Employment (PAIE), Newcomer Youth Green Economy Project (NYGEP), Multicultural Connections Program (MCP), and Partners in Project Green (PPG).

EARLY 2020 – MID 2021

Engaged on watershed vision and key issues of concern to undertake watershed characterization.

Released comprehensive Watershed Characterization Report in June 2021.

MID 2021 – MID 2022

Developed potential future management scenarios and carried out technical analyses, culminating in the release of the Future Management Scenario Analysis Report in July 2022.

Engaged on the results of the watershed characterization and future management scenarios stages, and on the objectives and indicators for the watershed plan and priorities for action.

MID 2022 – MID 2023

Developed the management framework for the watershed plan and the draft watershed plan, and engaged on the draft watershed plan.

Feedback received from First Nations and Indigenous communities, partners, stakeholders, watershed residents, and the general public was invaluable to the development of this watershed plan. The Etobicoke Creek Watershed Plan reflects the diversity of issues and concerns raised throughout the process and represents an achievable plan to improve watershed conditions.

Engagement Summary Reports

Engagement Summary reports were prepared throughout the watershed planning process and provide details of the engagement activities. These reports are referenced in **Section 9 - References** and are publicly available on the [project webpage](#).



2. Water Resource and Natural Heritage Systems

The land (i.e. terrestrial) and water (i.e. aquatic) features and areas that maintain watershed and ecological health consist of two integrated systems: the Water Resource System (WRS) and the Natural Heritage System (NHS). Together, these systems provide essential ecosystems services, such as water storage and filtration, cleaner air, support to biodiversity and habitats, carbon storage, and improving resiliency to climate change. Maintaining extensive, connected, and high-quality features and areas of both systems is essential for the long-term health and sustainability of the watershed, as shown in [Figure 4](#).

Identifying, protecting, enhancing, and restoring both systems is a key policy requirement of the Growth Plan and the Greenbelt Plan.

Ecosystem Services

Ecosystem services are the benefits to humans provided by natural environments. These benefits cover a wide range of contributions essential for human well-being. They can be classified into four primary categories:

Provisioning services

These are the tangible resources provided by ecosystems including food, water, wood, and medicinal plants. Examples of provisioning services include the harvesting of timber from forests and the availability of various fruits for consumption.



Regulating services

Ecosystems play a crucial role in regulating life in the biosphere. Climate change mitigation/adaptation, water purification, pollination, disease management, and pest control are examples of these regulating benefits. For instance, wetlands contribute to water flow regulation, flood mitigation, and pollutant filtration, and forests sequester, or store, carbon in trees and soil.



Cultural services

These are the intangible benefits provided by ecosystems including recreational opportunities, spiritual fulfillment, and nature appreciation. An example of a cultural service is the recreational enjoyment gained by spending time in nature.

Supporting services

These are essential for enabling various functions within natural ecosystems. Examples include processes like soil formation, the cycling of nutrients, and primary production via photosynthesis. For instance, the cycling of nutrients ensures that vital elements are accessible for plant development.

Natural assets, such as forests, grasslands, and wetlands, are the physical components of ecosystems that support these services. The delivery of ecosystem services depends on the health and functionality of these natural assets. By preserving, enhancing, and sustainably managing these assets, we can ensure the continuous provision of ecosystem services that are essential for human well-being as well as for economic prosperity and ecological equilibrium.

Table 1 explains the features and areas of both systems.

TABLE 1:
Water Resource and Natural Heritage Systems

Water Resource System	Natural Heritage System
A system consisting of groundwater features and areas, surface water features (including shoreline areas), and hydrologic functions, which provide the water resources necessary to sustain healthy aquatic and terrestrial ecosystems and human water consumption.	A system made up of natural heritage features and areas, and linkages identified to provide habitat connectivity and support natural processes, which are necessary to maintain biodiversity and ecosystem functions.
<p>The WRS consists of:</p> <p>Key Hydrologic Areas</p> <ul style="list-style-type: none"> • Significant Groundwater Recharge Areas (SGRAs), including Ecologically Significant Groundwater Recharge Areas (ESGRAs) • Highly Vulnerable Aquifers • Significant Surface Water Contribution Areas <p>Key Hydrologic Features</p> <ul style="list-style-type: none"> • Permanent Streams • Intermittent Streams • Inland Lakes and their Littoral Zones • Seepage Areas and Springs • Wetlands* 	<p>The NHS consists of:</p> <ul style="list-style-type: none"> • Significant Wetlands* • Significant Coastal Wetlands • Other Coastal Wetlands in Ecoregions 5E, 6E, and 7E • Fish Habitat* • Significant Woodlands • Significant Valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary’s River) • Habitat of Endangered Species and Threatened Species • Significant Wildlife Habitat • Significant Areas of Natural and Scientific Interest (ANSIs) • Sand Barrens, Savannahs, Tallgrass Prairies, and Alvars • Federal or Provincial Parks, and Conservation Reserves
<p>*Notes:</p> <p>Wetlands are important features in both systems. Wetlands are shown as features in the mapping for the WRS and as natural cover in the NHS mapping in Section 7 - Maps. Fish habitat in the NHS overlaps with features and areas in the WRS.</p> <p>The majority of these terms are defined in the Growth Plan. Some, but not all the definitions, have been included in the Glossary (Section 8 - Glossary).</p> <p>Not all these features or areas are necessarily present in the Etobicoke Creek watershed.</p>	

The importance of these systems is reflected in the management framework in [Section 5 - Management Framework](#), as the protection, enhancement, and restoration of each system is a goal of this watershed plan.

See [Section 7 - Maps](#) for maps of each system.

How was the WRS delineated?

The key hydrologic areas and key hydrologic features of the WRS were delineated using various techniques and methodologies. The key hydrologic areas and key hydrologic features of the WRS shown in the maps in [Section 7. Maps](#) include updates/refinements made for the watershed plan (and are consistent with TRCA's updated 2022 WRS). There are some slight changes from the WRS maps presented in the Watershed Characterization Report which is referenced in [Section 9. References](#) and is publicly available on the [project webpage](#).

Highly Vulnerable Aquifers and SGRAs were delineated through Technical Rules established under the *Clean Water Act, 2006* for the purposes of source protection planning. ESGRAs were delineated using a model developed by the Oak Ridges Moraine Groundwater Program. The model results for ESGRAs were used to minimize the land area covered by these areas while still maintaining a high level of protection of hydrologic function for these ecosystems. Significant Surface Water Contribution Areas were delineated by overlaying SGRAs and ESGRAs to ensure areas of both volume contribution and recharge-discharge connections to sensitive features are a prevalent component of the WRS.

Each of the five key hydrologic features were delineated using a combination of satellite imagery, ArcHydro GIS, and field site verification.

While not a defined component of the WRS, Headwater Drainage Features (HDFs) are important surface water features that help maintain downstream aquatic health. HDFs are small, temporary streams, swales, or wetlands. HDFs were delineated through an assessment of existing data, satellite imagery, and field sampling. HDFs were classified according to TRCA's Evaluation, Classification, and Management of Headwater Drainage Features Guidelines as permanent (i.e. important hydrology functions), intermittent (i.e. valued or contributing hydrology functions), or unknown (i.e. either valued/contributing hydrology functions or limited hydrology

functions). The assessment of HDFs conducted as part of this watershed planning process should be considered preliminary, with additional field verification to be completed if there is to be alteration to lands in the Headwaters. This is reflected in the management actions identified in [Section 5 - Management Framework](#).

How was the Watershed Refined Enhanced NHS Delineated?

The features and areas of the watershed refined enhanced NHS were delineated using a robust systems-based methodology that incorporated multiple ecological criteria generated through models (e.g. habitat connectivity model, Landscape Analysis Model), information from recent satellite imagery, monitoring data, field site verification, and expert-based knowledge.

The features and areas of the watershed refined enhanced NHS were identified for their ecological value as existing natural cover and potential natural cover (i.e. areas targeted for restoration and enhancement) to:

- Increase natural cover (e.g. forests, wetlands, meadows, etc.) quantity and quality by improving habitat patch size, shape, and connectivity in and around natural areas.
- Protect and restore biodiversity by incorporating multiple habitat types and mitigating the impacts of urban development on habitat function.
- Incorporate natural system vulnerabilities to climate change in planning processes to build a watershed refined enhanced NHS that is more sustainable and resilient.

FIGURE 8:
Before and After, Kings Park Stream
Restoration (Mississauga)



FIGURE 9:
Etobicoke Creek, West of
Pearson International Airport



3. Existing Watershed Conditions

Watershed characterization is a vital stage of the watershed planning process, which helps to understand current conditions in the watershed and identify key issues to help inform the next stages of the watershed planning process. As part of this watershed planning process, a technical report on watershed characterization was developed focusing on four key components including the Water Resource System, Natural Heritage System and Urban Forest, Water Quality, and Natural Hazards. This section summarizes key components of those technical analyses.

Watershed Characterization Key Messages (i.e. Existing Conditions)

The Etobicoke Creek watershed is a highly urbanized watershed with a significant amount of impervious cover (i.e. hard surfaces) and low amounts of natural and rural land cover. This has resulted in a high amount of stormwater runoff, issues with flooding and erosion, and impacts to aquatic and terrestrial habitat quantity and quality and to water quality. Climate change including increased precipitation, annual average temperatures, and the intensity and frequency of extreme weather events will add additional strain on a watershed like Etobicoke Creek and will further impact watershed health.

Based on the technical analyses completed as part of watershed characterization, the key issues affecting the Etobicoke Creek watershed that will need to be addressed to improve watershed health include:

Water Resource System

Aquatic habitat conditions are poor, and the watershed has a high amount of runoff and in-stream barriers that affect aquatic ecosystem health.

Natural Heritage System and Urban Forest

There is a low amount of natural cover and habitat quality is generally 'poor'. The remaining natural cover is highly vulnerable to the effects of climate change.

Water Quality

Surface water quality is generally poor compared to other TRCA watersheds.

Natural Hazards

The watershed has six Flood Vulnerable Clusters (which means there are flood risks in these areas), and can be categorized as medium or high erosion sensitivity.

3.1 CONTEXT AND BACKGROUND

TRCA used the most recent available data and scientific methodologies to undertake watershed characterization. The complete Watershed Characterization Report is referenced in [Section 9 - References](#) and is publicly available on the [project webpage](#).

The technical components outlined in [Table 2](#) were assessed as part of watershed characterization.

TABLE 2:
Summary of Technical Analyses for Watershed Characterization

Water Resource System	Natural Heritage System and Urban Forest
<p>Involves the comprehensive delineation of the features and areas that comprise the WRS.</p> <p>Additionally, assessments of the condition and health of riparian corridors, fish and benthic communities, groundwater, streamflow, and aquatic habitat were undertaken. The presence of in-stream barriers was also characterized.</p>	<p>Involves the comprehensive delineation of the features and areas that comprise the NHS and urban forest.</p> <p>Habitat quantity, quality, terrestrial biodiversity, habitat connectivity, and climate vulnerabilities were assessed for the NHS.</p> <p>The amount of tree canopy, its composition, diversity, and health were assessed for the urban forest.</p>
Water Quality	Natural Hazards
<p>Involves the assessment of surface water quality parameters of concern and trends over time, as well as chemicals of emerging concern, microplastics, and spills.</p>	<p>Involves the characterization of flood and erosion risk in the watershed.</p>

In addition to the technical components outlined in [Table 2](#), watershed characterization also included the following technical analyses:

- **Stormwater management** - including an assessment of the proportion of the watershed with various levels of stormwater control (e.g. quantity or quality control).
- **Restoration planning** - including an assessment of completed restoration projects in the watershed and refinement of existing restoration opportunities.

Biodiversity

The term biodiversity describes the wide variety of living organisms that inhabit the earth. Biodiversity is an indicator of ecosystem health and helps ensure that ecosystems are functioning and providing valuable ecosystem services for human health and well-being.

Natural landscapes within the Etobicoke Creek watershed provide habitat for numerous species, which use these areas for breeding, feeding, roosting, and migrating. Based on limited inventory surveys conducted between 2010 and 2019, there are 139 fauna (i.e. animal) species (likely an underestimation of the actual number of fauna species) and 40 fish species found within the watershed. This shows that the watershed is capable of supporting a variety of species, though the presence of sensitive species is primarily

outside of the urban areas. Improvements to habitat quantity, quality, and connectivity would benefit these species throughout the watershed.

Some of the sensitive species present in the Etobicoke Creek watershed include Butternut (*Juglans cinerea*; threatened species in Ontario), Little Brown Myotis (*Myotis lucifugus*; endangered species in Ontario), American Eel (*Anguilla rostrata*; endangered species in Ontario; located at the mouth of Etobicoke Creek only), Bobolink (*Dolichonyx oryzivorus*; endangered species in Ontario), Snapping Turtle (*Chelydra serpentina*; special concern species in Ontario), and Pitcher-plant (*Sarracenia purpurea*; species of regional concern).



Little Brown Myotis (*Myotis lucifugus*)



Pitcher-plant (*Sarracenia purpurea*)

3.2 HISTORICAL AND CURRENT LAND USES

The Etobicoke Creek watershed is heavily urbanized, resulting in low amounts of natural and rural land cover. **Table 3** illustrates land use change in the watershed from 2002 to 2019 for three generalized land use classifications: urban, rural, and natural. The amount of impervious cover (i.e. hard surfaces that prevent precipitation from penetrating the ground) was also calculated for these time periods.

TABLE 3:
Land Use Change

	2002 (area% and ha)	2012 (area% and ha)	2002 – 2012 (% change)	2019 (area% and ha)	2012 – 2019 (% change)
URBAN	53% (11,969 ha)	56% (12,636 ha)	+6%	60% (13,222 ha)	+5.4%
RURAL*	33% (7280 ha)	31% (6916 ha)	-5%	28% (6328 ha)	-9%
NATURAL	14% (3156 ha)	13% (2853 ha)	-10%	12% (2755 ha)	-3%
IMPERVIOUS COVER (i.e. hard surfaces)	43% (9765 ha)	46% (10,374 ha)	+6%	48% (10,856 ha)	+5%

*Rural includes land use classifications such as agriculture, golf courses, open space, hydro corridors, etc. These types of land uses cannot be considered natural, nor can they be considered urban as they have low amounts of impervious surfaces.

3.3 CURRENT STATE OF THE WATERSHED

Based on the watershed characterization technical analyses conducted (discussed in [Subsection 3.1 - Context and Background](#)), there are four key issues in the Etobicoke Creek watershed:

1 WATER RESOURCE SYSTEM: aquatic habitat conditions are poor and the watershed has a high amount of runoff and in-stream barriers that affect aquatic ecosystem health.

Among larger watersheds in TRCA's jurisdiction (i.e. >200 km²), Etobicoke Creek has the second highest annual runoff at 402 mm/year, second only to the Don River.

The average habitat rating for fish is 'fair' and for benthic communities is 'poor'.

There has been little to no change in aquatic habitat quality since 2002. It is important to note that the amount of impervious surfaces in a watershed impacts the natural flow regime of watercourses, water temperature, and water quality which subsequently impacts aquatic species and ecosystems through changes in aquatic habitat quality. Environment Canada provides recommendations on impervious cover percentages and has defined the quality of aquatic habitat based on the amount of impervious cover in a catchment area where 'sensitive' quality habitat occurs when there is 0-10% impervious cover, and

declines in aquatic habitat quality are demonstrated when impervious cover is greater than 11% (with greater than 25% impervious cover being non-supporting) (Environment Canada 2013, Schueler 1994). Therefore, to minimize impacts to aquatic habitat health, it is recommended that the impervious cover percentage (effective impervious cover) remains below 25%. See [Appendix A](#) for more details.

Additionally, there are a large number of in-stream barriers that prevent the movement of species and only approximately 50% natural cover within the riparian corridor (i.e. within 30 metres of streams).

2 NATURAL HERITAGE SYSTEM AND URBAN FOREST: there is a low amount of natural cover and habitat quality is generally 'poor'. The remaining natural cover is highly vulnerable to the effects of climate change.

Only approximately 12% of the watershed consists of natural cover, well below recommended targets (at least 30%) for long-term sustainability and resiliency.

There are some 'fair' quality habitat patches in the Headwaters, which support some sensitive plant and animal species.

Urban forest canopy cover (i.e. trees and tall shrubs) is approximately 15% and has remained stable from 2009 to 2018.

3 WATER QUALITY:

surface water quality is generally poor compared to other TRCA watersheds.

Contaminants of particular concern include chlorides (e.g. from road salts), phosphorus (e.g. from fertilizers), *E. coli* bacteria (e.g. from sewage and animal wastes), and metals such as copper and zinc (e.g. from industrial sources and / or roadways).

Exceedances of chlorides and nitrates were also observed in groundwater.

4 NATURAL HAZARDS:

the watershed has six Flood Vulnerable Clusters (FVCs) with a total area of 508 hectares (see **Figure 10**) and can be categorized as medium or high erosion sensitivity.

Table 4 provides a summary of certain watershed conditions and trends for each of these four key issues. Trends are assessed as changes from the baseline period (2002 – 2010) to current period (2011 – 2020). See the full [Watershed Characterization Report](#) and the [online Etobicoke Creek Watershed Plan](#) for more details and to explore some of the key characterization mapping layers.

TRCA’s Watershed and Ecosystems Reporting Hub

TRCA’s [Watershed and Ecosystems Reporting Hub](#) is another resource that provides interactive regional information about the watersheds (including the Etobicoke Creek watershed) and the waterfront in the Toronto region. The Reporting Hub identifies current conditions by theme and explains the importance of different environmental indicators for understanding watershed and ecosystem health. It also shows how conditions are changing over time and where we are relative to where we want to be. This helps to determine if watershed conditions are declining and what actions may be required to improve watershed health.





Difference between urban forest and natural cover

The term **urban forest** is used to describe the trees and woody shrubs located on all private and public property within a watershed, including urbanized spaces (i.e. along roads) and in forests. The percentage of urban forest cover is determined by the area covered by the canopies of all trees and shrubs in both built and natural areas.

Natural cover is the area of the watershed covered by natural habitats, including forests, meadows, and wetlands.

Natural cover includes habitats with varying amounts of trees and shrubs. Meadows for example are open habitats that do not contain trees. Although meadows are natural cover, they are not part of the urban forest. Conversely, the urban forest includes trees in built portions of the watershed that are not part of natural cover. For these reasons, the amount of natural cover and the amount of urban forest in a watershed will not be equal. Learn more about the differences between urban forest, natural cover, and forest cover [here](#).

TABLE 4:
Summary of Watershed Characterization Results

	Current Conditions	Trend Assessment Between Baseline (2002 – 2010) and Current (2011 – 2020)
WATER RESOURCE SYSTEM		
Riparian Corridors	50% natural cover within corridor	Slight improvement (+1%)
Fish Community Health	Average IBI ¹ Score: 22.7 (Fair)	No change
Benthic (e.g. insects, worms, molluscs) Community Health	Average FBI ² Score: 6.57 (Poor)	No change
NATURAL HERITAGE SYSTEM / URBAN FOREST		
Habitat Quantity (i.e. total natural cover)	2,617 hectares 12% of watershed	Decrease (-14%)
Habitat Quality	Average LAM ³ Score: 7.51 (Poor)	No change
Urban Forest (i.e. canopy cover for the entire watershed)	3,290 hectares 15% of watershed	No change
Urban Forest Health (only in urbanized portions of the watershed, excludes agricultural areas)	Average condition is 80% (good) 20% are in poor or critical condition, dying or dead	Average condition declined by 4%, with the proportion of trees in poor condition or dead increased by 6%
WATER QUALITY		
Total Suspended Solids (CWQG⁴ = 30 mg/L)	88% of samples met CWQG	Decrease (-6% or 6% fewer samples met objective in 2015-2019)
Chloride (CWQG, chronic = 120 mg/L, acute = 640 mg/L)⁵	7% of samples met chronic CWQG 70% of samples met acute CWQG	Decrease (-6%) for chronic Increase (+3%) for acute

¹IBI stands for Index of Biotic Integrity and measures a set of metrics (number of fish species, presence of sensitive species, abundance, and food chain classifications) to assign a rating of very good (>38), good (28-37.9), fair (20-27.9), or poor (<20).

²FBI refers to Family Biotic Index, which is often used to assess the quality of water in rivers and has a rating scale of excellent (0-3.75), very good (3.76-4.25), good (4.26-5.0), fair (5.01-5.75), fairly poor (5.76-6.50), poor (6.51-7.25), or very poor (7.26-10).

³LAM, known as Landscape Analysis Model, combines the metrics of patch size (larger patches support larger populations), patch shape (habitat fragmentation), and matrix influence (influence of surrounding land uses) to determine an average score. LAM has a rating scale of excellent (13-15), good (11-12), fair (9-10), poor (6-8), or very poor (0-5).

⁴Canadian Water Quality Guidelines are federal water quality guidelines for various parameters. In healthy ecosystems, 100% of samples meet guidelines.

⁵Chronic refers to long-term exposure, compared to acute, which refers to short-term exposure.

	Current Conditions	Trend Assessment Between Baseline (2002 – 2010) and Current (2011 – 2020)
WATER QUALITY <i>(continued)</i>		
Total Phosphorus (PWQO ⁶ = 30 ug/L)	29% of samples met PWQO	Decrease (-2%)
Copper (PWQO = 5 ug/L)	72% of samples met PWQO	Decrease (-26%)
Zinc (PWQO = 20 ug/L)	78% of samples met PWQO	Decrease (-27%)
<i>E. coli</i> (PWQO = 100 CFU / 100 mL)	21% of samples met PWQO	Increase (+8%)
NATURAL HAZARDS		
Flooding (peak flows) Based on 100-year⁷ inflow at points for each of the six FVCs	Brampton Central FVC = 78.8 m ³ /s	Range from -1% to +7% ⁸
	Avondale FVC, West Tributary = 23.5 m ³ /s	Range from -0.4% to +1% ⁹
	Avondale FVC, East Tributary = 29.8 m ³ /s	Range from +2% to +12%
	Little Etobicoke FVC = 37.1 m ³ /s	Increase (+2%)
	Dixie / Dundas FVC = 106.9 m ³ /s	Increase (+3%)
	Longbranch FVC = 359.0 m ³ /s	Increase (+1%)

⁶Provincial Water Quality Objectives refer to provincial water quality standards for various parameters. In healthy ecosystems, 100% of samples meet objectives.

⁷100-year refers to a rainfall event that statistically has a one percent chance of occurring in any given year, at any given place. This does not mean it will only occur once every 100 years.

⁸The Brampton Central and Avondale FVCs are the furthest upstream and closest to the areas of urban expansion in recent years and thus more sensitive to flows, so the trend is reported as a range (best and worst case). All other FVCs are reported as a single percent change.

⁹See previous footnote.

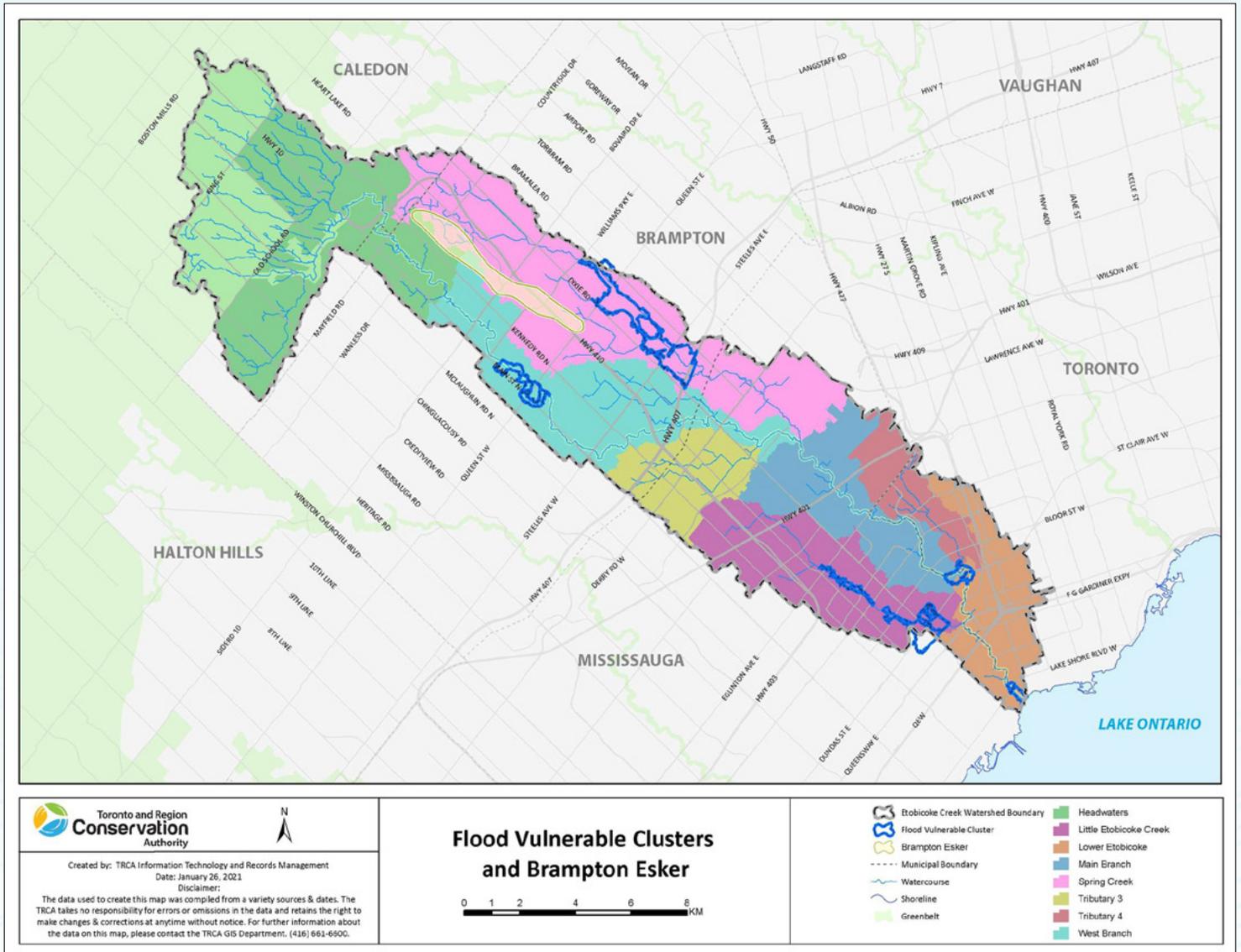
	Current Conditions	Trend Assessment Between Baseline (2002 – 2010) and Current (2011 – 2020)
NATURAL HAZARDS <i>(continued)</i>		
Flooding (peak flows) Based on 100-year⁷ inflow at points for each of the six FVCs	West Mall FVC, West Tributary = 304.7 m ³ /s	Increase (+1%)
	West Mall FVC, East Tributary = 36.5 m ³ /s	Increase (+1%)
Erosion Sensitive Stream Reaches¹⁰ (35 stream reaches were assessed)	22 'Highly' erosion sensitive stream reaches	Increase (+8) 'Highly' erosion sensitive stream reaches
	12 'Moderately' erosion sensitive stream reaches	Decrease (-8) 'Moderately' erosion sensitive stream reaches ¹¹

¹⁰Current conditions are based on erosion sensitivity for 2020, while the trend is compared to 2010.

¹¹Two of the stream reaches for 2010 are categorized as both moderate and high erosion sensitivity, and are thus included as both high and moderate in these numbers.



**FIGURE 10:
FVCs and Brampton Esker**



Historical Watercourses

Urbanization has resulted in extensive watercourse burial and diversion of water flows into sewers leading to substantial changes to natural drainage patterns, and hydrological and ecological functions. When watercourses are connected to sewers, heavy rain can cause more flashy and immediate flooding, reduced water quality, and changes in the nutrient cycling processes of the watercourse.

The loss of natural watercourses in Toronto, including within the Etobicoke Creek watershed, began in the 18th century and accelerated with increased development during the 19th and 20th centuries. Extensive and well documented mapping work has been completed to identify the location of historical watercourses in Toronto, mainly by community organizations such as the Toronto Green Community's Lost Rivers group.

The Etobicoke Creek Watershed Plan does not assess the hydrologic or ecological impacts of burying these historical watercourses or provide advice on potential restoration opportunities. However, TRCA and the City of Toronto are exploring the feasibility of potential restoration opportunities for certain historical watercourses (including within the southern portion of the Etobicoke Creek watershed). This collaborative work will examine areas within the alignment of historical watercourses where hydrologic functions could be improved and natural cover could be increased. As well, TRCA and the City of Toronto are investigating potential ways to better highlight the natural, cultural, and historical significance of historical watercourses, including through signage and improved mapping.

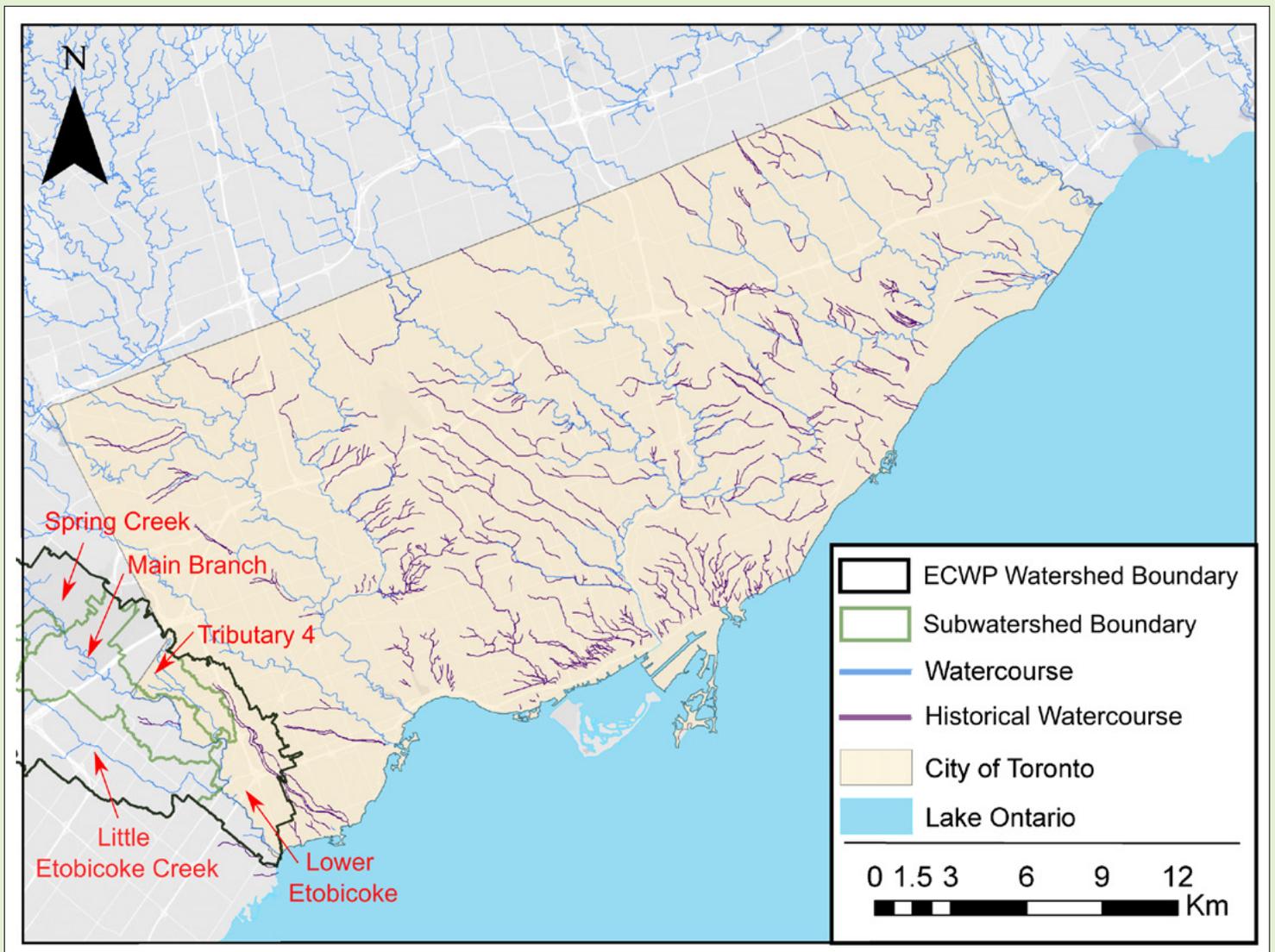


FIGURE 11:
Etobicoke Creek Just South of QEW



4. Future Watershed Conditions

Another important stage of the watershed planning process is assessing potential future conditions based on future land use scenarios and the impacts of climate change. The results of watershed characterization discussed in [Section 3 - Existing Watershed Conditions](#) informed the development of the future land use scenarios. An additional technical report documenting the results of the Future Management Scenario Analysis stage was produced, which is referenced in [Section 9 - References](#) and is publicly available on the [project webpage](#).

Future Management Scenarios

Analysis Key Messages (i.e. Future Conditions)

Future management scenario analysis is a technical exercise that involves assessing and comparing how different potential future land uses, climate changes, and varying levels of watershed enhancements/interventions may affect watershed conditions and overall watershed health. Scenario analysis is essentially a tool that can be used to compare the potential scenarios and does not constitute a land use decision, or a particular recommendation on land use patterns and specific management interventions. All of the scenario analysis information, along with the results of watershed characterization, were used to inform the development of the management framework described in [Section 5 - Management Framework](#). A management framework and associated actions are needed to protect, enhance, and restore watershed health and ensure a more sustainable and resilient watershed.

For the Etobicoke Creek watershed, four different potential future management scenarios (described in [Table 5](#)) were assessed to help understand how each of the key watershed components (i.e. Water Resource System, Natural Heritage System and Urban Forest, Water Quality, and Natural Hazards) may respond in the future (i.e. will conditions improve, stay the same, or deteriorate). TRCA conducted extensive watershed modelling and performed technical analyses to assess the impacts of different levels of land uses, climate change (where possible), and watershed enhancements (e.g. improvements to natural cover, urban forest canopy, and stormwater management) on watershed health.

The scenario analysis results highlighted that, with changing land uses and climate, all four watershed components are negatively impacted, which affects overall watershed health. However, the watershed enhancements help mitigate these impacts and contribute to a safer, healthier, and more resilient watershed.

4.1 FUTURE STRESSORS

To determine appropriate future land use scenarios, it is necessary to identify potential future stressors on a watershed. For Etobicoke Creek, the high levels of urbanization and low amounts of natural cover are key determinants of watershed health. Due to growth pressures in Peel Region, further urbanization in the currently rural part of the Headwaters of the Etobicoke Creek watershed is expected.

Climate change is expected to increase precipitation, annual average temperatures, and the frequency of extreme weather events, which will add further strain on a watershed like Etobicoke Creek. There are already six FVCs in this watershed and significant erosion risk, which is likely to increase with more frequent and intense precipitation events without significant watershed interventions. The fragmented and low quality and quantity of natural cover decreases the likelihood of ecosystem resilience to extreme weather events.

Climate change and further urbanization in the Headwaters were factored into the future management scenario analysis, as much as possible, to determine how these key stressors will potentially impact watershed health. For example, the flood risk analysis and water quality analysis included climate projections into watershed modelling, while climate vulnerabilities and the thermal regime were incorporated into the terrestrial and aquatic impact assessments respectively.

The management framework for the watershed plan outlined in [Section 5 - Management Framework](#) recognizes these two future stressors and identifies management actions to minimize and mitigate the impacts of urban development, while protecting, enhancing, and restoring ecosystems to improve climate adaptation and ecosystem resilience.

4.2 FUTURE SCENARIOS

An effective way to assess how a watershed will respond to potential future change is to develop, analyze, and compare several possible future management scenarios, each reflecting a different composition of land uses and mitigation measures. As a result, future management scenario analysis is a tool to compare how possible future land uses might affect watershed health.

Future management scenario analysis is a technical exercise to ensure management actions are based on the best available science. The results of modelling and technical impact assessments helped to guide the development of the management framework in [Section 5 - Management Framework](#), and will support municipalities in land use and infrastructure planning.

It is important to note that the future management scenarios analyzed are based on different potential future land uses only and do not represent specific municipal planning decisions or result in decisions about the type and configuration of land uses. In other words, **the scenarios do not constitute a land use decision, or a particular recommendation on land use patterns and specific management actions.** The aim was not to select one of these scenarios as the 'preferred scenario or approach' but, instead, the future management scenario analysis helped us understand how watershed conditions may change based on different potential future land uses (and varying amounts of urbanization), climate changes, and different levels of watershed enhancements/interventions.

For the Etobicoke Creek watershed, the future management scenarios were designed to:

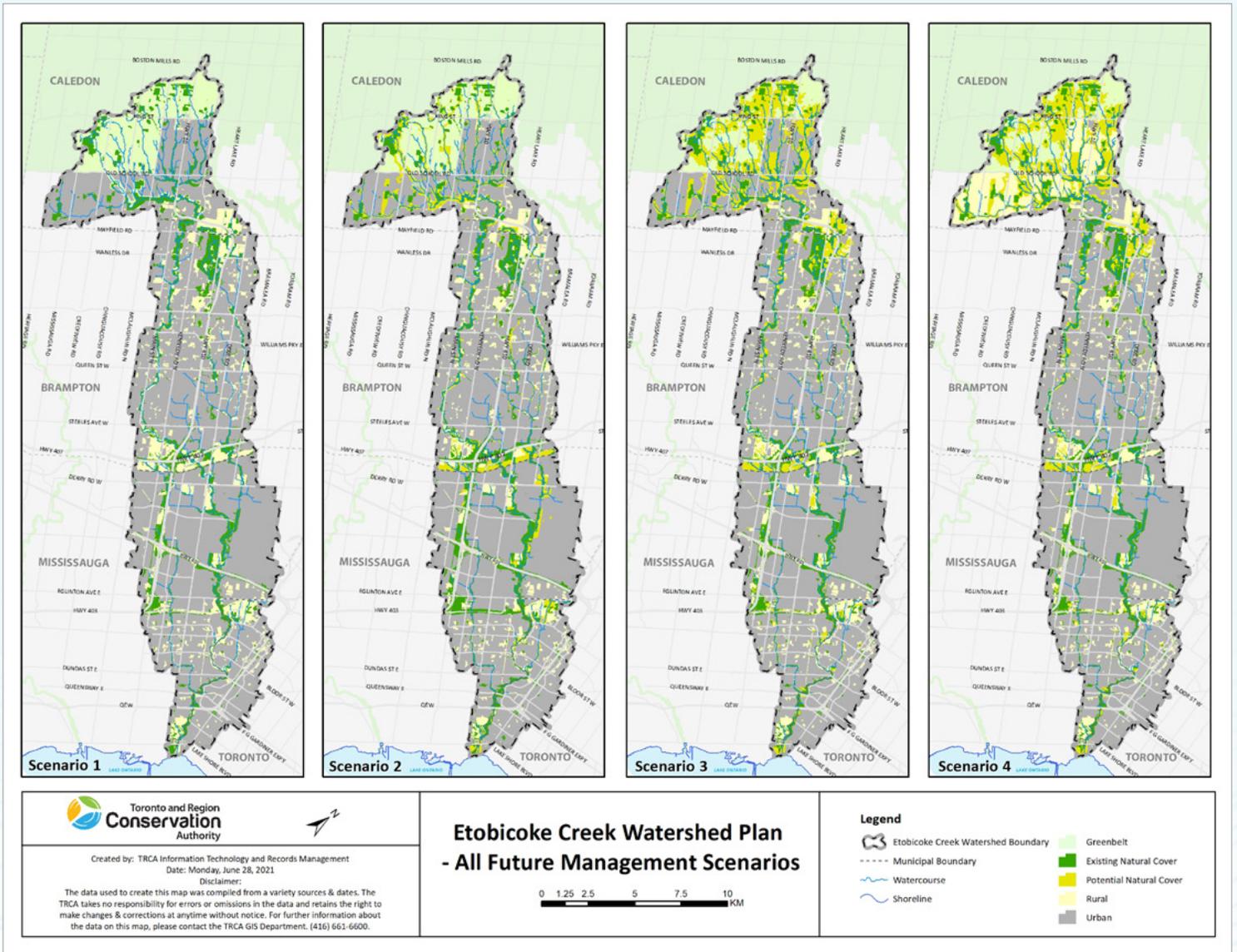
- Project potential future land use change based on growth projections by examining different land use and infrastructure planning scenarios to 2051 (i.e. planning horizon for municipal Official Plans).
- Assess the effects of different levels of ecosystem restoration and enhancement (e.g. increase in natural cover quantity and quality) on watershed conditions.
- Assess the effects of different levels of stormwater control on watershed conditions.
- Assess the potential impacts of climate change on watershed conditions, where possible.

Four future management scenarios were assessed (see [Figure 12](#)). The baseline for comparison is the current conditions of the watershed as identified in [Section 3 - Existing Watershed Conditions. Table 5](#) provides a description and rationale for each of the four future management scenarios.

TABLE 5:
Summary of Future Management Scenarios

	Description	Rationale
Scenario 1: Urban Expansion with Minimal Enhancements	Assumes urbanization of the remaining whitebelt* lands in the Headwaters. No enhancements to natural cover or stormwater management.	Compares current conditions to further urbanization in the Headwaters with minimal other watershed enhancements.
Scenario 2: Urban Expansion with Mid-range Enhancements	Same as Scenario 1, with some enhancements to stormwater management, urban forest, and natural cover. Includes the potential Greater Toronto Area West Highway (i.e. Highway 413).	Compares additional watershed interventions to Scenario 1 to determine the relative benefits of the enhancements.
Scenario 3: Urban Expansion with Optimal Enhancements	Same as Scenario 1, with a greater level of enhancements to stormwater management, urban forest, and natural cover than Scenario 2.	Compares an even higher level of watershed interventions to Scenario 1 to determine the relative benefits of the enhancements.
Scenario 4: Existing Urban Boundary with Optimal Enhancements	Same as Scenario 3, except the current urban boundary is maintained in the Headwaters.	Compares the same high level of interventions as Scenario 3 without further urbanization to determine the relative benefits of the enhancements and maintaining the existing urban boundary.
<p>*Note: The whitebelt refers to lands between the built boundary of urban settlement areas and the boundary of the Greenbelt Plan Area.</p>		

FIGURE 12:
Future Management Scenarios



At the time that the future management scenarios were developed and analyzed, many municipalities were in the process of updating their Official Plans, thus mapping (including the projected urban boundaries) may differ from mapping in municipal Official Plans. However, these differences are not expected to change the key messages of the analyses, which still provide useful insights to inform decision-making.

See the full [Future Management Scenario Analysis technical report](#) for more information on the assumptions that went into each scenario.

4.3 SCENARIO ANALYSIS

The key findings of the Etobicoke Creek watershed future management scenario analyses are organized into four watershed components: WRS, NHS and Urban Forest, Water Quality, and Natural Hazards. **Table 6** provides further details on potential future watershed conditions associated with each future management scenario for each of these watershed components. Potential future conditions are expressed by percent change for each component.

For all the calculations of percent change, Scenario 1 is compared to current conditions, while Scenarios 2, 3, and 4 are compared to Scenario 1. This is to compare and assess the relative benefits of the different levels of enhancements in Scenarios 2, 3, and 4 against the minimal enhancements in Scenario 1. To aid in interpreting the results in **Table 6**, percent change is colour-coded to indicate whether watershed conditions improve, are roughly equal, deteriorate, or significantly deteriorate from a hydrological or ecological perspective.

-  **>+5% change**, watershed conditions improve
-  **0 to +5% or 0 to -5% change**, watershed conditions stay roughly the same
-  **-6% to -10% change**, watershed conditions deteriorate
-  **>-10% change**, watershed conditions significantly deteriorate

It is important to note that percent change is identified by the thresholds listed solely based on watershed conditions and not whether the report value is a positive or negative number. For example, a decrease in chloride concentrations or peak flows is a good thing from a hydrological or ecological perspective and would be presented as a positive percent change in **Table 6**.

As noted earlier, future management scenario analysis does not result in decisions about the type and configuration of land uses. Instead, future management scenario analysis helps to inform decisions through the municipal planning process.

It is the responsibility of the applicable municipality to determine the ultimate land use configuration for any future changes in the watershed.

Appropriate mitigation strategies are developed during the detailed planning strategies for new developments. These mitigation strategies may include assessments on the appropriate levels of stormwater controls, the use of green infrastructure, and opportunities for ecological restoration.

TABLE 6:
Summary of Future Management Scenario Results

WATER RESOURCE SYSTEM



Watershed Plan Component		CURRENT CONDITIONS (2019)	SCENARIO 1 Urban Expansion + Minimal Enhancements (compared to Current Conditions)	SCENARIO 2 Urban Expansion + Mid-range Enhancements (compared to Scenario 1)	SCENARIO 3 Urban Expansion + Optimal Enhancements (compared to Scenario 1)	SCENARIO 4 Existing Urban Boundary + Optimal Enhancements (compared to Scenario 1)
WATER RESOURCE SYSTEM						
Riparian Corridors	Area (ha)	600	600	758	797	797
	% change	N/A	0%	26%	33%	33%
Aquatic Habitat Quality ¹²	Area (ha)	10,719	11,663	11,531	11,220	10,538
	% change	N/A	-9%	1%	4%	10%
Groundwater recharge ¹³	mm/yr	133	119	124	128	138
	% change	N/A	-11%	4%	8%	16%
Groundwater discharge ¹⁴	mm/yr	118	107	111	114	122
	% change	N/A	-9%	4%	7%	14%

¹²This is based on the amount of impervious cover in the watershed as a metric of aquatic habitat quality. Aquatic habitat quality is expected to decrease as impervious cover increases (and it is recommended that effective impervious cover remains below 25%).

¹³The current conditions results for groundwater recharge are based on the model results from the future management scenario analysis rather than baseflow analysis completed during watershed characterization.

¹⁴See footnote 13.

NATURAL HERITAGE SYSTEM / URBAN FOREST

Watershed Plan Component		CURRENT CONDITIONS (2019)	SCENARIO 1 Urban Expansion + Minimal Enhancements (compared to Current Conditions)	SCENARIO 2 Urban Expansion + Mid-range Enhancements (compared to Scenario 1)	SCENARIO 3 Urban Expansion + Optimal Enhancements (compared to Scenario 1)	SCENARIO 4 Existing Urban Boundary + Optimal Enhancements (compared to Scenario 1)
NATURAL HERITAGE SYSTEM / URBAN FOREST						
Habitat quantity (natural cover)	Area (ha)	2,617	2,617	4,153	5,108	5,108
	% change	N/A	0%	59%	95%	95%
Habitat Quality	Average LAM score	7.56	7.33	7.47	7.74	7.91
	% change	N/A	-3%	2%	6%	8%
Urban forest (canopy cover)	Area (ha)	3,290	3,290	4,338	5,947	5,984
	% change	N/A	0%	32%	81%	82%



WATER QUALITY

Watershed Plan Component		CURRENT CONDITIONS (2019)	SCENARIO 1 Urban Expansion + Minimal Enhancements (compared to Current Conditions)	SCENARIO 2 Urban Expansion + Mid-range Enhancements (compared to Scenario 1)	SCENARIO 3 Urban Expansion + Optimal Enhancements (compared to Scenario 1)	SCENARIO 4 Existing Urban Boundary + Optimal Enhancements (compared to Scenario 1)
WATER QUALITY¹⁵						
Chlorides ¹⁶	% change	N/A ¹⁷	30%	-49%	-3%	-6%
TSS	% change	N/A ¹⁷	-21%	68%	135%	186%

¹⁵Percent change for water quality is based on averages for all stream segments. Results for chlorides are presented as winter season only, while TSS results are for all seasons.

¹⁶Based on modelling results, average chloride concentrations decreased overall under all future management scenarios. However, the magnitude of the decrease was variable, especially in the winter season. In Scenario 1, chloride concentrations decreased from current conditions (percent change by 30%) reflecting positive watershed conditions despite urbanization. This is largely due to implications of climate change that result in reduced salt use. In Scenario 2, chloride concentrations were higher than Scenario 1 due to the proposed GTA West Highway and the additional expected road salting in winter months. Lastly, Scenarios 3 and 4 had similar (but slightly greater) chloride concentrations than Scenario 1 again suggesting that changes in urbanization and enhancements had less of an impact compared to climate change implications resulting in reduced salt use. Please see the Etobicoke Creek Watershed Future Management Scenario Analysis technical report (referenced in Section 9 and publicly available) for more details on the water quality results. It is important to note that, although climate change seems to be driving a decrease in chloride concentrations in the watershed, concentrations are already high, affecting aquatic life.

¹⁷Due to the partially calibrated nature of the water quality model, absolute concentrations are not being reported. Instead, percent change observed in the model is reported for the future scenarios, with Scenario 1 still being compared to current conditions.





NATURAL HAZARDS - FLOODING

Watershed Plan Component		CURRENT CONDITIONS (2019)	SCENARIO 1 Urban Expansion + Minimal Enhancements (compared to Current Conditions)	SCENARIO 2 Urban Expansion + Mid-range Enhancements (compared to Scenario 1)	SCENARIO 3 Urban Expansion + Optimal Enhancements (compared to Scenario 1)	SCENARIO 4 Existing Urban Boundary + Optimal Enhancements (compared to Scenario 1)
NATURAL HAZARDS - FLOODING¹⁸						
Flood risk (100-year storm at Dixie/Dundas FVC without climate change)	Peak flow (m ³ /s)	107	108	106	91	91
	% change	N/A	-1%	3%	16%	16%
Flood risk (100-year storm at Dixie/Dundas FVC with climate change)	Peak flow (m ³ /s)	107	134	132	121	121
	% change	N/A	-26%	1%	10%	10%
Flood risk (5-year storm at Dixie/Dundas FVC without climate change)	Peak flow (m ³ /s)	63	64	59	42	42
	% change	N/A	-1%	8%	34%	34%
Flood risk (5-year storm at Dixie/Dundas FVC with climate change)	Peak flow (m ³ /s)	63	68	64	47	47
	% change	N/A	-9%	7%	31%	31%

¹⁸See the full Future Management Scenario Analysis technical report for full flood and erosion risk results. For the purposes of this watershed plan, a sample from two design storms at one FVC is used to illustrate changes in flood risk associated with the future management scenarios. For erosion risk, the Headwaters and Lower Etobicoke subwatersheds are shown with results for Cumulative Effective Work and Time of Exceedance.



NATURAL HAZARDS - EROSION

Watershed Plan Component		CURRENT CONDITIONS (2019)	SCENARIO 1 Urban Expansion + Minimal Enhancements (compared to Current Conditions)	SCENARIO 2 Urban Expansion + Mid-range Enhancements (compared to Scenario 1)	SCENARIO 3 Urban Expansion + Optimal Enhancements (compared to Scenario 1)	SCENARIO 4 Existing Urban Boundary + Optimal Enhancements (compared to Scenario 1)
NATURAL HAZARDS - EROSION¹⁸						
Erosion risk based on Cumulative Effective Work Index¹⁹ (CEW) in Headwaters	% change	N/A ²⁰	-128%	18%	35%	58%
Erosion risk based on CEW in Lower Etobicoke	% change	N/A ²¹	-13%	35%	48%	53%
Erosion risk based on Time of Exceedance²² (TOE) in Headwaters	% change	N/A ²³	-104%	17%	32%	48%
Erosion risk based on TOE in Lower Etobicoke	% change	N/A ²⁴	-8%	36%	51%	54%

¹⁹Cumulative Effective Work index, CEW, provides a measure of the energy expended by the channel above the threshold discharge, or critical shear stress value. Larger values of CEW imply greater potential for erosion of the channel material.

²⁰The continuous erosion modelling conducted calculated CEW in Newtons/metre, but only the results as percent change for the future management scenarios are shown here.

²¹See footnote 20.

²²Time of Exceedance, TOE, provides a measure of the total amount of time over which the threshold, or critical flow, is exceeded in the channel. Larger values of TOE imply a larger total time period during which the channel could erode.

²³The continuous erosion modelling conducted calculated TOE in hours, but only the results as percent change for the future management scenarios are shown here.

²⁴See footnote 23.

The following summary illustrates expected changes to watershed conditions based on available information and assessments conducted as part of this watershed planning process. The management framework in [Section 5 - Management Framework](#) identifies what is necessary to protect, enhance, and restore watershed conditions.

Summary of implications:

Water Resource System	<ul style="list-style-type: none"> • Aquatic habitat quality will decrease as impervious surface amounts increase (and will likely become non-supporting if effective impervious cover exceeds 25%). • With increasing urbanization, more sensitive fish species will be replaced with species more tolerant of disturbance, and benthic communities will shift towards more pollution tolerant species. • With natural cover enhancements, the number of coolwater, coldwater, and stable temperature stream reaches could increase and make the system more resilient to climate change. • Groundwater discharge and recharge will be negatively affected in the Headwaters without enhancements to natural cover, urban forest, stormwater management, and LID implementation.
Natural Heritage System and Urban Forest	<ul style="list-style-type: none"> • Even with optimal natural cover enhancements, this watershed remains below recommended federal guidelines for natural cover quantity and TRCA’s terrestrial NHS target, but any increase will provide a benefit to biodiversity and other ecosystem services. • There are opportunities to increase the quantity and quality of the urban forest to provide ecosystem goods and services, increase climate resiliency, and provide socio-economic benefits.
Water Quality	<ul style="list-style-type: none"> • Changes in water quality parameters (e.g. TSS and chlorides) demonstrate the impact of urbanization and the benefits of improved stormwater management and natural cover enhancements in a changing climate.
Natural Hazards	<ul style="list-style-type: none"> • Optimal enhancements to natural cover and stormwater management help reduce peak flow levels, though not as effectively when climate change is factored in. • Land use changes can manage peak flows for all design storms through enhancements and interventions (if TRCA’s stormwater management criteria for the Etobicoke Creek Headwaters is applied), but climate change will cause peak flows to exceed current stormwater infrastructure design standards. • Increasing enhancements to natural cover and stormwater management help mitigate erosion, which would otherwise increase with further urbanization.



What does this mean?

These results demonstrate the importance of ensuring that land use and infrastructure planning decisions are made to minimize and mitigate impacts to the watershed regardless of potential future land use configurations. The results also clearly demonstrate the benefits of increased watershed enhancements to the quantity of quality of natural cover and urban forest, improved stormwater management, and greater use of LID infrastructure.

The results of this future management scenario analysis emphasize the importance of protecting, enhancing, and restoring the WRS and NHS as identified in this watershed plan.

Climate change, combined with a heavily urbanized and already degraded watershed, has the potential to further reduce watershed health and increase the risk to watershed residents and infrastructure (i.e. through more frequent and intense flooding and erosion).

The management framework outlined in [Section 5 - Management Framework](#) is designed to address existing watershed issues and the implications of these future management scenarios by identifying actions to improve watershed conditions and increase resiliency to the impacts of climate change, by:

- Limiting impervious cover as much as possible, or mitigating it through the use of green infrastructure and LID.
- Increasing natural cover and improving terrestrial and aquatic habitat quality through targeted ecological restoration and urban forest canopy enhancements.
- Ensuring municipal policies and programs are in place to achieve best management practices and mitigate the impacts of urban development on watershed health.

FIGURE 13:
Etobicoke Creek Trail South of 401



5. Management Framework

The role of municipalities in watershed planning is to implement the watershed planning requirements/guidance of provincial legislation, plans, and the PPS. Watershed planning helps municipalities make informed decisions on where and how to grow in a way that minimizes and/or mitigates impacts to watershed health. Watershed plans can also be an excellent resource to municipalities to inform various initiatives including greenlands securement and management planning and green infrastructure and/or stormwater management retrofit planning, and to contribute to urban revitalization strategies where natural heritage restoration or flood remediation strategies may be needed.

The management framework for the Etobicoke Creek Watershed Plan represents what needs to be done to protect, enhance, and restore watershed health and build resiliency to land use and climate changes. Improving the health of the Etobicoke Creek watershed will have many co-benefits such as providing ecosystem services and improving community health and well-being.

The management framework consists of goals, objectives, indicators, and management actions (described in [Table 7](#)).

TABLE 7:
Management Framework Explanation

Management Framework Components	Description
GOALS	Represent the outcomes to achieve.
OBJECTIVES	Are the specific statements about desired results, or steps to be undertaken, to achieve the goal.
INDICATORS	Explain how progress on implementing the objectives is going to be tracked or measured.
MANAGEMENT ACTIONS	Specifically explain what needs to be done, and by what partner, to accomplish the relevant objective.

The management framework for the Etobicoke Creek Watershed Plan consists of three goals, eight objectives, 10 indicators, and 36 management actions (see **Figure 14**). The management framework was developed collaboratively by TRCA, the municipalities within the watershed, MCFN, and the GTAA, and based on feedback from stakeholders and the public to address the issues identified during the watershed characterization stage and to mitigate potential future stressors (i.e. urban expansion and climate change) as identified during the future management scenario analysis stage. Regardless of potential future land use, the management framework is designed to minimize and mitigate potential future watershed impacts.

Each of the goals in the management framework are complementary, with no one goal being more important than another. The management actions are numbered to correspond with their applicable goal and objective, and are also in no particular order. The management actions apply to the entire watershed, unless otherwise specified. For example, there are specific management actions for the Town of Caledon in the Headwaters subwatershed in the event of future urban expansion. The majority of the other management actions directed at municipal partners apply to areas of the watershed that already have urban land uses.

Additional detailed site-level investigations and technical studies will be required (as appropriate and as part of subwatershed planning, environmental assessments, development and planning applications/approvals, etc.). Further studies will provide local/site level information to help inform and assess the suitability for implementation of some of the management actions (e.g. stormwater controls and the use of low impact development and green infrastructure techniques based on site conditions).

To fully realize the vision for the Etobicoke Creek watershed and to improve watershed health and ensure sustainability of its ecosystem services for current and future generations, collaborative and comprehensive implementation of all aspects of this management framework is essential. Implementation of the management framework (and the specific management actions) will begin once final approvals and endorsements of the Etobicoke Creek Watershed Plan have been obtained from municipal committees and Councils and from TRCA’s Board of Directors in 2024. **Section 6 - Implementation, Monitoring and Evaluation** provides additional details about implementation of the Etobicoke Creek Watershed Plan including establishment of an Implementation Steering Committee and development of a detailed implementation, tracking, and reporting plan to ensure TRCA and the municipalities in the watershed, in particular, are committed to and held accountable for implementation.

FIGURE 14:
Overview of Management Framework

GOAL 1

Land Use

Achieve sustainable land use and infrastructure development patterns to improve watershed conditions and enhance climate resiliency.

OBJECTIVE 1

Minimize the impacts of human land uses through the adoption and implementation of sustainability policies, low impact development (LID), and green infrastructure.

Indicator:

Complete LID or green infrastructure projects in the recommended areas that would benefit most from LID or green infrastructure implementation (**Map 1**).

OBJECTIVE 2

Retrofit, upgrade, and install stormwater infrastructure using best available technologies to reduce the impacts of untreated runoff entering receiving waters.

Indicator:

Evaluate improvements to stormwater management across the watershed through municipal tracking and reporting on stormwater assets, drainage areas (i.e. sewersheds), and service levels.

OBJECTIVE 3

Reduce the risks associated with natural hazards through enhanced flood and erosion mitigation.

Indicators:

Flooding: implement risk reduction measures in 50% of Flood Vulnerable Clusters.

Erosion: continue monitoring and remediating infrastructure hazard sites for participating municipal partners, implementing the assessment and maintenance of erosion control asset systems.

OBJECTIVE 4

Encourage the use of agricultural best management practices to minimize agricultural runoff and improve rural land stewardship.

Indicator:

Track the number of landowners that implement best management practices.



GOAL 2

Water Resource System

Protect, enhance, and restore the areas and features that comprise the Water Resource System (including aquatic habitat) for ecosystem resilience and sustainability.

OBJECTIVE 1

Implement appropriate policies and programs that identify, protect, enhance, and restore the areas and features that comprise the Water Resource System.

Indicator:

Complete restoration projects at 75% of identified priority aquatic sites (**Maps 3A and 3B**).

OBJECTIVE 2

Improve aquatic habitat connectivity and reduce the impacts of pollutants on aquatic health.

Indicator:

Maintain, or improve, aquatic health rankings.



GOAL 3

Natural Heritage System and Urban Forest

Protect, enhance, and restore the Natural Heritage System and urban forest within the watershed to improve ecosystem resilience and sustainability.

OBJECTIVE 1

Improve the quality and quantity of the Natural Heritage System through ecosystem and biodiversity protection, enhancement, and restoration.

Indicators:

Habitat Quantity: increase total natural cover in the watershed.

Habitat Quality: maintain, or improve, terrestrial ecosystem quality rankings.

OBJECTIVE 2

Increase urban forest canopy cover throughout the watershed to improve social and environmental well-being.

Indicator:

Increase canopy cover in the watershed to achieve a minimum target of 16%.



5.1 LAND USE GOAL

GOAL 1

Achieve sustainable land use and infrastructure development patterns to improve watershed conditions and enhance climate resiliency.

This goal focuses on the policy, land use, and infrastructure planning processes that influence the health of the watershed. Management actions (outlined in [Table 8](#)) focus on mitigating the impacts of current urban development or agricultural lands uses and minimizing future impacts from potential urban expansion. Due to the heavily urbanized nature of this watershed, utilizing the highest urban development standards, improving stormwater management, mitigating natural hazards, and improving agricultural land uses will be essential to ensure the long-term health of watershed ecosystems and to improve climate resiliency.

The decision of whether to proceed with the construction of Highway 413 rests with the Province. Some municipalities have expressed differing positions about the proposed Highway 413 with calls for the Province to consider alternatives. This watershed plan includes a management action (1.1.3) intended to mitigate watershed impacts, as much as possible, which is directed at the Ministry of Transportation should construction of Highway 413 proceed.



Land Use Objective	Management Actions
<p>LAND USE OBJECTIVE 1</p> <p>Minimize the impacts of human land uses through the adoption and implementation of sustainability policies, low impact development (LID), and green infrastructure.</p>	<p>1.1.1</p> <p>Municipal partners, in collaboration with TRCA, to adopt green development policies, or standards, requiring new developments and redevelopments, to utilize low impact development and green infrastructure techniques to limit the impacts of impervious cover and maintain predevelopment water balance consistent with or exceeding provincial standards or guidance. Understanding that the provincial guidance has not yet been finalized, the current recommendation is:</p> <ul style="list-style-type: none"> a. through the control hierarchy of: <ul style="list-style-type: none"> i. retention (i.e. infiltration, reuse, or evapotranspiration) ii. LID volume capture and release (i.e. LID filtration) iii. stormwater volume detention and release (only once maximum control from steps i and ii have been exhausted) b. shall strive to meet the hydrology model recommended watershed runoff volume control target of the 90th percentile of a 12-hour event, where rainfall depth is approximately 27-29 mm c. shall adhere to best practices and standards for water quality, erosion, and sediment control
	<p>1.1.2</p> <p>Municipal partners, in collaboration with TRCA, to review and update existing policies/Official Plans, bylaws, guidelines, standards, secondary plans, and master plans to:</p> <ul style="list-style-type: none"> a. ensure consistency with the goals and objectives of this watershed plan b. ensure best practices are implemented and the highest standards applied across the watershed for matters related to: <ul style="list-style-type: none"> i. safeguarding against natural hazard risks ii. Water Resource System and Natural Heritage System protection, enhancement, and restoration iii. improving water quality and protecting water quantity for drinking water and ecological needs c. establish a policy evaluation process to assess the effectiveness of policy frameworks consistent with the monitoring of watershed and local trends (i.e. if indicators are not improving, what needs to be done?)
	<p>1.1.3</p> <p>Prior to the construction of Highway 413, if approved, the Ministry of Transportation should include in the design:</p> <ul style="list-style-type: none"> a. appropriate mitigation measures to ensure the natural hazard risks of flooding and erosion will not increase or are managed in accordance with Provincial guidelines and policies and TRCA's Voluntary Project Review process b. appropriate mitigation measures to demonstrate how the Natural Heritage System and Water Resource System will be protected and restored, including ecosystem compensation (once the protection hierarchy of avoid, minimize, and mitigate has been applied) c. appropriate mitigation measures to maintain ecological function and wildlife connectivity



Land Use Objective	Management Actions
<p>LAND USE OBJECTIVE 1</p> <p>Minimize the impacts of human land uses through the adoption and implementation of sustainability policies, LID, and green infrastructure.</p>	<p>1.1.4 Municipal partners, in collaboration with other levels of government and TRCA, to work to reduce the amount of chlorides entering the watershed by:</p> <ul style="list-style-type: none"> a. continuing to implement best management practices for winter de-icing procedures on public property b. continuing education and outreach on salt management for private property <p>1.1.5 TRCA, in collaboration with municipal partners, will:</p> <ul style="list-style-type: none"> a. update relevant stormwater management criteria guidance (consistent with the provincial standards/guidelines) to focus on retention (infiltration and reuse) and filtration to minimize the impacts of new development through the use of LIDs and green infrastructure b. continue to advocate to the Province to update the stormwater volume control guidelines and regulatory framework at the local level
<p>LAND USE OBJECTIVE 2</p> <p>Retrofit, upgrade, and install stormwater infrastructure using best available technologies to reduce the impacts of untreated runoff entering receiving waters.</p>	<p>1.2.1 Municipal partners, in collaboration with TRCA, to prioritize on-site control through LID or green infrastructure implementation as much as possible based on site conditions (see Map 1 for areas in the watershed that would benefit the most from LID or green infrastructure implementation to help with natural/pre-development water balance) or as opportunities arise through municipal capital planning for linear projects (i.e. road improvements) or other initiatives (e.g. sustainable community retrofit projects such as TRCA's Sustainable Neighbourhood Action Program).</p> <p>1.2.2 Municipal partners, in collaboration with TRCA, through stormwater master planning to continue to:</p> <ul style="list-style-type: none"> a. utilize best management practices for stormwater management and consistent design criteria to manage runoff quantity, quality, erosion, and water balance b. implement or continue to advance municipal stormwater cost recovery funding options (e.g. stormwater charges) to reduce effective impervious surfaces in the watershed c. examine opportunities to retrofit outdated stormwater infrastructure and install controls in areas without management through long-term planning and investment strategies (recommended target for watershed to be less than 25% effective impervious cover to minimize impacts to aquatic ecosystem health through the implementation of LIDs and green infrastructure) d. adaptively manage stormwater infrastructure through operation and maintenance schedules and procedures e. take a watershed approach to master planning by coordinating efforts and investment strategies with neighbouring watershed municipalities f. factor in the impacts of climate change on stormwater infrastructure

Land Use Objective	Management Actions
<p>LAND USE OBJECTIVE 2</p> <p>Retrofit, upgrade, and install stormwater infrastructure using best available technologies to reduce the impacts of untreated runoff entering receiving waters.</p>	<p>1.2.3</p> <p>For new developments, municipal partners to have regard for TRCA criteria that requires hydrologic analysis and erosion threshold assessments downstream of potential stormwater detention facilities (e.g. stormwater ponds) that need to demonstrate no negative, or adverse, downstream impacts, prior to municipal approvals.</p>
	<p>1.2.4</p> <p>The Greater Toronto Airports Authority, in collaboration with TRCA, to implement appropriate stormwater management measures to improve the quality and quantity of stormwater from airport lands.</p>
	<p>1.2.5</p> <p>Municipal partners, in collaboration with TRCA, to continue to advance stormwater infrastructure retrofit projects that minimize impacts to the NHS and are outside of the floodplain and identify opportunities for more natural infrastructure solutions.</p>
<p>LAND USE OBJECTIVE 3</p> <p>Reduce the risks associated with natural hazards through enhanced flood and erosion mitigation.</p>	<p>1.3.1</p> <p>TRCA, in collaboration with municipal partners, will:</p> <ul style="list-style-type: none"> a. focus first on Special Policy Areas to continue to characterize flood risk within Flood Vulnerable Clusters b. develop outreach initiatives to educate the public on roles and responsibilities when living in a flood risk area c. enhance flood forecasting and warning systems d. undertake detailed technical studies and Environmental Assessments e. support implementation of flood mitigation strategies in each Flood Vulnerable Cluster
	<p>1.3.2</p> <p>Municipal partners, in collaboration with TRCA, to implement appropriate flood mitigation measures at the six Flood Vulnerable Clusters as recommended in relevant studies and reports.</p>
	<p>1.3.3</p> <p>During planning for transportation infrastructure improvement projects, or new crossings, the City of Toronto, Region of Peel, and lower-tier municipalities to implement best management practices for siting and design in accordance with TRCA’s Valley and Stream Corridor Crossings Guideline, to facilitate hydraulic and hydrologic functions of crossings to avoid and / or mitigate flood risk, slope instability, and erosion risk.</p>

Land Use Objective	Management Actions
<p>LAND USE OBJECTIVE 3</p> <p>Reduce the risks associated with natural hazards through enhanced flood and erosion mitigation.</p>	<p>1.3.4</p> <p>TRCA and municipal partners will continue to prioritize the maintenance of their respective erosion and flood control assets and the remediation of infrastructure hazard sites based on erosion and flood risk.</p>
	<p>1.3.5</p> <p>TRCA will regularly collect Light Detection and Ranging (LiDAR) data (or data using other appropriate and available technology) to allow for robust geospatial analyses of significant terrain movement, and to monitor erosion hazards threatening essential infrastructure and degrading erosion control structures (TRCA assets), and will provide accurate base mapping for flood mapping and modelling projects.</p>
<p>LAND USE OBJECTIVE 4</p> <p>Encourage the use of agricultural best management practices to minimize agricultural runoff and improve rural land stewardship.</p>	<p>1.4.1</p> <p>In collaboration with the agricultural community and provincial ministries, TRCA, the Region of Peel, City of Brampton, and Town of Caledon, to identify opportunities to expand best management practices that reduce agricultural runoff and improve water management, such as:</p> <ul style="list-style-type: none"> a. using cover crops, and/or leaving crop residue b. adopting no till farm practices during the non-growing season c. conducting soil testing for nutrients and adjusting fertilizer application rates, if required
	<p>1.4.2</p> <p>In collaboration with the agricultural community, rural land owners, and provincial ministries, TRCA, the Region of Peel, City of Brampton, and Town of Caledon, to identify opportunities to improve rural land stewardship practices through:</p> <ul style="list-style-type: none"> a. improving education and outreach about the benefits of utilizing best management practices to improve habitat (e.g. meadows for sensitive bird species) and how efforts can have mutual benefits towards agricultural practices (e.g. windrows, reduced erosion, pollinator habitat, etc.) b. incentivizing increased tree canopy and naturalized vegetation buffers between agricultural lands and natural and/or Water Resource System features and areas c. incentivizing the implementation of Environmental Farm Plans and other rural land stewardship programs (e.g. TRCA’s Rural Clean Water Program)

5.2 WATER RESOURCE SYSTEM GOAL

GOAL 2

Protect, enhance, and restore the areas and features that comprise the Water Resource System (including aquatic habitat) for ecosystem resilience and sustainability.

This goal focuses on ensuring policies are in place for the long-term protection of the WRS, while implementing programs to enhance and restore aquatic habitat and riparian corridors. The WRS is presented in [Maps 2A](#) and [2B](#). The areas and features that comprise the WRS are to be protected in accordance with the management actions outlined below, and municipal and provincial policies.

The WRS in the Etobicoke Creek watershed is currently stressed, with limited natural cover, poor water quality, and poor aquatic habitat conditions. Implementing the management actions in [Table 9](#) will be essential to enhancing the health of the WRS and adapting to climate change.

TABLE 9:
WRS Management Actions

WRS Objective	Management Actions
<p>WRS OBJECTIVE 1</p> <p>Implement appropriate policies and programs that identify, protect, enhance, and restore the areas and features that comprise the Water Resource System.</p>	<p>2.1.1</p> <p>The City of Toronto, Region of Peel, and lower-tier municipalities, in collaboration with TRCA, to ensure the protection of the Water Resource System (Map 2A and Map 2B) and its functions by:</p> <ul style="list-style-type: none"> a. updating Official Plans and zoning bylaws to identify and protect the Water Resource System b. assessing existing standards, policies, and guidelines for land use and infrastructure development to ensure they reflect provincial policy direction to protect, enhance, and restore the quality and quantity of water c. avoiding development near key hydrologic features through the establishment of appropriate buffers d. requiring the implementation of appropriate mitigation measures where avoidance of key hydrologic areas is not possible, to maintain hydrologic functions
	<p>2.1.2</p> <p>The Town of Caledon, in collaboration with TRCA, to require Headwater Drainage Feature classification and relevant management approaches as per the Evaluation, Classification and Management of Headwater Drainage Features Guidelines, prior to planning approvals in the Headwaters subwatershed.</p>



WRS Objective	Management Actions
<p>WRS OBJECTIVE 1</p> <p>Implement appropriate policies and programs that identify, protect, enhance, and restore the areas and features that comprise the Water Resource System.</p>	<p>2.1.3</p> <p>The Town of Caledon, in collaboration with the Region of Peel and TRCA, to establish policies to ensure that the Headwaters of Etobicoke Creek maintains less than 25% effective impervious cover (in accordance with Appendix A) as urbanization increases to minimize impacts to aquatic ecosystem health, and to demonstrate through a subwatershed plan (or equivalent), prior to the approvals of any secondary plans in the Headwaters, that:</p> <ul style="list-style-type: none"> a. key hydrologic features will be protected and hydrologic functions maintained b. where avoidance of key hydrologic areas is not possible, appropriate mitigation measures are to be implemented to maintain downstream hydrologic functions c. there will be no negative or adverse downstream effects, such as increased flooding, erosion, or deteriorated water quality through a hydraulic analysis (to quantify and map depth and extent of impacts) and other relevant modelling
	<p>2.1.4</p> <p>TRCA, in collaboration with municipal partners, to prioritize the restoration of aquatic sites identified on Map 3A and Map 3B, which have been selected for contributing to the following:</p> <ul style="list-style-type: none"> a. enhancing habitat quality and watershed connectivity b. enhancing natural cover within riparian corridors c. ensuring biodiversity persists d. improving watershed resiliency to climate change <p>Note: Municipalities may have their own restoration priorities (outlined in various municipal strategies and park plans) in addition to these priority restoration sites. This watershed plan encourages restoring as much habitat as possible across the watershed.</p>
	<p>2.1.5</p> <p>The City of Brampton to ensure development applications for high density on the Brampton Esker (Map 4) include a hydrogeological study to confirm foundation stability and groundwater control, prior to planning approvals.</p>
	<p>2.1.6</p> <p>The City of Brampton and TRCA, in collaboration with the Region of Peel, to develop an alternative groundwater control strategy for the Highway 410/ Bovaird Drive area to prepare for the potential situation that dewatering by the Turnberry Golf Club ceases or becomes ineffective.</p>

WRS Objective	Management Actions
<p>WRS OBJECTIVE 2</p> <p>Improve aquatic habitat connectivity and reduce the impacts of pollutants on aquatic health.</p>	<p>2.2.1</p> <p>TRCA, in collaboration with municipal partners and landowners, to remove the priority barriers to fish movement identified on Map 5.</p>
	<p>2.2.2</p> <p>TRCA and municipal partners, in collaboration with industrial and commercial landowners and the province, to:</p> <ul style="list-style-type: none"> a. identify high risk spill areas and implement effective spill prevention and contingency plans in accordance with provincial regulations b. educate commercial and industrial property owners on effective maintenance of oil and grit separators, and other pollution control infrastructure
	<p>2.2.3</p> <p>TRCA and municipal partners to participate in research initiatives to identify sources of microplastics and emerging chemicals of concern, and to work with other levels of government to manage and ideally remove these pollutants from the environment.</p>

5.3 NATURAL HERITAGE SYSTEM AND URBAN FOREST GOAL

GOAL 3

Protect, enhance, and restore the Natural Heritage System and urban forest within the watershed to improve ecosystem resilience and sustainability.

This goal focuses on policies and programs to protect, enhance, and restore the quantity and quality of the NHS and urban forest within the watershed. The watershed refined enhanced NHS is shown in [Map 6](#) and the management actions are outlined in [Table 10](#). The priority areas for urban forest canopy enhancements are shown in [Map 9](#).

It is the responsibility of municipalities to adopt a NHS that is consistent with provincial policy and informed by the goals and objectives of the Etobicoke Creek Watershed Plan. The watershed refined enhanced NHS, developed as part of this watershed plan, includes areas with existing natural cover and areas that are targeted to be potential natural cover through restoration. It also includes contributing areas, which are built or unbuilt areas that can provide additional habitat and connectivity benefits through the use of green infrastructure.

Assuming that the potential natural cover areas are restored, the watershed refined enhanced NHS achieves approximately 23% natural cover across the watershed (up from approximately 12% currently). This is still below recommended guidelines (at least 30%) and the scientific literature for a sustainable and resilient system. However, given the heavily urbanized nature of this watershed, the watershed refined enhanced NHS represents a significant and realistic improvement that will have significant benefits for overall watershed health, biodiversity, and climate resiliency.

Urban forests provide valuable terrestrial habitat, help manage stormwater, provide clean air, and have other socio-economic benefits (e.g. regulating temperatures, improving personal well-being). Including the urban forest under this goal recognizes the integrated nature of natural areas and the ecological value of additional tree canopy in parks, on streets, or on private property. See [Appendix B](#) for more details on the tiered enhancement opportunities identified in the management actions related to urban forestry.

TABLE 10:
NHS and Urban Forest Management Actions

NHS and Urban Forest Objective	Management Actions
<p>NHS AND URBAN FOREST OBJECTIVE 1</p> <p>Improve the quality and quantity of the Natural Heritage System through ecosystem and biodiversity protection, enhancement, and restoration.</p>	<p>3.1.1 Municipal partners, in collaboration with TRCA, to establish habitat targets through programs and policies to increase natural cover within the watershed as follows:</p> <ul style="list-style-type: none"> a. increase forest cover to at least 14% of total watershed area b. increase wetland cover to at least 3% of total watershed area c. increase meadow cover to at least 5% of total watershed area <p>3.1.2 The City of Toronto, Region of Peel, and lower-tier municipalities, to ensure the protection, enhancement, and restoration of a watershed refined enhanced Natural Heritage System consistent with the goals and objectives of this watershed plan (Map 6) by:</p> <ul style="list-style-type: none"> a. designating in their Official Plans, at a minimum, existing natural cover as identified in Map 6 b. including policies in their Official Plans to identify enhancement and restoration opportunities for potential natural cover areas as identified in Map 6 c. assessing existing standards, guidelines, and policies for land use and infrastructure development to ensure they reflect best practices to maintain, restore, or enhance the designated Natural Heritage System d. avoiding infrastructure development (i.e. buildings and structures) and minimizing infrastructure linear feature crossings in a designated Natural Heritage System e. adopting municipal policies for ecosystem compensation that meet or exceed TRCA’s Guideline for Determining Ecosystem Compensation, where development in a designated Natural Heritage System is unavoidable f. applying a minimum vegetation protection zone along natural heritage features at the boundary of a designated Natural Heritage System (a minimum 30 metre vegetation protection zone is recommended, unless otherwise determined through an appropriate environmental study or provincial policy) g. requiring development and site alterations be designed and approved to prevent encroachment into a designated Natural Heritage System.

NHS and Urban Forest Objective	Management Actions
<p>NHS AND URBAN FOREST OBJECTIVE 1</p> <p>Improve the quality and quantity of the Natural Heritage System through ecosystem and biodiversity protection, enhancement, and restoration.</p>	<p>3.1.3</p> <p>TRCA, in collaboration with municipal partners, and the Greater Toronto Airports Authority, to prioritize the restoration and enhancement of the terrestrial sites identified on Map 3A and Map 3B (while ensuring aviation safety), which have been selected for contributing to:</p> <ul style="list-style-type: none"> a. increasing habitat quantity b. enhancing habitat quality and connectivity c. ensuring biodiversity persists d. reducing climate vulnerabilities <p>Note: Municipalities may have their own restoration priorities (outlined in various municipal strategies and park plans) in addition to these priority restoration sites. This watershed plan encourages restoring as much habitat as possible across the watershed.</p>
	<p>3.1.4</p> <p>TRCA, in collaboration with municipal partners, to explore opportunities to secure the sites identified on Map 7 for ecological protection and to increase the public land ownership and connectivity within the watershed.</p>
	<p>3.1.5</p> <p>All municipalities, in collaboration with TRCA and the Greater Toronto Airports Authority, are to expand the trail network in the Etobicoke Creek watershed to create a connected and safe active recreation network from Lake Ontario to the Headwaters and to neighbouring watersheds (based on TRCA’s Trail Strategy for the Greater Toronto Region 2019, the Province-wide Cycling Network, and municipal trail and active transportation strategies) that minimizes potential impacts to the Natural Heritage System by:</p> <ul style="list-style-type: none"> a. ensuring proper trail management and signage b. engaging trail users by providing education and outreach on the importance of the Natural Heritage System along the trail network c. promoting community stewardship to maintain and monitor the Natural Heritage System for improper trail usage (e.g. off-trail compaction and erosion), illegal dumping, and invasive species, while encouraging community restoration programs (e.g. tree plantings) d. collaborating, when possible, to manage problematic invasive species e. engaging with MCFN to develop interpretative trail signage on the importance of water and the relationship between Treaties and the Etobicoke Creek, and include appropriate Indigenous placemaking

NHS and Urban Forest Objective	Management Actions
<p>NHS AND URBAN FOREST OBJECTIVE 1</p> <p>Improve the quality and quantity of the Natural Heritage System through ecosystem and biodiversity protection, enhancement, and restoration.</p>	<p>3.1.6 Municipal partners, in collaboration with TRCA, to improve wildlife passage at priority road crossings identified on Map 8.</p> <p>3.1.7 Municipal partners, in collaboration with TRCA, to include in green development standards or guidelines, urban design requirements to improve conditions for biodiversity and habitat, such as green roofs, bird safe windows, wildlife crossings, etc., especially within contributing areas of the Natural Heritage System.</p>
<p>NHS AND URBAN FOREST OBJECTIVE 2</p> <p>Increase urban forest canopy cover throughout the watershed to improve social and environmental well-being.</p>	<p>3.2.1 The City of Toronto, Region of Peel, and lower-tier municipalities, in collaboration with TRCA, will undertake strategic tree planting as per the priority planting areas identified on Map 9 to achieve tree canopy cover targets for each subwatershed, or municipality, as follows:</p> <ul style="list-style-type: none"> - Lower Etobicoke = 23.3% - Main Branch = 15% - West Branch = 19.6% - Tributary 3 = 12.2% - Tributary 4 = 14.7% - Little Etobicoke Creek = 15.1% - Spring Creek = 16% - Headwaters (Greenbelt portion) = 13.3% <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>City of Toronto = 24%</p> <p>City of Mississauga = 12.5%</p> <p>City of Brampton = 20%</p> <p>Town of Caledon = 11.3%</p> </div> <p>Note: See management action 3.2.2 for the non-Greenbelt portion of the Headwaters. Municipalities may have specific canopy cover targets that exceed these watershed targets. This watershed plan encourages achieving the highest possible amount of canopy cover across the watershed.</p> <p>3.2.2 The Town of Caledon, in collaboration with the Region of Peel, will require a minimum of 30% canopy cover target for any new developments in areas of the Headwaters subwatershed outside of the Greenbelt by:</p> <ol style="list-style-type: none"> a. requiring developments to submit tree planting plans prior to planning approvals that are based on area specific data b. adopting tree preservation by-laws to retain mature trees c. ensuring green development standards contain progressive planting policies for all aspects of a development (e.g. right-of-ways, lots, parks, etc.).

NHS and Urban Forest Objective	Management Actions
<p>NHS AND URBAN FOREST OBJECTIVE 2</p> <p>Increase urban forest canopy cover throughout the watershed to improve social and environmental well-being.</p>	<p>3.2.3</p> <p>The City of Toronto, Region of Peel, and lower-tier municipalities, in collaboration with TRCA, will develop, or update, urban forest management plans or strategies that:</p> <ul style="list-style-type: none"> a. enhance tree and soil conservation in accordance with Preserving and Restoring Healthy Soil: Best Practices for Urban Construction at all public and private property b. implement the tree canopy cover targets as identified in management action 3.2.1 by focusing planting in the priority areas identified on Map 9 c. identify and promote opportunities for sustainable community retrofits (for example through TRCA’s Sustainable Neighbourhood Action Program) in the priority areas identified on Map 9 d. encourage an urban forest with diverse and native (or non-invasive) tree species and class sizes e. ensure consistent policies and bylaws for tree conservation on public and private lands f. develop, or expand, programs for native tree planting on public and private lands

FIGURE 15:
Etobicoke Creek at Centennial Park (Toronto)



6. Implementation, Monitoring and Evaluation

The following sections provide an overview of the process that will be used for implementation, tracking, and reporting of the Etobicoke Creek Watershed Plan, and provide information on the inventory, monitoring, and evaluation that will take place to continue to evaluate the health of the Etobicoke Creek watershed as well as the adaptive management plan.

6.1 IMPLEMENTATION, TRACKING AND REPORTING OF THE ETOBICOKE CREEK WATERSHED PLAN

The successful implementation of the Etobicoke Creek Watershed Plan will require the commitment, collaboration, support, and engagement of TRCA, the municipalities in the watershed, other partners, and watershed stakeholders/residents.

Once final approvals and endorsements of the Etobicoke Creek Watershed Plan have been obtained in 2024 from municipal committees and Councils and from TRCA's Board of Directors, implementation of the watershed plan will begin. The Etobicoke Creek Watershed Plan is intended to be in effect for 10 years from when it is finalized and approved. Collaborative and comprehensive implementation, tracking, and reporting of all aspects of the management framework outlined in [Section 5 - Management Framework](#) will be essential to fully realize the vision for the watershed and to improve watershed health and build resiliency to land use and climate changes.

An **Implementation Steering Committee** consisting of TRCA, the municipalities within the watershed, MCFN, and the GTAA will be established in 2024 to guide and support implementation and will be facilitated by TRCA. The Implementation Steering Committee will work together to create a detailed implementation, tracking, and reporting plan to ensure commitment to and accountability for implementation on the part of TRCA, our municipal partners, and other stakeholders. This will include:

- Identifying implementation timelines and clear responsibilities for each management action.
- Developing specific measures/metrics to track and report on implementation of each management action.

- Developing tracking and reporting mechanisms specific to the Etobicoke Creek Watershed Plan. This could include an interactive and user-friendly implementation and tracking platform to be developed by TRCA. This tool would track and report on implementation progress using dashboards, story maps, visual tools, etc.
- Identifying the resources required for implementation, including funding, to support actions such as restoration, in-stream barrier removal, and research/monitoring.
- Ensuring each Implementation Steering Committee member coordinates with their respective organizations to champion implementation of the Etobicoke Creek Watershed Plan including advocating for effective implementation and exploring opportunities for funding.

TRCA and our partner municipalities (along with a few other stakeholders) will play key roles in the implementation of the management actions. Although the Etobicoke Creek Watershed Plan will not make land use and infrastructure planning decisions, it is intended to inform municipal initiatives and processes. Many of the management actions will be implemented through municipal plans, processes, guidelines, and strategies such as Official Plans, Secondary Plans, zoning by-laws, subwatershed studies, stormwater master planning and stormwater control measures, best management practices, and urban forest and climate change strategies.

The Implementation Steering Committee will also establish mechanisms to continue to receive input from First Nations and Indigenous communities and from watershed stakeholders (including provincial partners, landowners, developers, agricultural organizations, NGOs), residents, and the public. The Implementation Steering Committee will provide updates on implementation progress and ways to participate and engage more directly in various implementation activities.

As part of the implementation of this watershed plan, TRCA and its partners will continue to conduct annual reporting on watershed health and plan implementation progress. Annual reporting through TRCA’s Watershed and Ecosystems Reporting Hub will track watershed health trends through the inventory/monitoring discussed below and the indicators identified in **Section 5 - Management Framework**.

Some components of the watershed plan may not be reported on annually (e.g. aquatic and terrestrial), since stations are not inventoried/monitored annually.

Through the implementation of the Etobicoke Creek Watershed Plan, all watershed partners and stakeholders can contribute to a healthier, more sustainable, and more resilient watershed that can provide long-term benefits to all residents.

6.2 INVENTORY, MONITORING AND EVALUATION

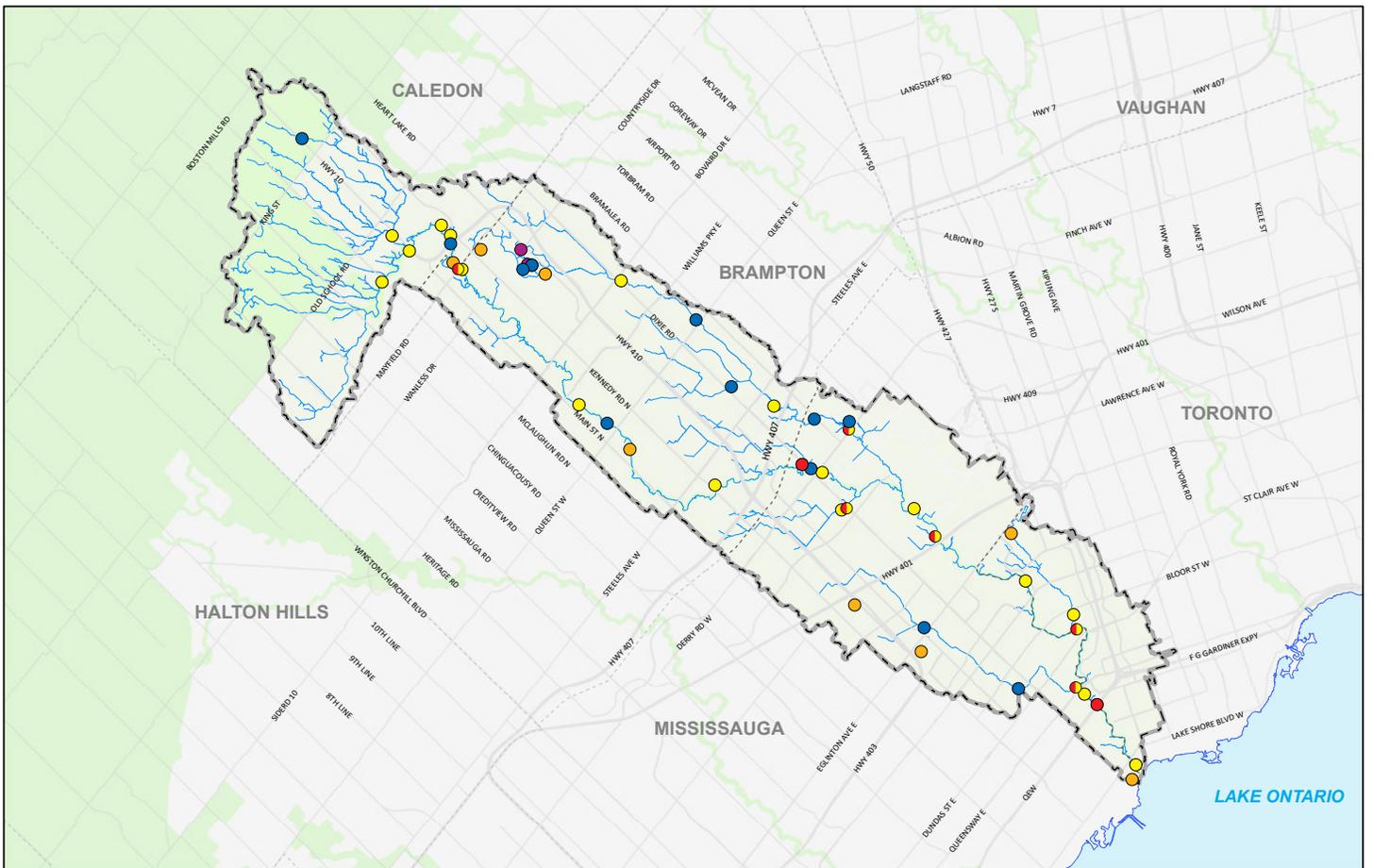
Regular and ongoing inventory, monitoring, and research of watershed conditions (to be undertaken by TRCA with support from partner municipalities) will help assess trends and track implementation of this watershed plan. This will help determine what is working to maintain or improve conditions and what, if necessary, needs to change should conditions deteriorate.

Inventory and monitoring for the Etobicoke Creek watershed is designed to help evaluate watershed health and specific indicators associated with the objectives of this watershed plan.

The location of the various types of monitoring stations is identified on the map in **Figure 16**.

Table 11 identifies the monitoring frequency, what is monitored, and why monitoring is important for the various types of stations identified, and provides some information about the inventory work for the ECWP.

**FIGURE 16:
Monitoring Stations**



 <p>Created by: TRCA Information Technology and Records Management Date: July 8, 2023 Disclaimer: The data used to create this map was compiled from a variety sources & dates. The TRCA takes no responsibility for errors or omissions in the data and retains the right to make changes & corrections at anytime without notice. For further information about the data on this map, please contact the TRCA GIS Department. (416) 661-6600.</p>	<h3>Etobicoke Creek Watershed Plan: Monitoring Stations</h3> 	<ul style="list-style-type: none"> ● Water Quality ● Water Quantity ● Water Quality / Aquatic ● Groundwater ● Aquatic ● Terrestrial Municipal Boundary ~~~~~ Watercourse ~~~~~ Shoreline Pearson Airport Greenbelt Etobicoke Creek Watershed Boundary
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Note:

Inventory locations are not shown on this map as they will be determined on a yearly basis based on where data updates are required.

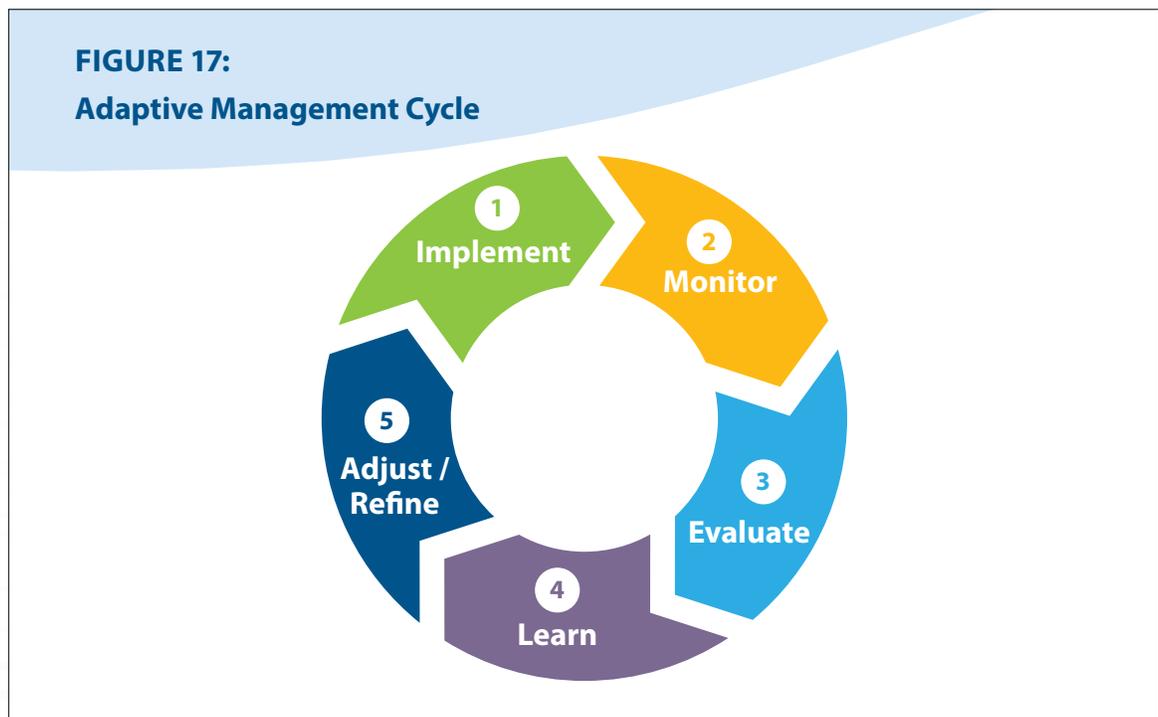
TABLE 11:
Monitoring / Inventory Program

Monitoring Station	Frequency	What is monitored?	Why do we monitor it?
WATER QUANTITY	Continuous measurement every 15 minutes for stream gauges and every 5 minutes for precipitation gauges	Stream level, discharge, and temperature, and/or rainfall/snowfall amount	<p>Applicable to overall watershed health and trends to know whether hydrology conditions are improving or not.</p> <p>Water quantity monitoring supports flood plain mapping, flood forecasting and warning, low water response, and infrastructure design.</p> <p>Real-time precipitation and stream monitoring information supports timely flood messaging.</p>
WATER QUALITY	Monthly samples and/or event-based samples (i.e. heavy rainfall)	Water chemistry (e.g. nutrients, metals, bacteria, etc.)	<p>Applicable to overall watershed health and trends to know whether water quality conditions are improving or not.</p> <p>Monitoring water quality helps to understand the impacts of land uses on local water quality that ultimately flows into Lake Ontario.</p>

Monitoring Station	Frequency	What is monitored?	Why do we monitor it?
GROUNDWATER	Hourly groundwater level and temperature, and quarterly manual groundwater level measurements, sampled annually for water quality	Water levels	<p>Applicable to overall watershed health and trends to know whether hydrogeology conditions are improving or not.</p> <p>Groundwater and surface water interactions are essential for a functioning WRS. Understanding groundwater conditions is vital to understanding the nature of these interactions.</p>
AQUATIC HEALTH	Every three years	Fish community, aquatic habitat, and benthic invertebrate community	Applicable to the health of the aquatic ecosystem.
TERRESTRIAL HEALTH	Annually	Vegetation and forest birds	Applicable to the health of the terrestrial ecosystem.
<p>Note: Inventory work is determined on a yearly basis based on where data updates are required, and can include vegetation community polygon mapping, flora and fauna species of concern mapping, and full species site lists.</p>			

6.3 ADAPTIVE MANAGEMENT

Adaptive management is a systematic process for continually improving practices by learning and applying updated knowledge to improve plan implementation (see [Figure 17](#)). In the context of this watershed plan, adaptive management, in conjunction with inventory, monitoring, and research programs, may lead to refinements of the management framework, or the number of monitoring stations, throughout the life of this watershed plan. For example, if water quality continues to deteriorate, management actions may need to be modified to focus on this particular issue.



Wildlife Movement and Habitat Connectivity

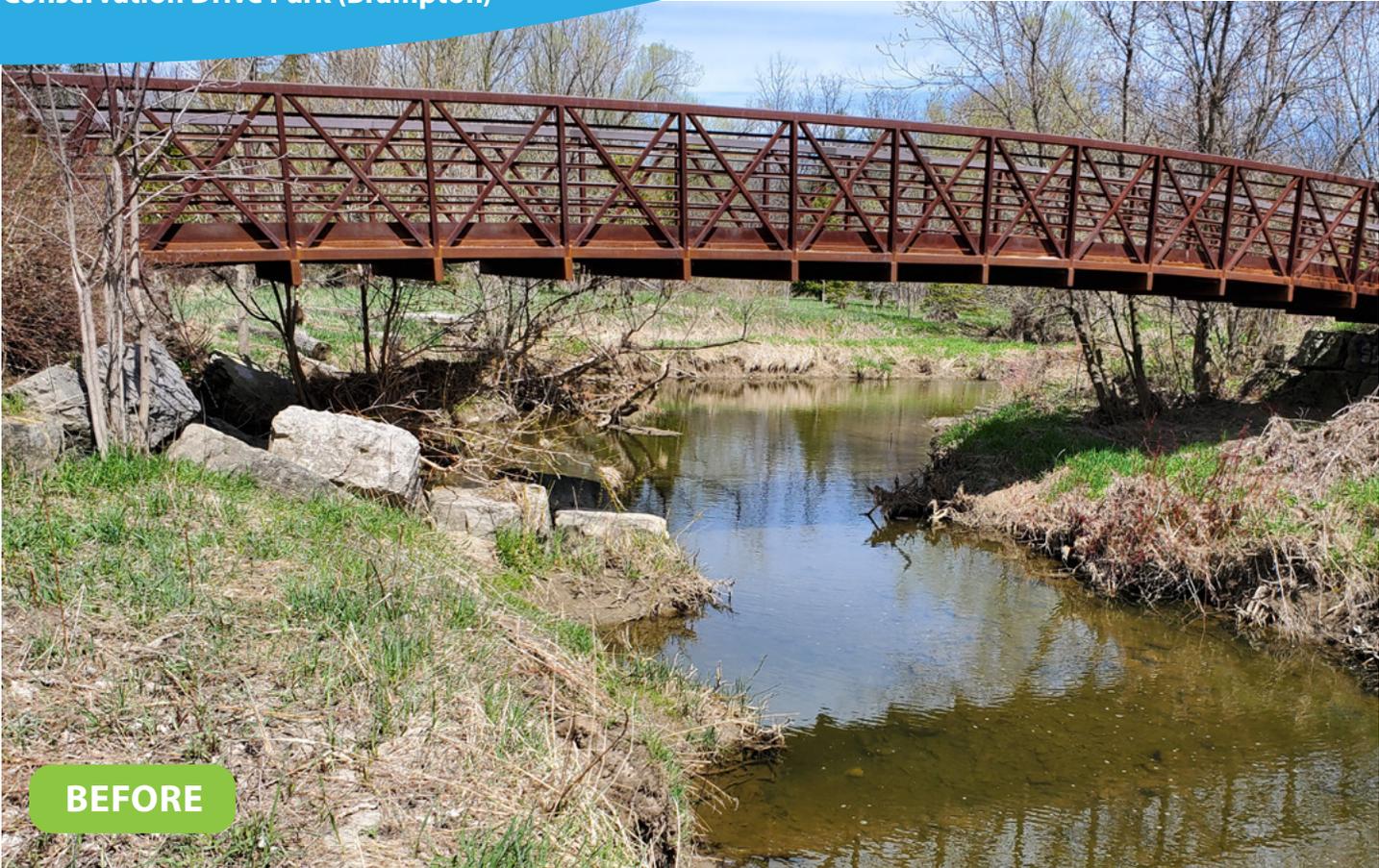
Many native wildlife species actively move between different habitats (forests and wetlands, for example) at different times of year for breeding, foraging, or hibernation. The Toronto region is expected to continue urbanizing as the population grows, necessitating further construction, expansion, and upgrading of roadways and railways. This transportation infrastructure reduces habitat size and severs the connections between different habitats, limiting the ability of species to safely access resources and leading to road mortality and/or population isolation.

An important aspect of TRCA's work is applied research on wildlife movement and habitat connectivity. One example of this is the work that was conducted along Heart Lake Road from Mayfield Road to Sandalwood

Parkway in the City of Brampton within the Etobicoke Creek watershed. Through road ecology surveys conducted by TRCA, the City of Brampton, the Toronto Zoo's Ontario Road Ecology Group, and over 40 community volunteers, it was determined that portions of this roadway were hotspots for road mortality. This led to the installation of dedicated wildlife culverts under Heart Lake Road in 2016 and 2020 to allow safe passage for wildlife. To facilitate access to the passages, directional wildlife fencing has also been installed so wildlife is channeled towards the culvert. Turtle nesting habitats were also created to allow turtles, such as Snapping Turtle (*Chelydra serpentina*; special concern species in Ontario), to lay their eggs in a safe wetland environment.

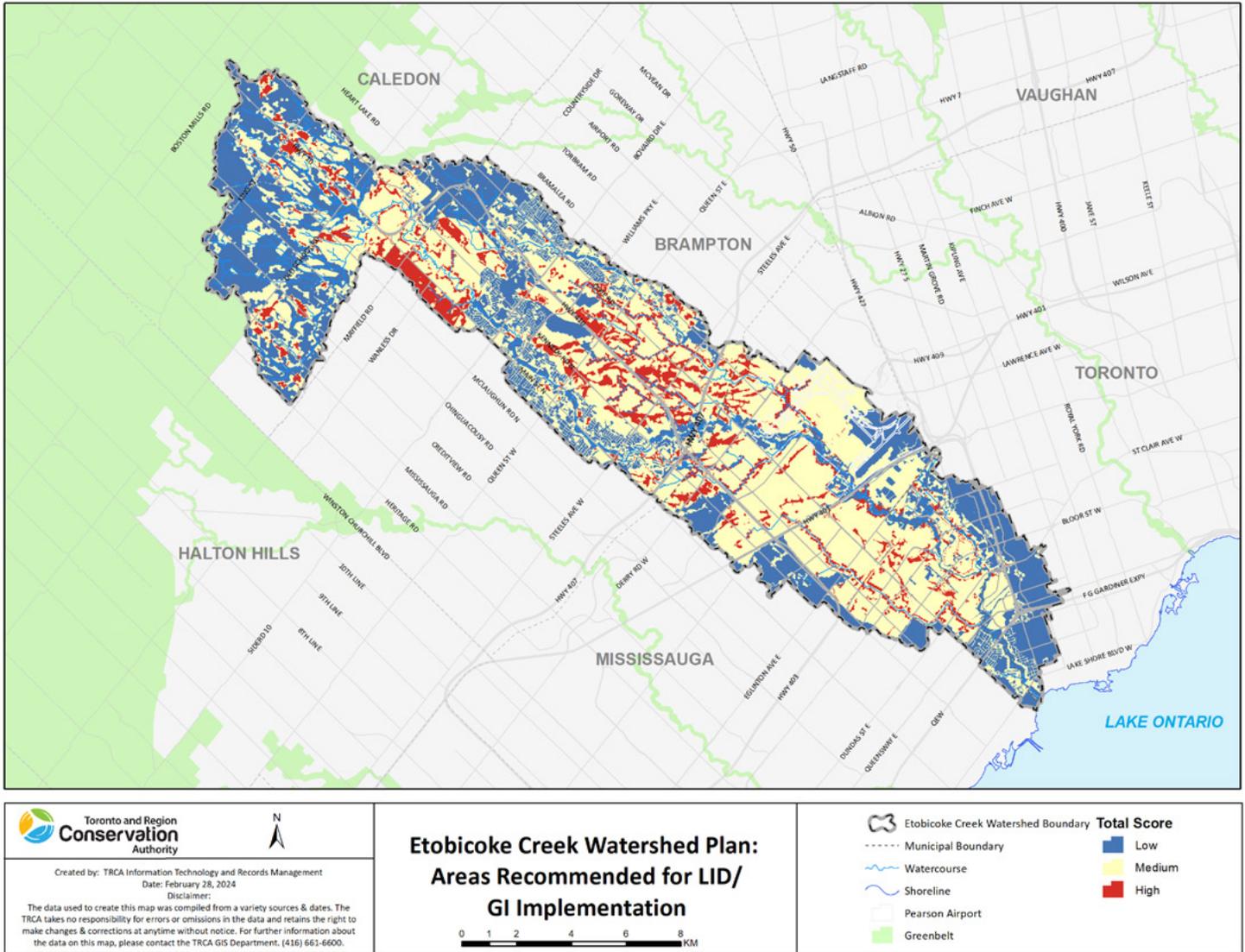


FIGURE 18:
Before and After, Stream Restoration at
Conservation Drive Park (Brampton)



7. Maps

The maps in this section, along with a map viewer showing many of the mapping layers, can be viewed in the online interactive Etobicoke Creek Watershed Plan [here](#).



Map 1

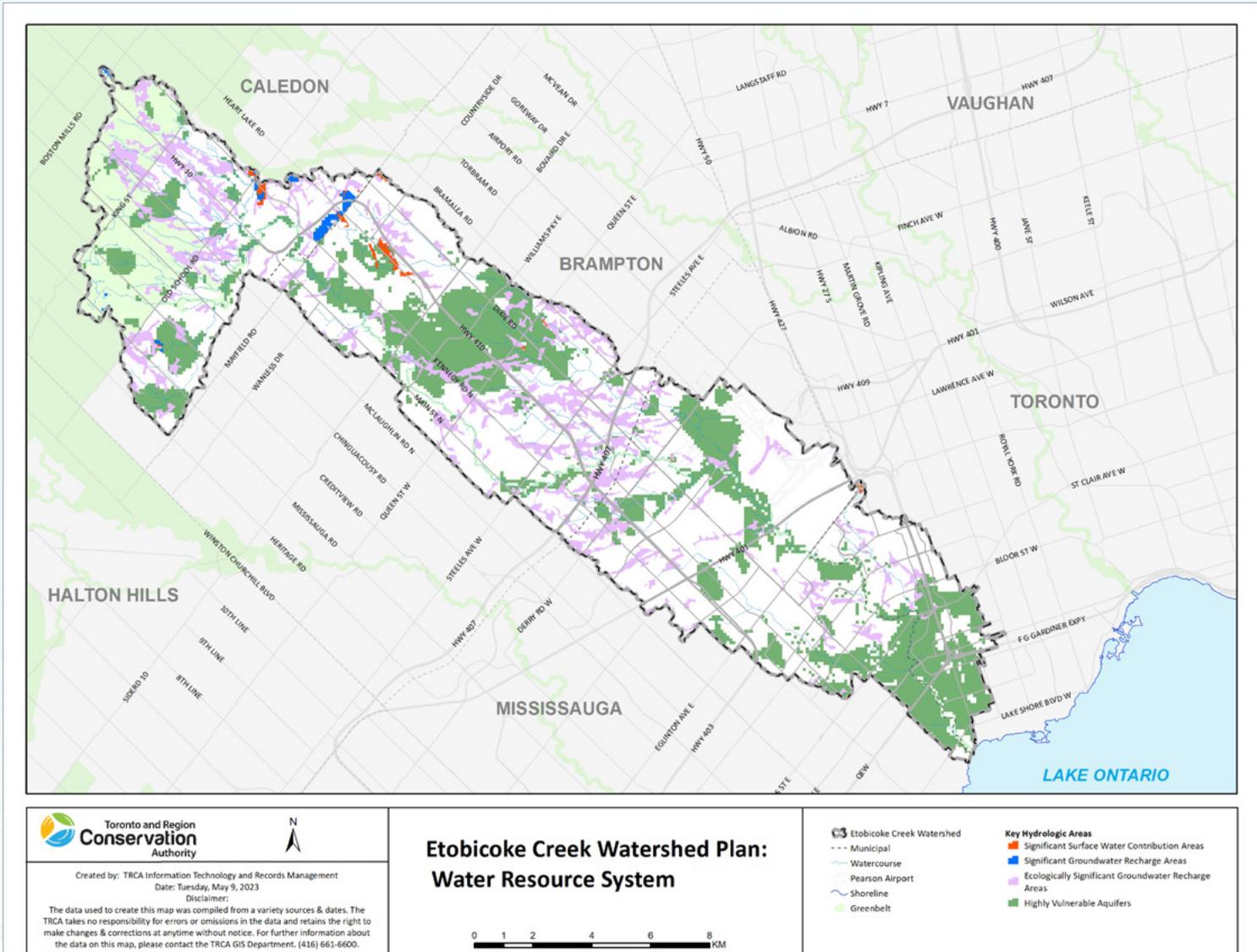
This map shows areas in the watershed that would benefit the most from low impact development (LID) or green infrastructure (GI) implementation to help regain natural or pre-development water balance. Areas in red are those that would benefit the most from the use of LID or green infrastructure implementation.

Appendix B contains information on how the areas were determined.

This map is meant to be used as a preliminary screening tool. Additional detailed site-level investigations and technical studies will be required to obtain local/site level information to help assess the suitability of the use of LIDs or green infrastructure in these areas based on site conditions.

MANAGEMENT ACTION

1.2.1 refers to this map.



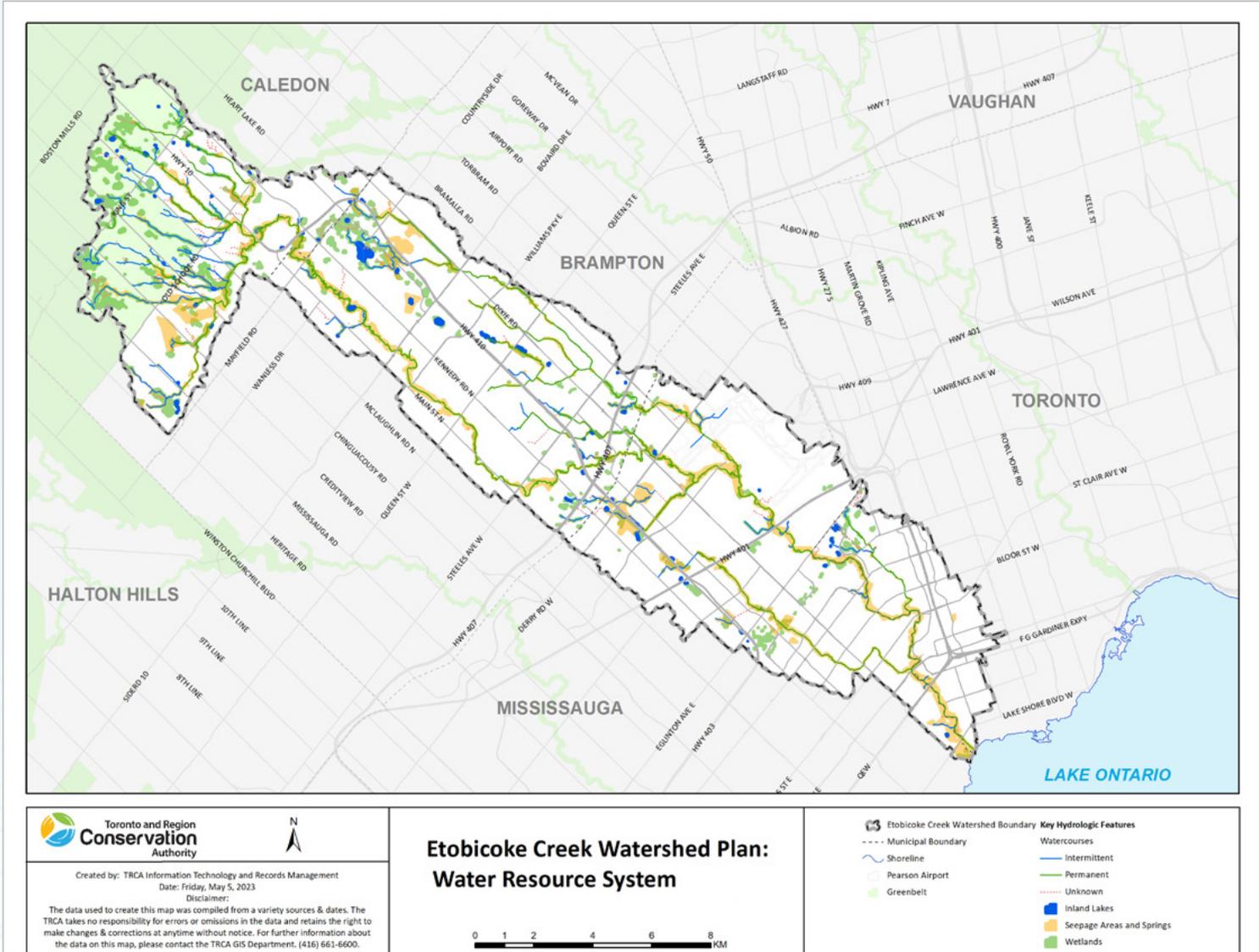
Map 2A

This map shows the Key Hydrologic Areas of the WRS. The WRS is essential for maintaining long-term ecosystem resilience and sustainability.

MANAGEMENT ACTION

2.1.1 refers to this map.

Map 2B shows the Key Hydrologic Features of the WRS.



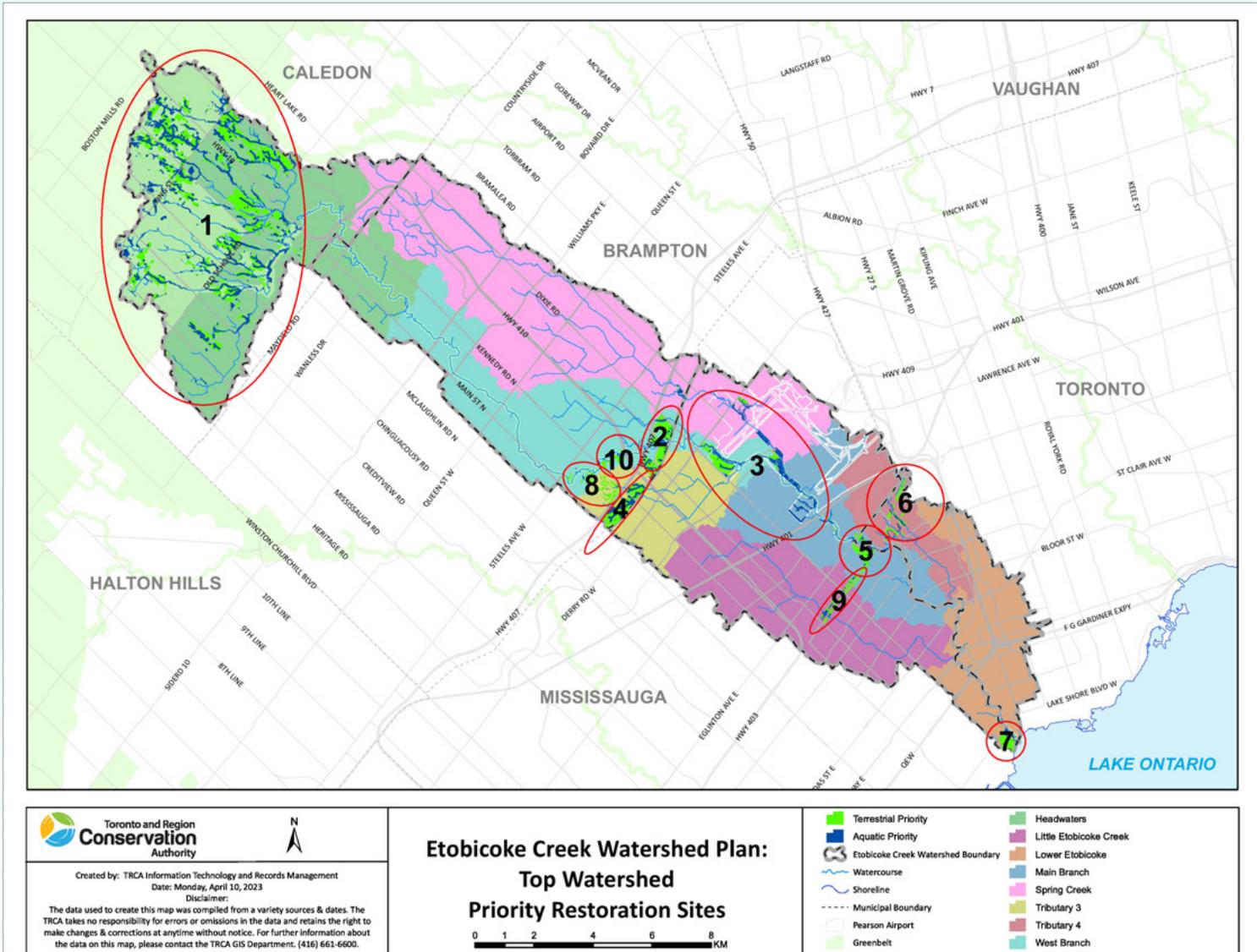
Map 2B

This map shows the Key Hydrologic Features of the WRS. The WRS is essential for maintaining long-term ecosystem resilience and sustainability.

MANAGEMENT ACTION

2.1.1 refers to this map.

Map 2A shows the Key Hydrologic Areas of the WRS.



Map 3A

This map shows the top 10 watershed priority restoration sites based on aquatic and terrestrial criteria and total size.

MANAGEMENT ACTIONS

2.1.4 and 3.1.3 refer to this map. See [Table 12](#) for more details on each priority site.

[Appendix B](#) contains information on how the priority restoration areas were determined.

TABLE 12:
Top 10 Watershed Priority Restoration Sites

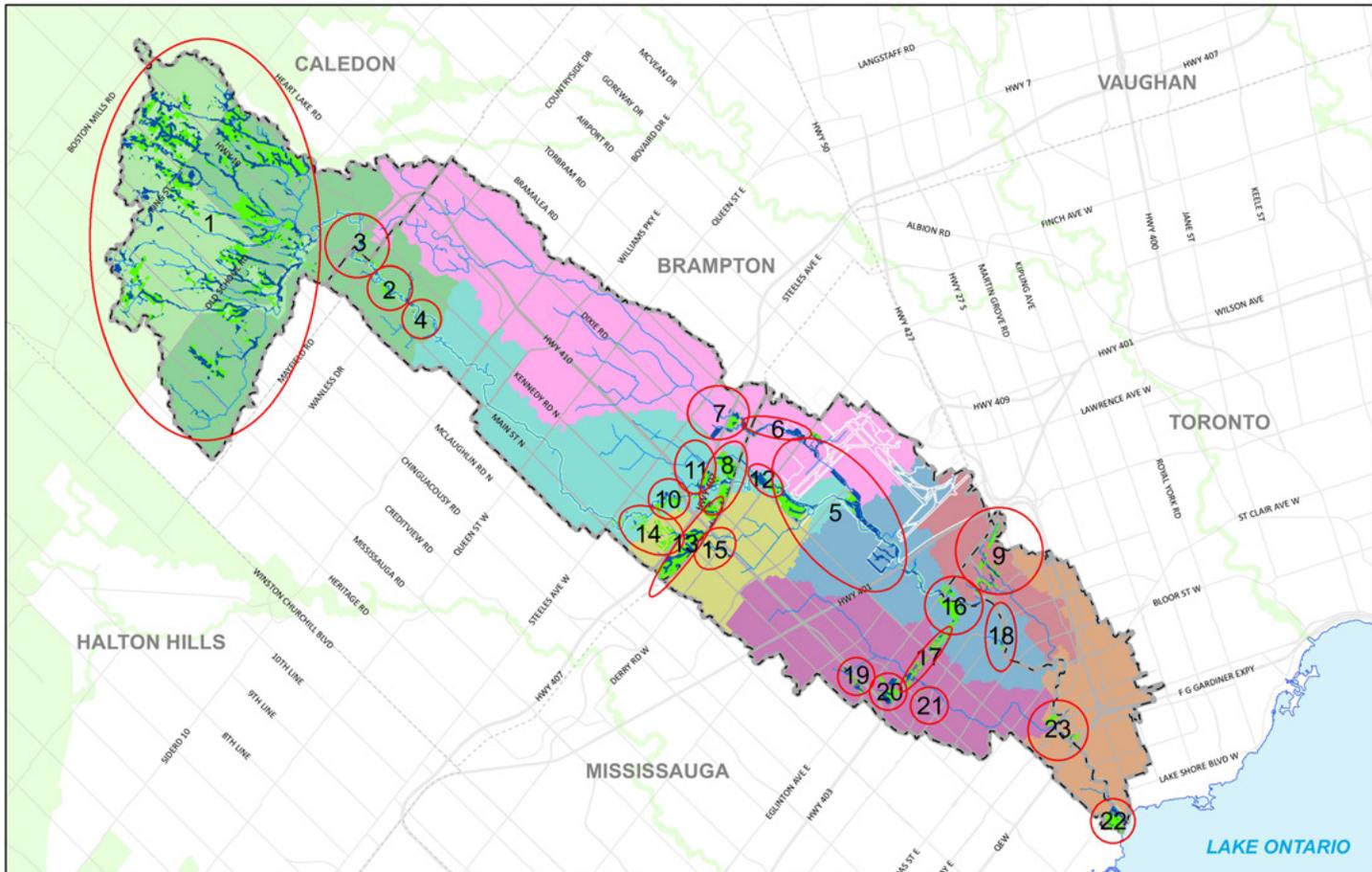
Name of Site (Subwatershed)	Existing Natural Cover to Enhance (in hectares)	Potential Natural Cover to Restore (in hectares)	Total Size (in hectares)	By Habitat Type (in hectares)
1. Headwaters 1* (Headwaters) Town of Caledon	130.2	550.4	680.6	Forest (357.2), Riparian (159.4), Wetland (164 ha)
2. Hwy 407 Hydro (East of 410) (Tributary 3 / West Branch / Spring Creek) City of Brampton	30.3	50.1	80.3	Forest (25.5), Meadow (34.1), Riparian (12.4), Wetland (8.3)
3. Pearson 1 (West Branch / Spring Creek / Main Branch) City of Mississauga	52.2	14.8	67.3	Forest (11.4), Riparian (50.8), Wetland 5.1)
4.Hwy 407 Hydro (West of 410) (Tributary 3) City of Brampton	9.2	57.0	66.1	Forest (10.0), Meadow (30.8), Riparian (20.0), Wetland (5.3)
5. Wood Creek (Main Branch) City of Mississauga	11.4	25.2	36.6	Forest (22.4), Meadow (5.9), Riparian (6.4), Wetland (1.8)
6. Centennial Park Etobicoke (Tributary 4) City of Toronto	2.3	22.7	25.1	Forest (8.2), Meadow (8.6), Riparian (3.8), Wetland (3.5)

Name of Site (Subwatershed)	Existing Natural Cover to Enhance (in hectares)	Potential Natural Cover to Restore (in hectares)	Total Size (in hectares)	By Habitat Type (in hectares)
7. Marie Curtis / Arsenal (Lower Etobicoke) City of Toronto and City of Mississauga	7.3	15.9	23.2	Forest (17), Riparian (5.3), Wetland (0.6), Shoreline (0.3)
8. Brampton Golf Club / Peel Village Golf Club (Tributary 3 / West Branch) City of Brampton	5.5	22.1	27.6	Forest (24.2), Meadow (1.1), Riparian (2.0), Wetland (0.3)
9. Eastgate Transitway (Little Etobicoke Creek / Main Branch) City of Mississauga	12.1	13.3	25.4	Forest (10.1), Meadow (9.6), Riparian (2.5), Wetland (3.3)
10. CAA Centre (West Branch / Tributary 3) City of Brampton	7.8	9.2	17.0	Forest (10.6), Meadow (3.0), Riparian (2.9), Wetland (0.4)
TOTALS	268.3	780.7	1,049.2	Forest (496.6), Meadow (93.1), Riparian (265.5), Wetland (192.6), Shoreline (0.3)

Notes:

*If there is urban expansion in the headwaters, most of the restoration opportunities will be through stewardship, and areas with high ecological function should be included in the NHS.

There may be some minor discrepancies between total size, existing + potential, and by habitat type due to rounding, overlap of restoration opportunities, and the exclusion of restoration opportunities like green infrastructure.



 <p>Created by: TRCA Information Technology and Records Management Date: Monday, April 10, 2023 Disclaimer: The data used to create this map was compiled from a variety sources & dates. The TRCA takes no responsibility for errors or omissions in the data and retains the right to make changes & corrections at anytime without notice. For further information about the data on this map, please contact the TRCA GIS Department: (416) 661-6600.</p>	<p>Etobicoke Creek Watershed Plan: Top Subwatershed Priority Restoration Sites</p> 	<table border="0"> <tr> <td> Terrestrial Priority</td> <td> Headwaters</td> </tr> <tr> <td> Aquatic Priority</td> <td> Little Etobicoke Creek</td> </tr> <tr> <td> Etobicoke Creek Watershed Boundary</td> <td> Lower Etobicoke</td> </tr> <tr> <td> Watercourse</td> <td> Main Branch</td> </tr> <tr> <td> Shoreline</td> <td> Spring Creek</td> </tr> <tr> <td> Municipal Boundary</td> <td> Tributary 3</td> </tr> <tr> <td> Pearson Airport</td> <td> Tributary 4</td> </tr> <tr> <td> Greenbelt</td> <td> West Branch</td> </tr> </table>	Terrestrial Priority	Headwaters	Aquatic Priority	Little Etobicoke Creek	Etobicoke Creek Watershed Boundary	Lower Etobicoke	Watercourse	Main Branch	Shoreline	Spring Creek	Municipal Boundary	Tributary 3	Pearson Airport	Tributary 4	Greenbelt	West Branch
Terrestrial Priority	Headwaters																	
Aquatic Priority	Little Etobicoke Creek																	
Etobicoke Creek Watershed Boundary	Lower Etobicoke																	
Watercourse	Main Branch																	
Shoreline	Spring Creek																	
Municipal Boundary	Tributary 3																	
Pearson Airport	Tributary 4																	
Greenbelt	West Branch																	

Map 3B

This map shows the priority restoration sites by subwatershed based on aquatic and terrestrial criteria and total size.

MANAGEMENT ACTIONS

2.1.4 and 3.1.3 refer to this map. See [Table 13](#) for more details on each priority site.

[Appendix B](#) contains information on how the priority restoration areas were determined.

TABLE 13:
Priority Restoration Sites by Subwatershed

Name of Site (Subwatershed)	Existing Natural Cover to Enhance (in hectares)	Potential Natural Cover to Restore (in hectares)	Total Size (in hectares)	By Habitat Type (in hectares)
1. Headwaters 1* (Headwaters) Town of Caledon	130.2	550.4	680.6	Forest (357.2), Riparian (159.4), Wetland (164 ha)
2. Conservation Drive Park (Headwaters) City of Brampton	8.4	3.2	11.6	Forest (5.5), Riparian (1.4), Wetland (1.2)
3. Summer Valley (Headwaters) Town of Caledon	2.8	2.2	5.0	Forest (1.4), Riparian (0.8), Wetland (0.8)
4. Loafers Lake (Headwaters) City of Brampton	2.9	0.1	3.0	Riparian / Wetland (3.0)
5. Pearson 1 (Spring Creek Portion) City of Mississauga	19.0	8.8	27.8	Forest (0.4), Riparian (21.1), Wetland (1.6)
5. Pearson 1 (West Branch Portion) City of Mississauga	13.2	2.9	16.2	Forest (5.1), Riparian (10.3), Wetland (0.8)
5. Pearson 1 (Main Branch Portion) City of Mississauga	19.0	8.8	27.8	Forest (0.4), Riparian (21.1), Wetland (1.6)

***Note:**

If there is urban expansion in the headwaters, most of the restoration opportunities will be through stewardship, and areas with high ecological function should be included in the NHS.

Name of Site (Subwatershed)	Existing Natural Cover to Enhance (in hectares)	Potential Natural Cover to Restore (in hectares)	Total Size (in hectares)	By Habitat Type (in hectares)
6. Wildfield Park (Spring Creek) City of Mississauga	8.6	5.1	13.7	Forest (0.8), Riparian (11.6), Wetland (1.3)
7. Hwy 407 Median (Spring Creek) City of Brampton and City of Mississauga	13.0	0.5	13.5	Forest (8.6), Riparian (2.2), Wetland (2.7)
8. Hwy 407 Hydro (East of 410) (Spring Creek Portion) City of Brampton	4.9	0.1	5.0	Forest (0.7), Riparian (1.4), Wetland (2.6)
8. Hwy 407 Hydro (East of 410) (West Branch Portion) City of Brampton	22.9	27.1	50.0	Forest (22.5), Meadow (16.7), Riparian (5.4), Wetland (5.5)
8. Hwy 407 Hydro (East of 410) (Tributary 3 Portion) City of Brampton	2.4	22.8	25.2	Forest (2.4), Meadow (17.0), Riparian (5.6), Wetland (0.3)
9. Centennial Park Etobicoke (Tributary 4) City of Toronto	2.3	22.7	25.1	Forest (8.2), Meadow (8.6), Riparian (3.8), Wetland (3.5)
10. CAA Centre (West Branch) City of Brampton	7.6	9.1	16.7	Forest (10.3), Meadow (3.0), Riparian (2.9), Wetland (0.4)
11. Westcreek Trailhead (West Branch) City of Brampton	7.5	7.6	15.1	Forest (10.0), Riparian (4.5), Wetland (0.6)

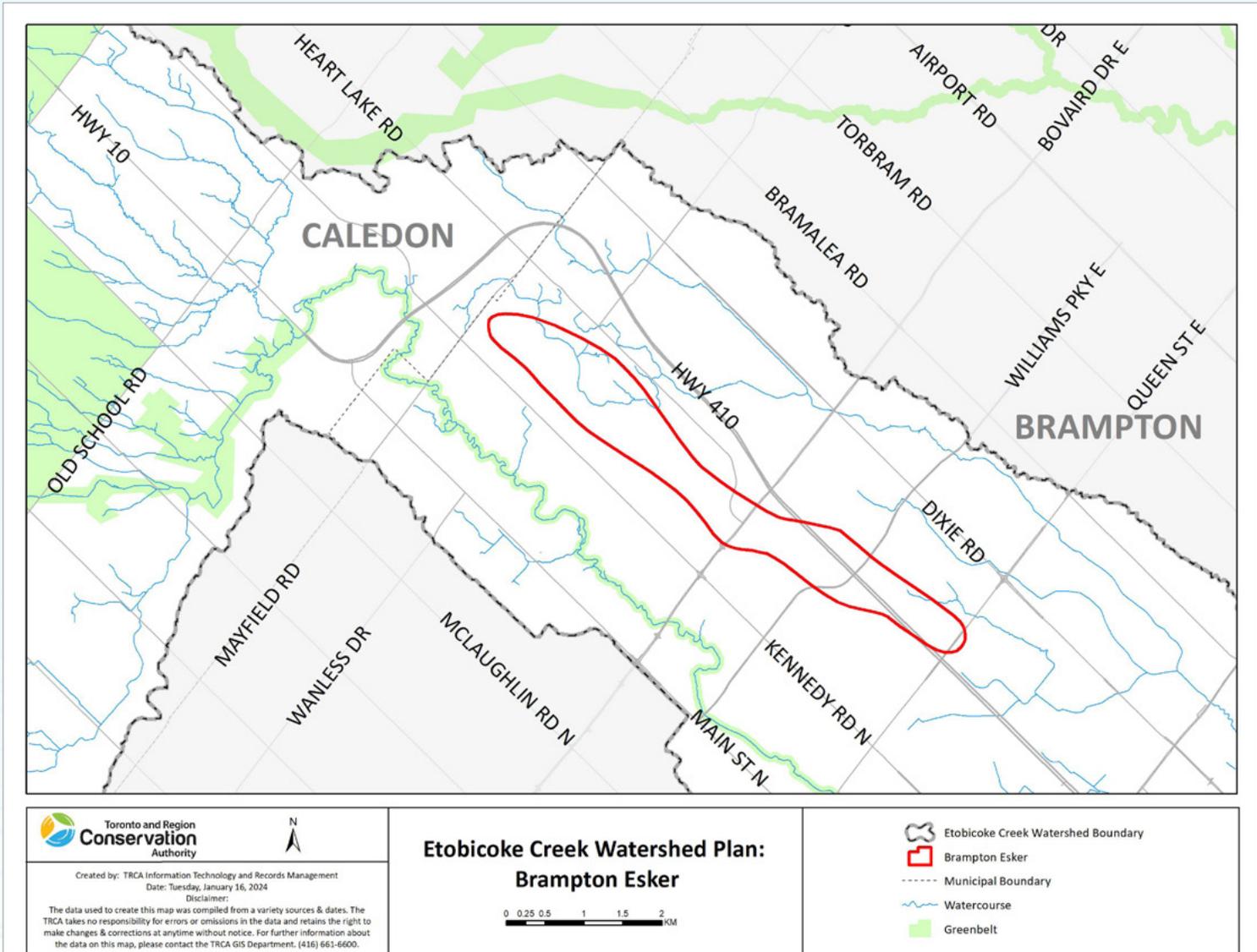
Name of Site (Subwatershed)	Existing Natural Cover to Enhance (in hectares)	Potential Natural Cover to Restore (in hectares)	Total Size (in hectares)	By Habitat Type (in hectares)
12. King's Park (West Branch) City of Mississauga	3.2	0.4	3.6	Forest (1.4), Riparian (2.2)
13. Hwy 407 Hydro (West of 410) (Tributary 3) City of Brampton	9.2	57.0	66.1	Forest (10), Meadow (30.8), Riparian (20), Wetland (5.3)
14. Brampton Golf Club / Peel Village Golf Club (Tributary 3) City of Brampton	3.4	16.5	19.9	Forest (19), Riparian (0.9)
15. SWMP Derry Road (Tributary 3) City of Mississauga	2.4	0.3	2.7	Riparian (2.7)
16. Wood Creek (Main Branch) City of Mississauga	11.4	25.2	36.6	Forest (22.4), Meadow (5.9), Riparian (6.4), Wetland (1.8)
17. Eastgate Transitway (Main Branch) City of Mississauga	2.7	4.1	6.8	Forest (2.6), Meadow (3.1), Wetland (1.1)
17. Eastgate Transitway (Little Etobicoke Creek) City of Mississauga	9.4	9.3	18.7	Forest (7.5), Meadow (6.5), Riparian (2.5), Wetland (2.2)
18. Fleetwood Park (Main Branch) City of Mississauga	0.7	1.7	2.4	Forest (1.5), Riparian (0.4), Wetland (0.4)

Name of Site (Subwatershed)	Existing Natural Cover to Enhance (in hectares)	Potential Natural Cover to Restore (in hectares)	Total Size (in hectares)	By Habitat Type (in hectares)
19. Iceland Forest (Little Etobicoke Creek) City of Mississauga	3.0	6.0	9.0	Forest (4.8), Riparian (1.6), Wetland (2.6)
20. Hwy 403 Eglinton (Little Etobicoke Creek) City of Mississauga	1.3	2.2	3.5	Forest (3.0), Wetland (0.5)
21. Rathwood Park 1 (Little Etobicoke Creek) City of Mississauga	0.8	0.8	1.6	Forest (0.7), Riparian (0.5), Wetland (0.3)
22. Marie Curtis / Arsenal (Lower Etobicoke) City of Toronto and City of Mississauga	7.3	15.9	23.2	Forest (17), Riparian (5.3), Wetland (0.6), Shoreline (0.3)
23. Etobicoke Creek Valley Park North (Lower Etobicoke) City of Toronto	4.4	4.5	9.0	Forest (7.6)

Notes:

There may be some minor discrepancies between total size, existing + potential, and by habitat type due to rounding, overlap of restoration opportunities, and the exclusion of restoration opportunities like green infrastructure and invasives management.

There is intentional overlap between the Top 10 watershed sites and the priority restoration sites by subwatershed, since the Top 10 by watershed are the largest sites by amount of restoration opportunity, which would also be the top sites for the relevant subwatershed. Sites that are also Top 10 watershed sites are in **bold**.

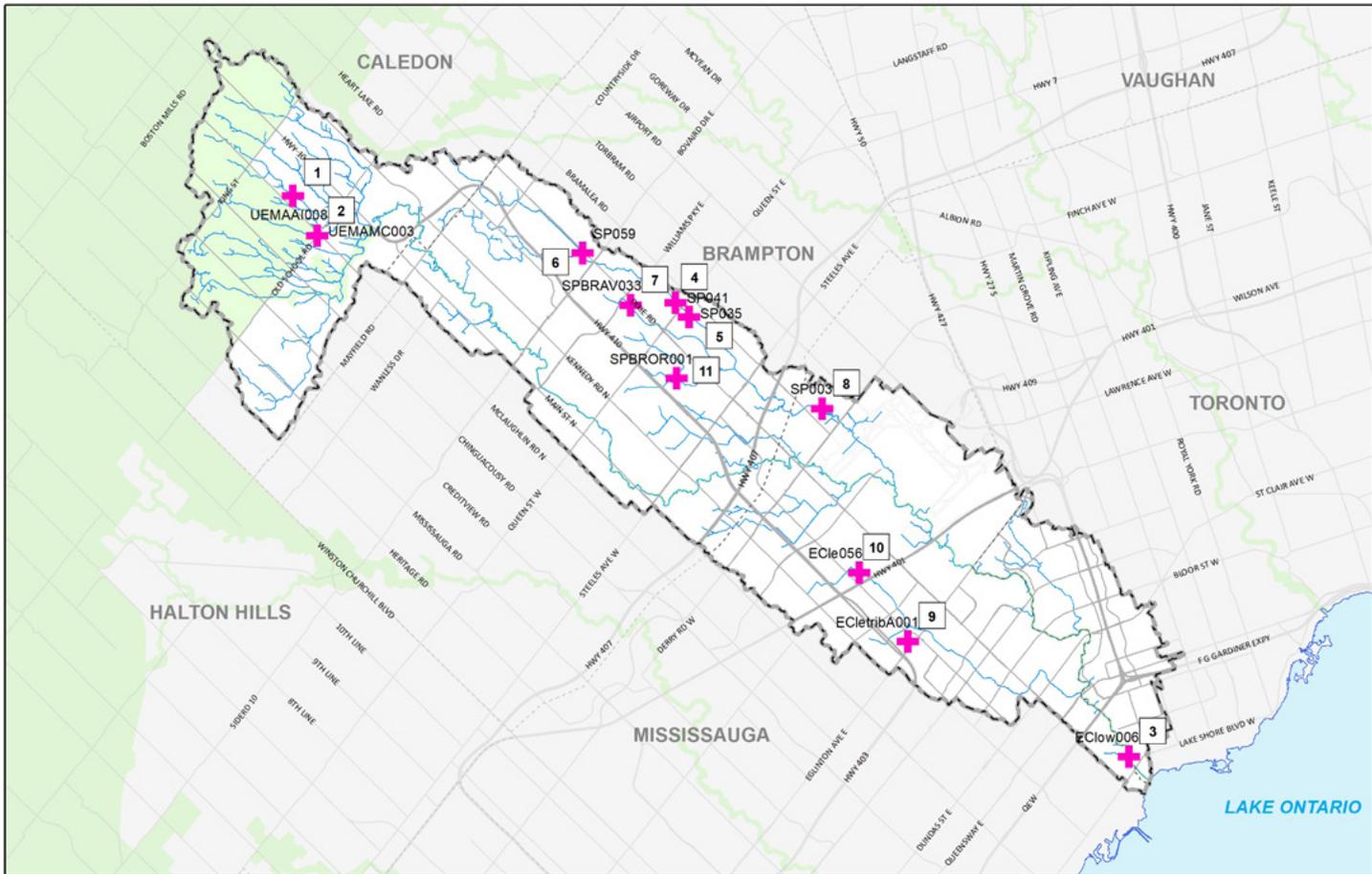


Map 4

This map shows the location of the Brampton Esker.

MANAGEMENT ACTION

2.1.5 refers to this map.




 Created by: TRCA Information Technology and Records Management
 Date: Wednesday, October 5, 2022
 Disclaimer:
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**Etobicoke Creek Watershed Plan:
 Priority Aquatic Barriers**

0 1 2 4 6 8 KM

-  Priority Barriers
-  Etobicoke Creek Watershed Boundary
-  Municipal Boundary
-  Watercourse
-  Shoreline
-  Pearson Airport
-  Greenbelt

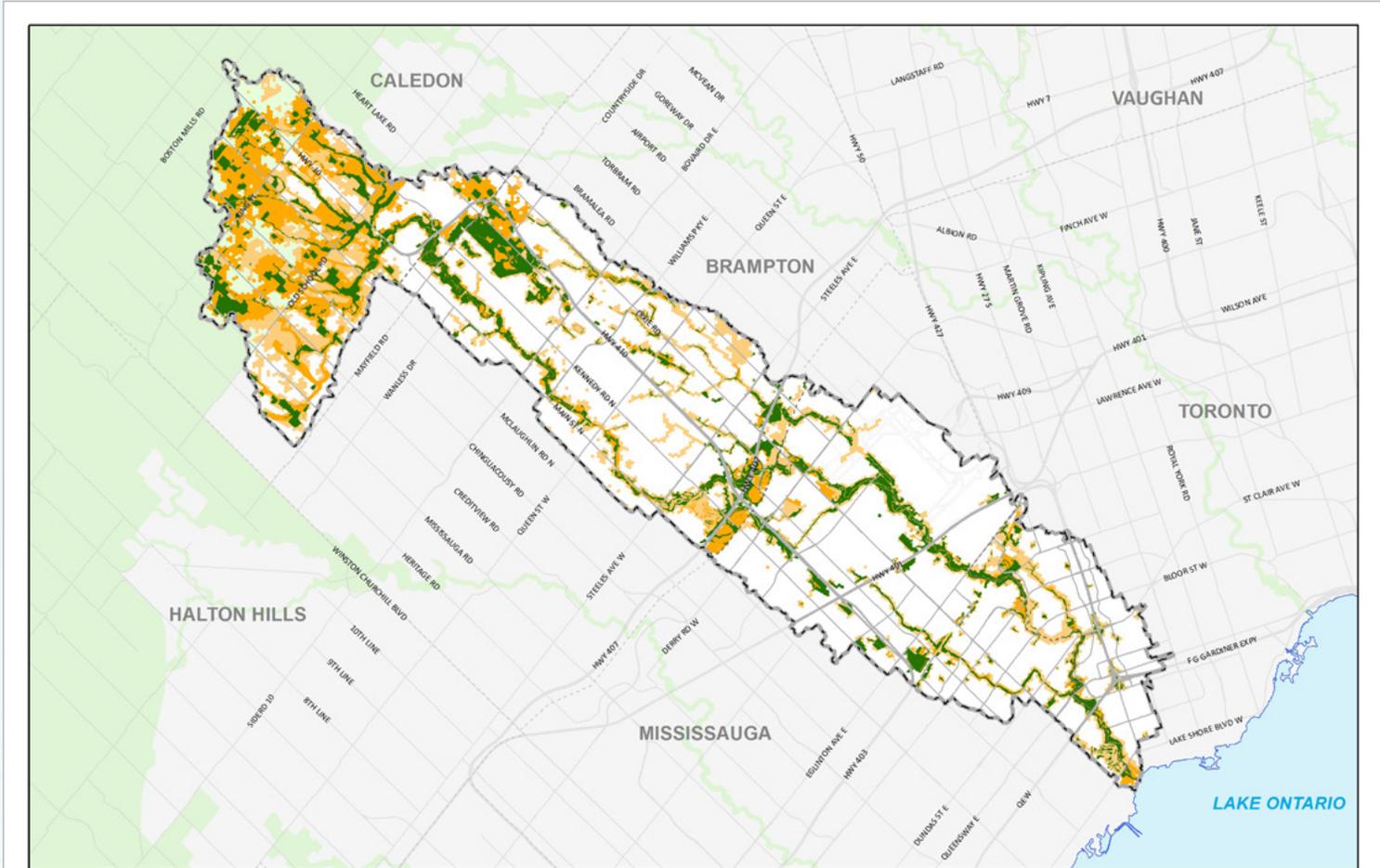
Map 5

This map shows the priority aquatic barriers for removal to restore in-stream habitat connectivity.

MANAGEMENT ACTION

2.2.1 refers to this map.

Barrier #	Type of Barrier
1	Weir
2	Road crossing
3	Weir
4	Dam
5	Weir
6	Stormwater weir
7	Weir
8	Stormwater culvert
9	Weir
10	Natural erosion step
11	Weir



 <p>Created by: TRCA Information Technology and Records Management Date: Friday, May 5, 2023 Disclaimer: The data used to create this map was compiled from a variety sources & dates. The TRCA takes no responsibility for errors or omissions in the data and retains the right to make changes & corrections at anytime without notice. For further information about the data on this map, please contact the TRCA GIS Department. (416) 663-6600.</p>	<p>Etobicoke Creek Watershed Plan: Natural Heritage System</p> 	<table border="0"> <tr> <td> Etobicoke Creek Watershed Boundary</td> <td> Greenbelt</td> </tr> <tr> <td> Municipal Boundary</td> <td> Pearson Airport</td> </tr> <tr> <td> Shoreline</td> <td></td> </tr> </table> <table border="0"> <tr> <td colspan="2">Watershed Refined Enhanced NHS</td> </tr> <tr> <td> Existing Natural Cover</td> <td> Potential Natural Cover</td> </tr> <tr> <td> Contributing Areas</td> <td></td> </tr> </table>	 Etobicoke Creek Watershed Boundary	 Greenbelt	 Municipal Boundary	 Pearson Airport	 Shoreline		Watershed Refined Enhanced NHS		 Existing Natural Cover	 Potential Natural Cover	 Contributing Areas	
 Etobicoke Creek Watershed Boundary	 Greenbelt													
 Municipal Boundary	 Pearson Airport													
 Shoreline														
Watershed Refined Enhanced NHS														
 Existing Natural Cover	 Potential Natural Cover													
 Contributing Areas														

Map 6

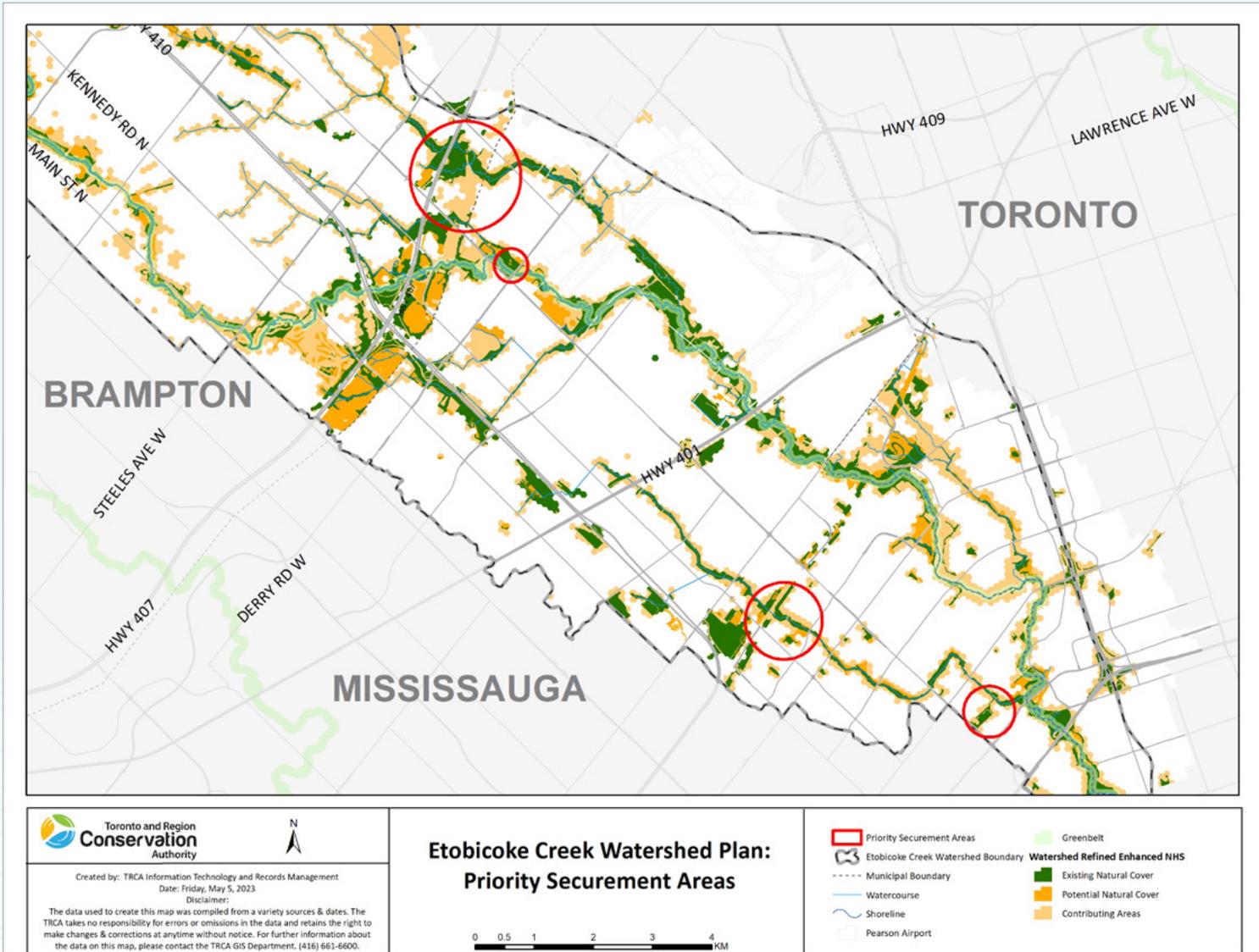
This map shows the watershed refined enhanced NHS, consisting of existing natural cover, potential natural cover, and contributing areas.

Potential natural cover are areas that could be restored to provide ecosystem and habitat benefits.

Contributing areas are built or unbuilt areas that can provide additional habitat and connectivity benefits through the use of green infrastructure.

MANAGEMENT ACTION

3.1.2 refers to this map.



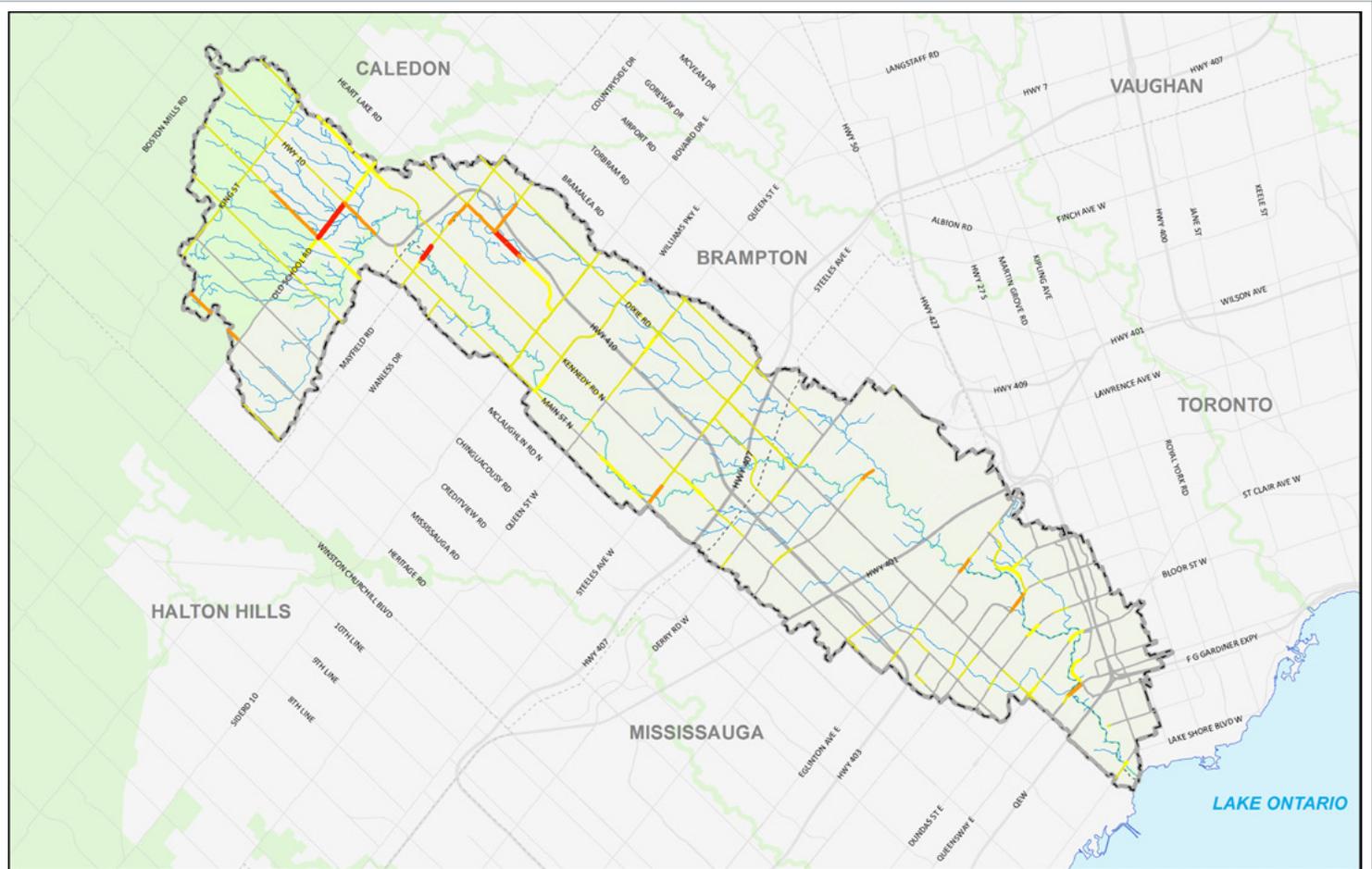
Map 7

This map shows priority areas for land securement based on lands where restoration priorities intersect with Flood Vulnerable Clusters (on both private land and some public land such as Hydro ROWs not in municipal or TRCA ownership). These areas are priorities to use nature-based solutions as part of flood risk mitigation. For land already in public ownership, the focus would be on conservation efforts (i.e. meadow habitat restoration) when opportunities arise.

Other lands outside these areas may be secured by municipalities or TRCA to increase public land ownership to achieve habitat objectives associated with this watershed plan.

MANAGEMENT ACTION

3.1.4 refers to this map.



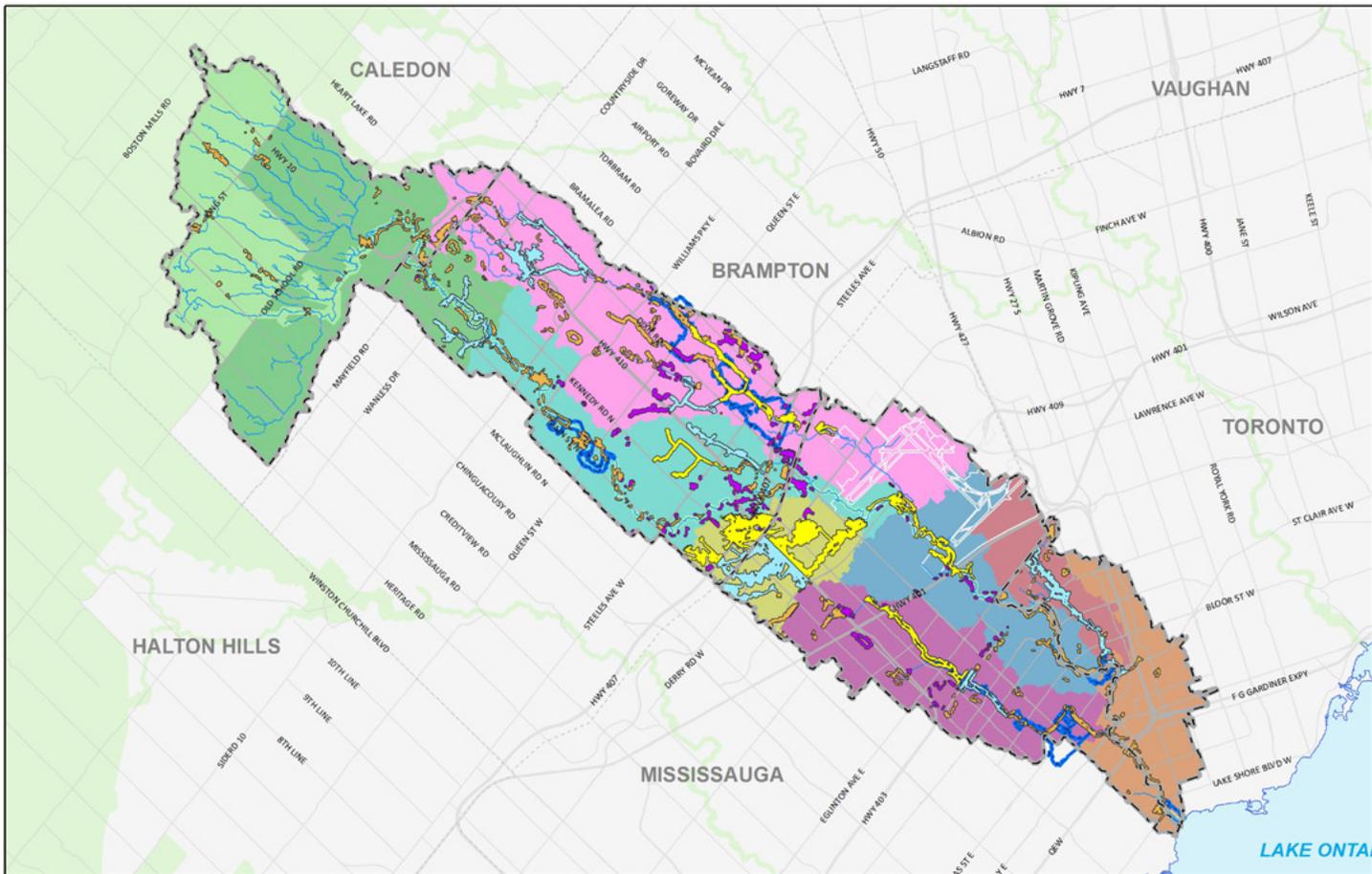
 <p>Created by: TRCA Information Technology and Records Management Date: Wednesday, September 28, 2022</p> <p><small>Disclaimer: The data used to create this map was compiled from a variety of sources & dates. The TRCA takes no responsibility for errors or omissions in the data and retains the right to make changes & corrections at anytime without notice. For further information about the data on this map, please contact the TRCA GIS Department, (416) 661-6600.</small></p>	<p>Etobicoke Creek Watershed Plan: Priority Crossings</p> 	<p>Priority Crossing</p> <ul style="list-style-type: none"> █ 4 (high) █ 3 █ 2 █ 1 █ 0 (low) <p>Legend</p> <ul style="list-style-type: none">  Etobicoke Creek Watershed Boundary  Watercourse  Shoreline  Municipal Boundary  Pearson Airport  Greenbelt
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Map 8

This map shows priority road crossings to enhance connectivity for wildlife to pass safely.

MANAGEMENT ACTION

3.1.6 refers to this map.



<p style="text-align: center;">N</p> <p>Created by: TRCA Information Technology and Records Management Date: May 9, 2023 Disclaimer: The data used to create this map was compiled from a variety sources & dates. The TRCA takes no responsibility for errors or omissions in the data and retains the right to make changes & corrections at anytime without notice. For further information about the data on this map, please contact the TRCA GIS Department. (416) 663-6600.</p>	<h3>Etobicoke Creek Watershed Plan: Urban Forest Priority Planting Areas</h3> <p>0 1 2 4 6 8 KM</p>	<p>Priority Planting Tiers</p> <ul style="list-style-type: none"> Tier 1a Tier 1b Tier 2a Tier 2b Etobicoke Creek Watershed Boundary <p>Legend</p> <ul style="list-style-type: none"> Flood Vulnerable Cluster Municipal Boundary Watercourse Shoreline Pearson Airport Greenbelt Headwaters Little Etobicoke Creek Lower Etobicoke Main Branch Spring Creek Tributary 3 Tributary 4 West Branch
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Map 9

This map shows the priority planting areas to increase tree canopy cover (i.e. urban forest) within the watershed.

See [Appendix B](#) for more information on each tier and how the priority areas were determined.

MANAGEMENT ACTIONS

3.2.1 and 3.2.3 refer to this map.

8. Glossary

Biodiversity

The variability among organisms from all sources including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species and ecosystems.

Detention

The temporary storage of stormwater to control discharge rates and allow for sedimentation.

Ecological Function

The natural processes, products, or services that living and non-living environments provide or perform within or between species, ecosystems, and landscapes, including hydrologic functions and biological, physical, chemical, and socio-economic interactions.

Green Infrastructure

Natural and human-made elements that provide ecological and hydrologic functions and processes. Green infrastructure can include components such as natural heritage features and systems, parklands, stormwater management systems, street trees, urban forests, natural channels, permeable surfaces, and green roofs.

Headwater Drainage Features

Ill-defined, non-permanently flowing drainage features that may not have defined beds and banks.

Highly Vulnerable Aquifer

Aquifers, including lands above the aquifers, on which external sources have, or are likely to have, a significant adverse effect.

Hydrologic Function

The functions of the hydrologic cycle that include the occurrence, circulation, distribution, and chemical and physical properties of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere, and water's interaction with the environment including its relation to living things.



Impervious Cover

EFFECTIVE IMPERVIOUS AREA/COVER

Represents a portion of the total impervious area that sheds stormwater directly into a water body or a storm drain system without being treated (e.g. by low impact development, green infrastructure, filtration, sedimentation, or other conventional techniques).

TOTAL IMPERVIOUS AREA/COVER

A measure of all the hard impermeable surfaces in the landscape that prevent precipitation from penetrating the ground in a catchment.

UNTREATED IMPERVIOUS COVER

Areas where runoff from impervious surfaces is conveyed directly to waterbodies without being treated (e.g., by low impact development, green infrastructure, filtration, sedimentation, or other conventional techniques).

Infiltration

The entry of water into site soils or material.

Key Hydrologic Areas

Significant groundwater recharge areas, highly vulnerable aquifers, significant surface water contribution areas, and ecologically significant groundwater recharge areas, that are necessary for the ecological and hydrologic integrity of a watershed.

Key Hydrologic Features

Permanent streams, intermittent streams, inland lakes and their littoral zones, seepage areas and springs, and wetlands.

Low Impact Development

An approach to stormwater management that seeks to manage rain and other precipitation as close as possible to where it falls to mitigate the impacts of increased runoff and stormwater pollution. It typically includes a set of site design strategies and distributed, small-scale structural practices to mimic the natural hydrology to the greatest extent possible through infiltration, evapotranspiration, harvesting, filtration, and detention of stormwater. Low impact development can include, for example: bio-swales, vegetated areas at the edge of paved surfaces, permeable pavement, rain gardens, green roofs, and exfiltration systems. Low impact development often employs vegetation and soil in its design, however, that does not always have to be the case and the specific form may vary considering local conditions and community character.

Natural Hazards *(Consisting of Erosion Hazard and Flooding Hazard)*

EROSION HAZARD

Means the loss of land, due to human or natural processes, that poses a threat to life and property.

FLOODING HAZARD

Means the inundation of areas adjacent to a shoreline or a river or stream system not ordinarily covered by water.

Natural Heritage System

A system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. The system can include key natural heritage features, key hydrologic features, federal and provincial parks and conservation reserves, other natural heritage features and areas, lands that have been restored or have the potential to be restored to a natural state, associated areas that support hydrologic functions, and working landscapes that enable ecological functions to continue.

Predevelopment

Is defined as follows for the various development conditions:

NEW DEVELOPMENT (I.E. GREENFIELD DEVELOPMENT AND/OR AGRICULTURAL CONVERSION TO URBAN)

The predevelopment impervious condition shall correspond to the current conditions present in the field at the project onset or to an undisturbed forested condition.

REDEVELOPMENT (I.E. EXISTING URBAN AREAS)

The predevelopment impervious condition shall correspond to the current conditions present in the field at the project onset, or the least urbanized conditions (i.e. lowest total impervious percentage for the site) prior to the project onset.

LINEAR DEVELOPMENT AND RETROFITS

The predevelopment impervious condition for the right-of-way shall correspond to the current conditions present at the project onset.

Riparian

The areas adjacent to water bodies such as streams, wetlands, and shorelines. Riparian areas form transitional zones between aquatic and terrestrial ecosystems.



Sustainable Community Retrofits

Focus on public and private land actions in older, urban neighbourhoods by retrofitting buildings and infrastructure, regenerating habitats and urban ecology, and revitalizing a community's social fabric. TRCA's Sustainable Neighbourhood Action Program provides examples of sustainable community retrofits.

Urban Forest

All trees, shrubs, and understory plants, as well as the soils that sustain them, occurring on public and private property in natural, urban, and rural areas.

Water Balance

The accounting of inflow and outflow of water in a system according to the components of the hydrologic cycle.

Water Resource System

A system consisting of ground water features and areas and surface water features (including shoreline areas), and hydrologic functions, which provide the water resources necessary to sustain healthy aquatic and terrestrial ecosystems and human water consumption. The water resource system is comprised of key hydrologic features and key hydrologic areas.

Whitebelt

Refers to lands between the built boundary of urban settlement areas and the boundary of the Greenbelt Plan Area.

9. References

ECWP Technical Reports

Toronto and Region Conservation Authority, 2022. *Etobicoke Creek Watershed Future Management Scenario Analysis Report*.

Toronto and Region Conservation Authority, 2021. *Etobicoke Creek Watershed Characterization Report*.

ECWP Engagement Summaries

Toronto and Region Conservation Authority, 2024. *ECWP: Engagement Summary 3 – August 2022 – March 2024*.

Toronto and Region Conservation Authority, 2022. *ECWP: Engagement Summary 2 – July 2021 – July 2022*.

Toronto and Region Conservation Authority, 2021. *ECWP: Engagement Summary 1 – July 2020 – June 2021*.

Provincial / Federal Policies / Plans / Guidelines

Canadian Council of Ministers of the Environment, no date. *Water Quality Guidelines for the Protection of Aquatic Life*.

CTC Source Protection Committee, 2019. *Approved Source Protection Plan: CTC Source Protection Region*. Amendment (Version 2.0) effective March 25, 2019.

Environment Canada, 2013. *How Much Habitat is Enough?* Third Edition.

Ontario, 2020. *A Place to Grow: Growth Plan for the Greater Golden Horseshoe*.

Ontario, 2020. *Provincial Policy Statement*.

Ontario, 2017. *Greenbelt Plan*.

Ontario, 2016. *Water Management: Policies, Guidelines, Provincial Water Quality Objectives*.

Ontario, 2013. *Ontario's Cycling Strategy - Province Wide Cycling Network*.

Schueler, T, 1994. *The Importance of Imperviousness*. *Watershed Protection Techniques 2*: 100-111.



Great Lakes Agreement and Policies

Government of Canada and Government of Ontario, 2021. *Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health*.

Government of Canada and Government of the United States of America, 2012. *Great Lakes Water Quality Agreement*.

Ontario, 2016. *Ontario's Great Lakes Strategy*.

TRCA Guidelines

Credit Valley Conservation and Toronto and Region Conservation Authority, 2014. *Evaluation, Classification and Management of Headwater Drainage Features Guidelines*.

Toronto and Region Conservation Authority, 2019. *Trail Strategy for the Greater Toronto Region*.

Toronto and Region Conservation Authority, 2018 (updated June 2023). *Guideline for Determining Ecosystem Compensation (after the decision to compensate has been made)*.

Toronto and Region Conservation Authority, 2017. *Wetland Water Balance Risk Evaluation*.

Toronto and Region Conservation Authority, 2016. *Wetland Water Balance Monitoring Protocol*.

Toronto and Region Conservation Authority, 2015. *Crossings Guideline for Valley and Stream Corridors*.

Toronto and Region Conservation Authority, 2012. *Stormwater Management Criteria*.

Relevant Municipal Plans / Strategies / Guidelines

Note: *this is not an exhaustive list of potentially relevant municipal plans, strategies, or policies with relevance to this watershed plan. It does not include Official Plans, Secondary Plans, Master Plans, or Bylaws, which may need to be updated as part of implementation of this watershed plan.*

Instead, the list below includes complementary Strategies, Plans, or Guidelines related to water management, biodiversity, environmental protection, etc.

CITY OF TORONTO

Biodiversity Strategy. October 2019.

Parkland Strategy. Adopted November 2019.

Ravine Strategy. Adopted October 2017.

Toronto Green Standard, Version 4. Adopted July 2021.

TransformTO: Net Zero Strategy, A Climate Action Pathway to 2030 and Beyond. November 2021.

Toronto's Strategic Forest Management Plan. Adopted February 2012.

Wet Weather Flow Master Plan. Adopted September 2003.

REGION OF PEEL

Climate Change Master Plan, 2020 – 2030. Adopted 2019.

Scoped Subwatershed Study (Part A – Existing Conditions and Characterization, Part B – Detailed Studies and Impact Assessment, and Part C – Implementation Plan), Settlement Area Boundary Expansion. 2022.

CITY OF MISSISSAUGA

City of Mississauga Climate Change Action Plan. Adopted November 2021.

Living Green Master Plan. Adopted January 2012.

Natural Heritage and Urban Forest Strategy. Adopted January 2014.

Parks and Forestry Master Plan. Adopted February 2019.

CITY OF BRAMPTON

Brampton Eco Park Strategy. Adopted in 2019.

Brampton Grow Green Environmental Master Plan. Adopted in 2014.

Brampton One Million Trees Program. Adopted in 2019.

Lake Enhancement Strategy. Adopted in 2021.

Natural Heritage and Environmental Management Strategy. Adopted December 2015.

Our 2040 Energy Transition: Community Energy and Emissions Reduction Plan. Adopted in 2020.

TOWN OF CALEDON

Community Climate Change Action Plan. Adopted January 2020.

Other References

Toronto and Region Conservation Authority. *Ecosystem Services and Valuation Webpage*:
<https://trca.ca/conservation/creating-green-infrastructure/ecosystem-services-valuation/>.

Toronto and Region Conservation Authority. *Wildlife Movement and Habitat Connectivity Webpage*:
<https://trca.ca/conservation/terrestrial-ecosystems/wildlife-movement-and-habitat-connectivity/>.

Toronto Green Community. *Lost Rivers Webpage*:
<https://www.torontogreen.ca/what-we-do/lost-rivers/>.

APPENDIX A

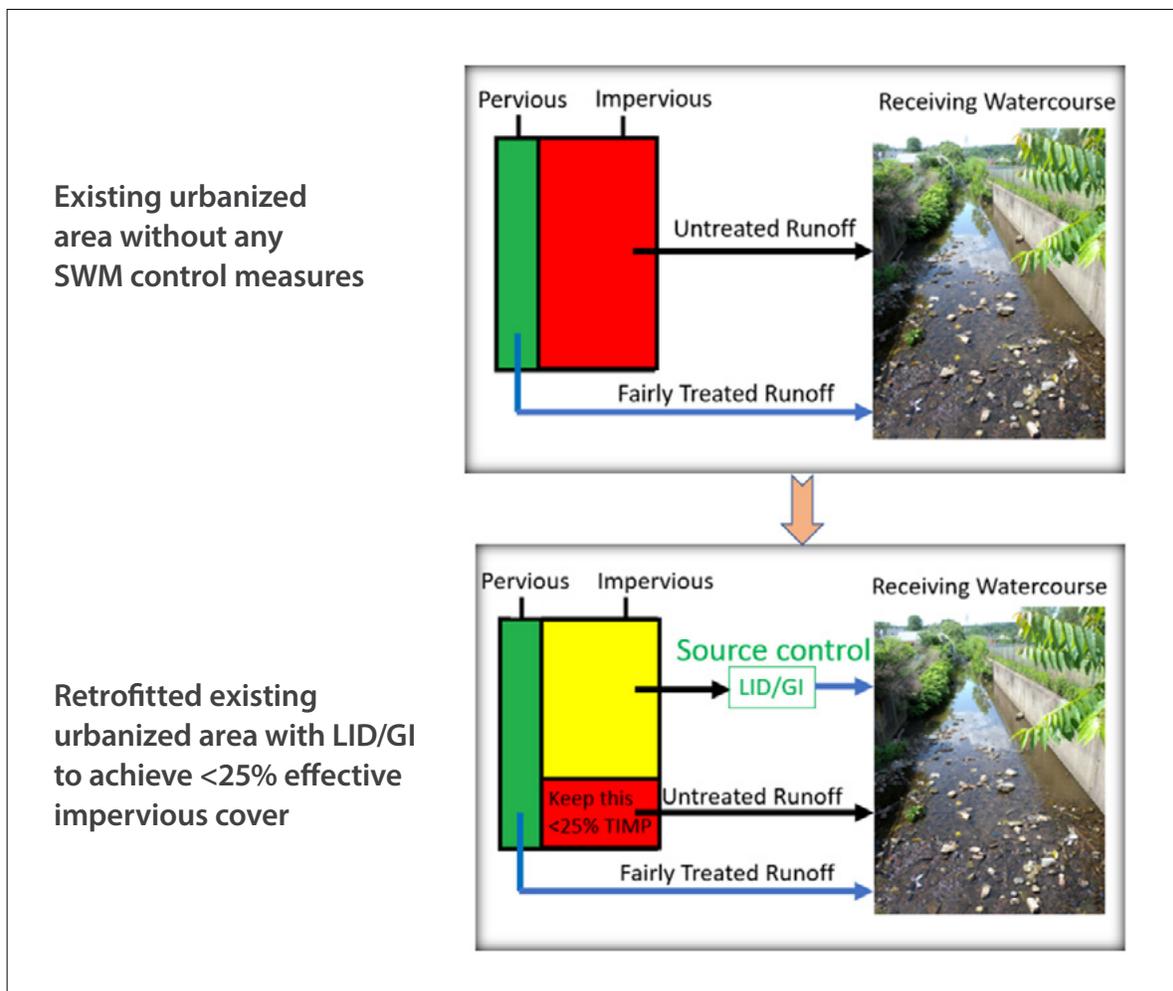
As outlined in [Section 3.3 - Current State of the Watershed](#), aquatic habitat quality is expected to decrease as impervious cover increases. Environment Canada provides recommendations on impervious cover percentages and has defined the quality of aquatic habitat based on the amount of impervious cover in a catchment area where 'sensitive' quality habitat occurs when there is 0-10% impervious cover, and declines in aquatic habitat quality are demonstrated when impervious cover is between 11-25% (impacted/urbanizing), greater than 25% (non-supporting), and greater than 60% (urban drainage). Therefore, to minimize impacts to aquatic habitat health, it is recommended that the impervious cover percentage (effective impervious cover) for the Headwaters subwatershed (and the watershed in general) remains below 25%. This is reflected in management actions 1.2.2 (c) and 2.1.3.

The following provides additional details about total impervious cover and effective impervious cover (see [Section 8 - Glossary](#) for definitions), the need for a 25% effective impervious cover target, and various stormwater management control measures in existing urbanized and urban expansion areas.



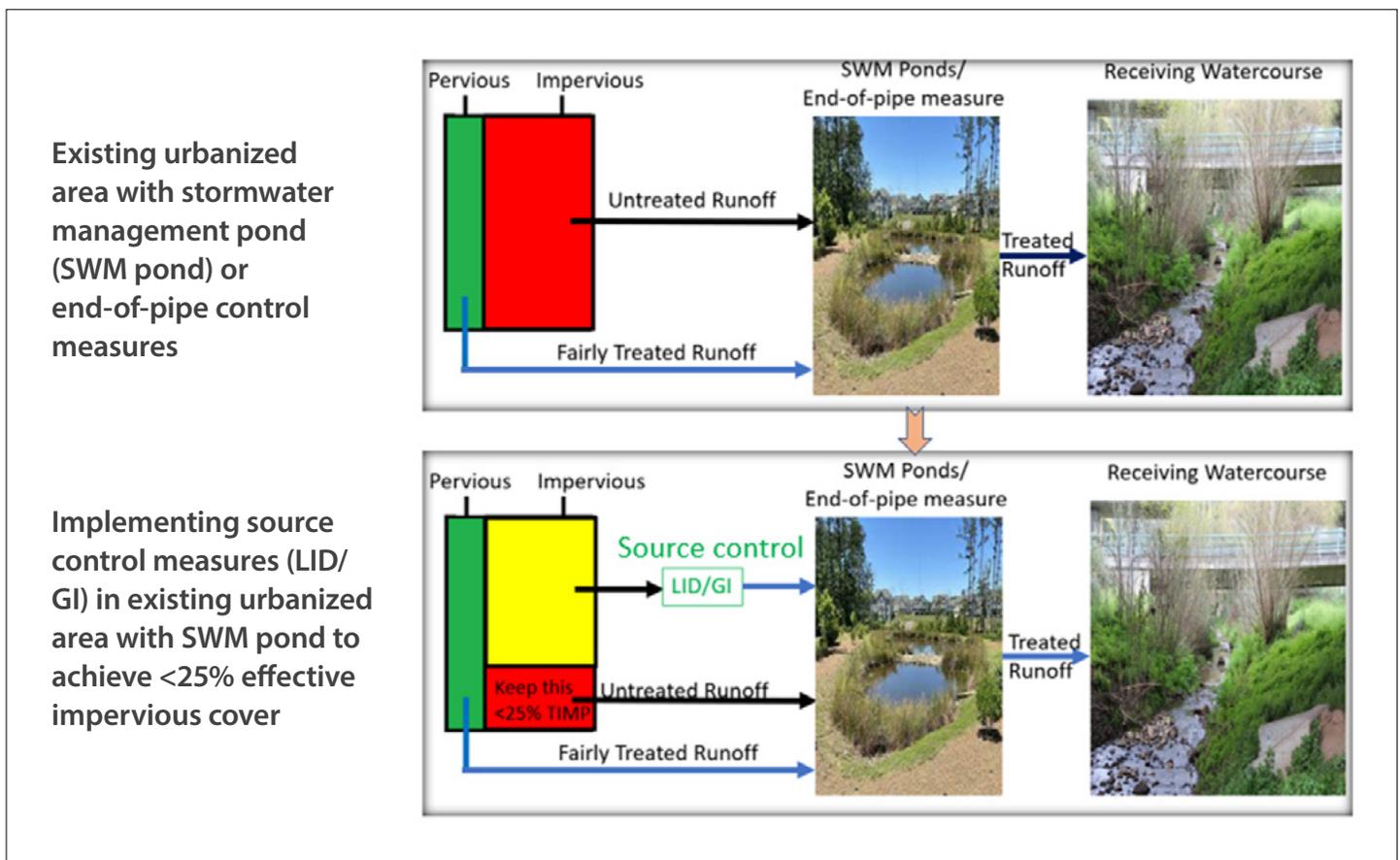
1 Existing urbanized area without any control measures:

Decreasing the impervious area that is directly connected to the storm sewer network to 25% of the total impervious area (TIMP) by connecting the remaining impervious area back to the ground via implementation of green infrastructure is crucial to reverse impacts of uncontrolled runoff generated from impervious cover. By doing so, we can mitigate the impacts of impervious cover on the watershed’s hydrological cycle (the amount of runoff, peak discharge rates, and baseflow are altered), stream morphology, stream temperature, stream water quality (nutrient and pollutant loads increase), and stream biodiversity.



2 Existing urbanized area with some end-of-pipe control measures:

Managing stormwater at the source (source controls) is widely effective for limiting the negative hydrological effects of urbanization. Decreasing the impervious area directly connected to the storm sewer network to 25% of total impervious area by connecting the remaining impervious area back to the ground via implementation of green infrastructure is recommended to further enhance the health of the watershed. This illustrates a recommendation/opportunity to go beyond the minimum requirements of stormwater management treatment criteria to help minimize impacts to the health of the receiving watercourse.



APPENDIX B

This appendix contains more details on prioritization exercises for LID, restoration, and urban forest that form a key part of the management framework.

LID Implementation Case Study

Map 1 shows areas in the watershed that would benefit the most from LID or green infrastructure implementation to help regain natural or pre-development water balance. These areas were identified based on a multi-hit analysis of various criteria (including the results from the erosion and water quality modelling, and other data layers including imperviousness, ESGRAs, sensitive fish species, NHS Contributing Areas, and the Brampton Esker) to determine the highest scoring areas that could benefit from LID or green infrastructure implementation at the watershed-scale. Areas in red are those that would benefit the most from the use of LID or green infrastructure implementation.

A case study of the cost and benefits of particular LIDs is presented to demonstrate how watershed enhancements such as this can address issues related to flooding, water quality, and erosion in developed portions of the watershed.

The LID implementation case study uses the **Treatment Train Tool** to assess the costs/benefits of LID implementation at the southeast corner of Bovaird Drive and Hurontario Street (West Branch subwatershed). This case study assumed three bioretention sites (two at the Walmart, and one at the row houses), one vegetated strip near the school, and two infiltration trenches by the Walmart.

The focus of this case study was a return to pre-development water balance.

The modelled LIDs were designed with a rainfall depth control target of 25 mm and a volume control target of 3,142.5 m².

For the chosen site, the results are shown in **Table 14**.

TABLE 14:
LID Modelling Results Pre and Post Retrofit

Site	Total (mm)
Site Rainfall	753
Infiltration Pre-retrofit	318
Infiltration Post-retrofit	463
External Outflow Pre-retrofit	263
External Outflow Post-retrofit	92
Rainfall Retention On-site Pre-retrofit	490 (65%)
Rainfall Retention On-site Post-retrofit	662 (88%)

The modelling results demonstrate that widespread LIDs designed to retain 25 mm of rainfall would prevent 90% of annual rainfall events from generating runoff.

Table 15 identifies the construction and maintenance costs associated with the modelled LIDs. The total life-cycle costs consist of the construction and 25-year maintenance costs for each LID. Costs provided in **Table 15** are an approximation based on 2023 construction/maintenance prices for the LIDs – and would vary based on market prices/conditions.

TABLE 15:
LID Implementation Case Study Costing

LID Type	Construction Cost	25-year Maintenance Cost	Total Lifecycle Cost
Bioretention	\$794,124.80	\$554,288.30	\$1,348,413.10
Vegetated Strips	\$122,455.00	\$176,890.00	\$299,345.00
Infiltration Trenches	\$726,926.70	\$372,727.50	\$1,099,654.20
TOTALS	\$1,643,506.50	\$1,103,905.80	\$2,747,412.30

FOR CONSIDERATION:

It is important to note that extreme events greater than 25 mm cannot be retained. Existing stormwater infrastructure is built to a standard of conveying and controlling the 100-year or Regional storm (current rainfall volume of 88.5 mm). With climate change, this rainfall volume is projected to increase to 107 mm, resulting in a need for additional storage of 18.9 mm. It will be necessary to factor climate change into stormwater asset management planning, including the implementation of LIDs as a volume control form of infrastructure.

ADDITIONAL RESOURCES:

The [Sustainable Technologies Evaluation Program](#) has guidance and resources on Low Impact Development that can inform municipal and development planning.

Priority areas for ecological restoration (as shown in [Maps 3A](#) and [3B](#)) were determined through a multiple hit analysis of various terrestrial and aquatic criteria overlaid with the NHS. This exercise accounted for existing policy designations and future plans, while trying to ensure geographic distribution across the watershed. The purpose of this prioritization exercise was to increase habitat quality and quantity, address biodiversity needs, and improve climate resiliency. Costing for restoration has not been provided as it is contingent on current market prices and conditions and can change significantly from year to year (but can be provided upon request).

In terms of the criteria identified in [Table 16](#), terrestrial and aquatic criteria were equally weighted to determine the highest scoring areas based on ecological function that should be targeted for further restoration to improve both the NHS and WRS.

TABLE 16:
Criteria for Restoration Priorities

Category	Aquatic Criteria	Terrestrial Criteria
Habitat Quantity	ESGRA HDF Riparian Corridor	Natural Cover Habitat Patch (L-rank)
Habitat Quality and Biodiversity	Benthic Species Diversity Fish Species Diversity	Vegetation Communities of Concern (ELC) Species Abundance (avian L1-L4) Species Richness (avian L1-L4) Habitat Suitability (avian and amphibians)
Habitat Connectivity	Stream Connectivity	Regional Connectivity (Top 50%) Watershed Connectivity (Top 50%) Local Connectivity (Forest-Wetland) Local Connectivity (Forest-Forest)
Climate Change Vulnerability	Thermal Regime – Max Temperature Thermal Regime – Stability	Climate Change Vulnerability

Municipalities may have their own restoration priorities (outlined in various municipal strategies and park plans) in addition to the priority restoration sites identified in [Map 3A](#) and [Map 3B](#). This watershed plan encourages restoring as much habitat as possible across the watershed. TRCA will continue to work collaboratively with our partner municipalities during implementation of the ECWP to investigate opportunities and alignments throughout the watershed for various projects including restoration and channel naturalization, plantings, and the creation of outdoor classrooms and natural style playgrounds, some of which could also become ‘signature watershed sites’. This collaborative work will help meet the goals and objectives of the ECWP to enhance and restore the natural heritage system in the watershed.

Priority areas for planting to enhance the urban forest canopy in the Etobicoke Creek watershed are not proposed in natural areas. Instead, the urban forest priority planting areas are focused on areas outside of the NHS (i.e. outside of existing and potential natural cover areas) within the contributing areas of the NHS (areas not suitable for restoration but areas that can still provide additional habitat/connectivity through use of LIDs/GI), within ESGRAs and areas with lower canopy cover percentages, and in proximity to the WRS. Social and municipal criteria was also used to identify priority planting areas including heat vulnerability and known municipal priorities like Brampton no-mow areas.

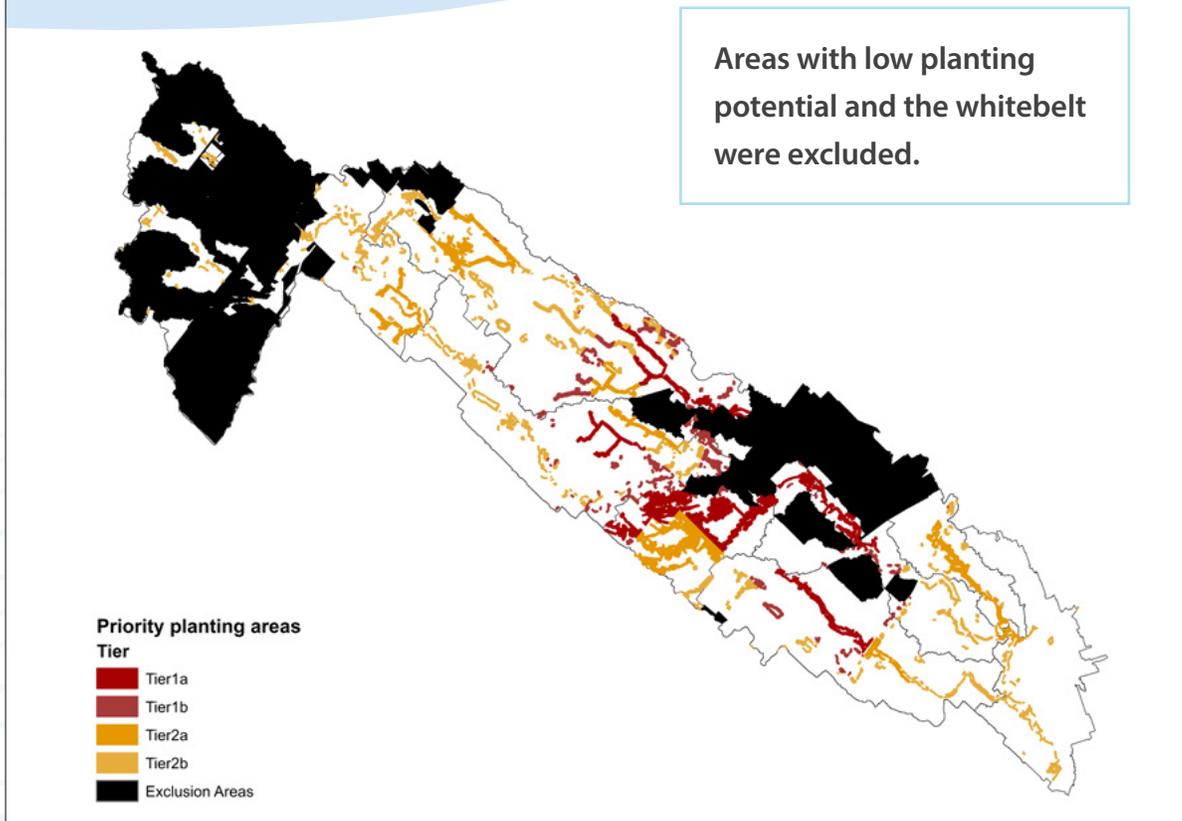
Restoration opportunities in natural areas of the Etobicoke Creek watershed are identified as part of the watershed refined enhanced NHS (generally in potential natural cover areas shown in [Map 6](#)) and the priority restoration sites (including plantings/enhancement of forest, riparian, wetland, and shoreline habitat) as shown in [Maps 3A](#) and [3B](#).

Priority areas for planting to enhance the urban forest canopy used a multiple criteria analysis with equally weighted scoring. [Figure 19](#) shows the results of the multiple criteria analysis.

The first set of criteria were ecological / hydrological, which consisted of:

1. Within the contributing areas of the NHS (i.e. to improve buffers)
2. Proximity to the Water Resource System (i.e. the closer to the system the higher the score)
3. Lower canopy cover of the subwatershed (i.e. needs more trees)
4. Within ESGRAs (i.e. to improve infiltration)

FIGURE 19:
Results of Urban Forest Priority Multiple Criteria Analysis



The social / municipal criteria consisted of the heat vulnerable mapping from Peel Region and known municipal priorities like Brampton no-mow areas and Peel climate change priority areas. The whitebelt was excluded from the analysis because of potential urbanization there. Additionally, areas with low planting potential based on land use (e.g. airport), and land cover (e.g. industrial) were excluded. Assumptions were made for each land use type on the amount of trees planted with impervious areas being more limited.

A tiered approach was chosen to represent priority canopy cover enhancement (see [Map 9](#) and the results in [Table 17](#)). Tier 1 represents priority areas based on ecological, hydrological, social, and municipal criteria. Tier 1a represents the top 10 areas by number of trees planted. Tier 2 represents priority areas based on ecological and hydrological criteria. Tier 2a represents the top 10 areas by number of trees planted. Tier 1b and 2b represent the remainder of plantable areas meeting the specified criteria. The number of potential trees to be planted was computed using planting densities specific to each land use type and the assumption that a medium-stature tree would be planted. The canopy cover enhancements do not include increases through underplanting. The [Etobicoke Creek Watershed Future Management Scenario Analysis Report](#) ([Table 18](#) Urban Forest Planting Assumptions) provides further information on tree planting assumptions and densities.

Available planting areas vary greatly if social and municipal criteria are considered in addition to ecological and hydrological criteria. For example, and as shown in [Table 17](#), the Headwaters has a much lower number of trees in Tier 1 compared to Tier 2.

A total of 288.6 hectares of additional canopy cover can be added based on this tiered approach.

TABLE 17:
Canopy Cover Enhancements by Tier

Subwatershed	Current Canopy Cover	Tier 1 and 2 Canopy Cover	Tier 1 (Number of Trees)	Tier 2 (Number of Trees)
Headwaters	12.9%	13.3%	16	3,808
Little Etobicoke	14.0%	15.1%	1,779	5,337
Lower Etobicoke	22.9%	23.3%	–	2,809
Main Branch	14.2%	15.0%	2,924	2,741
Spring Creek	14.5%	16.0%	5,326	6,822
Tributary 3	6.5%	12.2%	6,864	3,395
Tributary 4	13.3%	14.7%	10	2,222
West Branch	17.9%	19.6%	10,288	3,757
TOTALS	14.6% (watershed)	15.9% (watershed)	27,208	30,891

Note:

Urban tree planting costs are contingent on current market prices of stock and market conditions.





Report
Staff Report
 The Corporation of the City of Brampton
 9/4/2024

Date: 2024-08-02

Subject: **Recommendation Report - Centre for Community Energy Transformation (CCET) Update**

Contact: Pam Cooper, Manager, Environmental Planning, Environment and Development Engineering

Report number: Planning, Bld & Growth Mgt-2024-641

RECOMMENDATIONS:

1. That the report from Pam Cooper, Manager, Environmental Planning, Environment and Development Engineering Division to the Committee of Council Meeting of September 4, 2024, re: **Recommendation Report - Centre for Community Energy Transformation Update**, be received;
2. That the City of Brampton enter into a Service Level Agreement (SLA) with the not-for-profit Centre for Community Energy Transformation (CCET), for operations related to establishing a home energy retrofit program and integrating district energy, in the form of contractual payments under a Service Level Agreement (“SLA”);
3. That the Commissioner, Planning, Building & Growth Management be authorized to negotiate the SLA with the CCET Board and be delegated the authority to execute the SLA with the CCET on such terms and conditions as the Commissioner, Planning, Building & Growth Management approves and, in a form, satisfactory to the City Solicitor or designate; and
4. That the City of Brampton support CCET in the investigation of opportunities to work with other agencies and organizations and to enter into additional Service Level Agreements to provide energy planning services to their respective municipalities.

OVERVIEW:

- **This report provides an update on the Centre for Community Energy Transformation (CCET) since the 2022 Council endorsement of the recommendations from the CCET Advisory Task Force.**

- **To date, CCET has received \$300,000 from the City of Brampton through a Service Level Agreement (SLA), which was applied to the costs to establish the CCET and costs for its first year of operations.**
- **CCET has also received financial contributions from other municipal partners.**
- **Two of the CCET focus areas in their Business Plan (Advancing Deep Home Retrofits and District Energy Adoption) are of particular interest as they align with two Priority Projects of the Community Energy and Emissions Reduction Plan (CEERP):**
 - **Establish a system to deliver standardized retrofits to Brampton homeowners**
 - **Integrate District Energy Systems in appropriate locations within the City of Brampton**
- **As CCET has a Business Plan which aligns with the environmental sustainability work the City of Brampton is undertaking, entering into a further Service Level Agreement (SLA) with CCET will allow the City of Brampton to continue its progress.**
- **\$200,000 in existing capital funds from the Environmental Master Plan capital budget are proposed to be provided through a Service Level Agreement.**

BACKGROUND:

Originally identified as a catalytic action in Brampton's 2040 Vision, the [Centre for Community Energy Transformation \(CCET\)](#) is now a not-for-profit organization operating across Peel, advocating for energy investments, private and public funding opportunities and acting as a hub for municipal energy excellence. It will assist residents, businesses and commercial property owners with improving energy efficiency and lowering carbon emissions in collaboration with its municipal partners.

CCET's mandate is focused on convening partners to implement catalytic priorities to accelerate a community transition towards a low-carbon future. CCET's initial focus will be to collaborate with its municipal partners on:

- Advancing Deep Home Retrofits
- District Energy Adoption
- Spurring Institutional, Commercial and Industry (ICI) Energy Efficiency
- Promoting Climate Change Related Outreach and Engagement

CCET History

2018

- Brampton Council endorsed "[Brampton 2040 Vision: Living the Mosaic](#)". A key theme in the document was the creation of public non-profit institutions to take on the role of change agents. The first action from Vision 1: Sustainability and the Environment, states: "Action 1-1, Institute for Sustainable Brampton: Found a public-private facilitator for local environmental progress to position Brampton in the vanguard of suburban sustainability".
- Members of the Grow Green Network created a task force to look at options for creating the Institute for Sustainable Brampton (ISB). In February 2019, the Institute for Sustainable Brampton Task Force presented a White Paper outlining the recommended purpose, operation and benefits of an ISB, and sought support for its establishment. As a result of this delegation, Council passed resolution [C054-2019](#) directing staff to report back at a later date about establishing an "Institute for Sustainable Brampton".

2019

- June 5, 2019, Brampton Council officially declared a Climate Emergency for the purpose of aiming, framing, and deepening the City of Brampton's commitment to the protection of our ecosystems and community from climate change.
- September 25, 2019, Council passed resolution C360-2019 directing staff to initiate the process necessary to have the City join the Global Covenant of Mayors for Climate and Energy.

2020

- September 23, 2020, Council unanimously passed resolution CW196-2020 to endorse the City's Community Energy and Emissions Reduction Plan (CEERP). The CEERP developed ambitious GHG reduction targets and six key priorities actions to undertake in the next five years.
- September 23, 2020, as a means of meeting the City's ambitious GHG targets, Council unanimously passed resolution CW213-2020 to support staff's recommendation to establish a [Centre for Community Energy Transformation](#) (formerly ISB) and recommended moving forward with creating the not-for-profit organization.

2021

- Council endorsed the recommendations of the CCET Advisory Task Force in principle. Council Resolution [CW030-2022](#) supported the City in reallocating \$300,000 in existing capital funds from the Environmental Master Plan capital budget to be applied to the costs to establish the CCET and costs for its first year of operations, including those of the transitional board, either in the form of grants or contractual payments under a Service Level Agreement.

- Staff noted at the time that subsequent funding of \$1.2 million for years 2 through 4 (as noted in the report Establishing a Centre for Community Energy Transformation (CCET) Report) would be outlined in future Service Level Agreements between the City and CCET.
- CCET Advisory Task Force held its first meeting, which included 15 members from many Brampton sectors (Enbridge, Johnson Controls, Alectra, Peel District School Board, Brampton brick, Ontario Clean Water Agency, KPMG, Berger Group, Owens Illinois Brampton).
- Established a governance structure that corresponded to the approved CCET Framework and a Funding and Partnership Strategy

2022

- CCET Board was established and CCET was incorporated as a non-profit.
- CCET received funds from Brampton and Region of Peel

2023

- CCET Executive Director was recruited
- Advisory Group and Municipal Working Group established
- Lead for home energy retrofits was recruited
- CCET named one of Canada's 2024 Clean50 Top Projects

2024

- Launch of the free Energy Coach service and related community engagement
- Receipt of Close Out Report by City of Brampton
- Business Plan completed
- Exploration of funding/joint projects with Federation of Canadian Municipalities (FCM), Enbridge, Alectra, Efficiency Canada
- Planning a District Energy workshop in Fall 2024 in partnership with the Danish Consulate

Funding

City of Brampton

Council Resolution CW030-2022 states that the City would re-allocate \$300,000 in existing capital funds from the Environmental Master Plan capital budget to be applied to the costs to establish the CCET and costs for its first year of operations, including those of the transitional board, either in the form of grants or contractual payments under a Service Level Agreement.

CCET has received the \$300,000 payments from the City of Brampton as follows:

Amount	Date
\$15,000	seed money (June 2022)
\$90,000	signing agreement (October 2022)
\$175,000	hiring Executive Director (May 2023)
\$20,000	provision of Close-out Report (March 2024)

Other Municipal Funding

Funding contributions received from other municipal partners include:

Municipality	Amount	Status
Peel Region	\$100,000	\$50,000 (November 2022) \$50,000 (January 2024)
City of Mississauga	\$100,000	\$100,000 (January 2024)

CCET is in discussions with other municipal partners regarding additional potential funding contributions for the years 2025-2027.

CCET is evaluating various foundations and other levels of government for future proposals to support efforts to address the energy burden and underserved households, the energy coach service, and dwelling archetype analysis.

CCET Close-Out Report

The CCET Close-Out Report (Attachment 1) was provided in accordance with Paragraph 2.8 of Grant Agreement 2 from October 2022, which states that the City will pay any remainder of the Grant Agreement upon “receipt, review and satisfaction with the Recipient’s Project Close-Out Report for the Project”:

“completion of the Project or ii) the expiry of the Term, the Recipient shall deliver to the City the Project Close-Out Report in the form required by the City including a final completed Project Budget; details and confirmation of all other funding received for the Project including funding from other City sources, all invoices and receipts for the expenses incurred by the Recipient for the Project which are

eligible expenses pursuant to the Grant Terms and Conditions, and true copies of the incorporating document, corporate filings and organizing by-laws for CCET”

Finance has confirmed approval of the city-related financials of the Close-out Report.

CCET Business Plan

CCET’s mandate is focused on convening partners to implement catalytic priorities to accelerate a community transition towards a low-carbon future. CCET’s initial focus areas are:

- Advancing Deep Home Retrofits
- District Energy Adoption
- Spurring Institutional, Commercial and Industry (ICI) Energy Efficiency
- Promoting Climate Change Related Outreach and Engagement

Two of the CCET focus areas, Advancing Deep Home Retrofits and District Energy Adoption, are of particular interest to the City of Brampton as they align with two Priority Projects of the [Community Energy and Emissions Reduction Plan \(CEERP\)](#):

- Establish a system to deliver standardized retrofits to Brampton homeowners
- Integrate District Energy Systems in appropriate locations within the City of Brampton

Home Energy Retrofits

Carbon emissions in Brampton, Mississauga and Caldon increased by 9% between 2021 and 2022 (The Atmospheric Fund 2023). Most of the increase is a result of the ‘Buildings’ sector (8.9% increase) and ‘Transportation’ sector (11.5% increase). While the population in Peel increased by about 16,000 people or just over 1%, per capita emissions increased by 8.7% (see Table 1 below), from 6.9 tonnes CO₂e (tCO₂e) per person in 2021 to 7.5 tCO₂e per person in 2022.

Table 1 - Peel population and greenhouse gas (GHG) emissions in 2021 and 2022:

	2021	2022
People	1,499,917 (Census)	1,516,019 (Estimated)
Dwelling Units	450,740	455,673
GHG Emissions (tCO ₂ e)	10,410,575	11,349,874
GHG Emissions per capita	6.9	7.5

Population estimates from [Peel Region](#)

GHG emissions calculations from [The Atmospheric Fund](#)

To reduce carbon emissions from buildings there needs to be a focus on residential home retrofits. CCET will track progress towards the goal of “Accelerating Home Energy Retrofits for Low Rise Buildings” according to the Objectives and Outcomes below. Key

performance indicators (KPIs) developed for each Objective can be found in the CCET Business Plan in Attachment 2.

Objective	Outcome
Become a trusted advisor in the community	<p>CCET established as a trusted source of information</p> <p>CCET's presence and brand enhanced</p>
Raise awareness of energy retrofits benefits through community engagement	<p>Increased awareness of home energy retrofits</p> <p>Community feedback integrated into CCET's offerings</p>
Address energy burden	<p>Established partnerships or working relationships with community groups that serve income eligible and underserved households</p> <p>Gathered and incorporated feedback and research options (e.g. turnkey programs) for measures to address energy burden</p>
Build strategic partnerships	<p>Partner and stakeholder relationships established and maintained</p> <p>Support for funding and grant applications to implement the enabling services and financial tools is secured</p>
Launch an energy coach service	<p>Increased uptake of existing retrofit programs</p> <p>Improved likelihood of successful application to the Federation of Canadian Municipalities (FCM) Community Efficiency Financing (CEF) stream of funding</p> <p>Increased awareness of incentives and financial tools (e.g. LIC financing)</p> <p>The ability to track homeowner progress on their retrofit journey is determined</p> <p>Work plan to grow the energy coach service under varying scenarios (e.g. with and without CEF funding) is developed</p>
Launch a One-stop Window	Improved functionality of a One-stop Window
Secure private capital	<p>Confirm the processes and legal arrangements for CCET to collaborate with municipal partners to capitalize an LIC financing offering</p> <p>Alternate financing tools identified and tested</p>
Prepare an application to the Community Efficiency	Demonstrate ability to implement the applicant intake process for a potential LIC offering

Objective	Outcome
Financing stream of funding of the Federation of Canadian Municipalities	Demonstrate ability to manage financial flows

District Energy

The Heritage Heights Community Energy Plan (CEP) was commissioned to identify a pathway to achieving a near net zero future for the Heritage Heights Community with much less reliance on fossil fuels. The Heritage Heights Secondary Plan includes Sustainability and Climate objectives related to district energy as follows:

- facilitate efficient energy generation of all types and associated distribution systems, including, but not limited to, district energy services,
- the City will work with appropriate partners to develop a District Energy Utility (DECO) that will provide cost effective district heating and cooling services to development in Mixed Use Areas and on lands designated Employment, wherever appropriate.
- New development in Mixed Use Areas and on lands designated Employment will be designed to be district energy ready following guidelines provided by the City, and connect to the district energy system, except where the City has determined district energy will not be provided or a connection is not appropriate.
- The use of waste heat from large facilities as an opportunity to supply heating and cooling to buildings via district energy networks is encouraged.
- The City of Brampton will explore opportunities for incentive programs to support building efficiency and other measures to improve energy performance, to support the vision of establishing a near net zero carbon emitting community. The City will collaborate with the Centre for Community Energy Transformation to ensure the ready availability of information and assistance on available incentive programs.

To meet the objectives of the Heritage Heights Secondary Plan, staff need to explore the future of district energy in Heritage Heights and the City's role. CCET has a Board Resolution to convene a 'coalition' and develop a business plan for a Heritage Heights District Energy Company.

As well, many cities are using or exploring the use of district energy systems to help them reach their climate goals, such as the cities of Mississauga, Kitchener, Guelph and Markham. Brampton Plan refers to developing District Energy Ready Guidelines and requiring district energy systems to be incorporated into all major growth and intensification areas. The Downtown Revitalization team is leading the Downtown Brampton Secondary Plan Review and are exploring a component study for an

Integrated Energy Resilience Plan (IERP). The IERP will look at energy needs for the downtown as a whole, including district energy as one solution. As part of future work/support on the IERP, the team may seek input of CCET on the scope of work and review of the draft/final plan.

CURRENT SITUATION:

In 2022, Council endorsed the recommendations of the CCET Advisory Task Force and supported the City to re-allocate \$300,000 in existing capital funds from the Environmental Master Plan capital budget to be applied to the costs to establish the CCET and costs for its first year of operations. Staff noted at the time that subsequent funding would be outlined in future Service Level Agreements between the City and CCET.

As CCET has made strides in becoming a non-profit and their Business Plan aligns with the goals of the Community Energy and Emissions Reduction Plan (CEERP) and its priority projects, staff will re-allocate existing capital funds from the Environmental Master Plan capital budget in the amount of \$200,000 to allow CCET to assist the City is establishing residential energy retrofit program to Brampton homeowners and integrating District Energy Systems in appropriate locations within the City.

CORPORATE IMPLICATIONS:

Financial Implications:

There is sufficient funding available in the existing capital funds in the Environmental Master Plan capital budget to re-allocate \$200,000 for the Service Level Agreement:

Project #	Amount
237485-001	\$600,000

Any subsequent funding for additional years will be outlined in a Service Level Agreement between the City and CCET, subject to Council approval.

Other Implications:

There are no other implications resulting from the approval of the recommendations of this report.

STRATEGIC FOCUS AREA:

The information in this report directly fulfills the “Environmental Resilience and Sustainability” Strategic Focus Area of enhancing energy & climate resilience.

CONCLUSION:

The 2040 Vision recommended the establishment of an arms-length community organization to achieve the goals of “One Planet Living” over the next 25 years. CCET

will work together with Brampton to rapidly advance meaningful climate action and to respond to our collective Climate Emergency.

CCET's mandate, priority projects and business plan have been developed through extensive engagement with community stakeholders, the Advisory Group and Municipal Working Group.

Authored by:

Reviewed by:

Pam Cooper, Manager,
Environmental Planning, Environment
& Development Engineering Division

Michael Heralall, Director, Environment &
Development Engineering Division

Approved by:

Approved by:

Steve Ganesh, Commissioner,
Planning, Building & Growth
Management Department

Marlon Kallideen
Chief Administrative Officer

Attachments:

- Attachment 1 – Close-out Report
- Attachment 2 – Business Plan

Grant Agreement Close-Out Report: City of Brampton Grant Agreement 2

Prepared By:
Centre for Community Energy Transformation

Prepared For:
City of Brampton

March 4, 2024





Introduction

Originally identified as a catalytic action in [Brampton's 2040 Vision](#), CCET is now a stand-alone not-for-profit organization operating region-wide, that will advocate for energy investments, secure both private and public funding opportunities and be a hub for municipal energy excellence. It will assist residents, businesses and commercial property owners with improving energy efficiency and lowering carbon emissions region-wide and in collaboration with its municipal partners.

CCET's mandate is focused on convening partners to implement catalytic priorities to accelerate a community transition towards a low-carbon future. CCET's initial focus will be to collaborate with its municipal partners on:

- Advancing Deep Home Retrofits
- District Energy Adoption
- Spurring Institutional, Commercial and Industry (ICI) Energy Efficiency
- Promoting Climate Change Related Outreach and Engagement

The February 2022 Council Resolution CW030-2022 stated "That the City re-allocate existing capital funds from the Environmental Master Plan capital budget in the amount of \$300,000 (the "CCET Budget"), to be applied to the costs to establish the CCET and costs for its first year of operations, including those of the transitional board, either in the form of grants or contractual payments under a Service Level Agreement ("SLA")".

CCET has received grant payments to date as follows:

Amount	Date
\$15,000 (seed money)	June 2022
\$90,000 (signing agreement)	October 2022
\$175,000 (hiring Executive Director)	May 2023
\$20,000 (provision of final report with work completed to date)	Pending

This Project Close-Out Report is provided in accordance with paragraph 2.8 of the CCET Grant Agreement #2 dated the 3rd day of October, 2022. Paragraph 1.1 of the Grant Agreement states that the City will pay any remainder of the Grant Amount upon "receipt, review and satisfaction with the Recipient's Project Close-Out Report for the Project submitted in accordance with Paragraph 2.8".

CCET's short-term focus is to accelerate home energy retrofits across Peel Region and promote district energy in intensification nodes and priority greenfield areas. The milestones achieved to date and the program budget reflect this focus and administrative and operational activities of a start-up organization.

Milestones achieved from the start date of the CCET Grant Agreement include:

- Articles of Incorporation (June 2022)
- Peel Region Contribution Agreement (September 2022)



- Recruitment of Executive Director (February to June 2023)
- Submission of Clean50 application (June 2023) and award (September 2023)
- Development and submission of two grant applications for external funding
- Recruitment of Lead-Home Energy Retrofits position (December 2023)
- Establishment of a Municipal Working Group (October 2023)
- Establishment of an Advisory Group (November 2023)
- Negotiating municipal partner Service Level Agreements and MOUs (August 2023 and ongoing)
- 2024 Work Plan presented to the Board and shared with municipal partners and presented to the Advisory Group (November 2023)
- Draft Business Plan in preparation for completion by Q2 2024, including key performance indicators, and presented to the Advisory Group and Municipal Working Group (February 2024)
- Preliminary Marketing and Outreach Plan (February 2024)
- Community engagement to promote home energy retrofits in preparation to initiate in early 2024, including a 'One-stop Window' for home energy retrofit resources

Project Budget

Audited Financials for Fiscal Year Ending March 31, 2023

Audited financial statements for the fiscal year ending March 31, 2023 were prepared by Bassi and Karimjee LLP and approved by the CCET Board of Directors in September 2023. The legal fees for Articles of Incorporation (\$14,492) comprise most expenses for the fiscal year ending March 31, 2023, which ended with a cash balance of \$139,084. The audited financial statements are provided under separate cover as an attachment to this Close-Out Report.

Current Project Budget Fiscal Year 2023/24

The estimated program budget is just under \$900,000 and is provided in Appendix A (Table A-1). The cost breakdown in Appendix A includes anticipated staff of five (5) full time equivalents (FTEs) and operational spending including communications. CCET will need to raise additional revenue to meet this program spending. The program spending breakdown in Table A-1 does not include growth in the two main program areas. For example, program implementation projects not yet budgeted include:

- proposed flow-through funds for homeowners to undertake energy retrofits under a future Local Improvement Charges (LIC) financing mechanism in collaboration with municipal partners, and
- conducting various studies and business cases to support district energy readiness of buildings.

Additional fundraising is required for project implementation in the program areas.

The projected budget for the current fiscal year (April 1, 2023 to March 31, 2024) includes expenses related to the recruitment of the Executive Director and Lead-Home Energy Retrofits position. Forecasted expenses total \$369,380. The projected budget includes an allocation of



\$65,000 for communications and \$48,000 for consultants. CCET is tracking considerably under budget in these areas. With the onboarding of the Lead-Home Energy Retrofits staff, community engagement initiatives will begin in early 2024.

Recruitment of additional staff is dependent on securing additional funding. CCET will submit grant applications and proposals to private foundations to seek funding to support a Climate Action Specialist as a technical lead. This position will primarily support the residential energy retrofit efforts and an energy coach service. CCET will pursue partner funding with corporations to secure funding for the District Energy Lead position.

Forecasted contributions are from Peel Region, the City of Mississauga and Town of Caledon, in addition to those from the City of Brampton. Of the \$681,000 in municipal grant revenue either committed or in progress, it is anticipated that CCET will meet the requirements for disbursements to receive \$345,000 in the current fiscal year (see Table A-3). It is anticipated that \$336,000 will be received in Q2/Q3 2024 (fiscal year ending March 2025) upon approval of a Service Level Agreement with the City of Brampton and a Memorandum of Understanding with the Town and Caledon, and the completion of the CCET Business Plan.

As shown in Table A-4, the forecasted cash balance at fiscal year end (March 31, 2024) is \$163,464.

Funding Received, Secured or Pledged

Municipal Contribution Agreements

The status of funding contributions from municipal partners is provided in Table 1 below. Further details of grant revenues by anticipated disbursements are provided in Table A-3 in Appendix A.



Table 1 – Funding contributions from municipal partners committed or in progress.

Municipality	Contribution Amount	Status
Peel Region	\$100,000	\$50,000 received November 15, 2022 \$50,000 received January 2024 following submission of audited financial statements
City of Brampton Grant Agreement #2	Up to \$285,000	\$90,000 received January 4, 2023 \$175,000 received June 6, 2023 \$20,000 pending review of Close-Out Report
City of Mississauga 2023 SLA	\$100,000	SLA approved. Funding received January 2024.
Town of Caledon 2023/24 MOU	\$36,000	SLA approval in progress
City of Brampton 2024 SLA	\$300,000	SLA approval in progress

Other Funding Opportunities

CCET submitted two applications for additional funding as shown in Table 2 below. The applications were not successful.

Table 2 – External funding opportunities pursued by CCET in 2023.

Funder / Date Submitted	Project Description	Project Budget and Funding Request
Natural Resources Canada 'Deep Retrofit Accelerator Initiative' April 2023	A Replicable Model for Groundbreaking Net-Zero Community Deep Retrofits in Peel	Project Cost = \$10.9 million Funding Request = \$10.9 million
The Atmospheric Fund September 2023	One-stop Window and Energy Coach: Support Services to Scale up Home Energy Retrofits in Peel Region	Project Budget = \$420,000 Funding Request = \$220,000

CCET is evaluating the following foundations for future proposals in 2024 to support our efforts to address energy burden and underserved households, the energy coach service, and dwelling archetype analysis:

- Catherine Donnelly Foundation
- Peter Gilgan Foundation
- Trottier Family Foundation
- J.W. McConnell Family Foundation



Invoices and Receipts

As itemized in the audited financial statements, the following expense categories comprise most of the costs in the fiscal year ending March 31, 2023 (Table 3). Audit fees of \$5,932.50 are included in the financial statements, but payments were made in 2023 and are included in Table 4.

Table 3 – Main expenditures in fiscal year April 1, 2022 to March 31, 2023.

Account	Amount
Legal Fees	\$14,492.33
Insurance	\$617.12
Office and General	\$721.42

Fees associated with staff recruitment and consulting fees for grant applications are the largest expense items in the current fiscal year (Table 4), other than the salary for the Executive Director. With onboarding of the Lead-Home Energy Retrofits staff person, expenses associated with community engagement and launching an 'energy coach' service will increase.

Table 4 – Main expenditures in current fiscal year from April 1, 2023 to January 31, 2024.

Account	Amount
Recruitment	\$41,468.74
Consulting	\$11,300.00
Web Design	\$1,926.14
Payroll Service Fees	\$1,362.10
Office Equipment	\$985.21
Software	\$26.10
Insurance	\$1,542.56
Accounting Fees	\$6,474.90
Administrative	\$245.00
Bookkeeping	\$2,150.00
Banking Fees	\$1.50
Legal Fees	\$226.00
Communications	\$621.50



Incorporating Documents and Organizing By-laws

The Articles of Incorporation dated May 3, 2022 are provided under separate cover.

CCET's Board of Directors has approved the following organizational by-laws:

- Board Members' Role and Code of Conduct (May 2023)
- Board Members' Meeting Attendance Requirements (October 2023)
- Executive Director Responsibilities and Accountabilities (June 2023)
- Board and Executive Director Collaboration (June 2023)
- Contributor and Partner Role (June 2023)
- Code of Conduct and Intellectual Property Rights Agreement
- Confidentiality and Disclosure of CCET Information (May 2023)
- Conflict of Interest (May 2023)
- Policy – Chair's Role (May 2023)
- Policy – Secretary's Role (May 2023)
- Policy – Treasurer's Role (May 2023)
- Policy – Vice-Chair's Role (May 2023)
- Terms of Reference – CCET Advisory Group (June 2023)
- Terms of Reference – Governance and Human Resources Committee (May 2023)



Appendix A
Centre for Community Energy Transformation – Program Budget 2023 to 2024

Table A-1 – Breakdown of estimated expenses for fiscal year April 1, 2023 to March 31, 2024.

Item	Estimated Costs	Qty	Total Annual Costs	FY April 2023 to March 2024 Projected Costs
Executive Director	\$140,000.00	1	\$140,000.00	\$116,667
Staff Burden Cost (Benefits)	\$32,000.00	1	\$32,000.00	\$29,167
Program Leads	\$110,000.00	2	\$220,000.00	\$27,500
Staff Burden Cost (Benefits)	\$18,750.00	2	\$37,500.00	\$9,375
Program Coordinators	\$90,000.00	2	\$180,000.00	
Staff Burden Cost (Benefits)	\$12,500.00	2	\$25,000.00	
Administration staff salary	\$25,000.00	1	\$25,000.00	\$6,250
Staff Burden Cost (Benefits)	\$3,750.00	1	\$3,750.00	\$938
Office Equipment	\$10,000.00	1	\$10,000.00	\$4,000
Office supplies and subscriptions	\$200.00	12	\$2,400.00	\$110
Employee Recruitment	\$1,000.00	12	\$12,000.00	\$32,978
Accountant fees	\$3,000.00	1	\$3,000.00	\$12,542
Legal Fees	\$5,000.00	1	\$5,000.00	\$5,000
Payroll				\$5,425
Bookkeeping Fees	\$5,000.00	1	\$5,000.00	\$3,600
Insurance Fees	\$5,000.00	1	\$5,000.00	\$1,851
Banking Fees	\$30.00	12	\$360.00	\$360
Office Space Rental	\$2,000.00	12	\$24,000.00	
Communication, Engagement, Marketing Activities	\$7,500.00	12	\$90,000.00	\$65,622
Consulting Fees	\$50,000.00	1	\$ 50,000.00	\$47,995
Utilities Expenses	\$500.00	12	\$6,000.00	
Total Annual Costs			\$ 866,010.00	\$369,380



CENTRE FOR COMMUNITY ENERGY TRANSFORMATION
Statement of Cash Flows
Eleven Month Period Ended March 31, 2023

Table A-2 – Statement of Cash Flows

OPERATING ACTIVITIES

Excess of government grants over expenses	\$ -
Changes in non-cash working capital:	
Accounts payable and accrued liabilities	\$ 5,933
Deferred grant revenues	<u>\$133,151</u>
	<u>\$139,084</u>
INCREASE IN CASH FLOW	\$139,084
CASH - BEGINNING OF PERIOD	\$ -
CASH - END OF PERIOD	<u>\$ 139,084</u>



CENTRE FOR COMMUNITY ENERGY TRANSFORMATION
Grant Revenues
April 1, 2023 to March 31, 2024

Table A-3 – Breakdown of grant revenues.

Contribution Agreement	Milestone for Disbursement	Amount	Status	Timing
Peel Region Contribution Agreement	Audited Financial Statements	\$50,000	Received	Q1 2024
Brampton Grant Agreement 2	Recruitment of Executive Director	\$175,000	Received	Q2 2023
Brampton Grant Agreement 2	Submission and Acceptance of Close-Out Report	\$20,000	In review	Q1/Q2 2024
Caledon Memorandum of Understanding (MOU)	Upon signing MOU	\$20,000	In progress	Q2 2024
	Delivery of Business Plan	\$16,000	In progress	Q2 2024
Mississauga Service Level Agreement (SLA)	Upon signing SLA	\$50,000	Received	Q1 2024
	Onboard at least one staff person to support home energy retrofits program, establishment of Municipal Working Group and Advisory Group	\$50,000	Received	Q1 2024
Brampton Service Level Agreement (SLA) ¹	Upon signing SLA	\$150,000	In progress	Q2 2024
	Establishment of Advisory Group	\$75,000	In progress	Q2 2024
	Delivery of Business Plan	\$75,000	In progress	Q2 2024
TOTALS		\$681,000		
TOTALS (anticipated in current fiscal year)		\$345,000		

¹ The Brampton SLA is in review.



**CENTRE FOR COMMUNITY ENERGY TRANSFORMATION
Forecast Balance at Fiscal Year End (March 31, 2024)**

Table A-4 – Forecast cash balance at fiscal year end, March 31, 2024.

Starting Balance, April 1, 2023	\$139,084
Forecasted Expenses (FY April 2023 to March 2024)	\$369,380
Forecasted Revenues (FY April 2023 to March 2024)	\$345,000
Forecasted Ending Balance, March 31, 2024	\$114,704



CENTRE FOR COMMUNITY ENERGY TRANSFORMATION

Business Plan 2024/2025 – Executive Summary

August 2024



ACKNOWLEDGEMENTS

The Centre for Community Energy Transformation (CCET) recognizes and acknowledges that our work takes place on lands that are part of the Treaty Lands and Territory of the Mississaugas of the Credit. For thousands of years, Indigenous peoples inhabited and cared for this land, and continue to do so today. We acknowledge the territory of the Anishinabek, Huron-Wendat, Haudenosaunee and Ojibway/Chippewa peoples; the land that is home to the Metis; and most recently, the territory of the Mississaugas of the Credit First Nation who are the direct descendants of the Mississaugas of the Credit.

We are grateful to have the opportunity to work on this land, and by doing so, give our respect to its first inhabitants.

We thank the CCET Board of Directors for their leadership and contribution to the Business Plan.

CCET acknowledges the municipal partners (City of Brampton, Town of Caledon, City of Mississauga, and the Region of Peel) and the Advisory Group for their contribution to the Business Plan.

Board of Directors

Peter Love, Chair
 Hassaan Khan, Vice Chair
 Sukhminder Purba, Finance Committee
 Chair
 Herbert Sinnock, Governance
 Committee Chair
 Victoria Coffin
 David Laing
 Vincent Thomas

Municipal Partners

Teresa Chan, City of Mississauga
 Pam Cooper, City of Brampton
 Kristina Dokoska, City of Brampton
 Rija Rasul, City of Mississauga
 Jeremy Schembri, Peel Region
 Alexandra Service, Town of Caledon
 Christine Tu, Peel Region
 Dianne Zimmerman, City of
 Mississauga

Advisory Group

Miranda Baksh, Community Climate Council
 Murat Basarir, TD Bank
 Tina Beckles, Corix Utilities
 Pam Cooper, City of Brampton
 Teresa Chan, City of Mississauga
 Averyl D'Souza, Alectra Utilities
 Joseph Hong, i2 Developments
 Amy Jacobs, Enwave Corporation
 Gaby Kalapos, Clean Air Partnership
 Caroline Karvonen, BOMA Toronto
 Matthew Kerner, Creative Energy
 Brian Lee, Enbridge
 Gillian Lind, Hydro One
 Jaipaul Massey-Singh, Brampton Board of
 Trade
 Ridhima Nayyar, RioCan
 Trish Nixon, VanCity
 Niall Pidgeon, FVB Energy
 Bryan Purcell, The Atmospheric Fund
 Behnoosh Ramezani, Oxford Properties
 Malkeet Sandhu, David Suzuki Foundation
 Jeremy Schembri, Peel Region
 Alexandra Service, Town of Caledon
 Doug Whillans, MITS Air
 Meghan Wilson, Daniels Corporation
 Julia Zeeman, CCSR
 Dianne Zimmerman, City of Mississauga
 Future Energy Oakville (TBD)

EXECUTIVE SUMMARY

Reducing Carbon Emissions from Buildings

The Centre for Community Energy Transformation (CCET) was launched from a community vision to accelerate climate action in the municipalities of Brampton, Caledon and Mississauga (region of Peel). Our focus is to reduce carbon emissions from buildings. Doing so will also spur investment in the community, create jobs, and respond to municipal climate emergency declarations.

CCET's mandate is focused on convening partners to accelerate a community transition towards a low-carbon future, and work with municipal collaborators to:

- Accelerate Deep Home Retrofits
- Advance Low Carbon District Energy Systems
- Spur Institutional, Commercial and Industrial (ICI) Energy Efficiency
- Promote Climate Change Related Outreach and Engagement

The need to turn the curve on greenhouse gas (GHG) emissions from buildings

While there is demonstrated progress to reduce carbon emissions in sectors such as electricity generation and heavy industry, greenhouse gas emissions (GHGs) from buildings have increased between 2005 to 2022 (Sawyer et al. 2023 for the Canadian Climate Institute). Building emissions in Canada have increased by 2.3 MT or 2.7% since 2005 (Simon 2024).

Carbon emissions in the region of Peel increased by 9% between 2021 and 2022 (The Atmospheric Fund 2023). Most of the increase is a result of the 'Buildings' sector (8.9% increase) and 'Transportation' sector (11.5% increase). While the population in the region of Peel increased by about 16,000 people or just over 1%, per capita emissions increased by 8.7%, from 6.9 tonnes CO₂e (tCO₂e) per person in 2021 to 7.5 tCO₂e per person in 2022.

Who We Are and How We Work

CCET was established as a not-for-profit to work with multiple municipal partners to contribute to implement their climate mitigation plans and scale-up climate action.

Vision / Mission / Mandate	CCET Value Proposition
<p>Vision: A sustainable energy future</p> <p>Mission: To lead an inclusive suburban energy transformation</p> <p>Mandate: Implement catalytic priorities to accelerate a community transition towards a low-carbon future</p> <p>Transformation Programs:</p> <ul style="list-style-type: none"> • Accelerate Home Energy Retrofits • Advance Low Carbon District Energy Adoption • Spur Institutional, Commercial and Industry (ICI) Energy Efficiency 	<p>Practitioners - Staff are advisors serving the community and listening to community feedback to tailor program offerings</p> <p>Convenors - We connect people and organizations for coordinated climate action</p> <p>Agile – Our not-for-profit structure allows us to act and adapt quickly</p> <p>Champions – Build momentum with all stakeholders and celebrate leadership</p> <p>Fundraisers – We will secure external funding to advance CCET’s mandate to work in the community</p>

Goals and Objectives



Goal 1: Accelerate Home Energy Retrofits for Low-rise Buildings

Target: Energy efficiency retrofits are completed for 3% of the low-rise residential building stock annually by 2030, aided by incentives and financing options (e.g. Local Improvement Charges), to accelerate GHG reductions and equitably save residents' energy.

CCET will track progress towards Goal 1 according to the Objectives and Outcomes below. Key performance indicators (KPIs) developed for each Objective can be found in the "Business Plan - Part 1" document.

	Objectives	Outcomes
	Become a trusted advisor in the community	CCET established as a trusted source of information CCET's presence and brand enhanced
	Raise awareness of the benefits of energy retrofits through community engagement	Increased awareness of home energy retrofits Community feedback integrated into CCET's offerings
	Address energy burden	Established partnerships or working relationships with community groups that serve income eligible and underserved households Gathered and incorporated feedback and research options (e.g. turnkey programs) for measures to address energy burden
	Build strategic partnerships	Partner and stakeholder relationships established and maintained Support for funding and grant applications to implement the enabling services and financial tools is secured

	Objectives	Outcomes
	<p>Launch an energy coach service</p>	<p>Increased uptake of existing retrofit programs</p> <p>Improved likelihood of successful application to the Federation of Canadian Municipalities (FCM) Community Efficiency Financing (CEF) stream of funding</p> <p>Increased awareness of incentives and financial tools (e.g. LIC financing)</p> <p>The ability to track homeowner progress on their retrofit journey is determined</p> <p>Work plan to grow the energy coach service under varying scenarios (e.g. with and without CEF funding) is developed</p>
	<p>Launch a One-stop Window</p>	<p>Improved functionality of a One-stop Window</p>
	<p>Secure private capital</p>	<p>Confirm the processes and legal arrangements for CCET to collaborate with municipal partners to capitalize an LIC financing offering</p> <p>Alternate financing tools identified and tested</p>
	<p>Prepare an application to the Community Efficiency Financing stream of funding of the Federation of Canadian Municipalities</p>	<p>Demonstrate ability to implement the applicant intake process for a potential LIC offering</p> <p>Demonstrate ability to manage financial flows</p>

Goal 2: Advance District Energy and Low Carbon Thermal Networks in Priority Nodes

Target: Promote the business case for district energy (DE) among key sectors and advance the expansion of low-carbon DE opportunities.



Objectives		Outcomes
	Host a district energy forum by Q4 2024	<p>Increased knowledge of DE systems and neighbourhood decarbonization with government decision makers, municipal practitioners, the building sector and other key sectors</p> <p>CCET's role and activities to advance DE systems further defined</p> <p>Outreach to economic sectors that contribute to neighbourhood decarbonization (e.g. manufacturers, utilities, organized labour, etc.) is achieved</p> <p>CCET's brand further established</p>
	Map and identify building profiles in priority DE areas/nodes	<p>Baseline building profiles and energy usage developed</p> <p>DE business cases developed for select priority areas</p>

The Opportunities

Equitable access to energy efficiency programs

Census data from Statistics Canada suggests that a significant proportion of households in the region of Peel experience energy burden:

- 20% (Caledon) to 29% (Brampton) of owner-households spend 30% or more on shelter costs (see Business Plan – Part 2 for definition of shelter costs)
- 37% (Brampton) to 40% (Caledon) of tenant households spend 30% or more on shelter costs
- 54% of households have an after-tax household income less than \$100,000

A transition to net zero energy communities could further disadvantage households experiencing energy burden. CCET will work with municipal partners and other collaborators to build on existing energy affordability initiatives to deliver energy efficiency programs that benefit equity-deserving and income eligible households, including both homeowners and renters.

Financing options for home energy retrofits

Almost 320,000 dwellings in the region of Peel are low-rise (single detached, semi-detached and townhomes) and the average homeownership rate across the three municipalities (Brampton, Mississauga and Caledon) is 75% ([Peel Region Census Information Hub](#)). Residents in Brampton, Caledon and Mississauga collectively undertook over 16,000 energy retrofits since 2006 that utilized an EnerGuide audit (Natural Resources Canada EnerGuide data for Peel Region). This represents an average annual retrofit rate of about 0.5% and achieved energy consumption savings of 22% on average.

The pace of energy retrofits and the resulting carbon reductions need to be dramatically increased. Innovative municipally-supported financing programs have successfully increased the understanding and interest among households of the benefit of home energy retrofits, and the resulting rate of energy retrofits in Ontario and Canada.

CCET will work with municipal partners to provide financing options to homeowners to undertake home energy retrofits. This includes exploring the Local Improvement Charges (LIC) financing option which has the benefit of:

- spreading financing payments over long time periods (e.g. 15 to 20 years) to ease loan repayments and
- attaching loans to the property rather than the homeowner.

Community engagement is central to marketing the financing offerings and assisting households through the program steps to complete energy retrofits. CCET will do this by maintaining a one-stop web portal as a resource and application portal, as well as providing an energy coach service to residents.



Priority nodes to assess feasibility of low carbon district energy systems

CCET will advocate to assess the feasibility for low carbon district energy as early as possible in the planning process for the significant development opportunities described in the table below.

Priority Node	Status
Bramalea City Centre, Brampton	A City of Brampton precinct plan anticipates redevelopment to higher densities. Applications have been submitted for 25 Peel Centre Drive and 30 Peel Centre Drive at the periphery of the Bramalea City Centre mall.
Shopper's World, Brampton	Redevelopment of 20 hectares (50 acres) for proposed 5,000 residential units and 950,000 square feet of combined commercial and retail space. Source: Shoppers World Brampton
Square One, Mississauga	Redevelopment of 53 hectares (130 acres) for proposed 35,000 person (18,000 residential units) mixed-use community Source: Oxford and AIMCo
Downtown Brampton	Redevelopment opportunities in the northwest quadrant of Hurontario Street (Hwy 10) and Queen Street (Hwy 7) include Brampton's Innovation Centre and a Metrolinx transit hub in addition to private development for residential towers.
Downtown Mississauga	A feasibility study for low carbon district energy has been prepared for the City of Mississauga with a recommendation for the first phase of construction to connect public buildings owned by the City of Mississauga and Sheridan College. Source: City of Mississauga
Heritage Heights, Brampton	A Community Energy Plan in support of the Secondary Plan for Heritage Heights recommends a low carbon district energy system to service the medium and high density areas of Heritage Heights. Source: City of Brampton

REFERENCES

Peel Region Census Information Hub. Housing – A portrait of Peel's households in 2021. Online at: <https://census.peelregion.ca/pages/housing-2021>

Sawyer, Dave, Anna Kanduth, Bradford Griffin, Franziska Förg, Ross LindenFraser, and Arthur Zhang. 2023. Independent Assessment of Canada's 2023 Emissions Reduction Plan Progress Report. Canadian Climate Institute.

The Atmospheric Fund 2021. [2021-2023 Carbon Emissions Inventory for the Greater Toronto and Hamilton Area](#).

Simon, S. 2024. Driving Climate Action: How Federal Leadership Can Shape Mandatory Building Performance Standards in Canada. Efficiency Canada, Carleton University, Ottawa, ON.



CENTRE FOR COMMUNITY ENERGY TRANSFORMATION

Business Plan 2024/2025 – Part 1

Goals, Financial Forecast and Performance Monitoring

August 2024



ACKNOWLEDGEMENTS

The Centre for Community Energy Transformation (CCET) recognizes and acknowledges that our work takes place on lands that are part of the Treaty Lands and Territory of the Mississaugas of the Credit. For thousands of years, Indigenous peoples inhabited and cared for this land, and continue to do so today. We acknowledge the territory of the Anishinabek, Huron-Wendat, Haudenosaunee and Ojibway/Chippewa peoples; the land that is home to the Metis; and most recently, the territory of the Mississaugas of the Credit First Nation who are the direct descendants of the Mississaugas of the Credit.

We are grateful to have the opportunity to work on this land, and by doing so, give our respect to its first inhabitants.

We thank the CCET Board of Directors for their leadership and contribution to the Business Plan 2024/2025.

CCET acknowledges the municipal partners (City of Brampton, Town of Caledon, City of Mississauga, and the Region of Peel) and the Advisory Group for their contribution to the Business Plan.

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	Map and identify building profiles in priority DE areas/nodes	Baseline building profiles and energy usage developed DE business cases developed for select priority areas

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Community engagement is central to marketing the financing offerings and assisting households through the program steps to complete energy retrofits. CCET will do this by maintaining a one-stop web portal as a resource and application portal, as well as providing an energy coach service to residents.

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Heritage Heights, Brampton	A Community Energy Plan in support of the Secondary Plan for Heritage Heights recommends a low carbon district energy system to service the medium and high density areas of the Heritage Heights community. Source: City of Brampton

1.0 GOALS and OBJECTIVES

Since its incorporation as a not-for-profit in May 2022, CCET has been building capacity to accelerate climate action in the cities of Brampton and Mississauga and Town of Caledon (in the region of Peel) working collaboratively with municipal partners. This introductory Business Plan continues the focus on building capacity in the two priority program areas - accelerating home energy retrofits and advancing low carbon district energy - and shifts CCET's focus from establishing the organization to connecting with the community, partners and stakeholders on our transformation programs. A timeline through 2024 and 2025 is forecast in the Business Plan given that CCET is a start-up and the need to advance a variety of activities to implement the transformation programs. This is a living document and will be reviewed within 12 months to assess progress.

Two Goals are the focus of CCET's efforts in 2024 and 2025:

- Accelerating home energy retrofits, and
- Advancing low carbon district energy systems

Objectives in support of each Goal are described below, including the intended outcomes (key results) and proposed key performance indicators to track progress. This provides a framework for CCET to report on progress to the community, partners and funders as well as adjust efforts based on performance measures, as needed.

1.1 Goal 1: Accelerate Home Energy Retrofits for Low Rise Buildings

Energy efficiency retrofits are completed for 3% of the low rise residential building stock annually by 2030, aided by incentives and financing options (e.g. Local Improvement Charges), to accelerate GHG reductions and equitably save residents' energy.

Objective: Become a trusted advisor in the community

How we will track progress on this Objective:

- Build a strong online presence (e.g. website, social media platforms)
- Conduct regular outreach in the community
- Be available to respond to inquiries
- Provide resources in multiple languages
- Provide resources to undertake a retrofit journey and 'Net Zero Roadmap'

Outcomes (Key Results):

- CCET established as a trusted source of information
- CCET's presence and brand enhanced
- Increase uptake of existing retrofit programs by households

Implementation and Resources

- Managed by the Lead-Home Energy Retrofits
- Supported by energy coach (e.g. recruit Climate Action Specialist and/or contract the energy coach service through existing auditors, partner and other energy professionals)
- Supported by dwelling archetype analysis
- Supported by Communications Plan (evaluate tactics from broad awareness to neighbourhood canvassing)
- Fully functional website and content (e.g. calendar of events, “How to” guides)
- Translation resources

Proposed indicators to measure progress on the Objective to ‘Become a trusted advisor in the community’

Outcomes and Key Results	Proposed Indicators
CCET established as a trusted source of information	<p>Total number of unique retrofit resource materials developed (e.g., report, video, newsletter, webinar, learning modules, training modules)</p> <p>Number of additional languages materials are available</p> <p>Number of individuals that visit the resources pages and number of downloads of resource material</p>
CCET’s presence and brand enhanced	<p>Number of website visits</p> <p>Number of inquiries received</p> <p>Number of subscriptions to a CCET newsletter</p>

Objective: Raise awareness of the benefits of energy retrofits through community engagement and incorporate feedback to improve CCET’s offerings

How we will track progress on this Objective:

- De-mystify energy retrofits (e.g. webinars, surveys, neighbourhood meetings, events, etc.)
- Gather feedback on community needs to inform the energy coach service (e.g. pilot energy coach service, surveys, webinar feedback, etc.)
- Support community champions to raise awareness of energy retrofits
- Identify testimonials
- Provide resources on incentives and financing options

Outcomes (Key Results):

- Increased awareness of home energy retrofits in the region of Peel
- Community feedback integrated into CCET’s offerings
- Build awareness in the community of incentives and financing tools
- Increase uptake of existing retrofit programs by households

- Improve the likelihood of a successful application by CCET and municipal partners to the Federation of Canadian Municipalities' (FCM) Community Efficiency Financing (CEF) stream of funding

Implementation and Resources

- Managed by Lead-Home Energy Retrofits
- Supported by dwelling archetype analysis
- Supported by Communications Plan
- Supported and implemented by energy coach (e.g. recruit Climate Action Specialist and/or contract the energy coach service through existing auditors, partners and other energy professionals)
- Fully functioning website (website content developed largely using internal resources)

Proposed indicators to measure progress on the Objective to 'Raise awareness of the benefits of energy retrofits'

Outcomes and Key Results	Proposed Indicators
Increased awareness of home energy retrofits	Number and type of engagement activities held (e.g. surveys, webinars, events, etc.) Number of individuals reached for each type of activity Number of additional languages that materials are provided/available Testimonials in place Number of community champions or ambassadors recognized
Community feedback integrated into CCET's offerings	Number of community groups and individuals engaged Number of feedback sessions/opportunities for feedback offered Number of unique responses

Objective: Address energy burden and identify CCET's role to improve access of retrofit programs for underserved and income eligible households

How we will track progress on this Objective:

- Build relationships with community groups and agencies that serve income eligible households
- De-mystify energy retrofits (webinars, surveys, neighbourhood meetings, etc.)
- Gather community feedback on community needs to improve access to retrofit programs (surveys, webinar feedback, etc.)

- Research options (e.g. turnkey solutions) for measures to address energy burden
- Research energy equity initiatives in other jurisdictions (e.g. Efficiency Canada, ACEEE, etc.)
- Increase awareness of available incentives and financing tools (e.g. LIC financing)

Outcomes (Key Results):

- Established partnerships or working relationships with community groups that serve income eligible and underserved households
- Gathered and incorporated feedback and research options (e.g. turnkey programs) for measures to address energy burden
- Increase uptake of existing retrofit programs
- Identify specific measures to address energy burden and allocate for grant funding in a possible future application to the CEF stream of funding
- Build awareness of LIC financing and seek feedback on other financial instruments or measures that may be effective

Implementation and Resources

- Managed by Lead-Home Energy Retrofits
- Supported by dwelling archetype analysis
- Supported by energy coach (e.g. recruit Climate Action Specialist and/or contract the energy coach service through existing auditors, partners and other energy professionals)
- Additional consulting resources to gather available information on energy poverty and assist with stakeholder outreach

Proposed indicators to measure progress on the Objective to 'Address energy burden'

Outcomes and Key Results	Proposed Indicators
Established partnerships or working relationships with community groups that serve income eligible and underserved households	Number of community groups contacted Number of community groups with established relationship
Gathered and incorporated feedback and research options (e.g. turnkey programs) for measures to address energy burden Identify measures to address energy burden and allocate for grant funding in the application to the CEF stream of funding	Gather community feedback on community needs to improve access to retrofit programs (surveys, webinar feedback, etc.) Research options (e.g. turnkey solutions) for measures to address energy burden Report or briefing note on energy equity initiatives in other jurisdictions (e.g. Efficiency Canada, ACEEE, etc.) Materials and engagement initiatives to increase awareness of available incentives and financing tools (e.g. LIC financing)

Objective: Build strategic partnerships to deliver the energy coach service and potential incentives and financing tools

How we will track progress on this Objective:

- Provide regular liaison with the energy auditor network
- Engage in regular communications with the contractor network and relevant organizations (e.g. HRAI, NAEMA, RenoMark)
- Strengthen relationships with utilities (Alectra, Enbridge, Hydro One) through regular communications and data sharing
- Engage the real estate community
- Engage financial institutions and financial services agencies
- Build awareness of LIC financing and assess alternate financing options (e.g. rent-to-own financing, etc.)

Outcomes (Key Results):

- Partner and stakeholder relationships established and maintained
- Support for funding and grant applications to implement the enabling services and financial tools is secured
- Improve content for a future CEF application

Implementation and Resources

- Managed by Lead-Home Energy Retrofits
- Supported by dwelling archetype analysis
- Supported by energy coach (e.g. recruit Climate Action Specialist and/or contract the energy coach service through existing auditors, partners and other energy professionals)

Proposed indicators to measure progress on the Objective to ‘Establish strategic partnerships’

Outcomes and Key Results	Proposed Indicators
Partner and stakeholder relationships established and maintained	Number of organizations contacted Number and types of stakeholder outreach initiatives (e.g. workshops, meetings, webinars, etc.)
Support for funding and grant applications to implement the enabling services and financial tools is secured	Numbers of letters of support Number of MOUs, cooperation agreements, etc.
Improve content for a future CEF application	Specific stakeholder feedback incorporated into CCET’s offerings Information resources and outreach initiatives (e.g. workshops, etc.) on financial tools

Objective: Launch an energy coach service in 2024

How we will track progress on this Objective:

- Offer a free home energy assessment through contracted services and partner arrangements
- Select neighbourhoods for energy coach service as part of ongoing community engagement
- Research and prepare a 'One-stop Window' and determine resource requirements to launch and maintain the 'One-stop Window'
- Setup format for customer database
- Test the process structure for the energy coach service associated with a future LIC financing offering or alternate financing tools
 - Application form for energy coach service
 - Process and infrastructure to review customer profiles, projects and applications
 - Process and infrastructure to manage energy coach scheduling and resourcing
 - Process to forecast and estimate energy coach staff requirements
 - Contractor, energy advisor, and energy coach database
- Research and prepare 'Net Zero Roadmaps' for dwelling archetypes
- Prepare to scale-up the energy coach service by gathering feedback from residents to inform the main scope of the energy coach service and options to triage inquiries

Outcomes (Key Results):

- Increased uptake of existing retrofit programs
- Improved likelihood of successful application to CEF stream of funding
- Increased awareness of incentives and financial tools (e.g. LIC financing)
- The ability to track homeowner progress on their retrofit journey is determined
- Work plan to grow the energy coach service under varying scenarios (e.g. with and without CEF funding) is developed

Implementation and Resources

- Oversight by Lead-Home Energy Retrofits
- Supported by dwelling archetype analysis
- Implemented by energy coach (e.g. recruit Climate Action Specialist and/or contract the energy coach service through existing auditors, partners and other energy professionals)

Proposed indicators to measure progress on the Objective to 'Launch energy coach service'

Outcomes and Key Results	Proposed Indicators
Increased uptake of existing retrofit programs	Number of households participating in energy coach service
Improved likelihood of successful application to CEF stream of funding	Number of inquiries received to CCET and responses related to energy retrofits
Increased awareness of incentives and financial tools (e.g. LIC financing)	Extent of specific neighbourhood outreach (e.g. households reached, responses received, people engaged, etc.)

Outcomes and Key Results	Proposed Indicators
	Number of website visits and inquiries specific to financial tools
<p>The ability to track homeowner progress on their retrofit journey is determined</p> <p>Work plan to grow the energy coach service under varying scenarios (e.g. with and without CEF funding) is developed</p>	<p>Test process structure for energy coach service</p> <ul style="list-style-type: none"> ○ Application form for energy coach service ○ Process and infrastructure to review customer profiles, projects and applications ○ Process and infrastructure to manage energy coach scheduling and resourcing ○ Process to forecast and estimate energy coach staff requirements <p>Contractor, energy advisor, and energy coach database</p>

Objective: In 2024, launch a One-stop Window as an enabling service with a focus on providing resources to homeowners and landlords on home energy education and the retrofit processes

How we will track progress on this Objective:

- Launch a revised CCET website with a compelling, simple, secure, and user-friendly design (i.e. customer-centric lens).
- Seek input from community groups that represent underserved households (e.g. Peel's Community Response Table) on the website accessibility.
- Test website functionality and 'single point of contact' service through engagement with implementation partners and seeking community input (at events, surveys, etc.).
- Track website effectiveness (e.g. through website analytics and surveys).
- Identify future functionality (e.g. track customer retrofit journey, homeowner login portal) and determine resource requirements to implement desired functionality.

Outcomes (Key Results):

- Improved functionality of a 'One-stop Window'
- Increase uptake of existing retrofit programs
- Improve likelihood of successful application to CEF stream of funding
- Raise CCET's brand as a trusted advisor in the community and subscriber base

Implementation and Resources

- Oversight by Lead-Home Energy Retrofits
- Website design and IT support services
- Informed by energy coach (e.g. recruit Climate Action Specialist and/or contract the energy coach service through existing auditors, partners and other energy professionals) through feedback from household interaction and

Proposed indicators to measure progress on the Objective to ‘Launch a One-stop Window’

Outcomes and Key Results	Proposed Indicators
Improved functionality of a One-stop Window	<p>Specific input received from community groups that represent underserved households (e.g. Peel’s Community Response Table) on website accessibility</p> <p>Tests (e.g. workshop, surveys) of website functionality and ‘single point of contact’ service</p> <p>Website analytics</p>

Objective: Secure private capital for energy retrofits for use in a future LIC offering and explore alternate financing tools

How we will track progress on this Objective

- Engage financial institutions and FCM
- Confirm securities required by CCET and partners
- Determine lending criteria and any legal matters for CCET to be the recipient of loan amounts to distribute to homeowners under an LIC financing offering
- Evaluate options to process and track financing applications from homeowners
- Evaluate alternative financing offerings (e.g. rent-to-own) to provide choice for households

Outcomes (Key Results):

- Confirm the processes and legal arrangements for CCET to collaborate with municipal partners to capitalize an LIC financing offering
- Improve likelihood of a successful application to the CEF stream of funding
- Alternate financing tools identified and tested

Implementation and Resources

- Oversight by Lead-Home Energy Retrofits
- Implementing an LIC offering will require a Project Manager (at minimum) to track financial flows and ensure the applicant intake process runs smoothly
- Legal services (contracted)

Proposed indicators to measure progress on the Objective to ‘Secure private capital’

Outcomes and Key Results	Proposed Indicators
Confirm the processes and legal arrangements for CCET to collaborate with municipal partners to capitalize an LIC financing offering	Financial institutions engaged Type of securities and lending criteria confirmed Options to process and track financing applications from homeowners reviewed and recommendation determined
Alternate financing tools identified and tested	Evaluate alternative financing offerings (e.g. rent-to-own) to provide choice for households Risk register developed and risk management identified

Objective: Prepare elements of a Community Efficiency Financing application to FCM by Q4 2024 (*submission of a CEF application requires municipal Councils to endorse an implementing LIC bylaw*)

How we will track progress on this Objective

- Establish the ecosystem of partners (energy auditors, contractors, financial institutions, real estate sector, etc.) and letters of support
- Put in place value-add elements (e.g. addressing equitable engagement and energy burden, energy coach service experience, elements of a One-stop Window)
- Incorporate community engagement findings to tailor service offerings (enabling services and financing mechanisms)
- Prepare application forms and process map for applicant intake to an LIC offering (i.e. business systems) to work across multiple municipalities
- Track implementation of a Communications Plan to demonstrate program marketing ability
- Confirm process to set up a dedicated loan loss reserve fund
- Confirm loan underwriting criteria to evaluate applicant eligibility
- Identify consumer protection measures
- Identify program monitoring measures and financial flow monitoring

Outcomes (Key Results):

- Demonstrate ability to implement the applicant intake process for a finance offering
- Demonstrate framework to manage financial flows

Implementation and Resources

- Managed by Lead-Home Energy Retrofits in collaboration with municipal partners
- IT service support
- Supported by energy coach

Proposed indicators to measure progress on the Objective to ‘Prepare an application to CEF stream of funding’

Outcomes and Key Results	Proposed Indicators
Demonstrate ability to implement the applicant intake process for a potential LIC offering	Identify the required business systems to work across multiple municipalities
Demonstrate ability manage financial flows	<p>Confirm process to set up a dedicated loan loss reserve fund</p> <p>Confirm loan underwriting criteria to evaluate applicant eligibility</p> <p>Identify consumer protection measures</p> <p>Identify program monitoring measures and financial flow monitoring</p>

Objective: Prepare to launch an LIC financing offering in collaboration with municipal partners
(Implementation requires municipal Councils to endorse an implementing LIC bylaw)

How we will track progress on this Objective

- Secure funding and establish legal entities to flow funds (see Financial Forecast)
- Establish financial accountability and audit mechanisms
- Confirm back-end processing by municipal partners (i.e. charge on property tax bill)

Outcomes (Key Results):

- Pending LIC bylaws endorsed in the partner municipalities

Implementation and Resources

- Oversight by Lead-Home Energy Retrofits
- Requires a Project Manager (applicant intake and financial accountability) and Communications Specialist (marketing and outreach) to implement the LIC

1.2 Goal 2: Advance District Energy and Low Carbon Thermal Networks in Priority Nodes

Promote the business case for district energy (DE) among key sectors and advance the expansion of low-carbon DE opportunities.

Objective: Host a district energy forum by Q4 2024

How we will track progress on this Objective

- Convene key sector players to identify desired outcomes of the forum
- Prepare ‘primers’ to advance the discussion
- Secure professional coordination and facilitation expertise
- Secure sponsors
- Deliver a synopsis of the findings from the DE forum

Outcomes (Key Results):

- Increased knowledge of DE systems and neighbourhood decarbonization with government decision makers, municipal practitioners, the building sector and other key sectors
- CCET’s role and activities to advance DE systems further defined (through planning the DE forum and synopsis of forum findings in a synopsis report)
- Identified several potential ‘contributors’ and ‘partners’ to CCET (see CCET Contributor and Partner Role’ policy)
- Outreach to economic sectors that contribute to neighbourhood decarbonization (e.g. manufacturers, utilities, organized labour, etc.) is achieved
- CCET’s brand further established

Implementation and Resources

- Led by Executive Director
- Collaborate with Partners in Project Green or outsource event coordination and execution
- Partner with Future Energy Oakville to host event/forum

Proposed indicators to measure progress on the Objective to ‘Host a district energy forum’

Outcomes and Key Results	Proposed Indicators
Increased knowledge of DE systems and neighbourhood decarbonization	Number of events Number of attendees Number of sectors and organizations engaged/represented

Objective: Map and identify building profiles in priority DE areas/nodes

How we will track progress on this Objective

- Develop building energy and emissions profile database and/or report in one or more priority DE areas/nodes
- Compile ownership and lease information
- Advance awareness of neighbourhood decarbonization through thermal energy networks

Outcomes (Key Results):

- Baseline information for analysis and outreach is developed
- Baseline information is used to support funding requests
- DE business cases developed for select builders/owners

Implementation and Resources

- Oversight by Executive Director
- Led by DE Lead or outsourced to consultant (resources required)
- Possible partnership with the Sustainable Neighbourhood Action Plan (SNAP) and Sustainable Technologies Evaluation Program (STEP) teams of TRCA
- Fundraising required to implement program elements

Proposed indicators to measure progress on the Objective to 'Map building profiles in DE priority areas'

Outcomes and Key Results	Proposed Indicators
Baseline building profiles and energy usage developed	Number of building owners contacted and number of building owners regularly engaged
DE business cases developed for select priority areas	Number of building owners receiving guidance pertaining to deep retrofits and DE retrofits Number of building owners (along with associated number of buildings, floor space, potential energy and GHG savings) receiving guidance pertaining to the pre-development and/or project planning, design and management of a deep retrofit project Number of building audits / assessments Number of DE business cases for MURBs and for commercial buildings

1.3 Implementation Resources

Accelerate Home Energy Retrofits – Enabling Services

	Become a Trusted Advisor	Raise Awareness of Retrofit Benefits	Address Energy Burden	Build Partnerships	Energy Coach Service
Lead-Home Energy Retrofits	Program Manager				
Climate Action Specialist (or contracted service)	Support Role				Lead
Dwelling Archetype Analysis	Supporting Resources				
Communications Plan	Supporting Resources				
Website Revision	Supporting Resources				
Translation Resources	Supporting Resources				

Accelerate Home Energy Retrofits – Enabling Services and Financing Considerations

	One-stop Window	Financing Tools	CEF Application	Applicant Intake	Monitoring Program and Financial Flows
Lead-Home Energy Retrofits	Program Manager				
Climate Action Specialist (or contracted service)	Support Role				
Project Manager				Lead	
Communications Specialist				Support Role	
Website Revision	Supporting Resources			Supporting Resources	
Translation Resources	Supporting Resources			Supporting Resources	

Advance District Energy and Low Carbon Thermal Networks

	District Energy Forum	Building and Energy Profiles
Executive Director		
Partnerships		
District Energy Lead (or contracted services)		
TRCA	PPG (possible contract)	SNAP/STEP alignment opportunities

Status of Resources to Achieve Goals and Objectives

Resource Need	Status
Lead-Home Energy Retrofits	Secured
Climate Action Specialist	Requires additional funding to match base funding
Project Manager – LIC Finance offering and alternate financing tools	Requires additional funding pending municipal partner endorsement of LIC bylaw
Communications Specialist	Requires additional funding pending municipal partner endorsement of LIC bylaw
Dwelling Archetype Analysis	Requires additional funding for a consulting contract or to be undertaken by Climate Action Specialist
Communications Plan	In-house and budget for targeted contracts (e.g. marketing materials)
Website Revision	In-house and contract. Ongoing IT support services under consideration.
Translation Resources	Allocate resources from existing base funding and seek additional funds through project-based proposals to foundations

2.0 FINANCIAL FORECAST

2.1 2024 and 2025 Financial Forecast

Several budget scenarios for the 2024 and 2025 calendar years were evaluated to determine capacity and program growth options, as well as begin to identify fundraising requirements. Two scenarios are presented in the Financial Forecast[‡] below. All scenarios assume funding only from municipal Service Level Agreements (Brampton, Caledon, Mississauga and Peel) continuing at previous levels through 2024 and 2025.

Expense Category	Budget Estimate (without District Energy Lead)		Budget Estimate ^a (with District Energy Lead)	
	2024	2025	2024	2025
Home Retrofit Program	\$115,000	\$145,000	\$115,000	\$145,000
District Energy Program	\$30,000	\$30,000	\$30,000	\$30,000
Organization	\$353,700	\$338,700	\$395,200	\$463,200
Total Expenses	\$498,700	\$513,700	\$540,200 ^a	\$638,200
Starting Balance + Anticipated Revenue	\$736,000	\$737,300	\$736,000	\$695,800
Ending Balance	\$237,300	\$223,600	\$195,800	\$57,600

‡ Assumes funding only from municipal Service Level Agreements and MOUs with local municipalities and Peel Region at same level as previous years.

^a Assumes recruiting District Energy Lead by September 2024

Direction for capacity building can be derived from the scenarios:

- Recruiting additional staff without additional revenue generation results in a negative balance some time in 2025. Any further staff recruitment requires additional fundraising to offset costs, whether in the form of a District Energy Lead or ‘coordinator’ functions to support the transformation programs.
- The scenario above that includes recruiting the District Energy Lead in 2024 assumes that Peel Region is able to provide a contribution of \$100,000 a year for 2024 and 2025.
- The base case cost scenario includes a small budget to engage the energy auditor network and contractor network. However, more comprehensive engagement such as education opportunities and training will require fundraising for specific projects.
- Addressing equity deserving or income-qualified households is not budgeted separately. Initiatives such as identifying and testing additional incentives (e.g. pilot projects) or gathering community-specific information regarding energy burden (e.g. deep engagement with community groups that represent underserved households) requires additional fundraising.
- Deriving additional baseline information such as dwelling archetype analysis or updated energy poverty mapping, should it be determined as a priority, will require additional fundraising.

2.2 Home Energy Retrofit Program - Financial Scenarios 2025 to 2029

Three (3) scenarios present a range of options for CCET to consider in planning expenses and revenue generation requirements for the residential retrofit program. The table below represents estimated annual expenses and revenues to implement an LIC-based financing offering and energy coach service starting in 2025 and continuing to 2029.

	Annual Scenario 1 Moderate/High Uptake	Annual Scenario 2 Low Uptake	Annual Scenario 3 Low Uptake
	Maximum CEF/FCM Funding	Minimal CEF/FCM Funding	No CEF/FCM Funding
Expense or Revenue Category	600 applicants per year	100 applicants per year	100 applicants per year
Expenses			
Municipal Administration Costs	\$ 225,000	\$ 225,000	\$ 225,000
CCET Program Coordination - Program Lead	\$ 84,000	\$ 84,000	\$ 96,000
CCET Program Coordination - Project Manager	\$ 90,000	\$ 90,000	
CCET Program Coordination - Communications Specialist	\$ 80,000		
CCET Energy Coach - Climate Action Specialist Position or Contracted Service	\$ 90,000	\$ 90,000	\$ 90,000
CCET Energy Coach - Additional contracted services	\$ 60,000		
Marketing	\$ 50,000	\$ 25,000	\$ 25,000
Translation/Accessibility	\$ 25,000	\$ 15,000	\$ 15,000
One-stop Window and CRM ongoing Maintenance Costs			
Start-up Costs - Legal	\$ 100,000	\$ 100,000	\$ 100,000
Start-up Costs - Applicant Intake	\$ 50,000	\$ 50,000	in house
Start-up Costs - One-Stop Window	\$ 50,000	\$ 50,000	in house
Start-up Costs - Dwelling Archetype data	\$ 50,000	\$ 50,000	in house
Tracking Flow of Funds (Auditing Costs)			
TOTAL ONGOING PROGRAM COSTS	\$ 704,000	\$ 529,000	\$ 451,000
ADMINISTRATION COSTS TO COVER WITH EXTERNAL FUNDING	\$ 704,000	\$ 180,000	\$ 130,000
TOTAL START -UP COSTS	\$ 250,000	\$ 250,000	\$ 100,000
Loan Loss Reserve	\$ 500,000	\$ 75,000	\$ 75,000
Loan Disbursements	\$ 10,000,000	\$1,500,000	\$1,500,000

	Annual	Annual	Annual
	Scenario 1 Moderate/High Uptake	Scenario 2 Low Uptake	Scenario 3 Low Uptake
	Maximum CEF/FCM Funding	Minimal CEF/FCM Funding	No CEF/FCM Funding
Expense or Revenue Category	600 applicants per year	100 applicants per year	100 applicants per year
TOTAL COSTS	\$ 11,454,000	\$2,005,000	\$1,805,000
Revenues			
Admin Fees	\$ 270,000	\$ 45,000	\$ 30,000
Energy Coach Service Fee			\$ 3,750
FCM Grant	\$ 1,250,000	\$ 187,500	
FCM Loan (flow through)	\$ 2,500,000	\$ 375,000	
Private Capital (flow through)	\$ 7,500,000	\$1,125,000	\$ 1,500,000
TOTAL REVENUES	\$ 1,520,000	\$ 232,500	\$ 33,750
TOTAL ANNUAL ADMIN COSTS (required to be covered)	\$ 1,204,000	\$ 255,000	\$ 205,000
REVENUES LESS ONGOING COSTS	\$ 316,000	\$ (22,500)	\$ (171,250)
REVENUES LESS ONGOING COSTS AND START-UP COSTS	\$ 66,000	\$ (272,500)	\$ (271,250)

All scenarios assume:

- the need for a Climate Action Specialist position (or equivalent contracted service) to serve as the energy coach and coordinate additional resources to meet energy coach service levels
- \$100,000 in legal costs to set up the 'special purpose entity' to flow and track capital funds and establish legal agreements between CCET and municipal partners
- Setting aside a Loan Loss Reserve calculated as 5% of the loan disbursements
- Loan management is not out-sourced to a third-party administrator with a demonstrable record of lending and the software capabilities

Scenario 1 – Moderate to High Uptake with Successful Community Efficiency Financing Application

- Based largely on Dunksy Energy program design report and Dunksy cost estimates
- Assumes maximum loan and grant amount from FCM (\$10M loan and \$5M grant)
- Grant amount covers program administration costs and offsets base funding from municipal Service Level Agreements
- Allows for additional funds that can be allocated for additional incentives for income eligible households

- Allows CCET to hire 3 additional staff on 3-year contracts (Project Manager, Climate Action Specialist, Communications Specialist)
 - Dunsky assumes 4-5 FTE required to run the program by Year 3, with 6 FTE required in Year 1 for start-up and as efficiencies are learned
- Estimates \$150,000 for energy coach service (\$90,000 for Climate Action Specialist and \$60,000 for additional contracted services), offering the service at an estimated cost of \$250 per applicant if 600 applicants utilize the service
- Assumes grant funding can cover part of CCET's Lead-Home Energy Retrofits position, thus extending the base funding from municipal partners
- Allocates \$225,000 from grant funding to offset municipal partner staff costs (assuming 0.5FTE per municipality)
- Assumes \$30M secured from private financial institutions in addition to \$10M loan from FCM
- Loan Loss Reserve calculated at 5% of loan disbursements
- Assumes administration fee of \$450 per applicant as recommended by Dunsky Energy

Scenario 2 – Low Uptake Estimate from Dunsky Report (not costed out in Dunsky Report)

- Based on the low uptake option in Dunsky Energy program design report (this estimate was not costed out in the program design report), but assuming 100 applicants per year rather than 60 applicants per year as the low estimate in the Dunsky Energy report
- Assumes loan and grant amount from FCM are pro-rated based on the ratios developed by Dunsky Energy (\$1.5M loan and \$750,000 grant over 4 years)
- Assumes municipal partners cover the municipal staff time as an in-kind contribution (not reimbursed by FCM grant)
- Assumes that CCET base funding from municipal SLAs covers the Program Lead (i.e. Lead-Home Energy Retrofits)
- Two additional positions (Climate Action specialist or equivalent contracted service; and Project Manager for applicant intake tracking and financial flow tracking) can be covered by the FCM grant
- Assumes the Communications Specialist position cannot be cost-recovered, so would have to be covered by other funds if added to the Program Coordination costs
- Assumes start-up costs would have to be covered by other funds
- Assumes administration fee of \$450 per applicant as recommended by Dunsky
- Assumes \$4.5M secured from private financial institutions in addition to the \$1.5M loan from FCM over a 4-year period

Scenario 3 – Low Uptake Estimate Without Offset by FCM Funding

- Assumes capital from sources other than FCM (e.g. financial institutions, Infrastructure Ontario)
- Assumes municipal partners cover the municipal staff time as an in-kind contribution
- Assumes that CCET base funding from municipal SLAs cover the Program Lead (i.e. Lead-Home Energy Retrofits)

- Assumes that additional funding is required (e.g. from private foundations) to cover the Climate Action Specialist (or contracted energy coach service) and Project Manager positions
- Assumes Communications Specialist cannot be cost-recovered, so would have to be covered by other funds if added to the Program Coordination costs
- Assumes start-up costs would have to be covered by other funds
- Assumes administration fee of 2% of loan amount
- Assumes \$6M secured from private financial institutions and other sources (e.g. Infrastructure Ontario) over the four year period
- Assumes that the only revenue includes administration fees and results in an annual deficit of \$201,250 if not covered by other costs

Financial Scenario Summary – Home Energy Retrofit Program (estimated annual expenses and revenue starting in 2025)

	Scenario	1	2	3
Budget Impact	Revenue	\$1.52M	\$232,500	\$33,750
	Capital Flow Through	\$10M	\$1.5M	\$1.5M
	Expenses Scenario 1	Ongoing \$1.204M (+ \$316K)		
		Ongoing + Start-up (+ \$66K)		
	Expenses Scenario 2		Ongoing \$255,000 (- \$20,500)	
			Ongoing + Start-up (- \$272,500)	
	Expenses Scenario 3			Ongoing \$205,000 (- \$171,250)
				Ongoing + Start-up (- \$271,250)
Programmatic and Operational Impacts	Expense Constraints	None. Fully funded assuming successful FCM funding. FCM grant offsets municipal SLA funding.	Assumes: •Municipal admin provided as in-kind •Ongoing CCET SLA funding covers CCET Lead-Home Energy Retrofits position •Project Manager and Climate Action Specialist (or equivalent contracted service) essentially covered by FCM grant	Assumes: •Municipal admin provided as in-kind •Ongoing CCET SLA funding covers CCET Lead-Home Energy Retrofits position •Project Manager and Climate Action Specialist must be funded by other sources if not covered by SLA base funding
	Program Impact	Funds available to address energy burden Collect fee of \$450 per applicant	Collect fee of \$450 per applicant Assumes a Project Manager is still required to assist with FCM reporting and other project accountability and transparency	Assumptions that risk reducing program uptake include: •Admin fee of 2% of loan amount •Half of applicants willing to pay nominal \$50 fee for energy coach service

	<p>Organizational Impact</p>	<p>Ability to add staff to meet program needs</p>		<p>Assumes a skeleton staff can implement the LIC financing and energy coach</p> <p>Assumes start-up requirements other than Legal services can be completed in-house</p>
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Proposed Changes

The following recommendations are derived from the financial forecast and assumptions to implement LIC financing for residents:

- Identify opportunities to reduce the start-up costs while the energy coach service and website are utilized in 2024
- Review Loan Loss Reserve requirements
- Add an administration fee with any successful project-specific fundraising proposal to offset base contribution from the municipal partners
- Review PACE business models from the US with a focus on examples of reducing processing and administration costs
- Assess if a revised Greener Homes program to address low and moderate income households (e.g. more upfront grants to pay for energy efficiency measures) is further aided by the LIC financing (long payback terms)

REFERENCES

Canadian Urban Sustainability Practitioners (CUSP). 2019. Energy poverty in Canada: A CSUP backgrounder. [backgrounder.pdf \(energypoverty.ca\)](#)

Intergovernmental Panel on Climate Change. 2022. [Climate Change 2022: Impacts, Adaptation and Vulnerability](#). Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

Jo Hamilton, Ruth Mayne, Yael Parag & Noam Bergman (2014) Scaling up local carbon action: the role of partnerships, networks and policy, Carbon Management, 5:4, 463-476, DOI: 10.1080/17583004.2015.1035515

To link to this article: <http://dx.doi.org/10.1080/17583004.2015.1035515>

Peel Region Census Information Hub. Housing – A portrait of Peel's households in 2021. Online at: <https://census.peelregion.ca/pages/housing-2021>

Sawyer, Dave, Anna Kanduth, Bradford Griffin, Franziska Förg, Ross LindenFraser, and Arthur Zhang. 2023. Independent Assessment of Canada's 2023 Emissions Reduction Plan Progress Report. Canadian Climate Institute.

The Atmospheric Fund 2021. [2021-2023 Carbon Emissions Inventory for the Greater Toronto and Hamilton Area](#).

Simon, S. 2024. Driving Climate Action: How Federal Leadership Can Shape Mandatory Building Performance Standards in Canada. Efficiency Canada, Carleton University, Ottawa, ON.

APPENDIX A – MEASURING PROGRESS (Key Performance Indicators)

Many of the indicators to measure and report on progress relate to CCET’s initiatives and efforts. These are ‘process-based’ key performance indicators (KPIs) as CCET builds capacity and demonstrates a track record of accomplishment.

‘Outcome-based’ KPIs are also proposed (e.g. GHG reductions achieved) along with the data source and proposed reporting period (e.g. monthly or annual).

Process-based Key Performance Indicators (KPIs)

Objectives and Key Results	Proposed Indicators
Accelerating Home Energy Retrofits for Low Rise Buildings	
CCET is a trusted advisor	
CCET established as a trusted source of information	Total number of unique retrofit resource materials developed (e.g., report, video, newsletter, webinar, learning modules, training modules) Number of additional languages materials are available Number of individuals that visit the resources pages and number of downloads of resource material
CCET’s presence and brand enhanced	Number of website visits Number of inquiries received Number of subscriptions to a CCET newsletter
Raise awareness of the benefits of energy retrofits	
Increased awareness of home energy retrofits	Number and type of engagement activities held (e.g. surveys, webinars, events, etc.) Number of individuals reached for each type of activity Number of additional languages materials are provided/available Testimonials in place Number of community champions or ambassadors recognized
Community feedback integrated into CCET’s offerings	Number of community groups and individuals engaged

Objectives and Key Results	Proposed Indicators
	Number of feedback sessions/opportunities for feedback offered Number of unique responses
Build awareness in the community of incentives and financing tools	Number and type of resources on incentives and financing tools Findings of research and testing of financing options (e.g. workshops, pilot projects, etc.)
Address energy burden and energy equity	
Established partnerships or working relationships with community groups that serve income eligible and underserved households	Number of community groups contacted Number of community groups with established relationship
Gathered and incorporated feedback and research options (e.g. turnkey programs) for measures to address energy burden Identify measures to address energy burden and allocate for grant funding in the application to the CEF stream of funding	Gather community feedback on community needs to improve access to retrofit programs (surveys, webinar feedback, etc.) Research options (e.g. turnkey solutions) for measures to address energy burden Report or briefing note energy equity initiatives in other jurisdictions (e.g. Efficiency Canada, ACEEE, etc.) Materials and engagement initiatives to increase awareness of available incentives and financing tools (e.g. LIC financing)
Establish strategic partnerships	
Partner and stakeholder relationships established and maintained	Number of organizations contacted Number and types of stakeholder outreach initiatives (e.g. workshops, meetings, webinars, etc.)
Support for funding and grant applications to implement the enabling services and financial tools is secured Improve content for a future CEF application	Numbers of letters of support Number of MOUs, cooperation agreements, etc. Specific stakeholder feedback incorporated into CCET's offerings Information resources and outreach initiatives (e.g. workshops, etc.) on financial tools
Launch an energy coach service	
Increased uptake of existing retrofit programs Improved likelihood of successful application to CEF stream of funding	Number of households participating in energy coach service Number of inquiries received to CCET and responses related to energy retrofits

Objectives and Key Results	Proposed Indicators
Increased awareness of incentives and financial tools (e.g. LIC financing)	Extent of specific neighbourhood outreach (e.g. households reached, responses received, people engaged, etc.) Number of website visits and inquiries specific to financial tools
The ability to track homeowner progress on their retrofit journey is determined Work plan to grow the energy coach service under varying scenarios (e.g. with and without CEF funding) is developed	Test process structure for energy coach service <ul style="list-style-type: none"> ○ Application form for energy coach service ○ Process and infrastructure to review customer profiles, projects and applications ○ Process and infrastructure to manage energy coach scheduling and resourcing ○ Process to forecast and estimate energy coach staff requirements ○ Contractor, energy advisor, and energy coach database
Launch a One-stop Window	
Improved functionality of a One-stop Window	Specific input received from community groups that represent underserved households (e.g. Peel's Community Response Table) on website accessibility Tests (e.g. workshop, surveys) of website functionality and 'single point of contact' service Website analytics
Secure private capital	
Confirm the processes and legal arrangements for CCET to collaborate with municipal partners to capitalize an LIC financing offering	Financial institutions engaged Type of securities and lending criteria confirmed Options to process and track financing applications from homeowners reviewed and recommendation determined
Alternate financing tools identified and tested	Evaluate alternative financing offerings (e.g. rent-to-own) to provide choice for households Risk register developed and risk management identified
Prepare elements of a CEF application	
Demonstrate ability to implement the applicant intake process for a potential LIC offering	Identify the required business systems to work across multiple municipalities
Demonstrate ability manage financial flows	Confirm process to set up a dedicated loan loss reserve fund Confirm loan underwriting criteria to evaluate applicant eligibility

Objectives and Key Results	Proposed Indicators
	<p>Identify consumer protection measures</p> <p>Identify program monitoring measures and financial flow monitoring</p>
Advance District Energy and Low Carbon Thermal Networks	
Increased knowledge of DE systems and neighbourhood decarbonization	<p>Number of events (e.g. DE Forum)</p> <p>Number of attendees</p> <p>Number of sectors and organizations engaged/represented</p>
<p>Baseline building profiles and energy usage developed</p> <p>DE business cases developed for select priority areas</p>	<p>Number of building owners contacted and number of building owners regularly engaged</p> <p>Number of building owners receiving guidance pertaining to deep retrofits and DE retrofits</p> <p>Number of building owners (along with associated number of buildings, floor space, potential energy and GHG savings) receiving guidance pertaining to the pre-development and/or project planning, design and management of a deep retrofit project</p> <p>Number of building audits / assessments</p> <p>Number of DE business cases for MURBs and for commercial buildings</p>

Outcome-based Key Performance Indicators (KPIs)

Proposed Indicator	Data Source (Reporting Period)
Number of retrofits started	NRCan energy audit data (annual)
Number of retrofits completed	
Number and proportion of retrofits by dwelling archetype	NRCan energy audit data (annual)
Energy savings and GHG reductions from retrofits	NRCan energy audit data (annual)
Number of applicants utilizing energy coach service	CCET tracking (monthly)
Average cost or time for energy coach service per applicant	CCET tracking (monthly)
% of applicants using energy coach to total # of applicants proceeding with retrofits	CCET tracking and NRCan (annual)

APPENDIX B – CCET 2024/2025 Budget Estimate

EXPENSE BREAKDOWN	Budget Estimates (current staff resources)		Budget Estimates (recruiting District Energy Lead in 2024)	
	2024	2025	2024	2025
Staff and Benefits	\$277,500	\$277,500	\$319,000	\$402,000
Organization (Accountant fees, software, Insurance, Payroll, IT Services, etc.)	\$ 31,200	\$ 31,200	\$ 31,200	\$ 31,200
Website Design and Maintenance	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Communications Plan/Marketing Strategy	\$ 20,000	\$ 5,000	\$ 20,000	\$ 5,000
Translation Services	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
Retrofit Program - Engagement Materials + Services	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Retrofit Program - Engagement (Event Space)	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Retrofit Program - Energy Coach Services	\$ 40,000	\$ 60,000	\$ 40,000	\$ 60,000
Retrofit Program - Equity-deserving Groups	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
Retrofit Program - Auditor Network	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Retrofit Program - Contractor Network	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Retrofit Program - One-stop Window		\$ 10,000		\$ 10,000
DE Program - Event (coordination and location)	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
DE Program - Event (honoraria, fees for facilitators, SMEs, etc.)	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
TOTAL ESTIMATED EXPENSES	\$498,700	\$513,700	\$540,200	\$638,200
STARTING BALANCE + ANTICIPATED GRANTS	\$736,000	\$737,300	\$736,000	\$695,800
REVENUES LESS EXPENSES	\$237,300	\$223,600	\$195,800	\$ 57,600



CENTRE FOR COMMUNITY ENERGY TRANSFORMATION

Business Plan 2024/2025 – Part 2

Background and Context

August 2024



ACKNOWLEDGEMENTS

The Centre for Community Energy Transformation (CCET) recognizes and acknowledges that our work takes place on lands that are part of the Treaty Lands and Territory of the Mississaugas of the Credit. For thousands of years, Indigenous peoples inhabited and cared for this land, and continue to do so today. We acknowledge the territory of the Anishinabek, Huron-Wendat, Haudenosaunee and Ojibway/Chippewa peoples; the land that is home to the Metis; and most recently, the territory of the Mississaugas of the Credit First Nation who are the direct descendants of the Mississaugas of the Credit.

We are grateful to have the opportunity to work on this land, and by doing so, give our respect to its first inhabitants.

We thank the CCET Board of Directors for their leadership and contribution to the Business Plan.

CCET acknowledges the municipal partners (City of Brampton, Town of Caledon, City of Mississauga, and the Region of Peel) and the Advisory Group for their contribution to the Business Plan 2024/2025.

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Jeremy Schembri, Peel Region
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Christine Tu, Peel Region
Dianne Zimmerman, City of
Mississauga

Advisory Group

Miranda Baksh, Community Climate Council
Murat Basarir, TD Bank
Tina Beckles, Corix Utilities
Pam Cooper, City of Brampton
Teresa Chan, City of Mississauga
Averyl D'Souza, Alectra Utilities
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INTRODUCTION

The need to accelerate climate action

The [Intergovernmental Panel on Climate Change](#) (IPCC) in 2022 and 2023 issued its most stark warning yet about dangerous climate change:

“To avoid mounting loss of life, biodiversity and infrastructure, ambitious, accelerated action is required to adapt to climate change, at the same time as making rapid, deep cuts in greenhouse gas emissions.”

The IPCC recommendations for action focus on strengthening nature and supporting healthy ecosystems while also noting the role of cities in providing climate action:

“... green buildings, reliable supplies of clean energy, and sustainable transport systems that connect urban and rural areas can all lead to a more inclusive and fairer society”.

In late 2023 at [COP28](#), the Global Renewables and Energy Efficiency Pledge was endorsed by 132 countries with a goal to triple renewable energy generation and double annual energy efficiency improvements by 2030. This commitment relates directly to CCET’s mandate to accelerate home energy retrofits and advance low-carbon district energy systems to scale up greenhouse gas (GHG) emissions reduction.

CCET’s program focus:

- Accelerate home energy retrofits
- Advance district energy and low carbon thermal networks

Canada has experienced unprecedented extreme weather events

The consequences of climate change have played out across Canada over the last few years in the form of unprecedented extreme weather events:

- The British Columbia Coroners Service confirmed that the [heat dome of June 25 to July 1, 2021](#) resulted in 619 heat-related deaths
- In 2022, Hurricane Fiona (Category 4) was the [strongest hurricane on record to hit Canada](#)
- Canada’s [2023 wildfire season](#) has been the most destructive ever recorded

The impacts of climate change will affect human health, ecosystem resilience, and hard (i.e. grey) infrastructure ([Canada in a Changing Climate – Synthesis Report](#)). CCET’s program areas focus on GHG reductions (i.e. mitigation) rather than on climate adaptation. However, improving energy efficiency of buildings, advancing district energy, and promoting on-site renewable energy generation also builds resiliency in our communities. This is primarily by:

- improving the ability to shelter in place in case of extreme weather events in energy efficient buildings

Municipal Partner Climate Action Commitments

CCET's focus is informed by climate action plans of our municipal partners. CCET is collaborating with municipal partners to implement the following climate action commitments.

City of Brampton

OUR 2040 ENERGY TRANSITION

Community Energy and Emissions
Reduction Plan



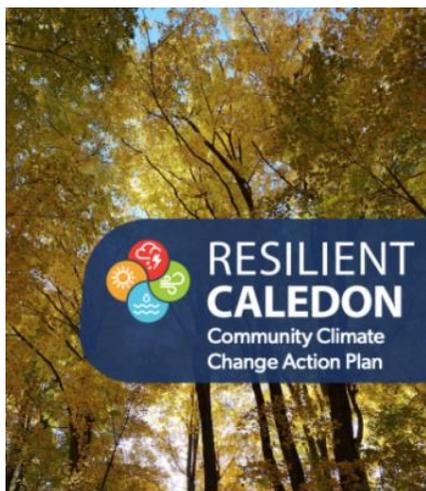
Reduce community-wide emissions by 50% from 2016 levels by 2041, and establish a pathway to reduce emissions by at least 80% by 2050 to meet or exceed federal and provincial targets.

Retain at least \$26 billion in cumulative energy costs within the community by 2041.

Climate Emergency Declaration [2019](#)

Global Covenant of Mayors for Climate and Energy [2020](#)

Town of Caledon



Mitigate: Reduce community-wide GHG emissions to reach net zero by 2050 and follow a carbon budget that aligns with 1.5°C warming, which would entail a 36% reduction of emissions by 2030.

Adapt: Increase resiliency of the Town, its residents, economy and the natural environment to current and future climate impacts

Climate Emergency Declaration [2020](#)

Global Covenant of Mayors [2017](#)

City of Mississauga



The Climate Change Action Plan (CCAP) aims to help Mississauga become a low-carbon and resilient community, with current targets to reduce greenhouse gas emissions by 40% by 2030, and 80% by 2050 (compared to 1990 levels). The CCAP will be updated in 2024-2025 to better align with IPCC recommendations to limit global warming to 1.5°C.

Climate Emergency Declaration [2019](#)

Joined Global Covenant of Mayors for Climate and Energy in [2017](#)

Why CCET's Focus and Our Collaboration with Partners is Needed

GHG emissions from buildings are still increasing

The independent report of the Canadian Climate Institute on Canada's progress on GHG reduction shows progress is being made, but accelerated efforts are required particularly for two sectors: oil/gas sector; and buildings. Emissions are still growing in these sectors as shown in Figure 2 from the report of the Canadian Climate Institute and excerpted below.

"With the Clean Fuel Regulations fully implemented, there is a need to turn attention to buildings, which we see as a continued risk, because of rising emissions in the sector. Federal, provincial, territorial, and municipal governments must work together to implement these policies as soon as possible to drive down emissions."

(Source: [Independent Assessment of Canada's 2023 Emissions Reduction Plan: A Progress Report \(climateinstitute.ca\)](#), page 7)

The results of the independent assessment prepared by the Canadian Climate Institute reinforces CCET's mandate to accelerate home energy retrofits and advance district energy to reduce GHG emissions in the buildings sector through:

- energy efficiency improvements
- fuel switching away from fossil fuel for space heating and domestic hot water heating
- connecting buildings along low carbon thermal networks
- promoting on-site renewable energy generation, where appropriate.

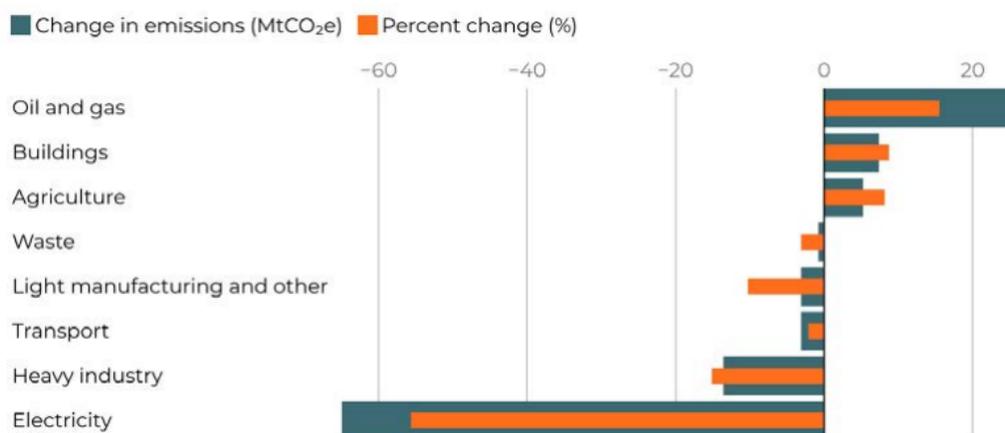


Figure 1 Sector emissions (nationally) from 2005 to 2022 showing GHG emissions from buildings continuing to increase. Source: Canadian Climate Institute “Independent Assessment of Canada’s 2023 Emissions Reduction Plan Progress Report”.

According to the [national greenhouse gas inventory](#), the Energy sector as a whole comprises 81% of total GHG emissions (see Figure 2 below) and contributed to most of the 8.4% in overall carbon reductions between 2005 to 2021. The national GHG inventory identifies a 16% decrease in carbon emissions from the ‘Residential’ sector and attributes this to a decrease in the consumption of light fuel oil in most provinces and territories. Switching away from light fuel oil for home heating has a clear rate of return and represents the “low hanging fruit” of home energy retrofits. Utility bill savings alone are often not a driver for home energy retrofits in most parts of southern Ontario.

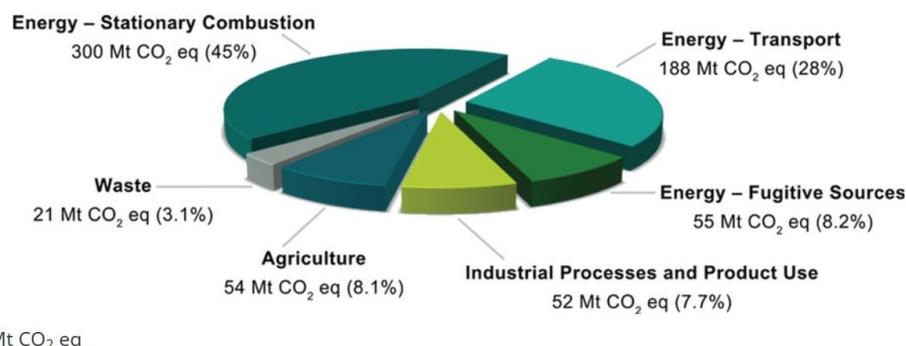


Figure 2 Total GHG emissions in the 2021 national inventory. The ‘Energy sector’ includes Stationary Combustion, Transport and Fugitive Sources as shown in the figure.

Next to fuel switching away from fossil fuels for electricity generation and transport, the [International Energy Agency](#) identifies “energy efficiency and behavioural change” as one of the most important decarbonization strategies.

Key behavioural changes in buildings and transport:

- Space heating temperatures moderated to 19-20 °C and space cooling temperatures to 24-25 °C on average by 2030
 - Use of internal combustion engine cars phased out in large cities by 2030
 - Eco-driving and motorway speed limits of 100 km/h introduced by 2030
 - One-out-of-two long-haul business flights are avoided by 2040
- (Source: International Energy Agency Net Zero Roadmap – 2030 Update)

Co-benefits of CCET's Program Areas

The CDP (Climate Disclosure Project) reported on their findings of cities' tracking of climate mitigation co-benefits, which the CDP defined as "beneficial outcomes from action that are not directly related to climate change mitigation". Highlights of the [CDP report](#) include:

- Cities citing the co-benefits of their climate action reported 2.5 times more climate actions than cities that did not
- The top co-benefits of mitigation actions reported by cities were shifts to more sustainable behaviour (reported as a co-benefit for 39% of all mitigation actions taken by cities) and improved resource efficiency (33%), followed by enhanced resilience, improved public health and greening the economy.

We anticipate the following co-benefits of CCET's program areas working with municipal partners and stakeholders:

- Enhanced resilience (e.g. improved energy efficiency of the building stock and district energy will provide improved energy security and allow the option for residents to shelter in place in the event of extreme weather events)
- Health improvements (mainly through reduced air pollutants)
- Household financial savings through utility bill savings
- Stimulating the local economy
- Electricity load management as fuel switching away from fossil fuels places more demand on the electrical grid

CCET Value Proposition

CCET will deliver accelerated climate action working collaboratively with partners with a focus on being:

Practitioners	Staff are advisors serving the community and listening to community feedback to tailor program offerings
Convenors	We connect people and organizations for coordinated climate action
Agile	Our not-for-profit structure allows us to act and adapt quickly
Champions	Build momentum with all stakeholders and celebrate leadership
Fundraisers	We will secure external funding to advance CCET's mandate to work in the community

ORGANIZATION OVERVIEW

CCET is a not-for-profit, community-based organization that will accelerate our community towards a low-carbon future.

Vision, Mission, Mandate and Values

Vision:

A sustainable energy future.

Mission:

To lead an inclusive suburban energy transformation.

Mandate:

CCET's mandate is focused on convening partners to implement catalytic priorities to accelerate a community transition towards a low-carbon future. CCET's initial focus will be to collaborate with its municipal partners on:

- Advancing Deep Home Retrofits
- District Energy Adoption
- Spurring Institutional, Commercial and Industry (ICI) Energy Efficiency
- Promoting Climate Change Related Outreach and Engagement

Values:

The work we do will:

Be informed by science.

Be replicable by other communities.

Have quantifiable, documented results.

Be collaborative with community partners to amplify our collective impact.

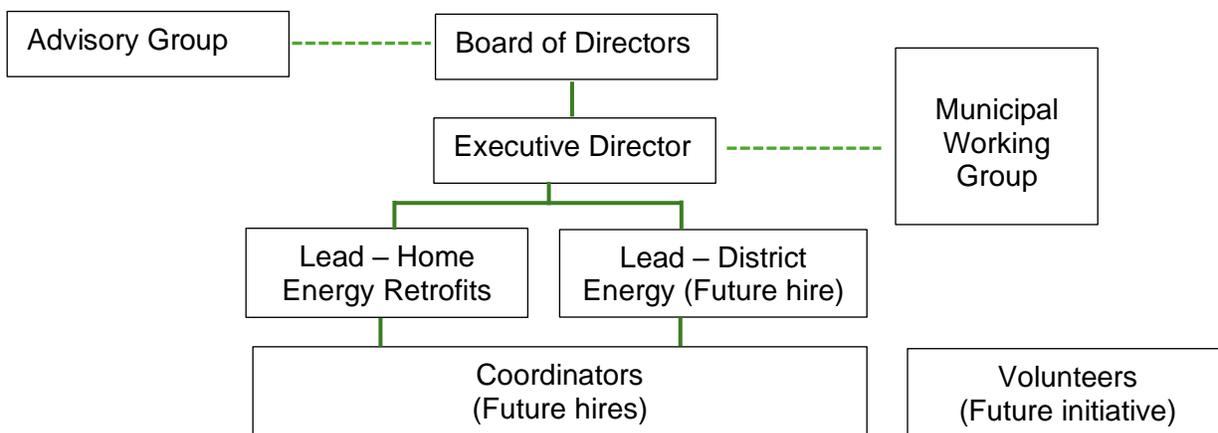
Ensure social justice and inclusivity.

Generate direct, local economic benefits.

Demonstrate the concept of circular economy and one planet living.

Provide educational benefits and engagement opportunities to our community.

People:



Strategic Map

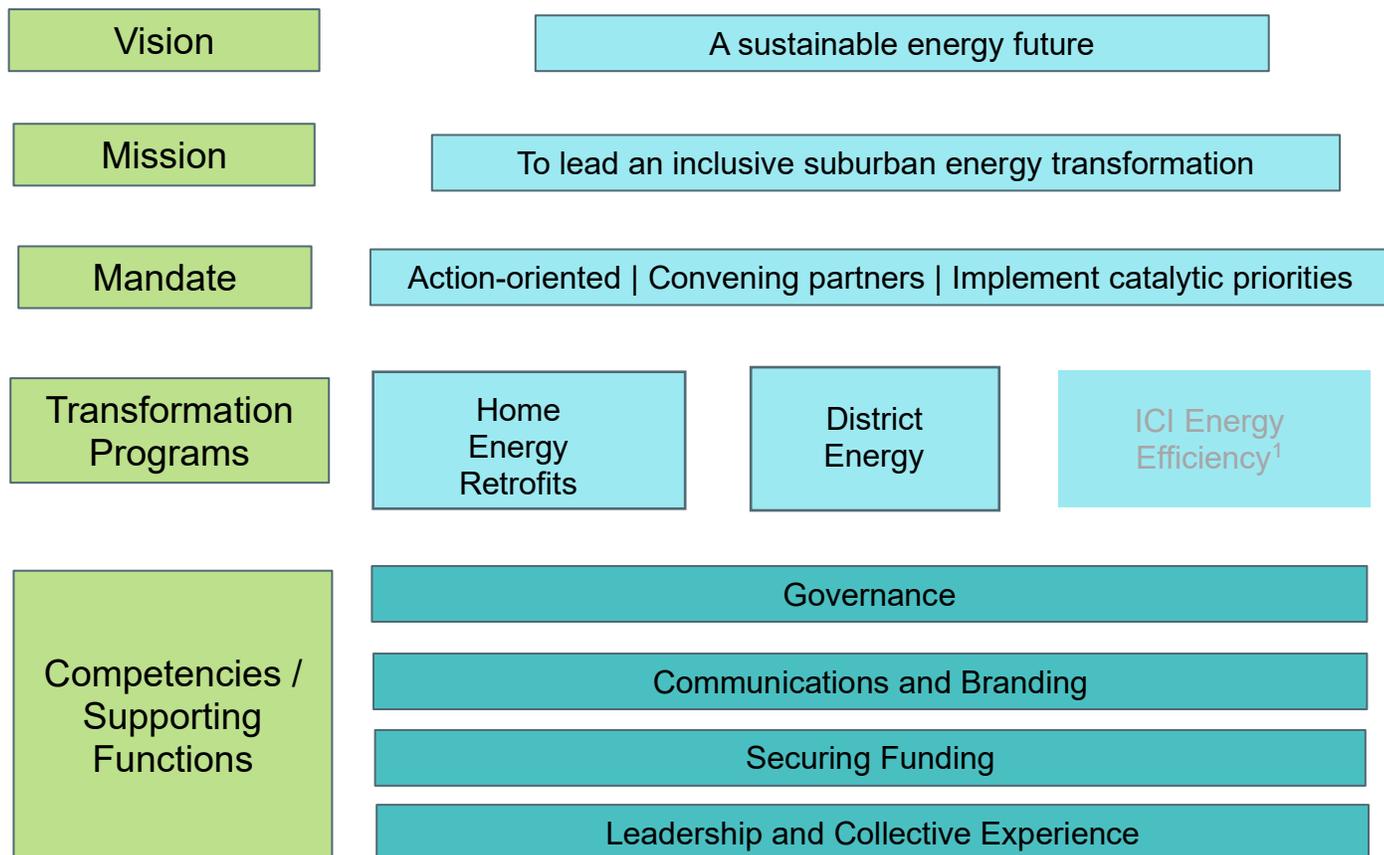


Figure 3 Strategic Map of CCET’s Vision, Mission, and Mandate supported by competencies to deliver the transformation programs.

¹ Energy efficiency in the industrial, commercial and institutional (ICI) sectors is not a focus for the start of CCET’s work program, but is an element of the effort to advance district energy and low carbon thermal networks.

CCET’s ‘competencies’ shown in the Strategic Map (above) support delivery of the transformation programs.

Governance:

- Strong Board
- Advisory Group for community touch point and feedback
- Municipal Working Group to track performance on service level agreements
- Financial oversight and accountability

Communications and Branding

- Deep community engagement
- Use feedback from community and stakeholder engagement to adapt CCET efforts (action learning)

- Understand audiences to tailor messages from general awareness to targeted outreach

Secure Funding

- Leverage base funding from municipal partners to secure financial support from foundations and other levels of government
- Seek sponsorship opportunities
- Evaluate fee-for-service offerings consistent with the Vision, Mission and Mandate

Leadership and Collective Experience

- Maximize collaborations and partnerships to deliver GHG reduction outcomes and the energy transition
- Distribute leadership and program ownership for program success
- Identify workforce development opportunities

CONTEXT

As estimated by The Atmospheric Fund, the Greater Toronto and Hamilton Area (GTHA) now requires a **9% decrease in carbon emissions per year to meet 2030 targets**

Carbon emissions in Brampton, Mississauga and Caledon (region of Peel) increased by 9% between 2021 and 2022 (The Atmospheric Fund 2023). Most of the increase is a result of the 'Buildings' sector (8.9% increase) and 'Transportation' sector (11.5% increase). While the population in the region of Peel increased by about 16,000 people or just over 1%, per capita emissions increased by 8.7% (see Table 1 below), from 6.9 tonnes CO₂e (tCO₂e) per person in 2021 to 7.5 tCO₂e per person in 2022.

Table 1 Peel population and greenhouse gas (GHG) emissions in 2021 and 2022.

	2021	2022
People	1,499,917 (Census)	1,516,019 (Estimated)
Dwelling Units	450,740	455,673
GHG Emissions (tCO ₂ e)	10,410,575	11,349,874
GHG Emissions per capita	6.9	7.5

Population estimates from [Peel Region](#)

GHG emissions calculations from [The Atmospheric Fund](#)

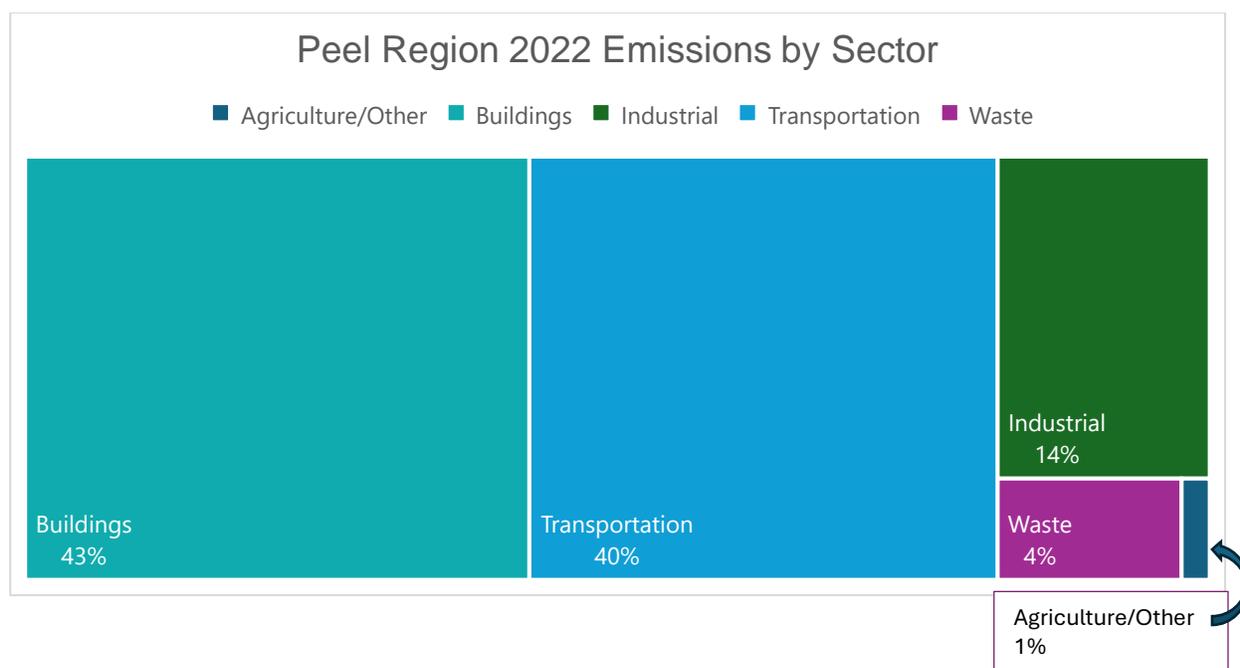


Figure 4 GHG emissions calculation for the region of Peel. Buildings = 4,832,828 tCO₂e; Transportation = 4,483,331 tCO₂e; Industrial = 1,546,952 tCO₂e; Waste = 423,150 tCO₂e; Agriculture/Other = 63,613 tCO₂e. (Source: The Atmospheric Fund)

Setting GHG Reduction Targets for Dwellings

A specific breakdown of GHG emissions from residential buildings in comparison to commercial and industrial buildings is not available across the region of Peel. As noted in the Brampton Community Energy and Emissions Reduction Plan (CEERP), it can be assumed that residential buildings account for over 20% of total carbon emissions, or about half of emissions from buildings are from dwellings. Given total building emissions of 4,462,584 tCO₂e in 2021 (The Atmospheric Fund) and that half of the emissions are from residential buildings (~ 2,198,137 tCO₂e from residential buildings in 2021), the average residential dwelling in the region of Peel emits about 4.9 tCO₂e per year (2,198,137 tCO₂e per year / 450,450 dwellings) based on 2021 data.¹

If the average energy efficiency retrofit achieves a GHG reduction of 23% (see [Green Communities](#) report on average GHG reductions from retrofits across Canada), then the average retrofit reduces GHG emissions by 1.12 tCO₂e in the region of Peel. This would require retrofitting on average over 142,000 dwellings each year to 2030, or retrofitting the entire building stock two and a half times, to achieve a 9% annual carbon emissions reduction from residential buildings.

Such a rate of retrofits from the residential building stock of 450,450 units (of which, approximately 360,000 are ground-related units), is not realistic. An alternative approach to setting GHG emission reduction targets for homes can include setting:

- a target retrofit rate that is a 'stretch' target based on retrofitting the entire building stock by 2050
- a target GHG emissions reduction per retrofit (on average)

Energy Retrofit Rate in the Region of Peel

CCET received EnerGuide audit data in May 2024 from Natural Resources Canada for energy audits completed between 2006 to 2024. Data for building type is not available for all records in the data received. As such, it is assumed that the EnerGuide audits are limited to single detached, attached and town home dwelling types.

A total of 16,050 energy audits are recorded in the 19-year period from 2006 to 2024 (Figure 5). Years of highest recorded audits occurred in 2009 (2,846 completed audits) and 2023 (2,217 completed audits), which is the last year of complete data. All but three years recorded at least 100 completed energy audits. However, the number of audits varies considerably from year to year and likely tracks the available rebates from program offerings. For example, the number of energy audits increased from 2021 (870 audits), 2022 (1,174 audits) to 2022 (2,117 audits) and

¹ Statistics Canada calculates the average GHG emissions for Ontario dwellings to be 3 tonnes CO₂ per household per year ([Canadian System of Environmental-Economic Accounts – Energy use and greenhouse gas emissions, 2020](#)). Until energy audit data is analyzed to inform the average household emissions, 4.9 tCO₂ is used in this report.

likely reflects the awareness of available rebates from both the federal Greener Homes Program and the Enbridge Home Efficiency Rebate Plus program at that time.

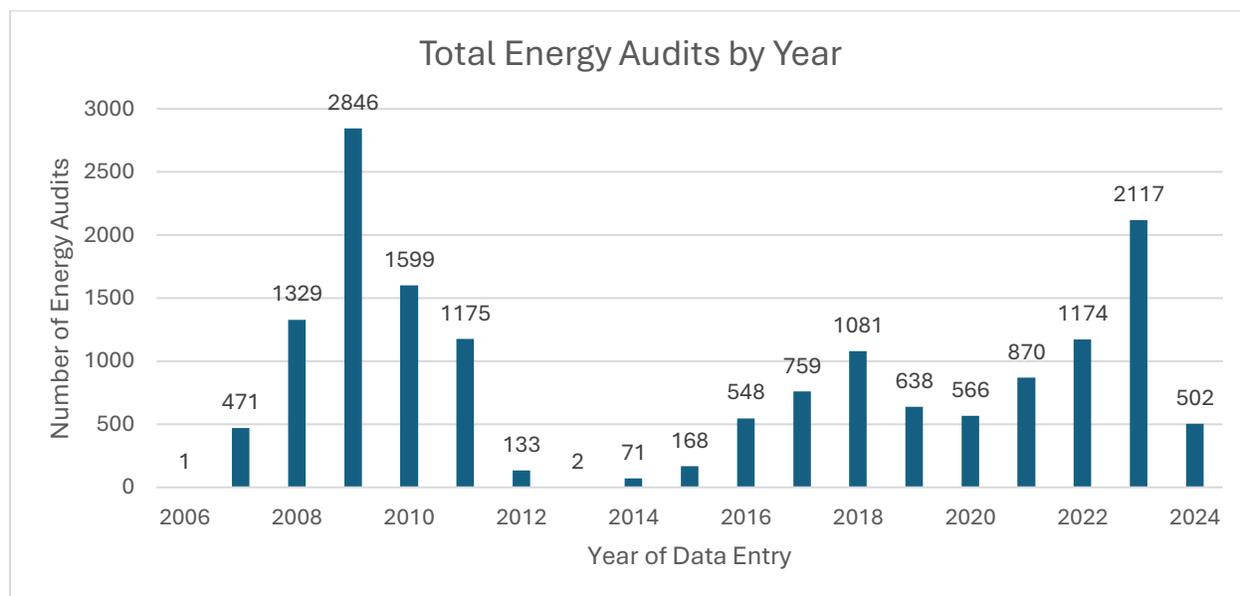


Figure 5 Number of energy audits completed by certified auditors by year. Source: Natural Resources Canada.

Average percent improvement in energy consumption from retrofit measures was also estimated using the EnerGuide data. Note that the energy consumption values are estimated from modelled results recorded in the EnerGuide audit data. Data was assessed by age of dwelling and is shown in Figure 6. Average improvements in energy consumption range from 15% to 30% (Figure 6). This generally agrees with the findings of Green Communities that evaluated an average 23% improvement in energy consumption for energy retrofits.

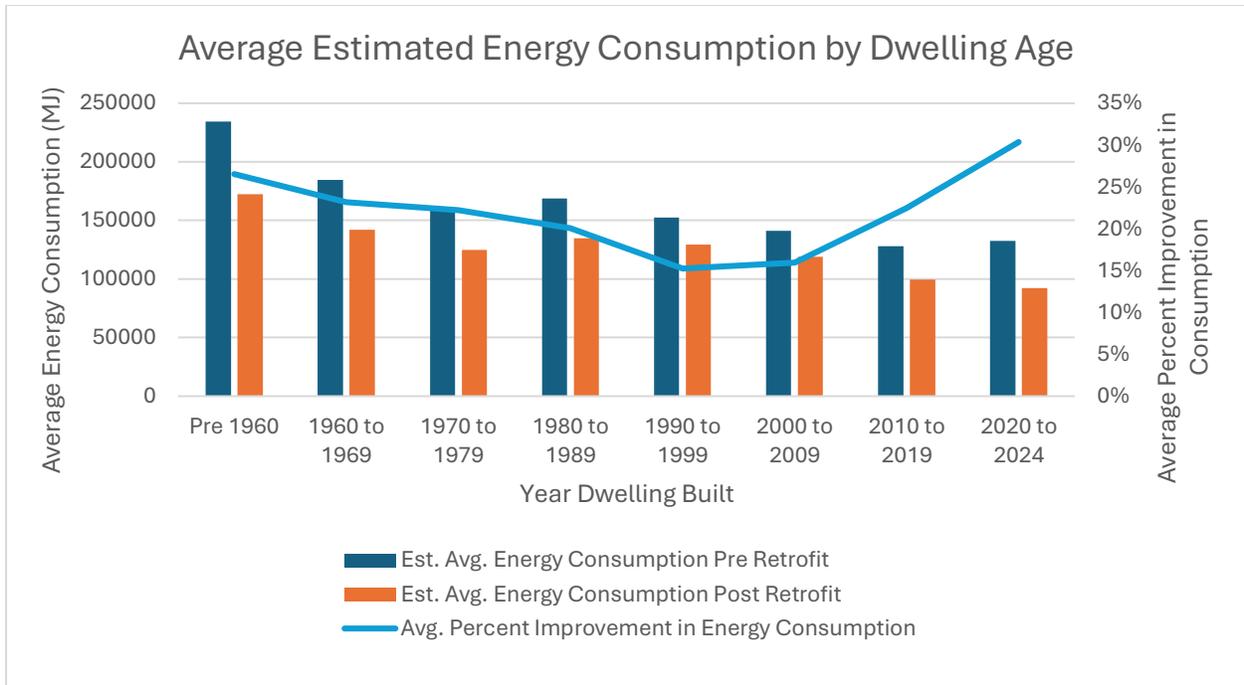


Figure 6 Average estimated improvement in energy consumption from home energy retrofits by age of dwelling. Source: Natural Resources Canada

The Region of Peel's Home Building Stock

Communicating the benefits of energy efficiency to increase the uptake of residential retrofits will require strategies for broad awareness as well as targeted messages. Information related to dwelling type, dwelling age and the geography of energy use is presented below to identify target audiences to accelerate home energy retrofits.

Low-rise dwelling types continue to be the most prevalent in Peel Region

Table 2 Residential dwelling unit breakdown for Peel Region based on 2021 Census information (450,450 total units).

	Mississauga		Brampton		Caledon	
	No. of Units	%	No. of Units	%	No. of Units	%
Single-detached house	90,660	37%	96,020	53%	19,120	81%
Semi-detached house	26,855	11%	24,750	14%	1,650	7%
Row house	34,455	14%	23,055	13%	1,825	8%
Apartment or flat in a duplex	7,895	3%	11,960	7%	335	1%
Apartment (< five storeys)	17,545	7%	8,045	4%	480	2%
Apartment (> five or more storeys)	66,830	27%	18,585	10%	255	1%
Other single-attached house	80	0%	35	0%	15	0%
TOTALS	244,320		182,450		23,680	

Source: Statistics Canada. Total dwellings = 450,450. Total single detached in Peel = 205,800 (46%)

Although intensification is underway in the region of Peel, low-rise dwelling units (detached, semi-detached and row houses) continue to make up the largest proportion of dwelling units: 62% in Mississauga; 79% in Brampton; and 96% in Caledon.

Table 3 Proportion of low-rise dwelling* units in the region of Peel.

	Mississauga	Brampton	Caledon
Detached	37%	53%	81%
Attached	25%	26%	15%
Apartment (<5 storeys)	10%	11%	3%

* Low-rise units total 364,780 and defined as detached, attached (e.g. semi-detached) and apartment building less than 5 storeys.

Most dwellings were built before the year 2000



Figure 7 Dwellings by year of construction.
 Source: Peel Region [[Housing 2021 | Census Information Hub \(peelregion.ca\)](https://www.peelregion.ca/housing/)].
 NOTE: Peel Total from above = 450740. Built before 2000 = 296,860.

Most dwellings (66%) were built before the year 2000 (Figure 7), such that awareness of deep energy retrofits will be an important element of CCET’s communications and marketing. Even low-rise dwellings built between 2000 to 2010 will require mechanical equipment upgrades and present an opportunity for fuel switching, although a limited opportunity for building envelope improvements.

Exploring areas of higher energy consumption as a focus for deeper community engagement

Areas of higher energy consumption or GHG emissions intensity will be a focus for communication tactics. Brampton’s CEERP, for example, calculated energy use and GHG emissions for defined energy planning units (EPUs – see Figures 8 and 9 below). As CCET’s community engagement deepens, such neighbourhoods can be a focus for communication efforts.

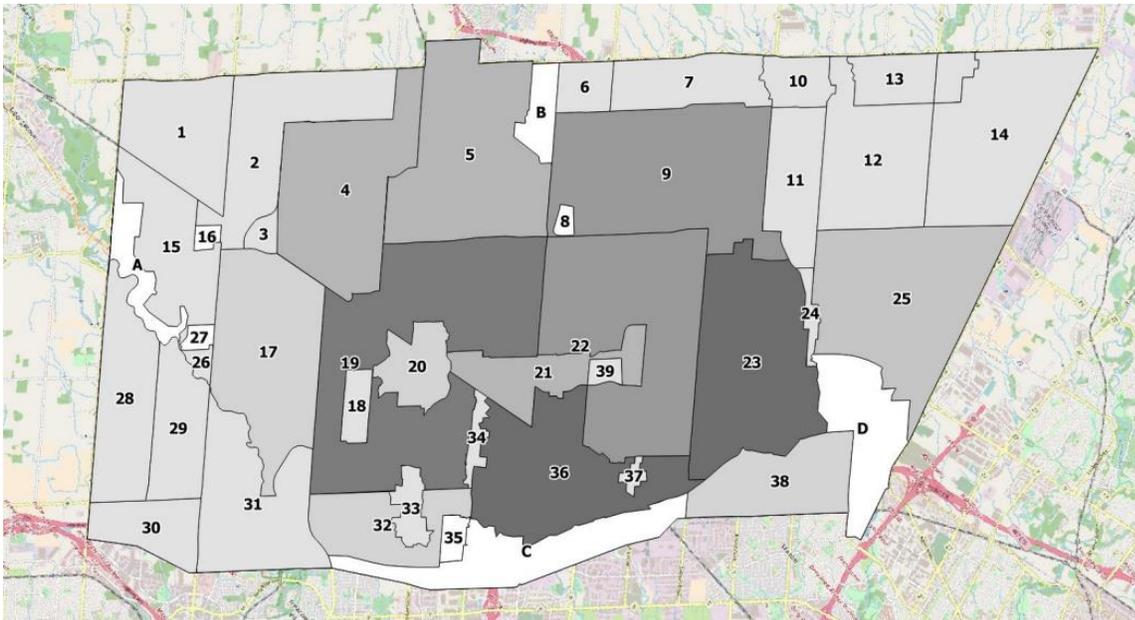


Figure 8 Energy planning units (EPUs) with higher energy consumption (darker shaded areas) from homes and buildings (2016 data). From Figure 7 in Appendix 2 (Analytical Report) of the Brampton CEERP.

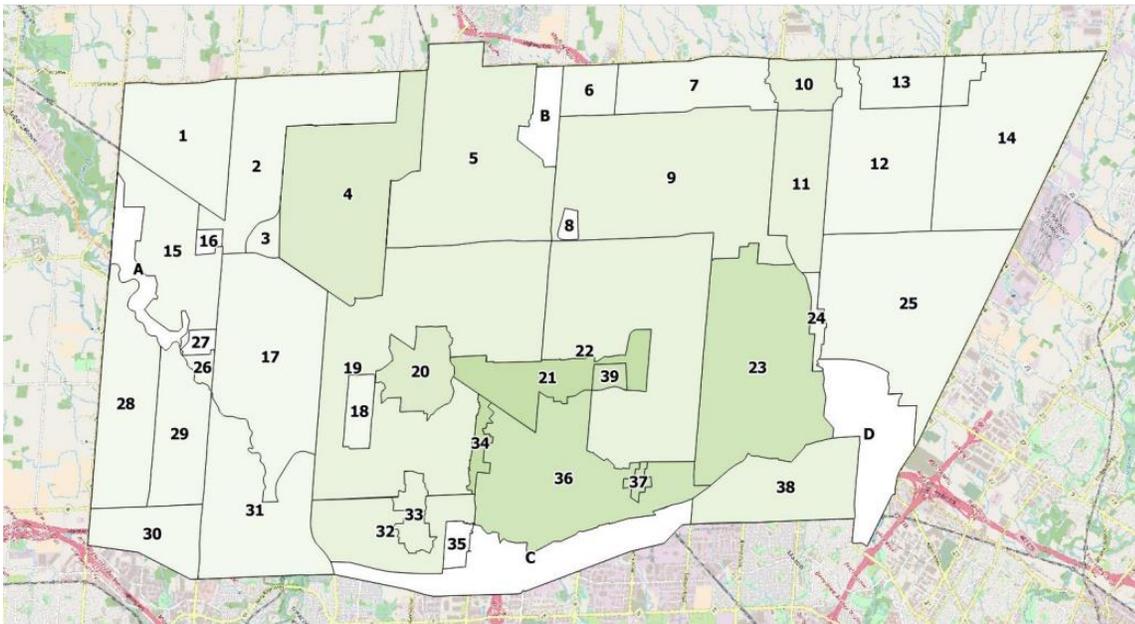


Figure 9 GHG emissions intensity (tonnes/square km) by EPUs. Darker areas represent higher emissions intensity. From Figure 18 from Brampton CEERP (Appendix 2).

Demographics of Households

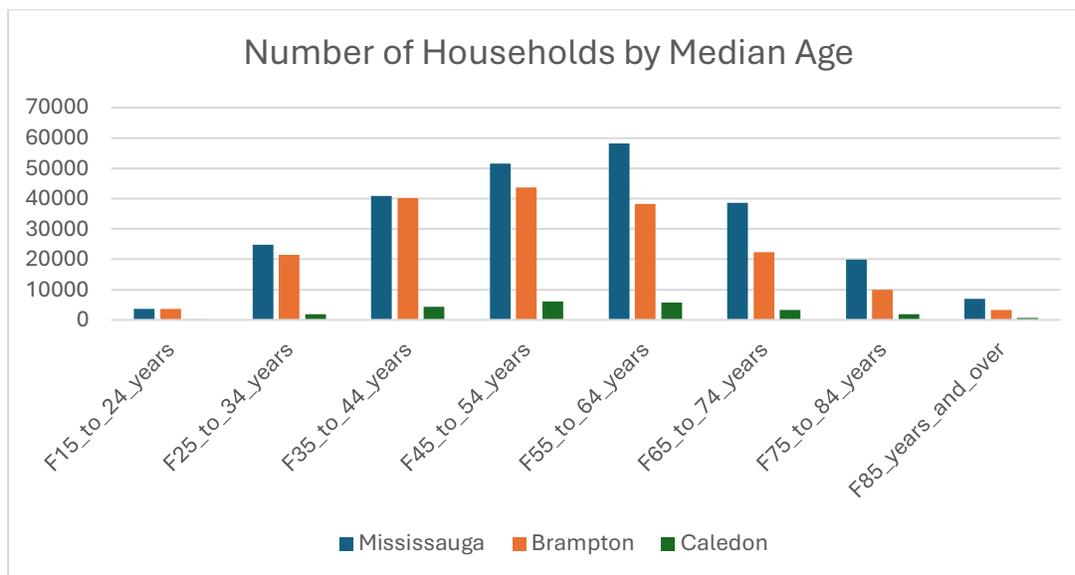


Figure 10 Median age of households in the region of Peel.
 Source: Peel Region Census Hub. Includes all dwellings: 244,575 dwellings in Mississauga; 182,475 dwellings in Brampton; 23,700 dwellings in Caledon.

Dunsy Energy was contracted by the three municipal partners to provide a program design report for a future home energy retrofit program. The recommended target audiences described in the report by Dunsy Energy are consistent with the housing and demographic data presented above.

Primary Target Audience

- Homeowners with detached or semi-detached homes that are 10 years or older
 - Over 50% of dwellings in Peel Region were built between 1961 to 2000 and various systems and mechanical equipment will be coming due for replacement
- Homeowners between the ages of 30 to 60 (represents most homeowners as shown in Figure 10 above)
 - Primary motivation:
 - 30-39: First-time homebuyers who found a good deal on a home that requires repairs and upgrades.
 - 35-45: Homebuyers who bought a new property with the intention of renovating.
 - 40-60: homeowners with older homes that are due for home repairs and upgrades.
- Households with a combined income of \$125,000 or more
- Households in areas of higher energy consumption and GHG emissions intensity

Secondary Audiences

- Prospective home buyers (tend to renovate within first 3 years)
- Homeowners experiencing a renovation emergency (facing unexpected expenses and will appreciate help)

Key Messages to Homeowners

- CCET can provide trusted advice on energy retrofits, including within the context of deep retrofits and a 'net zero journey'
- CCET can help homeowners navigate existing energy efficiency programs
- Give homeowners confidence in their decisions
- Give homeowners confidence in reducing GHG emissions and saving on utility bills

Addressing Energy Burden and Equitable Engagement

While the residential energy retrofit program should accelerate uptake by households with the financial ability to pursue renovations and to maximize GHG reductions, CCET and municipal partners must ensure that equity-deserving and income eligible households are able to benefit from available retrofit programs and incentives. A report by the American Council for an Energy-Efficient Economy (ACEEE, November 2023) notes the following main strategies to reach underserved households:

- Pursue equitable community engagement
- Establish a one-stop shop
- Create and disclose equity metrics
- Develop a diverse and inclusive energy efficiency workforce
- Tailor marketing based on customers' preferences and behaviours

Defining Energy Burden (Canadian Urban Sustainability Professionals)

Home energy cost burdens are reported as the percentage of total after-tax household income that is spent on home heating and electricity. For most Canadians, this value is below 3 per cent, which is to say that the median Canadian household spends less than 3 per cent of its after-tax income meeting its home energy needs.

Households that spend more than twice this value on home energy services, can be said to experience high home energy cost burdens. For purposes of policy discussion, CUSP uses this 6 per cent threshold of home energy cost burden to define households that experience energy poverty.

Available data from Statistics Canada data (2020 data in 2021 Census) suggests that a proportion of households in Peel Region experience energy burden:

- 20% (Caledon) to 29% (Brampton) of owner-households spend 30% or more on shelter costs
- 37% (Brampton) to 40% (Caledon) of tenant households spend 30% or more on shelter costs
- 54% of households have an after-tax household income less than \$100,000
 - Almost half of Peel's households have an after-tax household income greater than \$100,000.
- The number of households in lower income groups has decreased since 2015.
 - However, 13% of households are living on less than \$40,000 per year, although this is down from 20% of households in 2015.

Table 4 Shelter costs related to owner-households (Based on Statistics Canada Census data).

	Number of households spending 30% or more on shelter costs	% of owner-households with a mortgage	% of owner-households spending 30% or more on shelter costs	Average monthly shelter costs for owned dwellings
Mississauga	57695	60	24	\$1,974
Brampton	49190	77	29	\$2,304
Caledon	4680	64	20	\$2,142

Source: StatsCan and Peel Region ([Demographics | Data Portal - Peel Region](#)).

Table 5 Shelter costs related to tenant households (Based on Statistics Canada Census data).

	% of tenant households spending 30% or more on shelter costs	% in core housing need	Median monthly shelter costs for rented dwellings	Average monthly shelter costs for rented dwellings
Mississauga	39	28	\$1,600	\$1,650
Brampton	37	27	\$1,520	\$1,628
Caledon	40	26	\$1,740	\$1,776

Source: StatsCan and Peel Region ([Demographics | Data Portal - Peel Region](#)).

Definition of Shelter Costs Used by Peel Region

<p>Shelter costs for owner households include:</p> <ul style="list-style-type: none"> • Mortgage payments • Property taxes • Condominium fees • Costs of: electricity, heat, water, and other municipal services 	<p>Shelter costs for renter households include:</p> <ul style="list-style-type: none"> • Rent • Costs of: electricity, heat, water, and other municipal services
--	--

Median After-Tax Household Income

Median after-tax households income

Median after-tax income of household in 2020 (\$)

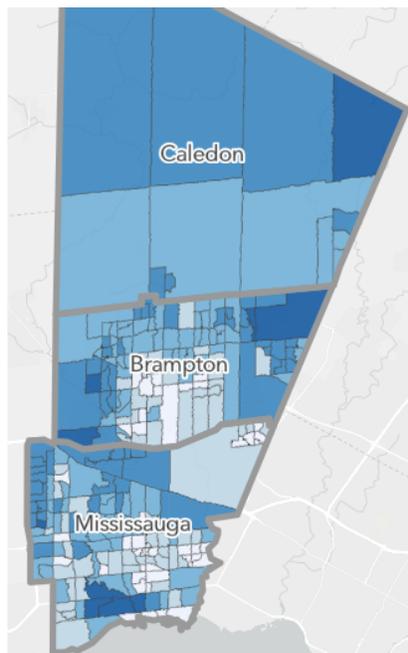
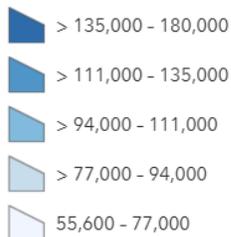


Figure 11 Median after-tax household income by census tract (2020 data).

Prevalence of low income by Census Tract 2020

Prevalence of low income based on the Low-income measure, after tax (LIM-AT) (%)

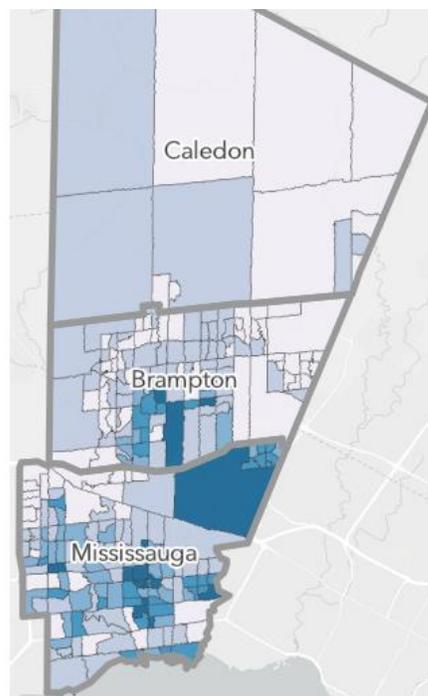
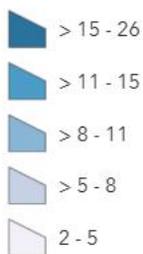


Figure 12 Prevalence of low income households by census tract (2020 data).

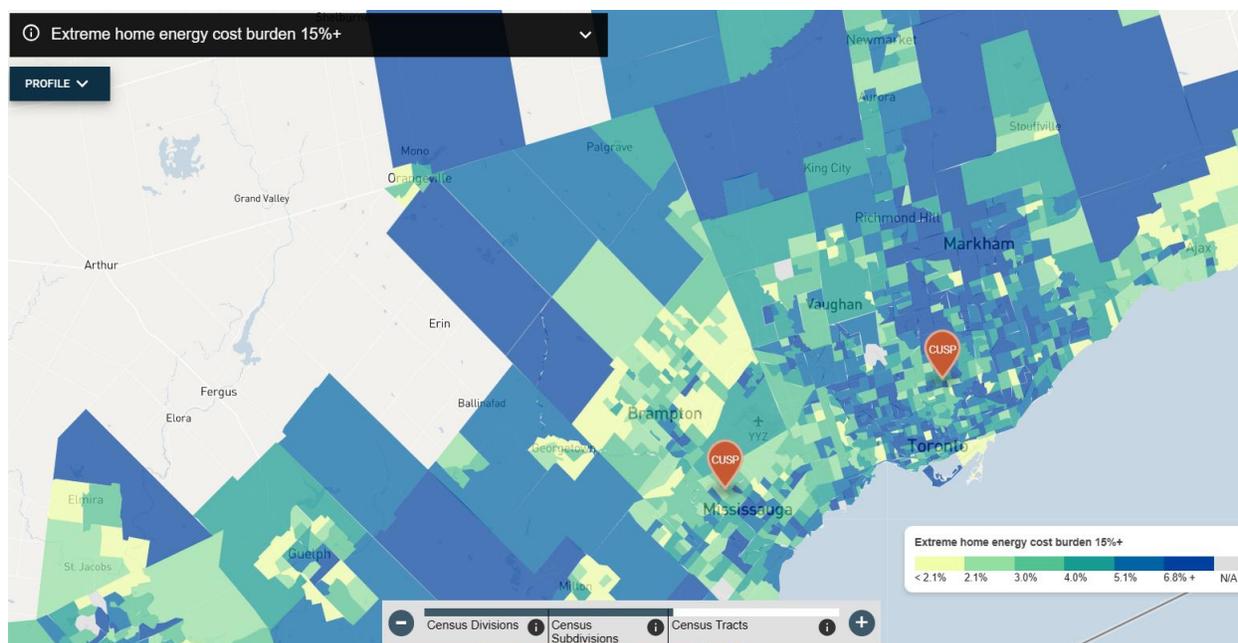


Figure 13 Example of mapping [energy poverty](#) showing the proportion of households by census tract spending (estimated) more than 15% of after tax income on energy bills. Source: Canadian Urban Sustainability Professionals.

Nationally, about 25% of households in single detached dwellings experience energy burden (CUSP Backgrounder) and a greater proportion of households (22% to 27%) in homes built before 1980 experience energy burden. CUSP (2019) also note that many modest-income households also experience energy burden. This reinforces the need for CCET to obtain better local information on energy burden to best tailor program offerings.

The available information is not sufficient to allow CCET to tailor the home energy retrofit program to ensure equitable access. CCET will pursue the steps below to improve our understanding and approach of equitable engagement to address energy burden:

- Identify and engage community groups that represent underserved communities to inform CCET's program offerings to benefit equity deserving groups and identify collaboration opportunities
- Identify leadership steering opportunities as part of the administration of CCET's home energy retrofit efforts
- Undertake stakeholder consultation to identify workforce development opportunities
- Work with community groups to create equity metrics for regular disclosure as part of CCET's regular reporting on progress
- Update energy poverty mapping for Peel Region

Commercial and Industrial Sectors

Energy efficiency in the industrial, commercial, institutional (ICI) sector is identified as a program area in the strategic framework prepared by the Community Task Force. At this time, it is not a priority for CCET, although business types and locations factor into the efforts to advance and design low carbon district energy systems. As such, a high-level scan of the ICI sector is provided at this time and will be further developed in the future.

City of Brampton

The City of Brampton's Economic Development department provides a summary of key sectors in the City (Source: [Key Sectors - City of Brampton | InvestBrampton](#)).

Advanced Manufacturing

- 1,500 companies employing over 30,000 people
- Leading advanced manufacturing companies in Brampton include:
Stellantis Canada • Brampton Assembly ABB Inc. • Brican Automated Systems
Armcell Canada Inc. • Matcor Automotive Inc. • Velcro Canada Corp. Amcor
Packaging • Shepherd Thermoforming & Packaging • Aircraft Appliance &
Equipment Ltd • MDA ClimateWorx, a Div. of the BEMPRO Global Group •
Almag Aluminum Brannon Steel • Gray Tools Canada Inc

Food and Beverage

- 8,500 people employed in over 300 companies

Health and Life Sciences

- 2,300 companies employing over 13,000 medical practitioners and support services
 - doctor's offices to global players in medical research and devices including Medtronic (HQ), Taro Pharmaceuticals (HQ), Dynacare, Canadian Blood Services

Innovation and Technology

- Over 6,500 companies employing over 13,000 people, including
Air Canada • Rogers Communications • Canon Canada • Amazon • MDA •
Survalent • IT Weapons (Konica Minolta)

Logistics

- Over 11,000 companies and 24,000 employers
- Amazon • M-O Freight Works (HQ) • DHL Express Canada (HQ) • CEVA Logistics •
Indigo Distribution and Support Centre • Day and Ross Inc. • Hopewell Logistics Inc.
• Speedy Transport Group Inc. (HQ) • CN Intermodal • DICOM Express • Allied
Systems Canada Company

City of Mississauga

The City of Mississauga profiles the following key sectors ([Industries – Invest Mississauga](#)):

- Advanced manufacturing
- Financial services
- Life sciences
- Smart logistics
- Technology
- Creative industries

The following geographic areas have the highest concentrations of businesses according to the available Business Directory:

- Northeast Employment Area (West) – generally immediately west and north of Pearson Airport
- Meadowvale Business Park - Hwy 401 and Mississauga Road area
- Gateway Employment Area (East) – southwest corner of Hwy 401 and Hwy 410
- Airport Commercial Centre
- Downtown Core

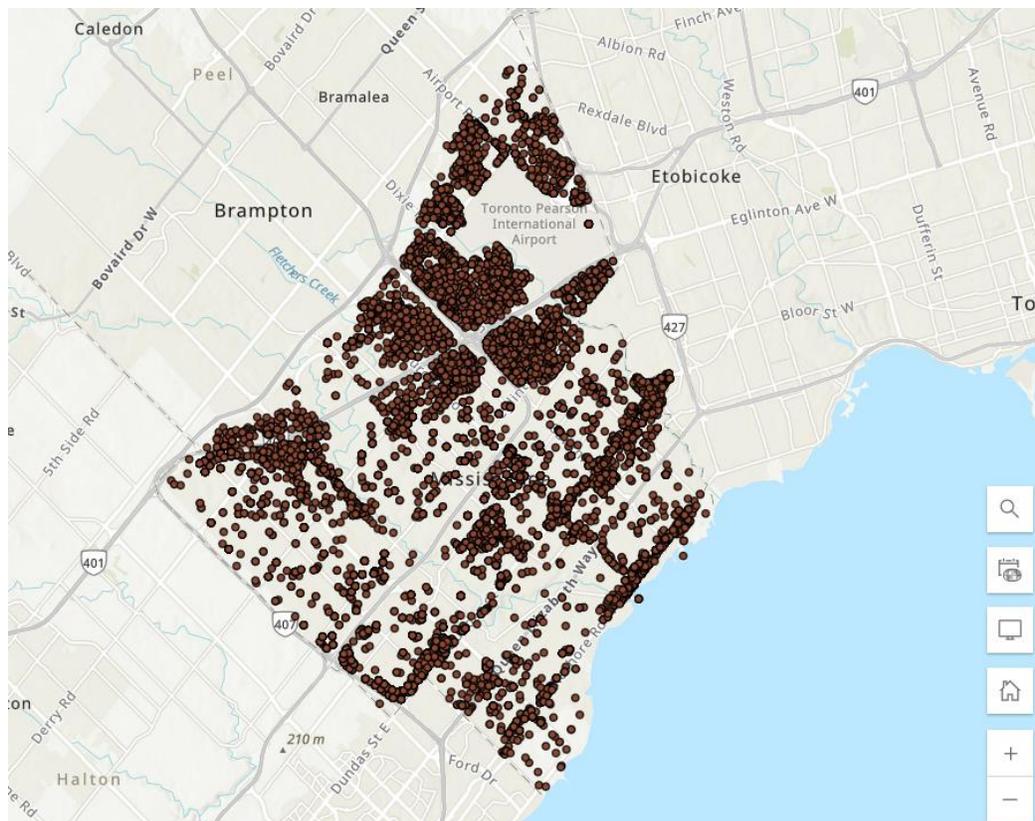


Figure Business locations in the Mississauga Business Directory. Source: ([2023 Mississauga Business Directory | Mississauga Open Data Catalogue](#))

SYSTEMS CHANGE THEORY

Policy Scan

CCET will monitor select policy initiatives that support implementation of CCET's mandate. Opportunities to advance policy instruments will be assessed, including in consultation with the CCET Advisory Group and partners.

Moving Towards Net Zero Standards in the National Building Code (NBC)

- Potential changes to be introduced in the NBC include:
 - Technical requirements to address the energy efficiency of existing buildings and standards for operational GHG emissions in the 2025 NBC
 - Embodied carbon requirements for the 2030 NBC

Source: June 9, 2023 article in [ConstructConnect](#)

Decarbonizing the Electricity Grid Through the National Clean Electricity Regulations

- The proposed [regulations](#) aim to decarbonize the national electricity grid by limiting the carbon emissions of electricity generating units starting in 2035

Climate Bylaws Under the Municipal Act, 2001

- The Municipal Act, 2001 grants municipal jurisdiction related to the environment and climate action. In particular, Section 11(2) provides that a “lower-tier municipality and an upper-tier municipality may pass by-laws” respecting “Economic, social and environmental well-being of the municipality, including respecting climate change.” (Subparagraph 5 of s. 11(2))
- CCET is not aware of a specific climate change by-law endorsed in a municipality. Source: Canadian Environmental Law Association, [Publication No. 1484](#)

Adoption of Municipal Green Development Standards

- Green development standards are widely used in Ontario municipalities to improve the sustainability of new construction. Green standards are an important policy and implementation tool to set out standards to achieve net zero energy buildings. (Source: Clean Air Partnership [GDS Briefing Note](#))
- The Planning Act, 1990 retains the ability to address sustainable design through Site Plan Control, while policy support is also provided broadly in the Municipal Act, 1990.
- Status of municipal partners' green standards:
 - City of Brampton: The Sustainability Metrics is endorsed by Council, including a pathway to net zero energy buildings.
 - Town of Caledon: Recently approved Green Development Standards came into effect as of July 1, 2024. (Source: [Climate-Friendly New Development | Have Your Say Town of Caledon previously Future Caledon \(haveyoursaycaledon.ca\)](#))
 - City of Mississauga: All new residential and non-residential Site Plan Applications submitted after March 1, 2025, will be required to conform to the mandatory Green Development Standards. (Source: [Mississauga Green Development Standards Update | City of Mississauga](#))

Energy Benchmarking of Buildings as a Driver of Efficiency Retrofits

- [Efficiency Canada](#) describes building energy benchmarking as “a powerful tool to drive the desired rate and depth of retrofits, while addressing the numerous barriers to increasing the energy and emissions performance of existing buildings”.
- The [City of Toronto](#) has recommended a Building Emissions Performance Reporting By-law that would apply to all buildings 929 square meters (~10,000 square feet) and larger, which would predominantly include buildings from the commercial, multi-residential, institutional, and industrial sectors. The implementation of mandatory emissions performance standards for all existing buildings is described as the most important of the actions in the City’s Net Zero Existing Buildings Strategy.

CCET as an Intermediary Organization

Many climate action areas require a high degree of coordination and collaboration between community partners. CCET’s two main program areas, accelerating home energy retrofits and advancing district energy systems, are examples of the coordinated effort that is required:

- The “building-by-building” approach to home energy retrofits requires ongoing coordination with an ecosystem of implementation partners including energy auditors, contractors, manufacturers, the real estate sector, and the financial sector, among others.
- The “neighbourhood decarbonization” approach in advancing district energy and low carbon thermal networks as solutions integrates underground infrastructure planning and maintenance, growth and development planning, and financial investments.

The Peel Climate Change Partnership has been leading a coordinated effort since 2011. Current priorities include:

- Flood Resiliency, led by Credit Valley Conservation
- Green/Natural Infrastructure, co-led by Toronto and Region Conservation Authority (TRCA) and the Region of Peel
- Low Carbon Communities, co-led by TRCA, Town of Caledon and the Region of Peel

CCET can fulfill a role as practitioners and as a “middle actor”, as described in Hamilton et al. (2014), to contribute to the coordinated action required for the energy transition:

“middle actors are neither energy suppliers, consumers nor regulators, but rather actors who shape energy consumption patterns and practices. For example, architects and planners are middle actors because they shape the built environment – materials and design – in which energy is consumed. This framework provides a lens to explore the “middle-out” influence of middle actors: “downstream” (for example, on the energy use of end users, such as householders), “upstream” (for example, on policy and government) and “sideways” (on other local and middle or midstream actors).”

The following principles guide CCET's collaborative and "middle-out" efforts:

- Take an "action-learning" approach in the engagement with residents, partners and stakeholders ([Complex Systems Change Starts with Those Who Use the Systems \(ssir.org\)](#))
- Target the deeper root causes of the problem, rather than the symptoms ([Small Organizations: The Change That Systems Change Needs \(ssir.org\)](#))
- Remain rooted in action and put users at the heart of design
- Fulfill the role as a catalyst for action (Calvert 2024)

AUDIENCE ASSESSMENT

Equitable Access to Energy Efficiency Programs

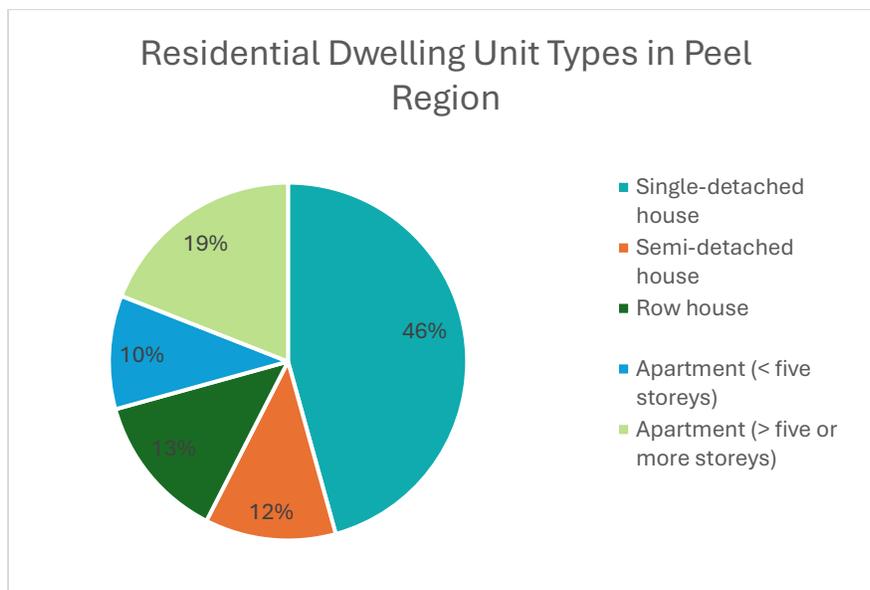
CCET will continue to engage and learn from community groups that represent equity-deserving and underserved groups to determine how we can tailor service offerings to improve equitable access to energy efficiency programs. Importantly, this will inform how CCET and partners approach potential funders to address equity-deserving groups and energy burden, including being open to developing ‘turnkey’ solutions with implementation partners.

Peel Region’s Community Investment Program initiated the Community Response Table (CRT) in March 2020 in response primarily to the COVID-19 pandemic. The CRT is a group of diverse partners, currently over 150, that tracks and monitors the needs of the community and coordinates responses on critical and current issues.

Energy Retrofits of Low-Rise Residential Dwellings

The residential building stock is outlined in the Context section above. As noted in the program design report by Dunsky Energy, CCET’s marketing approach to accelerate home energy retrofits will consider that:

- 46% of residential dwellings are single detached homes
- 66% of dwellings were built before 2000
- The median age of a majority of homeowners is between 35 to 64 years of age



Building Owners and Property Managers in District Energy Priority Areas

CCET will convene stakeholders to support the development of business cases in district energy priority areas. Building energy and emissions profiles will be developed as part of business case for low carbon district energy.

References

Calvert, K. 2024. The role of community energy planning in energy transition management. In “Sustainable Energy Transitions in Canada”. Edited by Mark S. Winfield, Stephen D. Hill, and James R. Gaede.

Canadian Urban Sustainability Practitioners (CUSP). 2019. Energy poverty in Canada: A CSUP backgrounder. [backgrounder.pdf \(energypoverty.ca\)](#)

Intergovernmental Panel on Climate Change. 2022. [Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.](#)

Jo Hamilton, Ruth Mayne, Yael Parag & Noam Bergman (2014) Scaling up local carbon action: the role of partnerships, networks and policy, Carbon Management, 5:4, 463-476, DOI: 10.1080/17583004.2015.1035515

To link to this article: <http://dx.doi.org/10.1080/17583004.2015.1035515>

Sawyer, Dave, Anna Kanduth, Bradford Griffin, Franziska Förg, Ross LindenFraser, and Arthur Zhang. 2023. Independent Assessment of Canada’s 2023 Emissions Reduction Plan Progress Report. Canadian Climate Institute.

The Atmospheric Fund 2021. [2021-2023 Carbon Emissions Inventory for the Greater Toronto and Hamilton Area.](#)



Report
Staff Report
 The Corporation of the City of Brampton
 9/4/2024

Date: 2024-07-30

Subject: **Request to Begin Procurement – Material Testing and Geotechnical Investigation Services on an as and when required basis for a three (3) year period plus two-year (1 + 1) option years - Citywide**

Contact: Pankaj Kohli, Senior Supervisor, Construction, Capital Works

Report number: Public Works & Engineering-2024-645

RECOMMENDATIONS:

1. That the report from Pankaj Kohli, Senior Supervisor, Construction, Capital Works to the Committee of Council Meeting of September 4, 2024, re:**Request to Begin Procurement – Material Testing and Geotechnical Investigation Services on an as and when required basis for a three (3) year period plus two-year (1 + 1) option years - Citywide**, be received;
2. That the Purchasing Agent be authorized to commence the procurement for the material testing and geotechnical investigation services on an as and when required basis for three (3) years plus two-year (1 + 1) option years – Citywide.

OVERVIEW:

This report seeks Council approval to authorize the Purchasing Agent to commence procurement for the material testing and geotechnical investigation services on an as and when required basis including providing excess soil management services for a three (3) year period plus two year (1 + 1) option to extend – Citywide.

BACKGROUND:

On an annual basis, the Capital Works Division delivers approximately \$100 million to \$120 million worth of capital projects such as: road reconstruction, road widening, intersection improvements, road resurfacing, bridges, culverts, noise walls, stormwater ponds rehabilitation, etc. This includes planning, engineering, operations, and construction services to deliver these projects. The material testing and geotechnical investigation services are required for each project to ensure that proper quality control

and quality assurance of workmanship as well as construction materials such as concrete, asphalt and soil, to maintain and achieve a high quality of the end product.

During the planning, design, and construction of all capital projects, material testing and geotechnical investigations are essential to confirm soil type, hydrogeological conditions, and environmental contamination, which includes chemical testing during the pre-engineering stages. The process also encompasses material testing and inspection services, and geo-structural analysis during the construction phase, along with excess soil management according to the latest Ministry of Environment, Conservation and Parks (MOECP) guidelines. These investigations and tests help mitigate cost overruns due to unforeseen soil conditions during construction activities.

To undertake this assignment, the City will hire two (2) Consultants to provide material testing and geotechnical investigation services on an as and when required basis for a term of 3 years plus two year option years (1+1).

The Consultants will provide experienced professionals to perform a variety of tests and reporting as requested, ensuring methodology is in accordance with applicable CSA, MTO, AASHTO and/or CCIL Standards, and provide the test results in report format within the specified timeframe.

CURRENT SITUATION:

The Capital Works Division is prepared to begin the procurement for the material testing and geotechnical investigation services on an as and when required basis for a three (3) year plus two year option years (1+1).

The scope of the material testing and geotechnical investigation services include: Road Operations, Road Resurfacing, Capital Construction and Engineering. The major component of this program is material testing services on capital projects, road resurfacing, park pathway construction, parking lot reconstruction, entrance feature construction and bridge rehabilitation projects.

Pending Council approval, the anticipated timing for the start of this contract is winter 2024 with a completion date of fall 2027 for the fixed three year term.

CORPORATE IMPLICATIONS:

Financial Implications:

Funding for Material Testing and Geotechnical Investigation services is available under various capital projects. Departmental staff has identified sufficient funding in the 2024 Capital Budget for year one of the contract and will ensure that sufficient funds are requested for future years of the contract in the annual Capital Budget submission, subject to the Mayor's consideration.

Other Implications:**Purchasing Implications**

A public procurement process will be conducted, and the two (2) lowest compliant Consultant bids will be eligible and qualified for Contract award. Purchase approval shall be obtained in accordance with the Purchasing By-law.

All communication with bidders involved in the procurement must occur formally, through the contact person identified in the RFP Document.

STRATEGIC FOCUS AREA:

This report supports Transit & Connectivity, through ensuring the quality and reliability of construction materials and workmanship, the City of Brampton can maintain and enhance its transportation infrastructure. This initiative supports the goal of providing a connected infrastructure that is safe, convenient, efficient, and sustainable.

CONCLUSION:

In conclusion, this report recommends that the Purchasing Agent be authorized to commence the procurement for material testing and geotechnical investigation services on an as and when required basis for a three year fixed term within the City of Brampton, as described in this report.

Authored by:

Reviewed by:

Pankaj Kohli, P.Eng., PMP
Senior Supervisor, Construction
Capital Works

Sunil Sharma, P.Eng.
Director, Capital Works

Approved by:

Approved by:

Peter Pilateris, M.A.Sc., P.Eng.
Commissioner
Public Works and Engineering

Marlon Kallideen
Chief Administrative Officer



Report
Staff Report
 The Corporation of the City of Brampton
 9/4/2024

Date: 2024-08-21

Subject: **Budget Amendment Report and Request to Begin Procurement for Demolition of the Former Ontario Provincial Police Administration Building – Ward 4**

Contact: Peter Gabor, Manager, Building Design and Construction

Report number: Public Works & Engineering-2024-682

RECOMMENDATIONS:

1. That the report from Peter Gabor, Manager of Building Design and Construction to the Committee of Council Meeting of September 4, 2024, re: **Budget Amendment Report and Request to Begin Procurement for Demolition of the Former Ontario Provincial Police Administration Building – Ward**, be received;
2. That the Purchasing Agent be authorized to commence procurements as required to proceed with all necessary work to demolish the existing building and preserve the heritage elements until construction of the new Arts and Culture Centre begins.
3. That Council approve the return of surplus capital funds totaling \$3,000,000 from project # 192840-003 Williams Parkway Works Yard - Phase 3; with funding to be returned to Reserve # 4- Asset Repair & Replacement.
4. That a budget amendment be approved for project #236812-001 – Brampton Arts & Culture Hub – for Demolition with Retention of Heritage Elements of the former Ontario Provincial Police Administration Building at Flower City Community Campus to increase the project budget by the amount of \$3,000,000, with the funding to be transferred from Reserve 91 – CCBF.

OVERVIEW:

- **Council approved Brampton's first Cultural Master Plan, identifying the need for expanded spaces for creative production and presentation, due to a lack of purpose-built facilities for multi-disciplinary arts and culture programming.**

- **In February 2023, Council approved \$2,600,000 for demolishing the former Ontario Provincial Police (OPP) Administration building at Flower City Community Campus and designing a new Arts and Culture Centre, with instructions to preserve heritage elements.**
- **A Request for Proposals (RFP) for hiring an architect was issued and closed on June 14th, 2024, with bid evaluations underway. The project is expected to be awarded in Q4 2024, with construction completion anticipated in Q3 2028.**
- **Staff recommend concurrent demolition of the former OPP building and preservation of heritage elements during the design process to expedite the construction timeline. This Budget Amendment to add \$3,000,000 is needed to cover the demolition costs, beyond the initially approved \$2,600,000.**
- **The report requests authorization for the Purchasing Agent to commence the procurement necessary to proceed with the demolition while retaining the heritage elements.**

BACKGROUND:

In 2018, Council approved the City's first Cultural Master Plan, which highlighted the need for expanded spaces for creative production and presentation in Brampton. Currently, the City lacks a purpose-built facility for multi-disciplinary arts and culture programming and dedicated community spaces.

In February 2023, Council approved \$2,600,000 for the demolition of the former Ontario Provincial Police (OPP) Administration building at the Flower City Community Campus (8990 McLaughlin Road) and the design of a new Arts and Culture Centre, including a community space. Council instructed staff to de-designate and demolish the building while preserving heritage elements where possible.

Council directed staff to expedite the assessment of the community's arts and culture needs and develop a strategy for a purpose-built Brampton Arts and Culture Centre. The Cultural Space Needs Validation Study, along with structural audits, heritage assessments, and other site surveys obtained by staff provided guidance for the demolition and design process. Public Works and Engineering developed a plan for a new 25,000 sq. ft. facility.

An RFP for hiring an architect was issued and closed on June 14th, 2024, with bid evaluations currently underway. Staff expects the project to be awarded to the successful bidder in Q4 2024, with construction completion anticipated in Q3 2028.

CURRENT SITUATION:

Staff recommend proceeding with the demolition of the former OPP building while concurrently retaining heritage elements during the design process. This approach will expedite the construction timeline, allowing the site to be ready for the new Arts and Culture Centre as soon as the design is completed. In this report, staff seek Council approval to hire a demolition company to carry out the demolition and install necessary shoring to preserve the heritage elements until the construction of the new Centre begins.

A Heritage Impact Assessment and staff report were presented to, and received by, the Brampton Heritage Board on July 23, 2024. Staff will present the minutes of the Heritage Board meeting, including the recommendations, for Council's acceptance.

To expedite the demolition of the former Ontario Provincial Police Administration building concurrently with the awarding of the design contract, additional funds are required beyond the approved budget of \$2,600,000. This budget amendment to add \$3,000,000 to the overall project budget is needed to cover the demolition costs.

CORPORATE IMPLICATIONS:

Financial Implications:

The recommendations in this report require capital investments and will result in a net zero capital budget impact as the additional required funding will be offset by the return of surplus capital funds totaling \$3,000,000 from project #192840-003 Williams Parkway Works Yards-Phase 3 to Reserve #4 Asset Repair & Replacement.

As per recommendations in this report, a budget amendment in the amount of \$3,000,000 is required to increase capital project # 236812 – Brampton Art & Culture Centre, for demolition work, with funding to be transferred from Reserve #91 – CCBF, subject to council approval.

The budget for this initiative will increase from \$2,600,000 to \$5,600,000 as shown in the table below:

Funding Source: Project 236812 Brampton Arts & Culture Hub	Approved Funding	Budget Amendment	Total Funding
Reserve # 91 – Canada Community Building Fund (CCBF)	2,600,000	3,000,000	5,600,000
Total Project	2,600,000	3,000,000	5,600,000

There is sufficient funding to proceed with the recommendations in this report.

Purchasing Implications

Upon approval, a Public Procurement process will be conducted, and the submissions shall be evaluated in accordance with the published evaluation process within the bid document. Purchase approval shall be obtained in accordance with the Purchasing By-law.

All communication with Bidders involved in the procurements must occur formally, through the contact person identified in the Bid Document.

STRATEGIC FOCUS AREA:

This report aligns with the Strategic Focus Area of Culture and Diversity, focusing on cultural diversity, cross-cultural understanding and supporting artistic expression and production by raising investments in Arts and Culture.

This report also aligns with the Focus Areas of Health and Well-being and Growing Urban Centers and Neighbourhoods by improving the sense of belonging and well-being through community programs and opportunities for the local creative sector.

CONCLUSION:

This report seeks Council approval for a budget amendment of \$3,000,000 to complete the abatement, demolition, and partial retention of the former Ontario Provincial Police Administration building.

Additionally, the report requests authorization for the Purchasing Agent to commence the procurements necessary to proceed with the demolition as outlined.

Authored by:

Reviewed by:

Peter Gabor
Manager, Building Design and
Construction

Mitsa Montaser
Director, Building Design and Construction

Approved by:

Approved by:

Peter Pilateris, A.Sc., P.Eng.
Commissioner, Public Works and
Engineering

Marlon Kallideen
Chief Administrative Officer



Report
Staff Report
 The Corporation of the City of Brampton
 9/4/2024

Date: 2024-08-15

Subject: **Request to Begin Procurement for Preventative and Demand Maintenance Services for Locksmith, Door Hardware, Automatic Sliders, And Low Energy Doors at Various City Locations for A Three-Year (3) Period - All Wards**

Contact: Dale Turpin, Supervisor, Contracts and Client Services, Facilities Operations and Maintenance

Report number: Public Works & Engineering-2024-646

RECOMMENDATIONS:

1. That the report from Dale Turpin, Supervisor, Contracts and Client Services, Facilities Operations and Maintenance to the Committee of Council Meeting of September 4, 2024, re: **Request to Begin Procurement Report for Preventative And Demand Maintenance Services for Locksmith, Door Hardware, Automatic Sliders, And Low Energy Doors at Various City Locations for A Three-Year (3) Period – All Wards**, be received; and
2. That the Purchasing Agent be authorized to commence the procurement for Preventative and Demand Maintenance Services for Locksmith, Door Hardware, Automatic Sliders, and Low Energy Doors at various City locations for a three-year (3) period with the renewal options for two (2) additional one-year (1) periods.

OVERVIEW:

- The purpose of this report is to obtain Council authorization to begin procurement for Preventative and Demand Maintenance Services for Locksmith, Door Hardware, Automatic Sliders, and Low Energy Doors at various City locations for a three-year period with the renewal options for two (2) additional one-year (1) periods.
- The current contract is due to expire on November 30, 2024.

BACKGROUND:

A public procurement process was conducted in 2019 to establish a three-year contract for the provision of preventative and demand maintenance services for locksmith, door hardware, automatic sliders, and low energy doors at various locations within the City of Brampton. The contract commenced December 1, 2019. This contract included two, one year renewal options which were both exercised.

CURRENT SITUATION:

The current contract will expire on November 30, 2024, and a new Contract is required.

Facilities Operations and Maintenance is ready to begin the procurement process to award a new contract for preventative and demand maintenance services for locksmith, door hardware, automatic sliders, and low energy doors at various City locations for a three-year period with the renewal options for two additional one-year periods. It is the City of Brampton's expectation that the facilities serviced through this contract receive a cost-effective corporate standard for preventative and demand maintenance services for locksmith, door hardware, automatic sliders, and low energy doors.

CORPORATE IMPLICATIONS:**Financial Implications:**

Funding for this service will be through various operating accounts and capital projects throughout the Corporation. Departmental staff has identified sufficient funding in the respective 2024 Operating & Capital Budgets for year one of the contract. Departmental staff will ensure that sufficient funds will be requested for future years of the contract in the respective annual Operating & Capital Budget submissions subject to the Mayor's consideration.

Purchasing Implications:

A public procurement process will be conducted, and the two (2) lowest compliant Consultant bids will be eligible and qualified for Contract award. Purchase approval shall be obtained in accordance with the Purchasing By-law.

All communication with Bidders involved in the procurement must occur formally, through the contact person identified in the Bid Document.

STRATEGIC FOCUS AREA:

Brampton is a Well-Run City, continuously improving the day-to-day operations of the Corporation by streamlining service delivery, effectively managing municipal assets, and demonstrating fiscal responsibilities. Managing the service excellence for the demand and preventative maintenance of locksmith, door hardware, automatic sliders, and low energy doors at various city locations supports Brampton's Health & Well-being by focusing on citizens' wellness and safety.

CONCLUSION:

This report recommends that the Purchasing Agent be authorized to commence the procurement as described in this report.

Authored by:

Reviewed by:

Dale Turpin
Supervisor, Contracts and Client Services
Facilities Operations and Maintenance
Public Works & Engineering

Rajkaran Chhina
Director,
Facilities Operations and Maintenance
Public Works & Engineering

Approved by:

Approved by:

Peter Pilateris, M.A. Sc., P.Eng.
Commissioner,
Public Works and Engineering

Marlon Kallideen
Chief Administrative Officer



Minutes

Brampton School Traffic Safety Council The Corporation of the City of Brampton

Thursday, June 6, 2024

Members Present: Dominique Darmanin-Sturgeon (Co-Chair)
Charles Gonsalves (Co-Chair)
Satvir Dhaliwal
Donald Haberer
Janice Gordon-Daniels
Daljit Singh
Trustee Will Davies, PDSB
Regional Councillor Navjit Brar - Wards 2 & 6

Members Absent: Mohan Bala
Nayan Brahmbhatt
Wendell Cole
Trustee Shawn Xaviour, DPCDSB

Staff and Agencies: Violet Skirten, Supervisor, Crossing Guard, Public Works and Engineering
Margaret Laramore, Team Lead, Crossing Guard
Chandra Urquhart, Legislative Coordinator

1. **Call to Order**

The meeting was called to order at 9:35 a.m. and adjourned at 9:50 a.m.

2. **Approval of Agenda**

SC034-2024

That the agenda for the Brampton School Traffic Safety Council meeting of June 6, 2024, be approved as published and circulated.

3. **Declarations of Interest under the Municipal Conflict of Interest Act**

Nil

4. **Previous Minutes**

4.1 Minutes - Brampton School Traffic Safety Council - April 4, 2024

The minutes were considered by Committee of Council on May 8, 2024, and approved by Council on May 15, 2024. The minutes were provided for Committee's information.

5. **Presentations\Delegations**

Nil

6. **Committees, Education and Promotions**

Violet Skirten, Crossing Guard Supervisor, advised that Crossing Guard Appreciation week was being celebrated during the week of June 3, 2024 across Ontario.

7. **Correspondence**

7.1 Correspondence from Jennifer Challinor, Principal, re: Request for a Crossing Guard at intersection of Fernforest Drive and Abitibi Lake Drive, Carberry Public School, 526 Fernforest Drive, Ward 9

Violet Skirten, Crossing Guard Supervisor, provided an overview of the request and suggested a site inspection be undertaken at the intersection to determine if a crossing guard was warranted.

Committee reviewed the request and considered the following motion:

SC035-2024

1. That the correspondence from Jennifer Challinor, Principal, to the Brampton School Traffic Safety Council meeting of June 6, 2024, re: **Request for a Crossing Guard at intersection of Fernforest Drive and Abitibi Lake Drive, Carberry Public School, 526 Fernforest Drive, Ward 9** be received; and,
2. That a site inspection be undertaken.

- 7.2 Correspondence from Adam Johnson, Brampton resident, re: Request for a Crossing Guard at the intersection of Hartwell Gate and Fernforest Drive, Fernforest Public School, 275 Fernforest Drive, Ward 9

Violet Skirten, Crossing Guard Supervisor, provided an overview of the request and advised that a crossing guard was already positioned at the intersection as the request was considered to be urgent. Staff had visited the site and determined that a guard was required.

The following motion was considered:

SC036-2024

That the correspondence from Adam Johnson, Brampton resident, to the Brampton School Traffic Safety Council meeting of June 6, 2024, re: **Request for a Crossing Guard at the intersection of Hartwell Gate and Fernforest Drive, Fernforest Public School, 275 Fernforest Drive, Ward 9**, be received.

Carried

- 7.3 Correspondence from Councillor Keenan, re: Request to Review Traffic Congestion on Brenda Avenue in the Vicinity of the School, Ridgeview Public School, 25 Brenda Avenue, Ward 3

Violet Skirten, Crossing Guard Supervisor, provided an overview of the request and noted that inspections have been conducted at this school, however traffic congestion remains an issue.

Committee agreed that several site inspections have been conducted and the layby that was recommended was installed, however the street is narrow which results in the congestion.

The following motion was considered:

SC037-2024

1. That the correspondence from Councillor Keenan to the Brampton School Traffic Safety Council meeting of June 6, 2024, re: **Request to Review Traffic Congestion on Brenda Avenue in the Vicinity of the School, Ridgeview Public School, 25 Brenda Avenue, Ward 3** be received; and,
2. That site inspection be undertaken.

Carried

8. New School Openings

Trustee Will Davies, Peel District School Board, advised that Malala Yousafzai Public School was anticipated to open in September 2024.

9. Changes/Updates to School Boards/Student Population

Trustee Will Davies, Peel District School Board, advised that student enrolment has seen a slight decline across the Greater Toronto Area (GTA).

10. Other/New Business

10.1 Update by Enforcement and By-law Services, re: School Patrol Statistics 2023 - May 2024

In response to a question from Committee, staff advised that two types of tickets are typically issued for schools, violations regarding failure to obey the 'no stopping' signage and the use of the fire route, if approved by the school.

The following motion was considered:

SC038-2024

That the report by Enforcement and By-law Services, to the Brampton School Traffic Safety Council meeting of June 4, 2024, re: **School Patrol Statistics 2023 - May 2024** be received.

Carried

11. Site Inspection Report(s)

11.1 St. Marguerite D'Youville Secondary School, 10815 Dixie Road

Committee reviewed the observations and recommendations in the site inspection report.

The following motion was considered:

SC039-2024

1. That the Site Inspection report for **St. Marguerite D'Youville Secondary School** be received;

2. That the Principal be requested to continue to educate and encourage the drivers to use the designated Kiss and Ride area to drop off students and use the parking lot area to turn around when needed; and,

3. That in an effort to encourage Active Transportation to and from school, the Principal contact their designated Peel Health Nurse to participate in the School Travel Plan Program in Peel.

Carried

12. Future/Follow-up Site Inspection(s)

Rowntree Public School, 254 Queen Mary Drive

13. Site Inspection Schedule

The following Site Inspection was scheduled:

Carberry Public School – 526 Fernforest Drive

Request for a Crossing Guard at intersection of Fernforest Drive and Abitibi Lake Drive

Tuesday, June 11, 2024 - 8:20 a.m. and 3:10 p.m.

Ridgeview Public School, 25 Brenda Avenue

Request to Review Traffic Congestion on Brenda Avenue in the Vicinity of the School,

Monday, June 17, 2024 – 7:40 a.m. – 2:35 p.m.

14. Information Items

Nil

15. Question Period

Nil

16. Public Question Period

Nil

17. Adjournment

SC040-2024

That Brampton School Traffic Safety Council do now adjourn to meet again on September 5, 2024, at 9:30 a.m.

Carried

Dominique Darmanin-Sturgeon, Co-Chair

Charles Gonsalves, Co-Chair

Tuesday, August 6, 2024**Members Present:**

Raman Vasudev (Co-Chair)
Sherry-Ann Ram (Co-Chair)
Sukran Balaban
Brajgeet Bhathal
Pushproop Brar
Charles Coimbra
Subhash Chander Duggal
Neil Fairhead
Shailly Prajapati

Members Absent:

Hardik Mankad
Sandra Roppa
Regional Councillor G. Toor – Wards 9 and 10

Staff Present:

Pam Cooper, Manager, Environmental Planning, Planning, Building and Growth Management
Kristina Dokoska, Policy Planner - Environment, Planning, Building and Growth Management
Zoe Milligan, Policy Planner - Environment, Planning, Building and Growth Management
Richa Dave, Project Manager, Transportation Planning, Planning, Building and Growth Management
Sonya Pacheco, Legislative Coordinator, City Clerk's Office

1. **Call to Order**

The meeting was called to order at 6:04 p.m. and adjourned at 7:20 p.m.

2. **Approval of Agenda**

The following motion was considered.

EAC018-2024

That the agenda for the Environment Advisory Committee Meeting of August 6, 2024, be approved.

Carried

3. **Declarations of Interest under the Municipal Conflict of Interest Act**

Nil

4. **Previous Minutes**

4.1 Minutes - Environment Advisory Committee - June 4, 2024

The minutes were considered by Committee of Council on June 19, 2024, and approved by Council on June 26, 2024. The minutes were provided for Committee's information.

5. **Presentations\Delegations**

5.1 Delegation from Tony Iacobelli, Executive Director, and Laurie Dickson, Lead-Home Energy Retrofits, CCET, re: Centre for Community Energy Transformation (CCET) Update

Tony Iacobelli, Executive Director, CCET, provided a presentation on the Centre for Community Energy Transformation, which included information regarding:

- Peel Region 2022 emissions by sector
- CCET vision, mission, milestones and priority areas
- Home Energy Retrofits and Low Carbon District Energy programs
- Financing options for energy retrofits
- District energy priorities

- Request that the Environment Advisory Committee support the CCET with marketing and communications, and by participating in CCET programs

The delegation responded to questions from Committee regarding the following:

- Building emission increases
- Local Improvement Charge (LIC) financing for home energy retrofits (also called Property Assessed Clean Energy (PACE))
- CCET focus on low rise residential dwellings
- Grant funding and loan capital from the Federation of Canadian Municipalities (FCM) (e.g. Community Efficiency Financing (CEF) Capital Program)
- Increasing the 0.5% energy retrofit rate to 3%
- Increasing awareness of the benefits of LIC financing for home energy retrofits
- Clarification regarding energy emission increases
- Long term opportunities to expand the program to include commercial properties
- Collaboration with Enbridge on their energy efficiency programs/incentives
 - Relaunch of the Enbridge Home Efficiency Rebate program
- Communication and outreach goals
- Information regarding the Low Carbon District Energy Workshop on November 5, 2024

The following motion was considered.

EAC019-2024

That the delegation from Tony Iacobelli, Executive Director, and Laurie Dickson, Lead-Home Energy Retrofits, CCET, to the Environment Advisory Committee Meeting of August 6, 2024, re: **Centre for Community Energy Transformation (CCET) Update**, be received.

Carried

- 5.2 Presentation by Zoe Milligan, Policy Planner - Environment, Planning, Building and Growth Management, re: Private Property Maintenance and Prohibited Plants By-law (Grass and Weed Cutting By-law 166-2011 Update)

Zoe Milligan, Policy Planner - Environment, Planning, Building and Growth Management, provided a presentation regarding the Private Property Maintenance and Prohibited Plants By-law (Grass and Weed Cutting By-law 166-2011 Update), which included information on updated provisions, goals, and timelines for the by-law update.

Committee discussion on this matter included the following:

- Concerns regarding the reduction of natural gardens and lack of permeable surfaces on residential properties
 - Staff advised that the City does not have a by-law requiring property owners to maintain a percentage of permeable landscape on their property
- The need to encourage residents to create more sustainable and naturalized gardens
- Communications strategy and programs to educate residents on the updated by-law
- Clarification regarding the removal/disposal of vegetative cuttings and Region of Peel yard waste restrictions
- The City's practices relating to the application of pesticides
- Opportunity for the Environment Advisory Committee to support the updated by-law through a delegation to Council/Committee of Council

The following motion was considered.

EAC020-2024

That the presentation by Zoe Milligan, Policy Planner - Environment, Planning, Building and Growth Management, to the Environment Advisory Committee Meeting of August 6, 2024, re: **Private Property Maintenance and Prohibited Plants By-law (Grass and Weed Cutting By-law 166-2011 Update)**, be received.

Carried

6. Reports/Updates

- 6.1 Report from Kristina Dokoska, Environmental Planner, Planning, Building and Growth Management, re: Update on the 2024 Earth Day Environmental Celebration Event

Kristina Dokoska, Environmental Planner, Planning, Building and Growth Management, provided an overview of the 2024 Earth Day Environmental

Celebration Event, including the Grow Green Awards, and provided information on future expansion of this event.

The following motion was considered.

EAC021-2024

That the report from Kristina Dokoska, Environmental Planner, Planning, Building and Growth Management, to the Environment Advisory Committee Meeting of August 6, 2024, re: **Update on the 2024 Earth Day Environmental Celebration Event**, be received.

Carried

6.2 Verbal Update from Richa Dave, Project Manager, Transportation Planning, Planning, Building and Growth Management, re: Brampton Mobility Plan

Richa Dave, Project Manager, Transportation Planning, Planning, Building and Growth Management, provided a verbal update regarding the Brampton Mobility Plan (Transportation Master Plan), which will guide investment and planning over a 20-year period. Information was provided in regard to the following:

- Alternative network solutions to address travel demand in an environmentally and economically sustainable manner
- Seven guiding principles endorsed by Council to guide and inform the plan and serve as the evaluation framework for assessing alternative network solutions
- Evaluation criteria metrics
- Phase 3 of the plan
- Upcoming public consultation/engagement opportunities in September and October 2024, and a request that the Environment Advisory Committee participate in, and help promote, these events

In response to concerns from a Committee Member regarding e-scooters, Richa Dave advised that staff are gathering information and feedback to evaluate the e-scooter pilot project and will provide a recommendation to Council in this regard. In addition, it was noted that e-scooters are not permitted on sidewalks and staff are aware of instances of non-compliance.

Sherry-Ann Ram, Co-Chair, advised that the City has an Active Transportation Advisory Committee (ATAC), which deals with these types of issues/concerns, and staff confirmed this verbal update will also be provided to the ATAC.

The following motion was considered.

EAC022-2024

That the verbal update from Richa Dave, Project Manager, Transportation Planning, Planning, Building and Growth Management, to the Environment Advisory Committee Meeting of August 6, 2024, re: **Brampton Mobility Plan**, be received.

Carried

- 6.3 Verbal Update from Karline McCawley, Environmental Project Specialist, Planning, Building and Growth Management, re: Dearbourne Pollinator Habitat Update and Upcoming Events

Karline McCawley, Environmental Project Specialist, Planning, Building and Growth Management, provided an update regarding the Dearbourne Pollinator Habitat, which included information on the current state of the habitat, phase two plantings, and the monthly community stewardship events. Karline advised that the phase two planting event is taking place on September 21, 2024 and invited Committee Members to participate.

The following motion was considered.

EAC023-2024

That the verbal update from Karline McCawley, Environmental Project Specialist, Planning, Building and Growth Management, to the Environment Advisory Committee Meeting of August 6, 2024, re: **Dearbourne Pollinator Habitat Update and Upcoming Events**, be received.

Carried

7. Sub-Committees

- 7.1 Minutes - Engagement Sub-Committee - July 17, 2024

Shailly Prajapati and Brajgeet Bhathal, Engagement Sub-Committee Members, provided an overview of the July 17, 2024 meeting and outlined the need for staff support and guidance with respect to event participation, community outreach, and collaboration with organizations such as the Brampton Environmental Alliance (BEA).

Pam Cooper, Manager, Environmental Planning, Planning, Building and Growth Management, responded to questions with respect to establishing a new program to engage newcomers, collaborating with organizations on existing programs, and suggested that the Engagement Sub-Committee develop a workplan.

The following motion was considered.

EAC024-2024

That the **Minutes of the Engagement Sub-Committee Meeting of July 17, 2024**, to the Environment Advisory Committee Meeting of August 6, 2024, be approved.

Carried

8. Other New/Business

Nil

9. Correspondence

Nil

10. Question Period

Nil

11. Public Question Period

The public was given the opportunity to submit questions in person or via e-mail to the City Clerk's Office regarding any decisions made at this meeting. Sonya Pacheco, Legislative Coordinator, confirmed there were no questions from the public.

12. Adjournment

The following motion was considered.

EAC025-2024

That the Environment Advisory Committee do now adjourn to meet again for a regular meeting on Tuesday, October 1, 2024 at 6:00 p.m. or at the call of the Chair.

Carried

Raman Vasudev – Co-Chair

Sherry-Ann Ram – Co-Chair



Report
Staff Report
 The Corporation of the City of Brampton
 9/4/2024

Date: 2024-08-13

Subject: **Updating User Fee By-law 380-2003 - Routine Disclosure**

Contact: Janice Adshead, Deputy Clerk, City Clerk's Office

Report number: Legislative Services-2024-668

RECOMMENDATIONS:

1. That the report from Janice Adshead, Deputy Clerk, City Clerk's Office to the Committee of Council Meeting of September 4, 2024, re: **Updating User Fee By-law 380-2003 – Routine Disclosure**, be received;
2. That a by-law be brought forward for Council's consideration to amend User Fee By-law 380-2003, as amended, for the purpose of adding fees for the routine disclosure of records related to:
 - I. By-Law and Enforcement;
 - II. Closed Circuit Television (CCTV) video; and
3. That the fees identified in Attachment 1 be included in the proposed by-law to amend the User Fee By-law.

OVERVIEW:

- Under MFIPPA, there are established processes and costs associated with the production and preparation of information requested under the Act.
- The City of Brampton is seeing a marked increase in volume and complexity of requests for By-law and Enforcement records, as well as CCTV video footage.
- A new, Routine Disclosure process and fee structure has been identified to streamline the receipt, review and dissemination of these records.
- Pending Council approval, the recommendations in this report will result in incremental revenues of approximately \$5,000.

BACKGROUND:

The *Municipal Freedom of Information and Protection of Privacy Act* (MFIPPA) provides the public a formal right of access to records that are within the City's custody or under its control, subject to limited and specific mandatory and discretionary exemptions to disclosure.

While MFIPPA sets out a process for formal requests under the Act, the City has the right to release records in response to requests made in the absence of a formal request under the Act. This informal release of information is referred to as Routine Disclosure (RD).

Under MFIPPA, the fees that can be applied are prescribed, and have not been updated since the legislation was enacted in 1991. The application fee is \$5 per request.

CURRENT SITUATION:

Year over year, there has been an uptick in the volume of requests received by the Access and Privacy team. In 2024, the number of requests has risen dramatically, in part resulting from an increased number of Enforcement Officers and a rise in the number of CCTV cameras in use within the City.

In 2023, of the 216 requests for access to information that were received, 24% were for By-law and Enforcement records, and 12.5% were for CCTV video. To date in 2024, of the 174 requests that were received, 28% were for By-law and Enforcement records, and 18% were for CCTV video.

Implementing a RD process for Enforcement and CCTV should result in a decrease in the number of formal requests received under MFIPPA. It will also allow the City to charge an appropriate and standardized fee for records using a cost-recovery model. Should the requestor not receive all the information they are seeking, or should they seek information that is not made available through RD, they then have the right to submit a formal Access to Information request under MFIPPA.

Regardless of if a request comes through a RD process, or through a formal Access to Information Request, the same requirement to protect personal information would apply, and appropriate redactions would be made prior to any release of information.

Formalizing a RD process and user-fee for Enforcement and CCTV information has many benefits including:

- recovering costs to produce records;
- reducing administration efforts such as removing the need to produce acknowledgement letters, decision letters, index of records, and statistical reporting to the IPC;
- removing legislated restrictions such as 30-day timeframes;

- improving transparency and accessibility; and
- providing the City with a streamlined approach to releasing information.

Currently the City routinely discloses information through informal channels for building permits, plans and drawings; site plans; fire occurrence reports; and environmental records all of which charge between \$5 - \$149, as per the User Fee By-law.

CORPORATE IMPLICATIONS:

Financial Implications:

Pending Council approval, the recommendations in this report will result in incremental revenues of approximately \$5,000.

Staff will continue to monitor the impacts and adjust future budgets if necessary.

STRATEGIC FOCUS AREA:

This report achieves the Government & Leadership strategic focus area by ensuring that user fees are reflective of current operations and achieve cost-recovery for commonly requested information.

CONCLUSION:

The City will continue to review efficiencies for the Routine Disclosure program and implement and/or adjust user fees on a regular basis as required. The fees associated with RD will be included within the User Fee By-law going forward.

Authored by:

Reviewed by:

Janice Adshead
Deputy Clerk
City Clerk's Office

Genevieve Scharback
City Clerk
City Clerk's Office

Approved by:

Approved by:

Laura Johnston
Commissioner, Legislative Services

Marlon Kallideen
Chief Administrative Officer

Attachments:

- Attachment 1 – Draft User Fee By-Law 380-2003 Amendment



THE CORPORATION OF THE CITY OF BRAMPTON

BY-LAW

Number _____ - 2024

To Attachment 1 - Draft User Fee By-Law 380-2003 Amendment.docx

WHEREAS The Corporation of the City of Brampton has enacted User Fee By-law 380-2003 including Schedule D thereto, which sets out fees related to the Legislative Services Department;

AND WHEREAS the Council of the Corporation of the City of Brampton, through by By-law No.102-90, subsequently included in Administrative Authority By-law 216-2017 designated the powers and duties of the Head to the City Clerk;

NOW THEREFORE the Council of The Corporation of the City of Brampton ENACTS as follows:

1. That User Fee By-Law 380-2003, a amended, is hereby amended by adding to Schedule D (Legislative Services Division User Fees & Charges), the following:

Goods and/or Services	Fee Unit	Tax Applicable	Current	Fee Applicable as of Effective Date	Effective Date
Routine Disclosure					
By-Law and Enforcement Records	Per Document	No	N/A	\$75.00	October 1, 2024
CCTV Video Footage	Per 15 minutes (or part thereof)	No	N/A	\$125.00	October 1, 2024

ENACTED and PASSED this [enter date] day of [enter month], 2024.

Approved as to
form.
20 __/month/day
[insert name]

Patrick Brown, Mayor

Approved as to
content.
20 __/month/day
[insert name]

Genevieve Scharback, City Clerk

(file reference, if applicable, or delete)