

CLIMATE READY BRAMPTON

DRAFT CLIMATE CHANGE ADAPTATION
PLAN FOR THE CITY OF BRAMPTON

EAC Meeting APRIL 1, 2025



Land Acknowledgement

We respectfully acknowledge that this plan was developed on the treaty lands and territory of the Mississaugas of the Credit, as well as the traditional territory of the Haudenosaunee and Wendat. These Nations, alongside all Indigenous Peoples, have lived on and stewarded the land now known as the City of Brampton for generations and continue to call this place home.

Brampton recognizes the commitments made in Treaty 19 – the Ajetance Purchase of 1818 – and reaffirms its responsibility to reconciliation through meaningful action grounded in truth, justice, and respect. The agreements of peace and friendship made in the Covenant Chain remind us of our shared duty to care for the lands and waters that sustain us, in partnership with Indigenous Peoples.

Brampton acknowledges that climate change poses a growing threat to these lands, waters, and communities. As we develop sustainable policies and practices, we commit to honoring Indigenous knowledge systems, addressing climate impacts, and working to restore a reciprocal relationship with the environment.

We express deep gratitude to the original caretakers, whose stewardship has allowed us to live, work, and play in Brampton today and into the future. Their teachings remind us that climate action is not only a necessity but a responsibility we must uphold for future generations.



Climate Impacts on the Rise in Brampton

- 2019
 - Extreme snowfall
 - Flash flooding
- 2022
 - Churchville Flooding
 - Extreme Wind Event
- 2023
 - Extreme Heat Event
- 2024
 - July flooding event



Climate Change in Local News

Storm that swept through Mississauga and Brampton became category-2 tornado in Uxbridge

Pickering | Brampton | Durham | Mississauga | Community | Latest News | Weather

By Nathan Sager

Published May 24, 2022 at 6:45 pm

Toronto & GTA

Flooding causes extensive damage, evacuations in **Brampton**

Postmedia News

Published Feb 17, 2022 • 2 minute read

Ontario's Special Advisor on Flooding Report to Government

An Independent Review of the 2019 Flood Events in Ontario

A Report to the Hon. John Yakabuski, Minister of Natural Resources and Forestry

Brampton residents grappling with flood damage after area pelted with month's worth of rain

100 mm dumped on north Brampton; normal monthly rainfall at Pearson Airport is 78

CBC News · Posted: Aug 22, 2022 5:28 PM EDT | Last Updated: August 22, 2022

Extreme heat warning extended in Mississauga and Brampton

+ PREFERRED REGION Mississauga | Brampton | Health | Weather

By Karen Longwell

Published July 5, 2023 at 9:04 am

Churchville Brampton Flooding

Flooding in Brampton community prompts evacuation, around 100 homes affected

"This flooding is going to leave some devastation," Brampton Mayor Patrick Brown said.

CANADA | FEB 17, 2022

'Stuck in the snow': Several cars on this Brampton street left spinning their wheels

City of Brampton said crews are working hard to clear roads within 24 hours after snowfall



By Louie Rosella Brampton Guardian



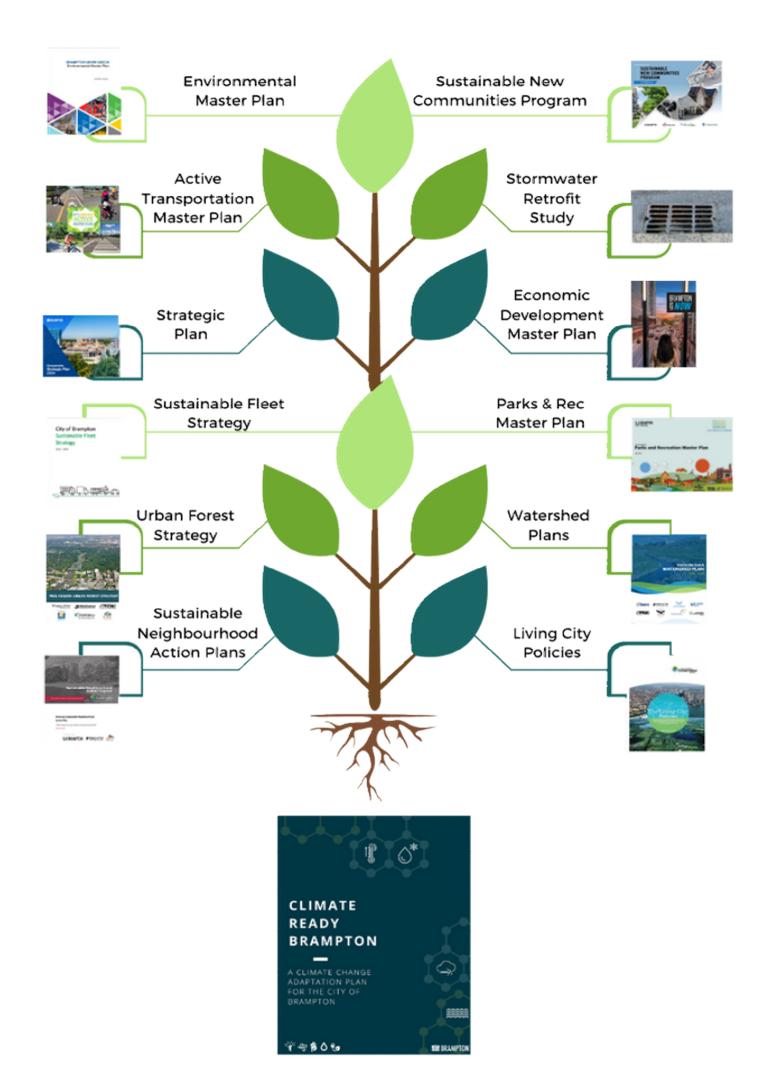
Highways and roads reopen after flooding in Brampton and Mississauga



+ PREFERRED REGION @ Mississauga | Brampton | Latest News | Traffic | Weather

By Karen Longwell

Published July 17, 2024 at 7:46 am



Climate Ready Brampton

A 5-year Plan, to help Brampton and its communities prepare for and be resilient to future climate change impacts.

- Builds on Brampton's existing climate action to date
- Updates to existing programs, initiatives, plans and policies and recommendations for new actions
- Collaboration and partnership with City departments and external stakeholders

CRB: Brampton's Response to the Climate Crisis

Brampton City Council Declares Climate Emergency

by Dylan Olley on June 6, 2019 in News, Hot Topics, Politics







The Brampton City Council is looking to take action against climate change.

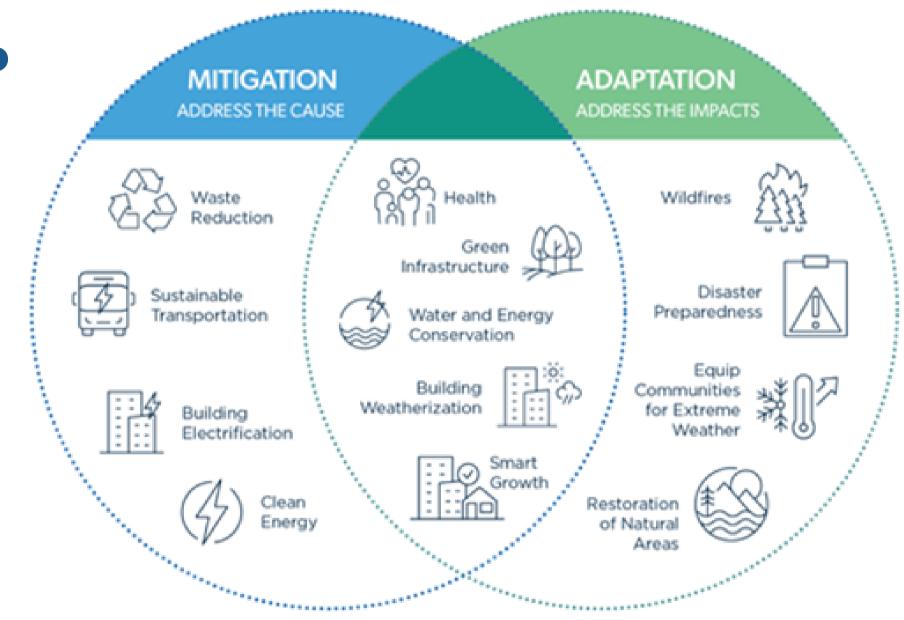
Adaptation vs. Mitigation

Climate Adaptation

Reducing our vulnerability and risks to the harmful impacts of climate change and building resilience

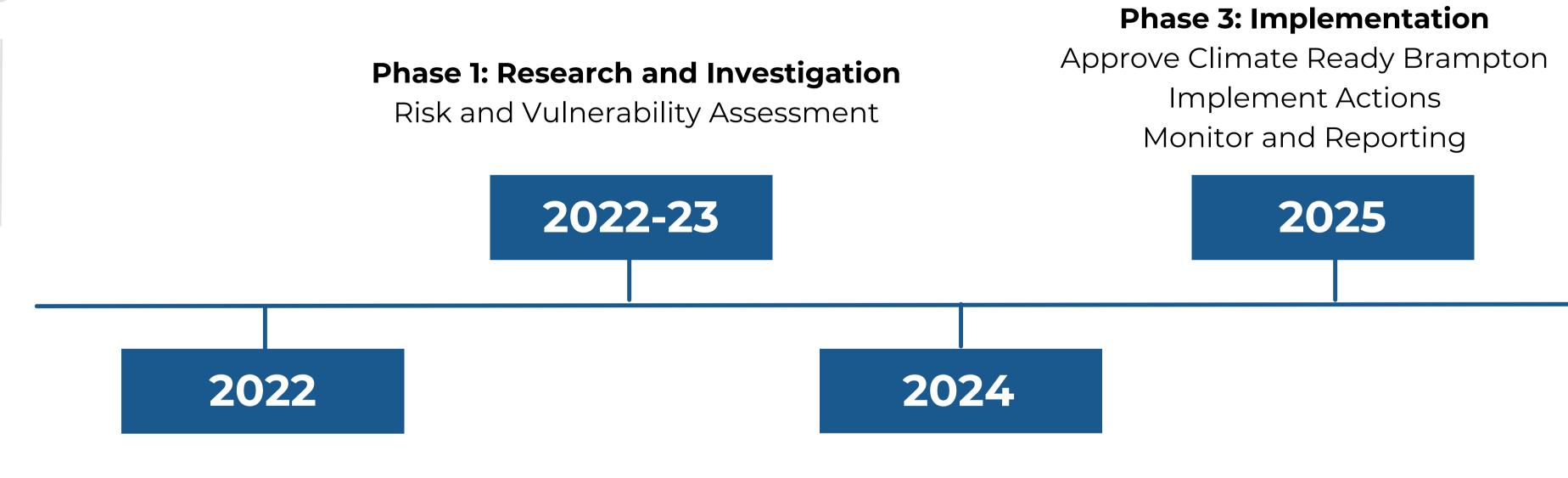
Climate Mitigation

Reducing greenhouse gases by reducing our source of emissions and enhancing carbon sinks



Plan Development Approach

Project Initiated

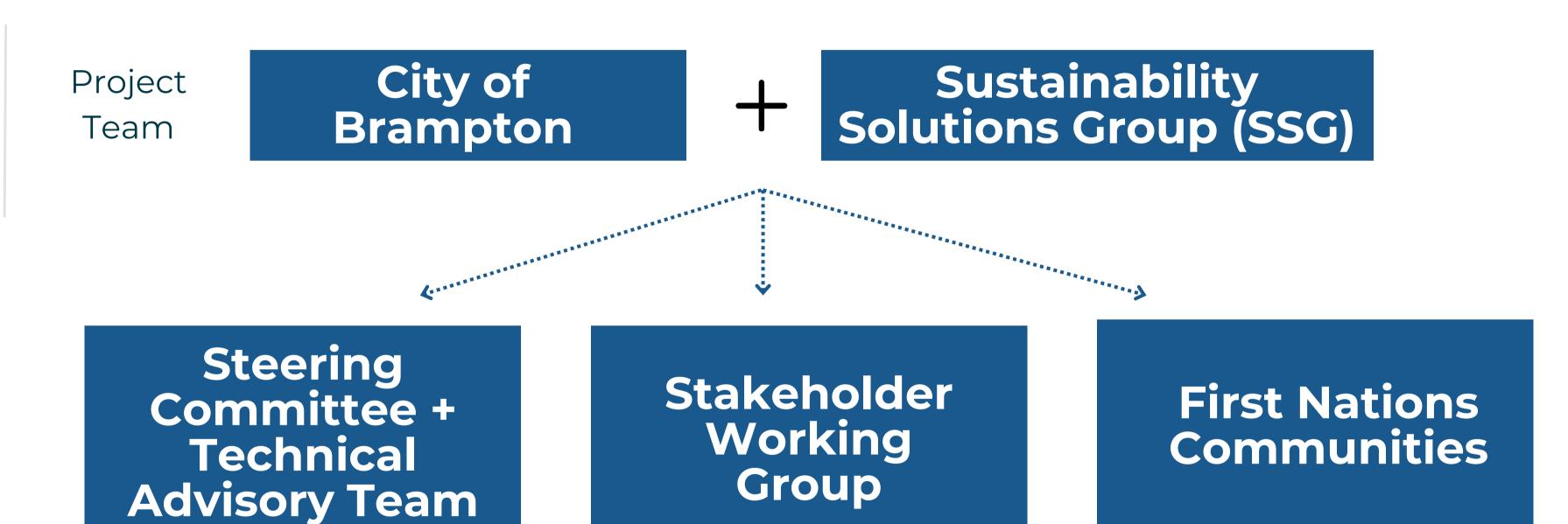


Phase 2: Plan Development

Develop Vision, Goals, Objectives, Actions Prepare Draft Adaptation Plan



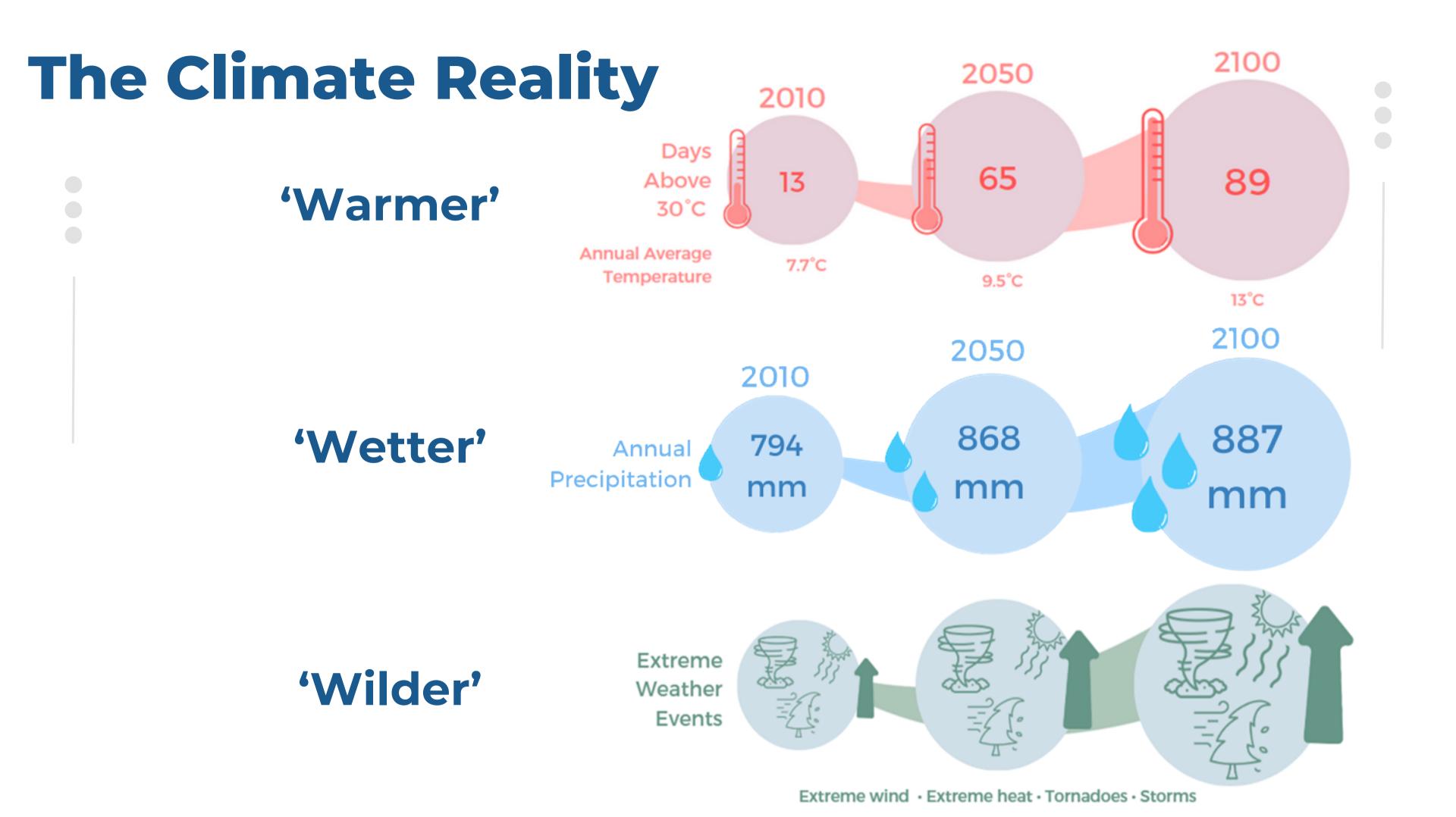
Project Team and Engagement Structure



Engagement

- Initial (pre) meeting with Six Nations of the Grand River
- Climate Change Survey
- Climate Change Art Competition
- Climate Change Exhibition
- Pop-Up Events
 - Farmer's Markets
 - Shopper's World
 - Bramalea City Centre
- Recreation Centres
- Meeting with Mississaugas of the Credit FN and SNGR
- Draft Plan Public Consultation





Top Climate Risks



Riverine Flooding



Local Flooding



ExtremeHeat



Biodiversity Change



ExtremeWeather

Climate Impacts

Social

- Physical Impacts (e.g., Injury/death)
- Intensify existing conditions (e.g., asthma)
- Increased risk of heat stroke, heart attacks, respiratory infections, etc.
- Vector-Borne Diseases
- Mental Health Impacts (e.g., trauma, anxiety)

Environmental

- Intensify the loss of ecosystems and habitat
- Northward movement of species
- Changes to water quality and quantity
- Pest outbreaks and diseases

Infrastructure

- Increased risk of power outages
- Infrastructure
 damage and loss of
 assets
- Deterioration and erosion, shorter lifespan
- Increased
 maintenance and
 repairs

Economic

- Loss of productivity and services
- Disruptions and damages for businesses
- Impacts to tourism and associated activities
- Slow down in economic growth



Brampton will be a climate leader fostering resilient, low-carbon, and adaptable communities with thriving natural systems, climate-ready infrastructure, and a robust economy, that advances equity, innovation and quality of life both now and for future generations.

Theme 1

Collaborative Leadership

Theme 2

Protected and Connected People

Theme 3

Resilient and Healthy Natural Systems

Theme 4

Resilient Infrastructure and Buildings

Theme 5

Community
Involvement
and
Communication

Goals

- 1. Brampton is adaptable to future climate change impacts, which are predicted using the best available science and climate data
- 2. The most vulnerable people, communities, and places are prioritized for climate action
- 3. Climate resilience is the new normal, where the City, its partners, neighbourhoods and generations work together to protect each other
- 4. The economy of Brampton thrives as people, businesses, and industries are prepared for climate emergencies and longer-term climatic changes
- 5. Strong partnerships enhance efficient and effective climate resilience action
- 6. Measurable, clear targets guide the work of climate adaptation, and progress is transparently reported

Collaborative Leadership

Objectives:

- 1. Municipal staff are prepared, informed and have all required tools
- 2. The City is a leader in climate resilience

- Climate lens in budgeting and asset management
- Train staff on climate adaptation through Climate Change Seminar Series
- Undertake departmental risk assessments



Protected & Connected People

Objectives:

- 1. Emergency Planning ensures people are prepared for climate disasters
- 2. Equity-deserving people are prioritized
- 3. Moving about the city is simple and safe in all conditions

- Create a climate toolkit for local businesses
- Review / update Emergency Management
 Plans
- Free fare during extreme weather

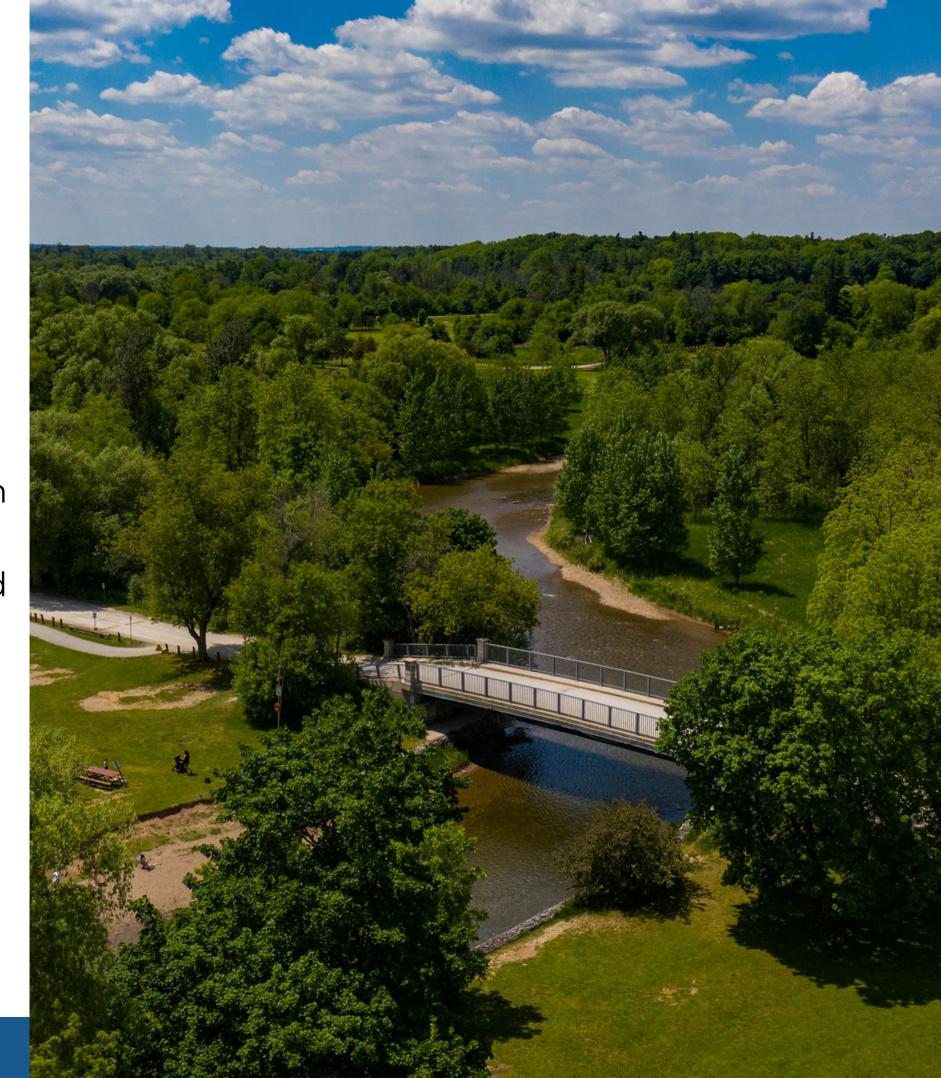


Resilient & Healthy Natural Systems

Objectives:

- 1. Natural spaces help protect Brampton from climate impacts
- 2.The natural heritage system is healthy, connected and thriving

- Tree canopy and natural cover policies and targets that factor in climate change
- Natural Systems Asset Management
- Wetland Health and Restoration Study

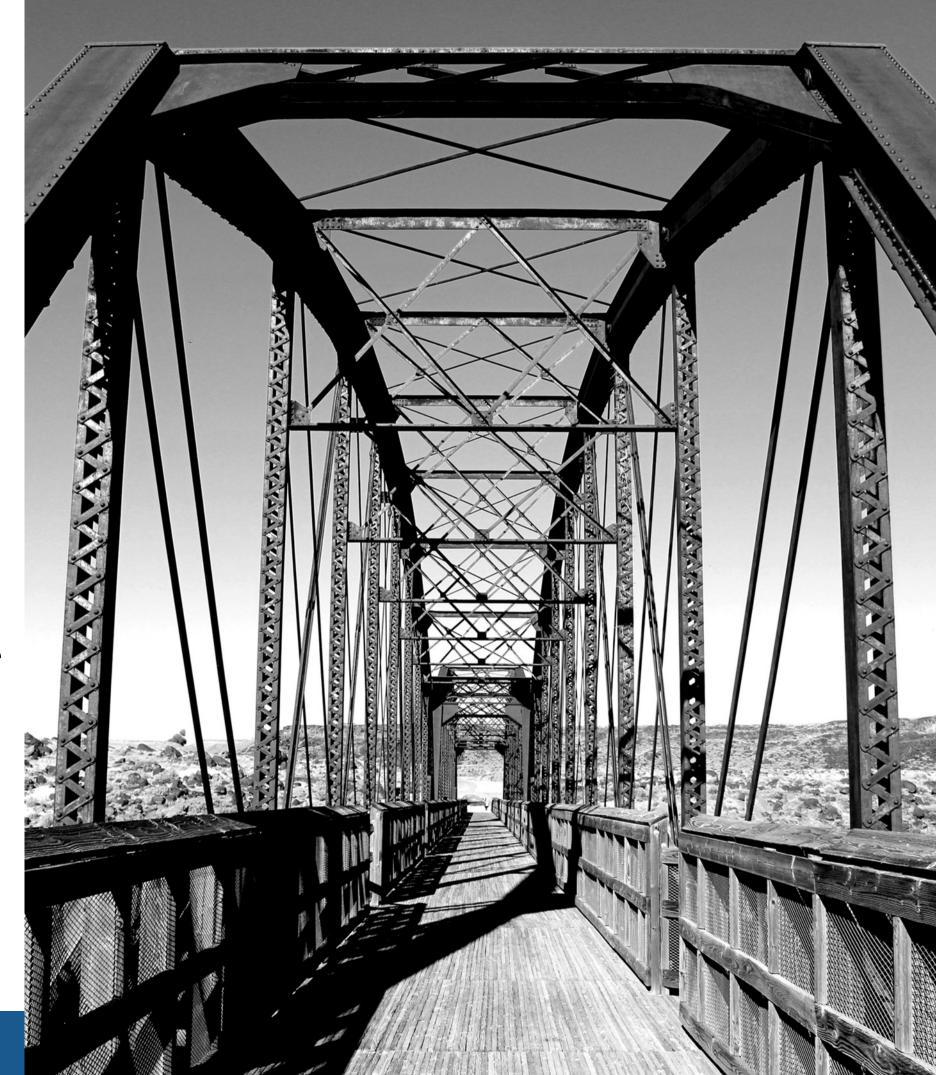


Resilient Infrastructure & Buildings

Objectives:

- 1. Essential infrastructure is resilient
- 2. Community is safe in their daily life
- 3. Businesses and ICI buildings are resilient
- 4. New construction can withstand climate impacts
- 5.Existing buildings are updated to increase resilience

- Integrating Adaptations into a retrofit program
- Culvert Replacement Study
- Community-scale energy storage



Community Involvement & Communication

Objectives:

- 1. The community is involved in climate action
- 2. Brampton is prepared for climate emergencies
- 3. Emergency comms. keep the community safe

- Incentivizing resilient energy systems
- Home Preparedness Education Program
- Integrating Emergency Preparedness into the City's IDEA (Inclusion, Diversity, Equity, and Anti-Racism) initiatives



Tracking Metrics & Targets

- 22 Metrics across 5
 themes
- 24 Targets linked to associated metrics
- Ongoing, continuous state of vulnerability and risk reduction

Community Involvement & Communication



TRACKING METRICS

TARGETS

- Number of stormwater storage interventions installed.
- Number of resilient retrofits completed
- Number of collaborative projects with an equity checklist.
- Number of locations with free emergency water supply.
- Number of community partnerships for resilience engagement.

- → 90% of homes at risk of basement flooding have backflow preventers by 2030; 100% by 2035
- → 100% of existing dwellings by 2035
- → 100% by 2026
- → To be determined, based on needs assessment
- → Number should be stable or increasing annually (2024 baseline)

: Implementation Strategy

- Five-year action plan
- Actions for each Theme
- Identifies leads and partners
- Demonstrates Mitigation cobenefits
- Example Short-Term Actions (i.e. 1-3yrs):
 - Develop a Climate Lens
 - Stormwater incentives
 - Update Cooling CentresStrategy

COMMUNITY INVOLVEMENT AND COMMUNICATION					
Action	Timeline	Cost	City Lead	Partners	Mitigation Co- Benefits
Objective 1: Brampton is prepared for climate emergencies					
Integrate Emergency Preparedness into IDEA: Integrate climate change and emergency preparedness in the City's IDEA (Inclusion, Diversity, Equity, and Anti-Racism) initiatives.	Short	\$	Equity Office	Region of Peel	
Define 'Equity-Seeking' Population with Brampton Equity Office: Expand the definition for equity-deserving populations to include individuals at increased risk for health problems and health disparities due to extreme weather events.	Short	\$	Equity Office	Cnsrvtn Auth.	
Develop Climate Equity Checklist: Develop a climate equity checklist to ensure plans and projects identify and help protect Brampton's most vulnerable populations, which should be used alongside any decision-making process to improve equitable outcomes.	Short	\$	Equity Office	Region of Peel, Cnsrvtn Auth.	
Incentivize Stormwater Storage: Develop an incentive program for residents to implement flood-proofing measures on their property (e.g., downspout disconnection, sump pumps, rain barrels, native species planting, grass swales, etc.)	Short	\$\$	Strmwtr Programs	Cnsrvtn Auth. Region of Peel	+
Incentives for Resilient Energy Systems: Develop incentive program for residents to undertake resilient, low-carbon energy retrofits. For example, providing incentives to residents to install heat pumps and energy storage increase energy efficiency, maintain energy demand, lower energy costs, and provide greater thermal comfort.	Medium	\$\$\$	Env Planning	CCET, Cnsrvtn Auth.	+

Moving Forward

- Municipal resources through corporate Green Team
- Develop Funding Opportunities Assessment
- Implement Action Plan
- Implement Short Term actions
- Ensure municipal policy/program alignment
- Continue staff training on climate change
- Develop a Climate Lens to integrate climate change into projects and decision-making
- Monitor progress and report back
- Communication and outreach



How Can EAC Help?

- Support and promote Climate Ready Brampton and the benefits of climate resilience to your networks
- Support Climate Ready Brampton and the financial funding opportunities assessment when presented to Council
- Support the City with the implementation of adaptation actions (e.g., community outreach and engagement)
- Participate in engagement activities related to Climate Ready Brampton

Thank You



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