

Etobicoke Creek Watershed Plan Overview and Key Messages

Presentation for: Mississauga Environmental Action Committee

Presented by:

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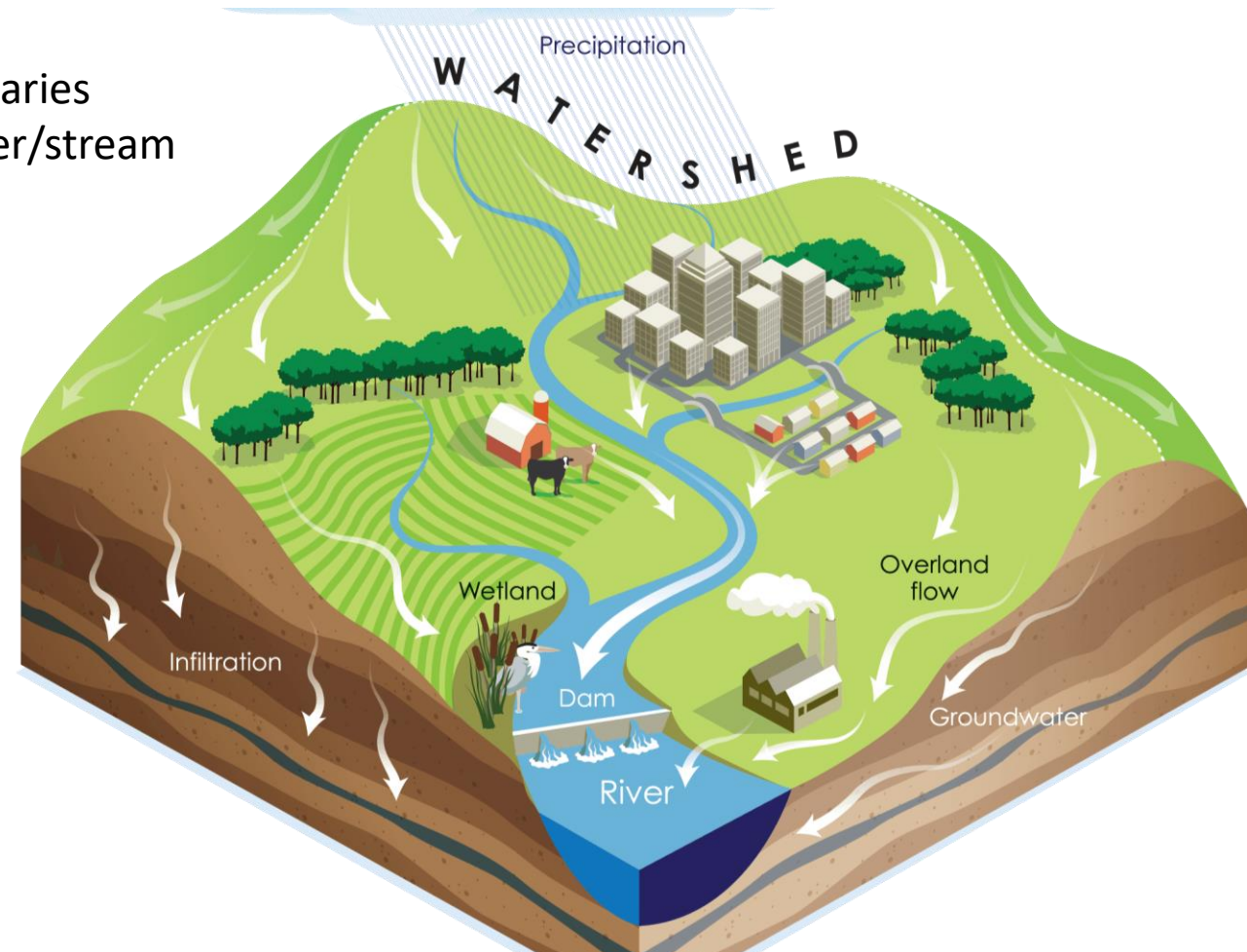
April 2, 2024

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 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 (GI) implementation, and climate adaptation
- Provincial plans and policies require municipalities to complete watershed plans, in partnership with Conservation Authorities



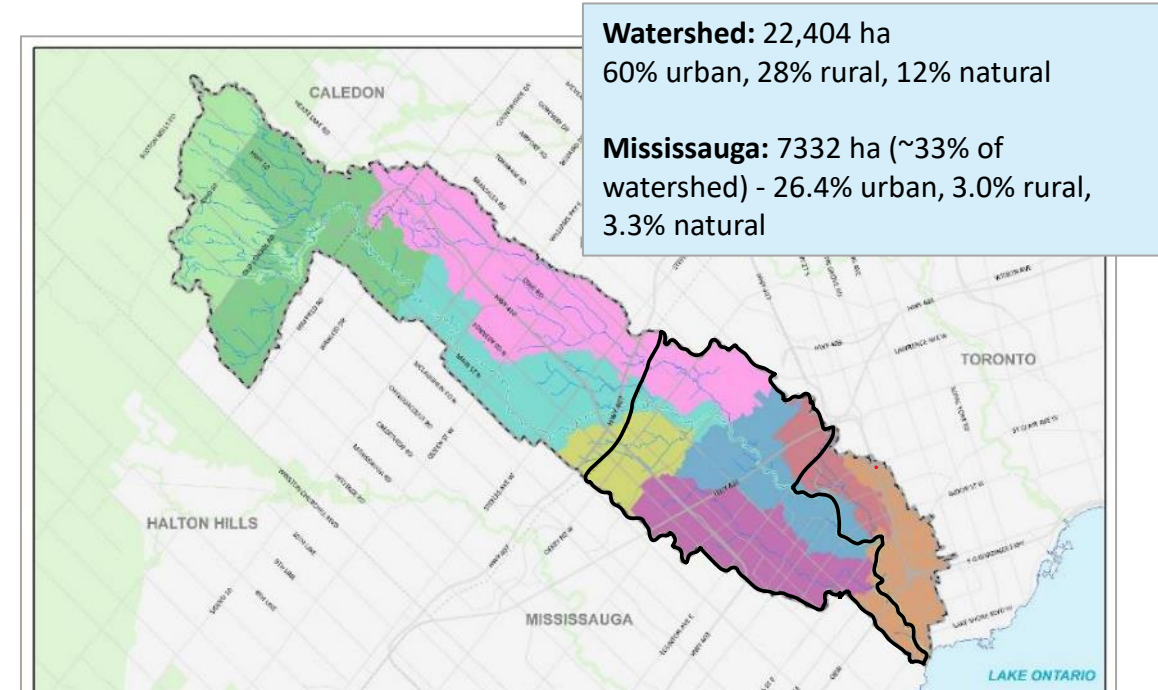
Etobicoke Creek Watershed Plan

Watershed Vision

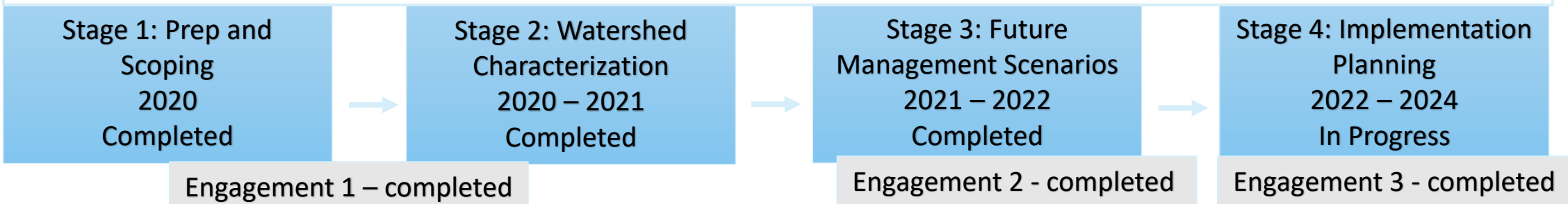
Etobicoke Creek watershed is protected and restored to a cleaner, healthier, and more natural state, to sustain its waterways, ecosystems, and human communities.

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



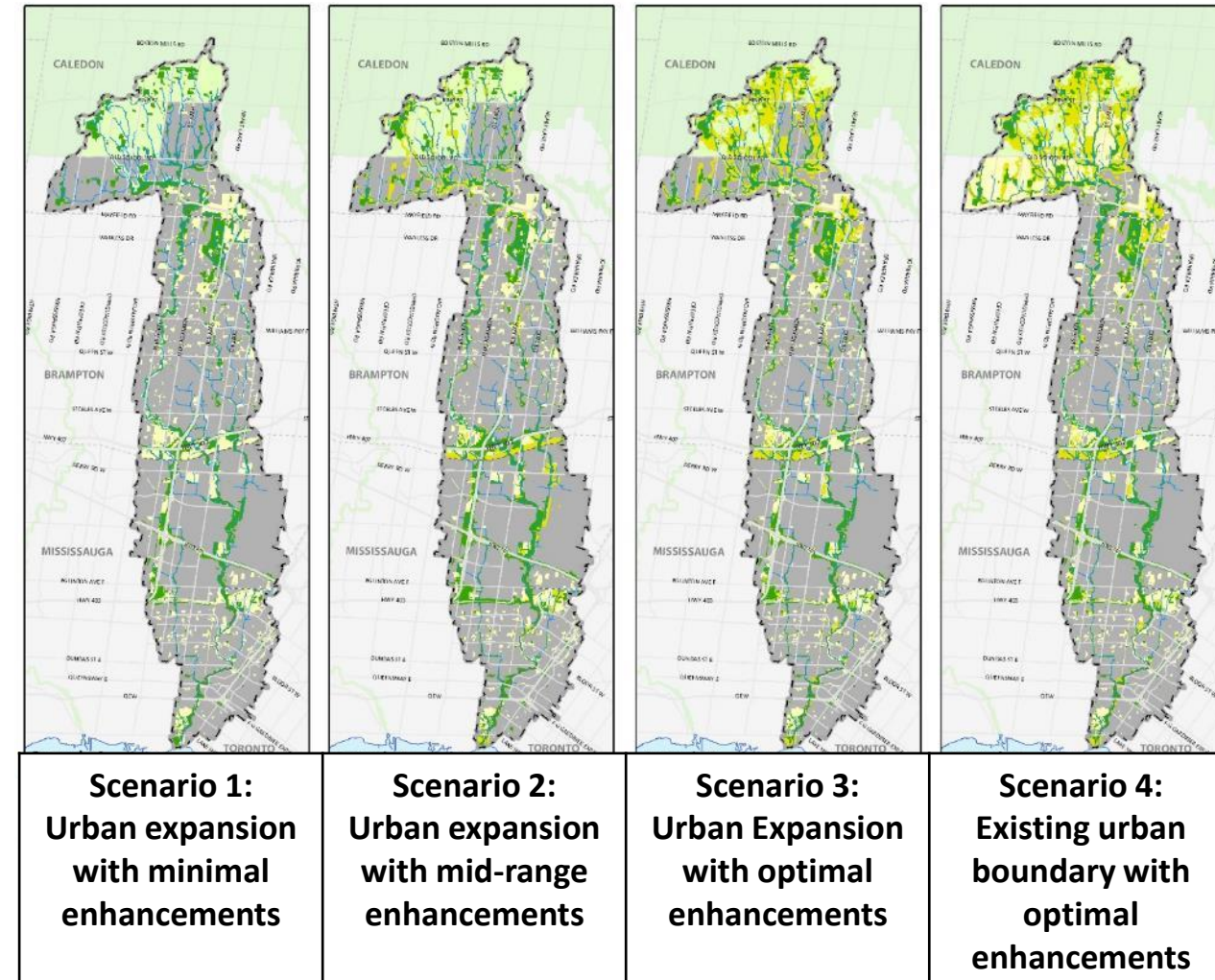
Key Findings: Watershed Characterization

Key Components	Watershed Characterization Key Findings
Water Resources	<ul style="list-style-type: none"> • Aquatic ecosystem is sensitive & poor 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 • Medium/high erosion sensitivity



Key Findings: Future Management Scenarios

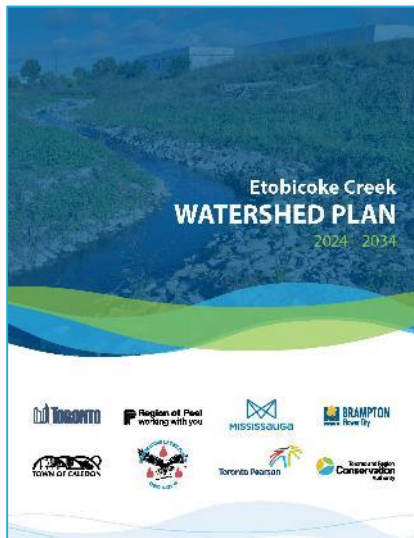
- Urbanization and climate changes negatively affected all four components of watershed health.
- However, the increasing levels of natural cover enhancements and stormwater management seem to help mitigate these impacts and increase climate resiliency.



ECWP Management Framework

ECWP Alignment with Mississauga's Policies and Plans

- Draft Mississauga Official Plan 2051
- Stormwater Master Plan (adopted 2023)
- Parks Plan (adopted 2022)
- Climate Change Action Plan (adopted 2021)
- Parks and Forestry Master Plan (adopted 2019)
- Natural Heritage and Urban Forest Strategy (adopted 2014)
- Living Green Master Plan (adopted 2012)



Management Framework Components

3 Goals

8 Objectives

10 Indicators

36 Management Actions

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.

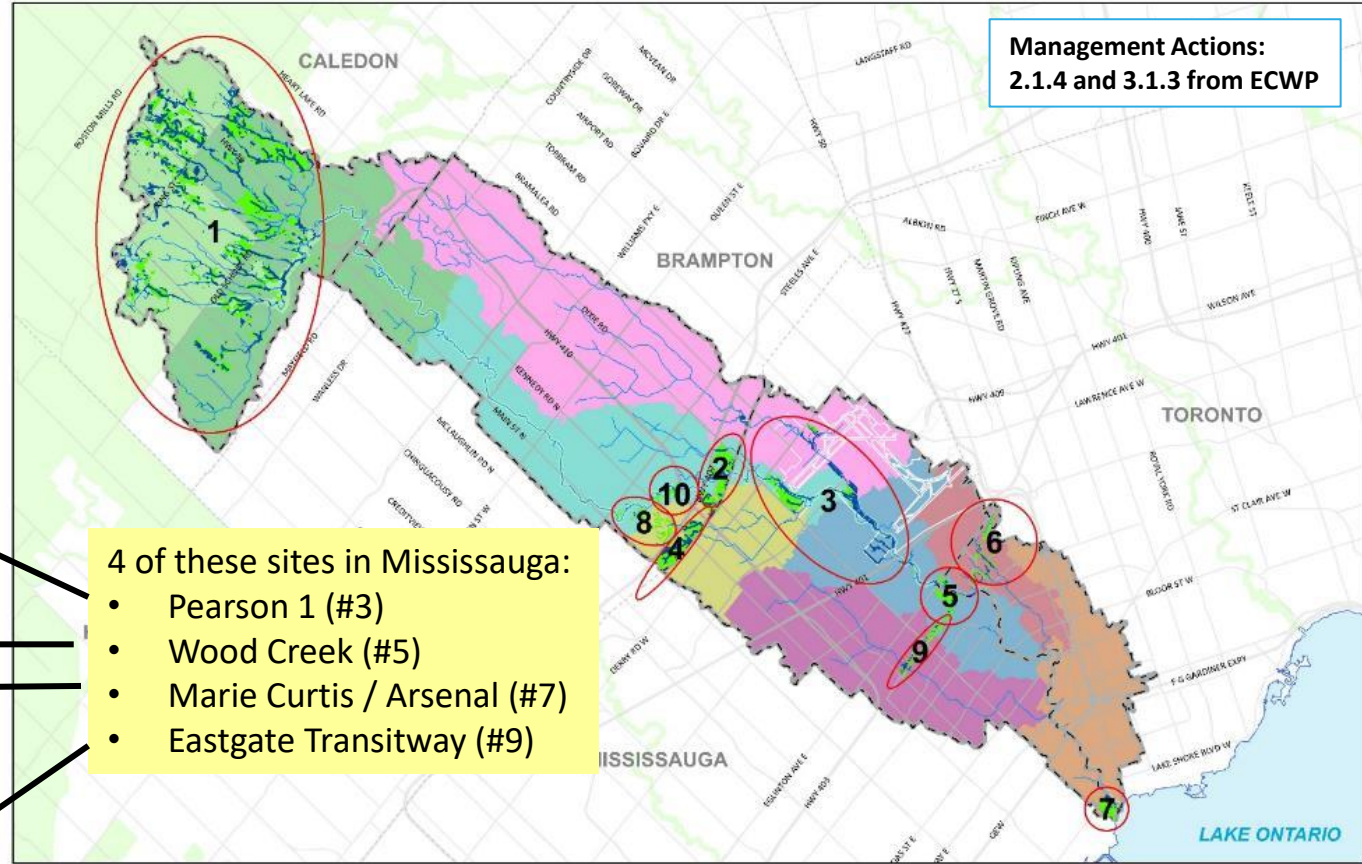
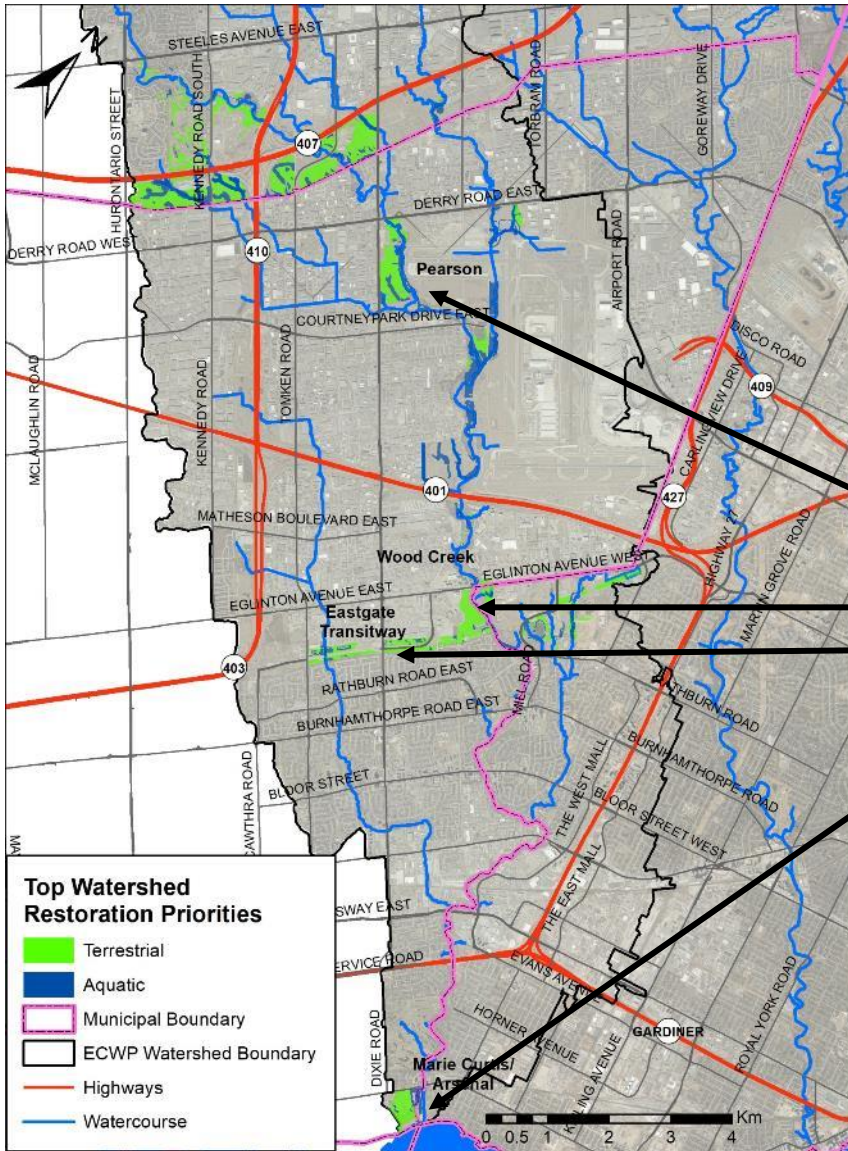
Indicator:

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



Draft ECWP Engagement: 60-day public review period (Aug. 1 to Sept. 29, 2023)

ECWP Priority Areas – Priority Restoration Sites



Created by: TRCA Information Technology and Records Management
Date: Monday, April 10, 2023

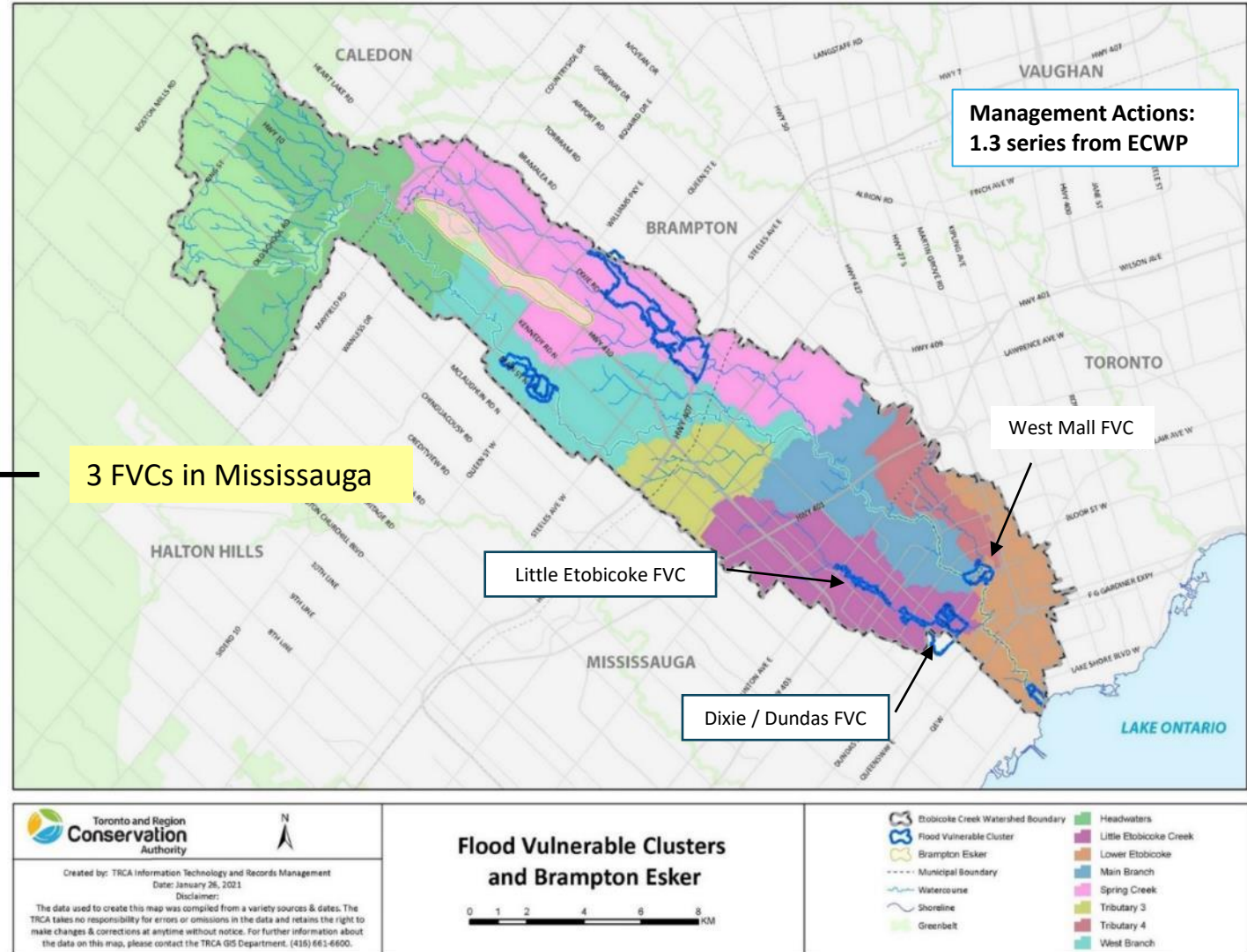
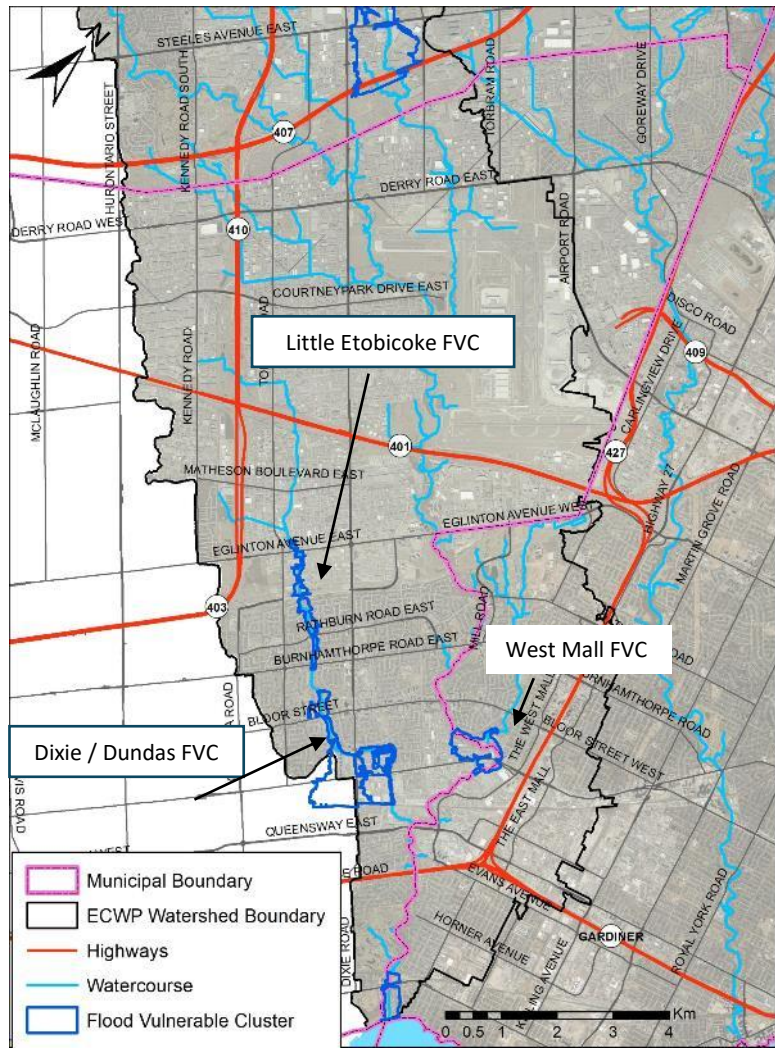
Disclaimer:
The data used to create this map was compiled from a variety of sources & dates. The TRCA takes no responsibility for errors or omissions in the data and retains the right to make changes & corrections at anytime without notice. For further information about the data on this map, please contact the TRCA GIS Department, (416) 661-6600.

**Etobicoke Creek Watershed Plan:
Top Watershed
Priority Restoration Sites**

0 1 2 4 6 8 KM

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

ECWP Priority Areas – Flood Vulnerable Areas

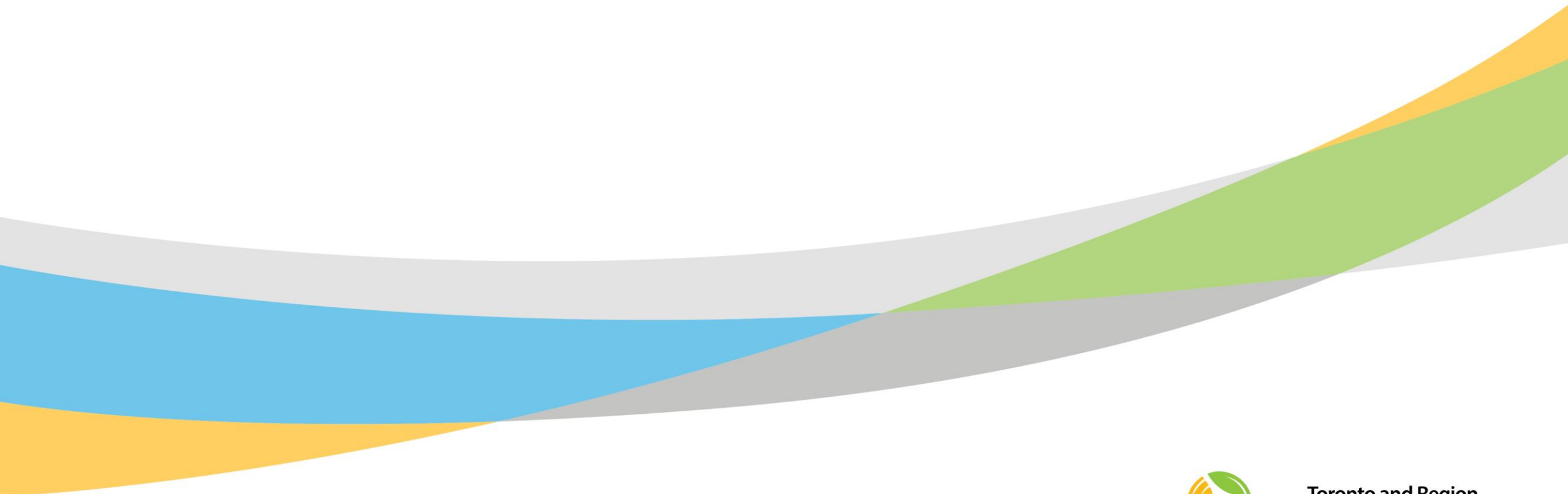


ECWP Next Steps

- Release updated ECWP and Engagement Summary – March/April 2024
- Seek approvals/endorsements/support of ECWP from other municipal partners (Peel, Toronto, Brampton, Caledon, GTAA) – Q2 2024
- Obtain final approval from TRCA’s Board of Directors and release final ECWP - ~September 2024
- Establish ECWP Implementation Steering Committee and implementation tracking mechanisms / tools – Q4 2024
- ECWP Implementation – 2024-2034



- **Updated ECWP:** [ECWP project webpage](#)
- **[Online interactive ECWP](#)**



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