## **Facts and Figures**

## What We Are Doing

Municipalities	Toronto, Peel, Brampton, Caledon, Mississauga
Tributaries	Spring Creek, Little Etobicoke Creek, West Etobicoke Creek
Length of Major Tributaries (km)	West Etobicoke – 42, Main Etobicoke – 17, Spring Creek – 23
Mean Stream Flow	2.3 m³/sec
Area (km²)	212
Population (2011)	286,360
Land Use	Rural — 22%, Urbanizing — 7%, Urban — 71%
Physiographic Regions	South Slope, Peel Plain, Iroquois Plain
Natural Cover	14% of the watershed has Natural Cover: Forest – 5%, Meadow – 8%, Successional – 1%, Wetland – 1%
Native Plant & Animal Species	Plants – 375, Fish – 23, Birds – 93, Amphibians – 8, Mammals –17, Reptiles – 7. Of these, 165 are Species of Regional Conservation Concern.



• From 2008 to 2012, TRCA planted 105,490 trees and shrubs in the watershed, actively restoring and enhancing those natural heritage areas identified as priorities. Healthy forests provide habitat for wildlife, help cool urban areas, retain water and reduce run-off, and capture CO<sub>2</sub> from the air to minimize the impacts of climate change.

• TRCA's County Court Sustainable Neighbourhood Retrofit Action Plan (SNAP) in the City of Brampton, is engaging approximately 1,000 single family homes in eco-friendly renovations that improve both water and energy efficiency inside and outside the home. SNAP is working with project partners to explore innovative stormwater management opportunities, such as a rainwater storage system for irrigating nearby golf courses and an institutional green parking lot design.

• Local municipalities are working with their snow and ice contractors to reduce the amount of salt applied on parking lots and exploring alternatives to traditional road salts to help improve water quality. Melting snow carries road salt and other contaminants into storm sewers and straight into Etobicoke Creek and Lake Ontario.

• TRCA in partnership with Greater Toronto Airports Authority (GTAA) and local businesses through Partners in Project Green is developing North America's largest eco-business zone within the Etobicoke and Mimico Creeks watersheds. The program aims to reduce the water footprint by investing in water efficient fixtures, recycling wastewater, harvesting rainwater for landscape irrigation and cooling operations, and installing permeable parking areas on the industrial lands surrounding Toronto Pearson International Airport.

• Urban forest studies have been completed for the cities of Brampton, Mississauga and Toronto, and the Town of Caledon; these studies have been completed through the collaborative efforts of TRCA, regional and local municipalities and neighbouring Conservation Authorities. The Region of Peel, together with Conservation Authorities and area municipalities, has developed an Urban Forest Strategy, and the City of Toronto has developed a Strategic Urban Forest Management Plan. Collectively these documents will provide strategic direction for sustaining and expanding the urban forest.

• The Region of Peel is working closely with TRCA to develop a web-based tool to track and manage hazardous spills in the region. Spills of chemicals, petroleum products, sewage and hazardous wastes pose a serious threat to water quality.

## What You Can Do

- **Divert** your downspouts away from paved areas and install a rain barrel to capture and reuse the rainwater that falls on your roof. This reduces run-off to sewers, prevents flooding and saves money on your water bill.
- **Reduce** or eliminate the use of salt, pesticides and fertilizers, which contaminate rivers, ponds and groundwater supplies.
- **Volunteer** for community tree plantings, litter pick-ups or other stewardship events. Register for a volunteer opportunity at: **www.trcastewardshipevents.ca**
- Become a Watershed Champion to protect, regenerate and celebrate the Etobicoke Creek watershed. Visit: **www.trca.on.ca/watershed-champion** to get involved.
- **Call** the Ministry of the Environment's 24-hour hotline (1-800-268-6060) to report spills so that they can be managed quickly and properly.

Donate to The Living City Foundation to support programs and initiatives in the Etobicoke Creek watershed at www.thelivingcity.org

> visit www.trca.on.ca/emcreeks and subscribe to the CreekTime Newsletter

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## **Etobicoke Creek Watershed** Report Card 2013



A watershed is the area of land that catches rain and snow, which drains or seeps into a marsh, creek, river, lake or groundwater. Watersheds are the collectors, filters, conveyers and storage compartments of our fresh water supply.

Toronto and Region Conservation (TRCA) has prepared this Watershed Report Card on the state of forests, surface water, groundwater and stormwater conditions.





## Where We Are



We are one of 36 Conservation uthorities across Ontario under the umbrella rganization of Conservation Ontario.

#### What Does this Report Card Measure?









#### Surface Water Oualit

orest Condition

#### Groundwater Ouali



#### Why Measure?

Measuring helps us better understand our watersheds. It helps us to focus our efforts where they are needed most and to track the progress made. It also helps us to identify ecologically important areas that require protection or enhancement.

#### What is a Watershed?



#### Grading



The standards used in this Report Card were developed by Conservation Authorities to ensure consistent reporting across the Province of Ontario. They are intended to provide watershed residents with the information needed to protect, enhance and improve the precious natural resources that surround us.

## **About the Indicators**

#### This Report Card provides a snapshot of some environmental conditions in the Etobicoke Creek watershed.

Monitoring, measuring and reporting helps us better understand the watershed, the progress we've made in protecting it and the threats to its future health. Tracking the environmental indicators used in this Report Card provides watershed residents, and the general public with the information needed to protect, restore and improve the precious natural resources within our watersheds. Where possible, an arrow is included alongside grades to show whether conditions are improving, getting worse, or stable.

#### What Does this Report Card Measure?

#### Surface Water Ouality

**Total Phosphorous** – High levels can trigger blooms of algae that choke waterways with plant life and deplete oxygen levels in watercourses.

*E. coli* Bacteria – Indicate the presence of untreated human or animal waste.

Benthic Macroinvertebrates (BMI) – Bottom-dwelling stream insect larvae, snails, crayfish and clams are sensitive to many pollutants. The presence or absence of certain invertebrate species reflects the water quality conditions.

#### **Forest Conditions**

% Forest Cover – Woodlands absorb run-off, filter out pollutants and increase biodiversity. They also help reduce the impacts of climate change.

% Forest Interior – Large blocks of forest cover provide homes for many sensitive species of birds and other animals.

**% Riparian Zone Forested** – Vegetation along watercourses keeps the water cool, prevents erosion and provides homes for many species.

#### **Groundwater Quality**

Nitrate and Nitrite – These contaminants come from agricultural manure, fertilizers and leaky septic systems, and may indicate a possible health threat. Chloride – High chloride levels indicate road salt may be reaching groundwater.

#### **Stormwater Management**

% of Developed Area with Stormwater Controls – Systems that manage the quantity and quality of stormwater run-off generated by our communities to protect watercourses. Stormwater management consists of practices that slow down, hold and reuse water.



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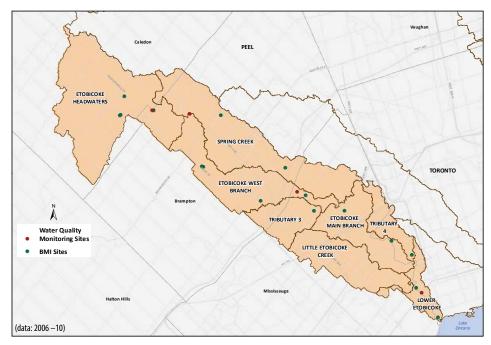


## Surface Water Quality

#### ndicators Total Phosphorous

*E. coli* Bacteria Benthic Macroinvertebrates (BMI)





The Etobicoke Creek watershed receives an overall water quality grade of "D," based on results from 15 monitoring sites. The "Poor" score reflects the fact that this watershed is 71% urbanized, with only fragments of the headwaters remaining rural.

The Upper Etobicoke Creek subwatershed monitoring site receives a slightly better E. coli grade ("C") than the two other monitoring sites in the lower reaches, however, BMI scores are poor across the watershed with seven sites receiving a "D" grade and five sites receiving a grade of "F." Phosphorus levels at all three water monitoring sites earn a "D" grade. Poor water quality affects both wildlife and human interaction with the watercourse



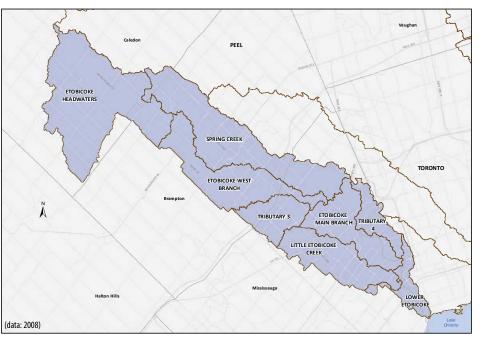




# **Forest Conditions**

dicators % Forest Cover % Forest Interior % Riparian Zone Forested



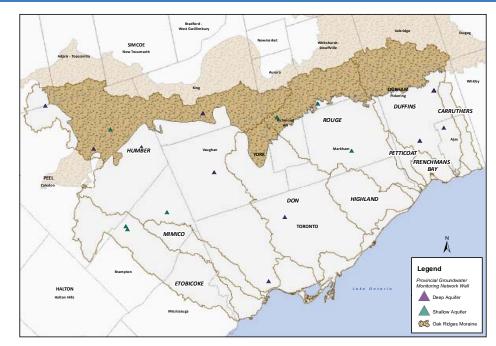


The Etobicoke watershed supports limited forest cover and receives an overall grade of "F." Currently, less than 5% of the watershed is forested. Approximately 20% of the existing streambank (riparian) cover is forest and one-tenth of one percent is the deeper, interior forest habitat.

The highest proportions of forest cover are found in the headwaters, where some sensitive bird and plant species are still found. However, these patches are highly fragmented. In the lower, heavily urbanized sections of the watershed, only those species that have adapted to urban conditions can be found in the limited forest cover. Significant action is needed to protect the existing forest cover, restore and expand forest areas, and achieve the targets set out in TRCA's Terrestrial Natural Heritage Systems Strategy.

### **Groundwater Quality** Indicators

#### Nitrate and Nitrite Chloride *Groundwater quality in the Etobicoke is not graded due to* insufficient data.



#### Overall, groundwater quality in TRCA's watersheds is "Good" with the best water quality found in the intermediate aquifer on the Oak Ridges Moraine.

The majority of the wells yield very good results for nitrates and nitrites, indicating little or no contamination from agricultural manure, fertilizers or leaky septic systems. However, several wells show chloride levels above the Canadian drinking water standard in urbanized portions of the watersheds, where road salt may be a factor or in deeper aquifers over shale bedrock that have naturally elevated chloride levels. There are 21 groundwater monitoring wells in the current monitoring network, concentrated in northern sections of TRCA's jurisdiction where wells still provide municipal drinking water. There is no data for the Mimico, Highland, Carruthers and Petticoat watersheds, and limited data for the other watersheds. Over time, TRCA intends to expand the network through partnerships with the Regional municipalities of Peel, York and Durham.

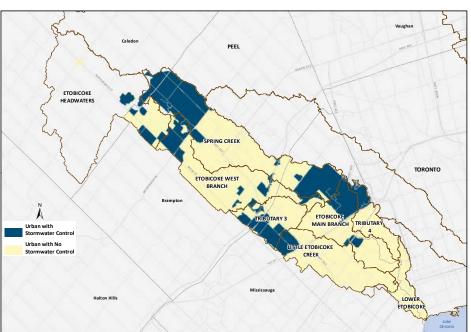
NO GRADE

F

#### Stormwater Management

#### Indicator

% of Developed Area with Stormwater Controls-Quality and Quantity (i.e., stormwater management pond)



#### As of 2013, only 28% of the urbanized area of the watershed has stormwater controls in place. As a result, Etobicoke Creek gets a "Very Poor" grade of "F" for stormwater management.

The highest levels of controls are found in the cities of Brampton and Mississauga within the Spring Creek subwatershed. The continued construction of stormwater management ponds and effective end-of-pipe controls, such as wetlands and storage tanks, are vital in restoring the health of the creek. Additional low impact development controls — such as rain gardens, green roofs and permeable parking lots that allow rainwater to seep into the ground would further reduce run-off.

