

WHAT IS AN IMPORTANT ISSUE IN OUR WATERSHED?



There are many issues threatening the local environment – from land use change to climate change. Each of the issues cumulatively has an impact on the ecological health of the watershed. We have highlighted one specific issue here.

Pollution of our waterways

- Sources of pollution include industry, wastewater treatment plants, residential practices, urban development and agriculture.
- Pollution comes from the choices we make. For example, when we apply fertilizers, pesticides or road salt to our land, these eventually wash into our nearby waterways.
- Warming stream temperatures is also a form of pollution.

What actions can you take to reduce pollution of our waterways?

- Seek green alternatives for things like fertilizers, pesticides, or road salt.
- Attend a [CVC Your Green Yard](#) workshop or book a consultation with [Region of Peel's Fusion Landscaping](#) to learn how to reduce pollutants leaving your property through sustainable landscaping.
- Reduce nutrients entering waterways by adopting agricultural best management practices such as managing manure.
- Properly dispose of harmful pollutants – check with your municipality for more information.

What local actions have been taken?

- Over 625 watershed residents a year learned to adopt sustainable landscaping practices in their yard with support from the City of Mississauga and the Region of Peel.
- Over \$870,000 has been invested to help farmers improve their agricultural practices to protect water quality since 2004. See [examples of what landowners have done to manage their properties to protect, enhance or restore the watershed.](#)
- CVC has supported approximately 30 [low impact development \(LID\)](#) projects in our watershed from small to large, residential to commercial applications. In the last three years, 1876 professionals have been trained in the implementation of LID.

HOW CAN WE ENHANCE THE WATERSHED?

What can you do?

- **Learn** about the local natural environment at a [CVC workshop](#) or join a local naturalist club.
- **Volunteer** your time, skills and energy.
- **Take action** on [your property](#). We offer technical advice and resources for corporations, and urban and rural landowners.
- **Donate** to the [Credit Valley Conservation Foundation](#).
- **Get involved** and attend meetings, join groups and stay informed. Make your voice count!
- **Explore** and appreciate our incredible local environment and be inspired to enhance, protect and restore.



What can agencies do?

- Develop strategies for managing [natural heritage systems](#) that include protection and connecting natural areas, managing invasive species and improving interior habitat.
- Adopt [low impact development \(LID\)](#) practices, and implement stormwater rates to help fund and manage stormwater resources.
- Continue to support [monitoring](#) the long-term changes in our environment to guide management recommendations.
- Provide services to the community to help them do the best they can on their properties.
- Walk the talk.

Do you have questions not answered by this summary document? Visit [cvc.ca](#) or contact us for more information.



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The Watershed Report Card is available online and in other formats upon request.

WHERE ARE WE?



What is a watershed?

A watershed is an area of land drained by a creek or stream into a river which then drains into a body of water such as a lake or pond. Everything in a watershed is connected. Our actions upstream can affect conditions downstream.

Why measure?

Measuring helps us better understand our watershed. We can target our work where it is needed and track progress. We measured:



Groundwater Quality



Surface Water Quality



Forest Conditions

GRADING

A Excellent
B Good
C Fair
D Poor
F Very Poor
Insufficient Data

What is a watershed report card?

Ontario's Conservation Authorities report on watershed conditions every five years. The watershed report cards use Conservation Ontario guidelines and standards developed by Conservation Authorities and their partners.

Credit Valley Conservation WATERSHED Report Card 2018



Credit Valley Conservation has prepared this report card as a summary of the state of our groundwater, forest and water resources.



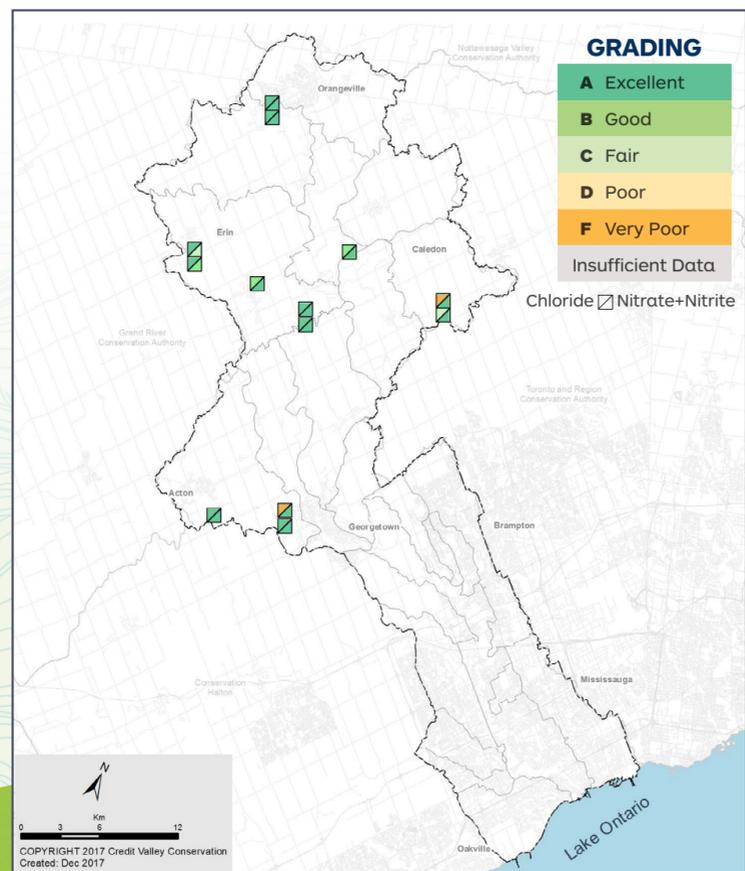


GROUNDWATER QUALITY

Concentrations of nitrate + nitrite and chloride were measured at 13 Ministry of the Environment and Climate Change wells. Learn more about groundwater in our watershed at cvc.ca/sourcewaterprotection.

What did we find?

- Grades range from A (Excellent) to F (Very Poor), with mostly A grades.
- Nitrate + nitrite concentrations are better than Ontario Drinking Water Standards (ODWS) in all wells sampled. No trends of increasing or decreasing concentrations are evident.
- Chloride concentrations are better than ODWS (aesthetic objective) in all wells sampled, except two wells located in the middle and lower watershed. These two wells showed exceedances in chloride, likely due to shallow aquifer conditions and use of road salt.
- Three wells in the upper watershed show increasing trends in chloride which is likely related to land use change.

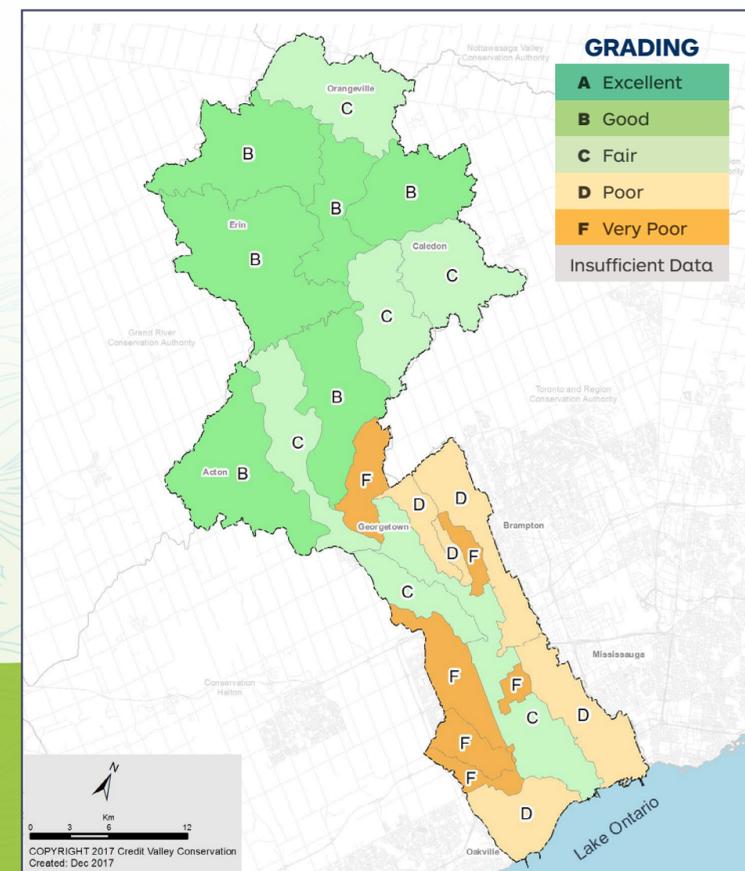


SURFACE WATER QUALITY

Graded based on water chemistry and benthic macroinvertebrates. Concentrations of phosphorus and Escherichia coli - a type of bacteria - were measured at Ministry of the Environment and Climate Change (MOECC) and Credit Valley Conservation stations. The type and number of benthic macroinvertebrates - small aquatic bugs living in the stream - are a measure of water quality.

What did we find?

- Grades range from B (Good) to F (Very Poor).
- Water quality in urban streams is worse than in rural streams, which can impact fish and aquatic life.
- A coordinated effort by residents, municipalities and industry to reduce pollution at its source and treat pollution before it enters a watercourse, will lead to improved water quality. To achieve this, actions such as implementing low impact development and enhancing and connecting natural areas must continue.

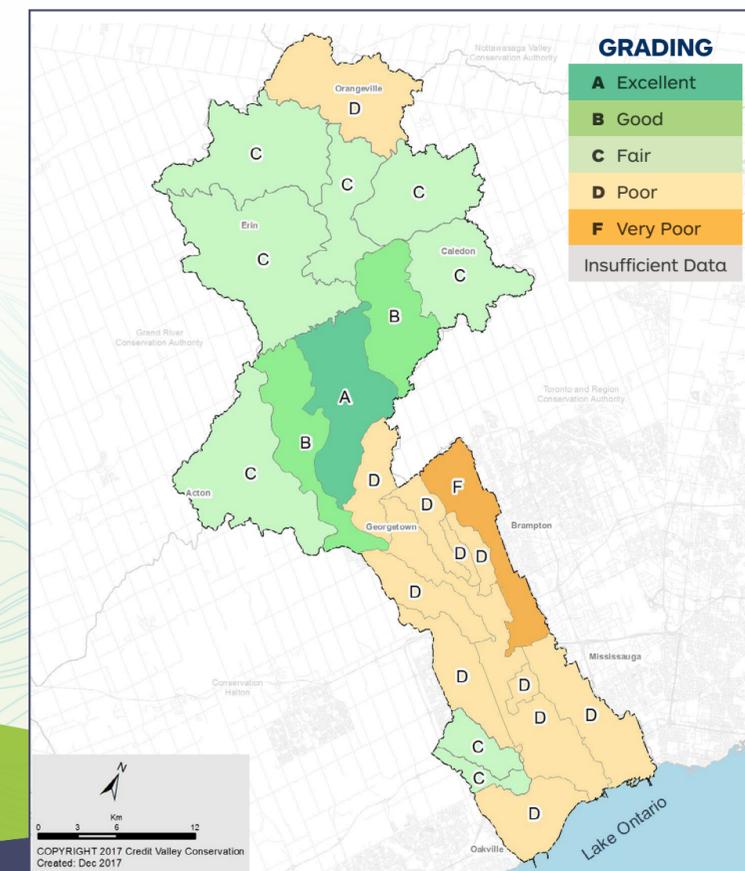


FOREST CONDITIONS

Graded based on the percentage of forest cover, forest interior and streamside riparian cover. These were measured based on an analysis of aerial photographs.

What did we find?

- Grades range from A (Excellent) to F (Very Poor), with most subwatersheds scoring C (Fair) or D (Poor).
- High-quality interior habitat away from forest edges is scarce.
- Forests grow slowly, but environmental benefits begin as soon as trees are planted. Changes in forest cover will be noticed in five years or more.
- While there is Good streamside riparian cover, there are opportunities to enhance its quality by planting trees. Trees moderate stream temperature and provide food for aquatic life.



WHAT'S TRENDING?

CVC's *Integrated Watershed Monitoring Program (IWMP)* has collected data for over 18 years. Here are some of the top stories our staff have discovered so far.



Brook trout are disappearing from our watershed. They are an important indicator species because they like cold, clean, well-oxygenated streams. Scientists across Ontario are seeing the same trend but are not sure why they are disappearing. We are working together to better understand the declines and to protect, restore and enhance Brook trout habitat.



Chloride concentrations are increasing in our waterways and groundwater. This pollutant is harmful to aquatic life in high concentrations. A common source of chlorides is road salt. When rain or snowmelt runs off our landscapes, it carries pollutants into our waterways and groundwater. Municipalities are adopting road salt management plans to reduce their impact on the environment. Check out *Smart About Salt* for tips on how you can reduce your salt usage.



Red-bellied woodpecker populations are increasing in the watershed. This is likely because of warmer winters and an increase in the number of backyard bird feeders. Red-bellied woodpeckers eat a variety of foods, including larvae of one of the most destructive invasive forest pests in North America, the *Emerald Ash Borer (EAB)*. Scientists believe that as the woodpeckers feast on EAB larvae, they slow the spread of this pest and reduce the devastating impacts the pest has on forest health. Wherever possible retain large trees and dead wood to protect habitat for these resident birds.