

Ganaraska Region

Watershed Report Card 2023



Ganaraska Region Conservation Authority (GRCA) has prepared this report card as a summary of the state of your forests and water resources.



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.



Ganaraska Conservation SURFACE WATER QUALITY

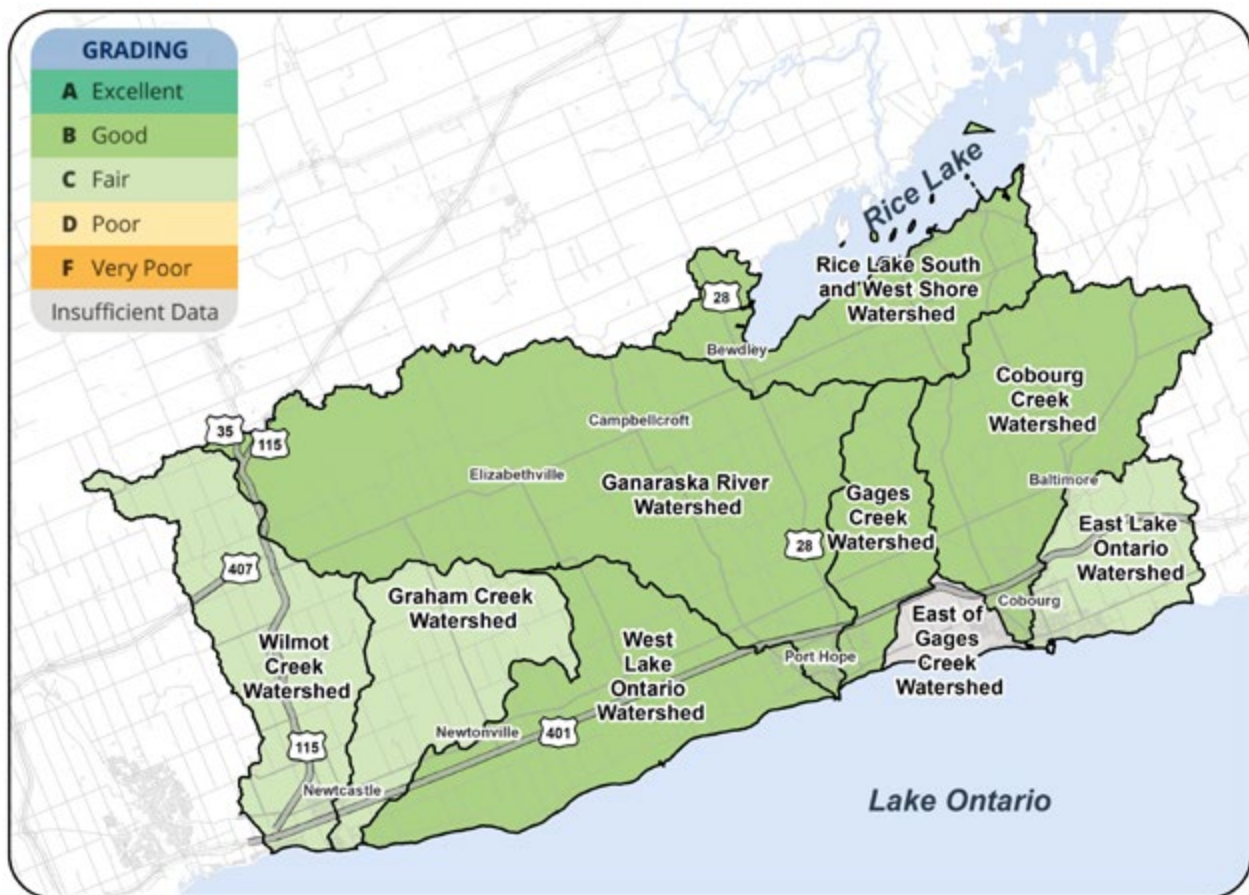
GRADE

C

Concentrations of phosphorus, chloride and Escherichia coli (E. coli bacteria) were measured at Ontario Ministry of the Environment, Conservation & Parks and Ganaraska Conservation stations. All GRCA watersheds (measured at the closest site to the outlet) fall below the federal guideline for chronic exposure.

What Did We Find?

- In sub-watersheds, the grades range from B to C, with mostly B grades.
- Most watersheds remain steady – since the last reporting period – however, there have been changes in the grades for Graham Creek and East Lake Ontario watersheds from B to C due to including additional data. (Visit grca.on.ca to compare 2018 and 2022 report cards).





Ganaraska Conservation **FOREST CONDITIONS**

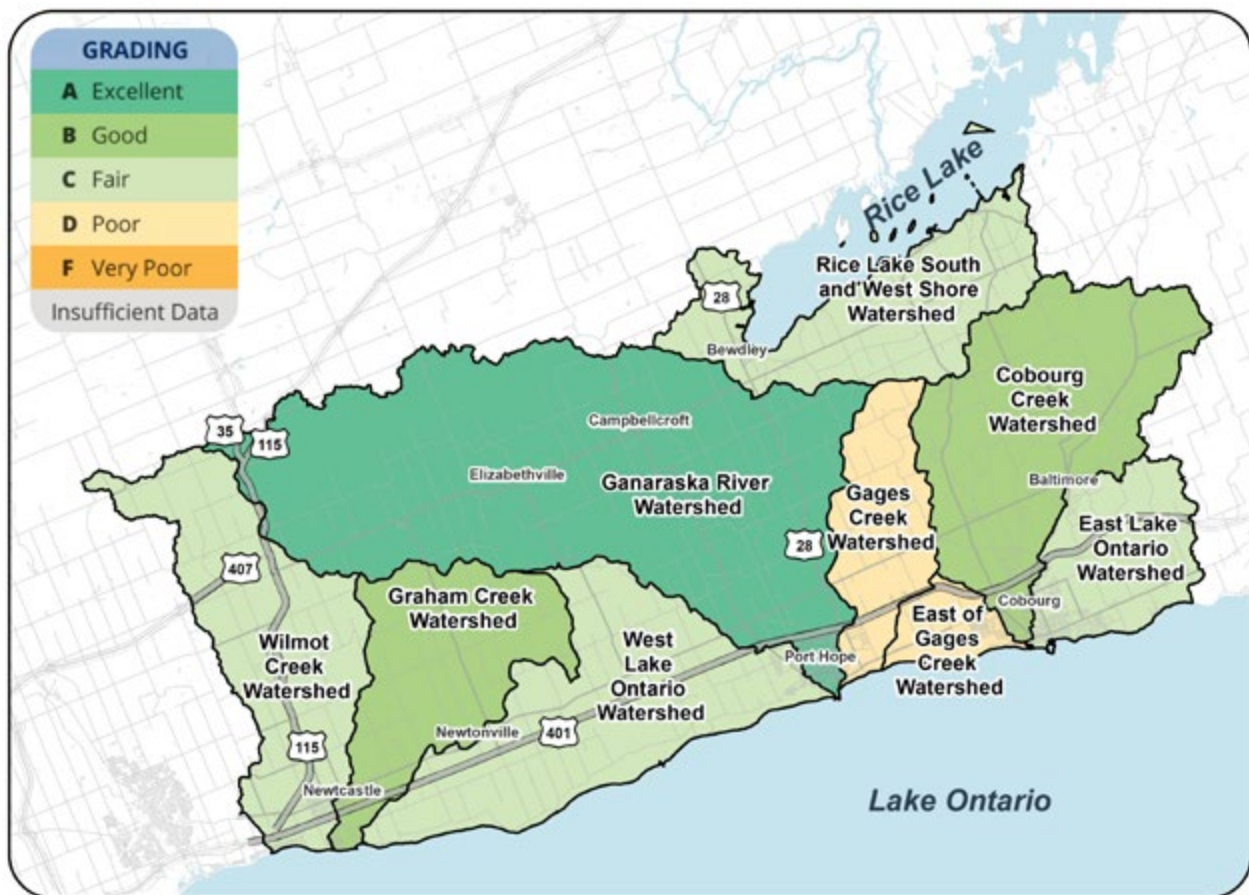
GRADE

B

Forests are a major component of a watershed and contribute to the overall health of the ecosystem. Forest Cover is the amount of Forest in a watershed, while Interior Forest is found in excess of 100 meters from its edge and Forested Riparian is found within a 30 meter buffer zone adjacent to the banks of all watercourses (streams).

What Did We Find?

- Approximately 32% of the GRCA is Forested, with 8% Interior Forest. Interior Forest is sheltered from many negative impacts, such as wind, invasive species, predators and parasites.
- 51% of the Riparian Area is Forested. Forested Riparian Areas benefit from stream shading, bank stability, food sources for insects, fish, as well as increased instream habitat complexity.
- Watersheds differed in the amount of Forest Cover, Interior and Riparian. For example, the Ganaraska River watershed received an "A" for all indicators, whereas East of Gages Creek watershed received a "D" for Forest and Riparian Cover, with an "F" for Interior Forest.





Ganaraska Conservation GROUNDWATER QUALITY

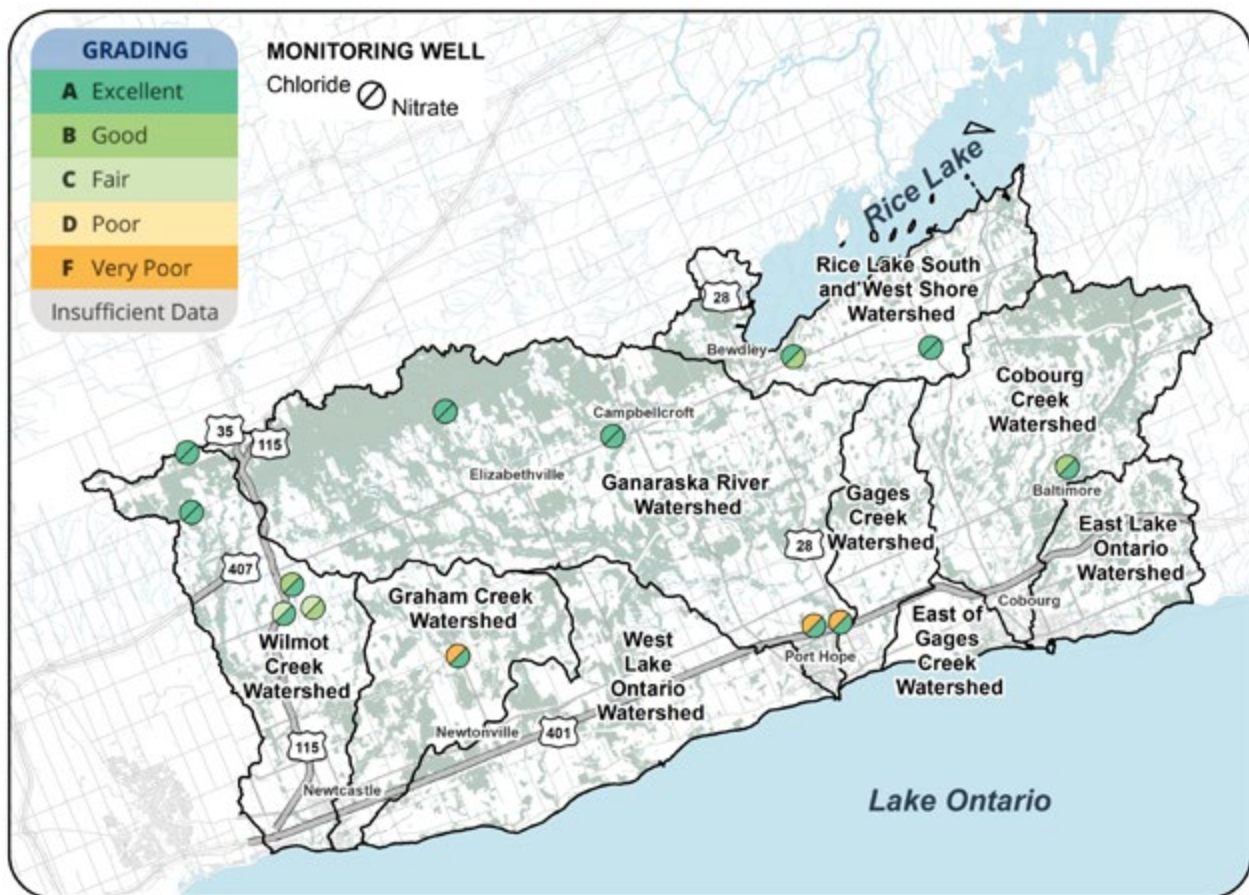
GRADE

A

Concentrations of nitrate and chloride were measured at 16 Ontario Ministry of the Environment, Conservation & Parks monitoring wells. (*Learn more about groundwater at trentsourceprotection.on.ca and the Provincial Groundwater Monitoring Network at ontario.ca.)*)

What Did We Find?

- Nitrate and chloride concentrations are lower than the drinking water guidelines in most wells (A grade).
- Concentrations of nitrate and chloride approach or exceed the drinking water guidelines at some wells, resulting in a poorer grade (less than A grade).
- Concentration of chloride exceeded the drinking water guidelines at three wells (F Grade).
- The quality of your well water may vary from that of the monitoring wells. In some instances, the location of wells was chosen to monitor local issues.



WHAT IS OUR WATERSHED'S KEY ISSUE?



Non-point source pollution:

- Comes from many sources
- Occurs when rain or snowmelt runs off fields, streets, or backyards
- Carries soil particles and pollutants to water bodies and groundwater

What actions could you take to reduce non-point source pollution?

- Conserve and connect existing woodlands.
- Create natural landscapes to filter stormwater.
- Control soil erosion through the use of grassed waterways, berms, cover crops, and crop residue.
- Apply nutrients at rates and times that optimize crop uptake.
- Dispose of chemicals properly through household hazardous waste days or drop-off locations.

What local actions have been taken?

- Community-based watershed plans have been developed over the years for Cobourg Creek, Ganaraska River, Wilmot Creek, Graham Creek, Lovekin, Bouchette, and Port Granby Creeks.

All of which can be found at grca.on.ca, under **Watershed Management**.

Please see:

[Watershed Management](#)

[Tree Planting](#)

[Clean-Water-Healthy Lands
Funding Program](#)

- The GRCA continues to assist landowners through stewardship opportunities in taking actions to protect and restore local watersheds, including tree planting, livestock restriction from waterways and other best management practices.

HOW CAN WE ENHANCE THE WATERSHED?



What Can You Do?

- Plant native trees and shrubs.
- Inspect and pump out your septic system every three to five years.
- Create wetlands to maintain water balance during wet and dry periods.
- Reduce the amount of household chemicals you use and store – such as antifreeze, paint, lawn chemicals, detergents, and cleaners.
- Ensure manure storage facilities are adequate.
- Be careful when opening and closing your pool for the season to ensure pool discharge is managed properly (i.e. discharging across the lawn to a storm sewer or ditch with chlorine residual virtually absent).

What Can Your Community Do?

- Support ongoing improvements to municipal infrastructure, including the integration of green infrastructure where possible.
- Direct development away from areas of environmental significance.
- Support local initiatives to monitor water quality and quantity.
- Consider the evaluation of natural assets in your community to quantify the ecological goods and services being provided.

What Can Agencies Do?

- Protect wetlands.
- Green their operations.
- Evaluate the effectiveness of environmental programs.
- Explore innovations in best management practices.



*Do you have questions not answered by this summary document?
Visit **grca.on.ca** for the full report or contact us for more information:*

Ganaraska Region Conservation Authority (GRCA)

2216 County Road 28, Port Hope, ON L1A 3V8

E-mail: info@grca.on.ca | **Website:** grca.on.ca

Phone: 905.885.8173 | **Fax:** 905.885.9824

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