

# Crowe Valley Conservation

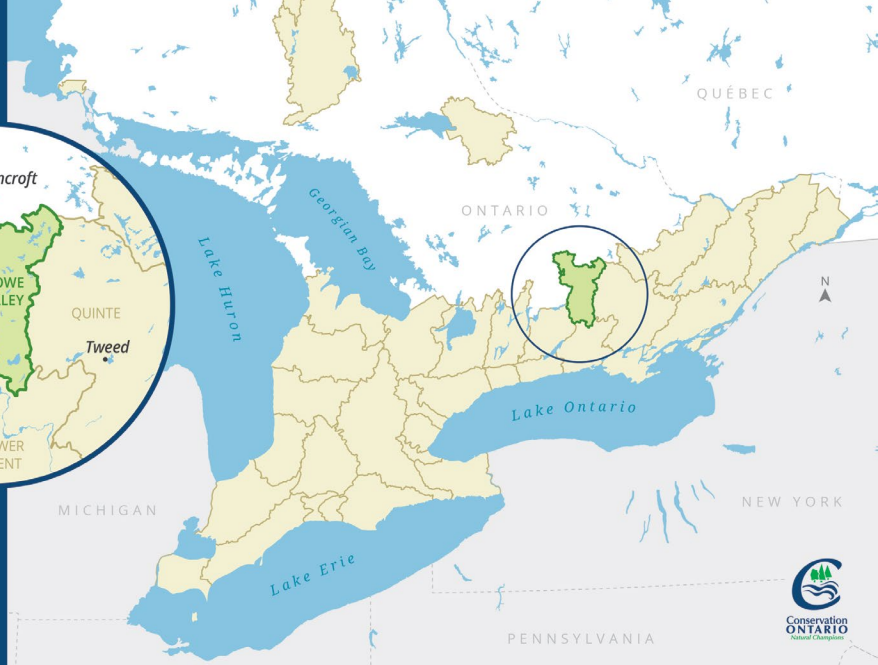
## Watershed Report Card 2023



Crowe Valley Conservation Authority has prepared this report card as a summary of the state of forests, wetlands, and water resources in the watershed using data from 2017 to 2021.



# 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.





# Crowe Valley Conservation SURFACE WATER QUALITY

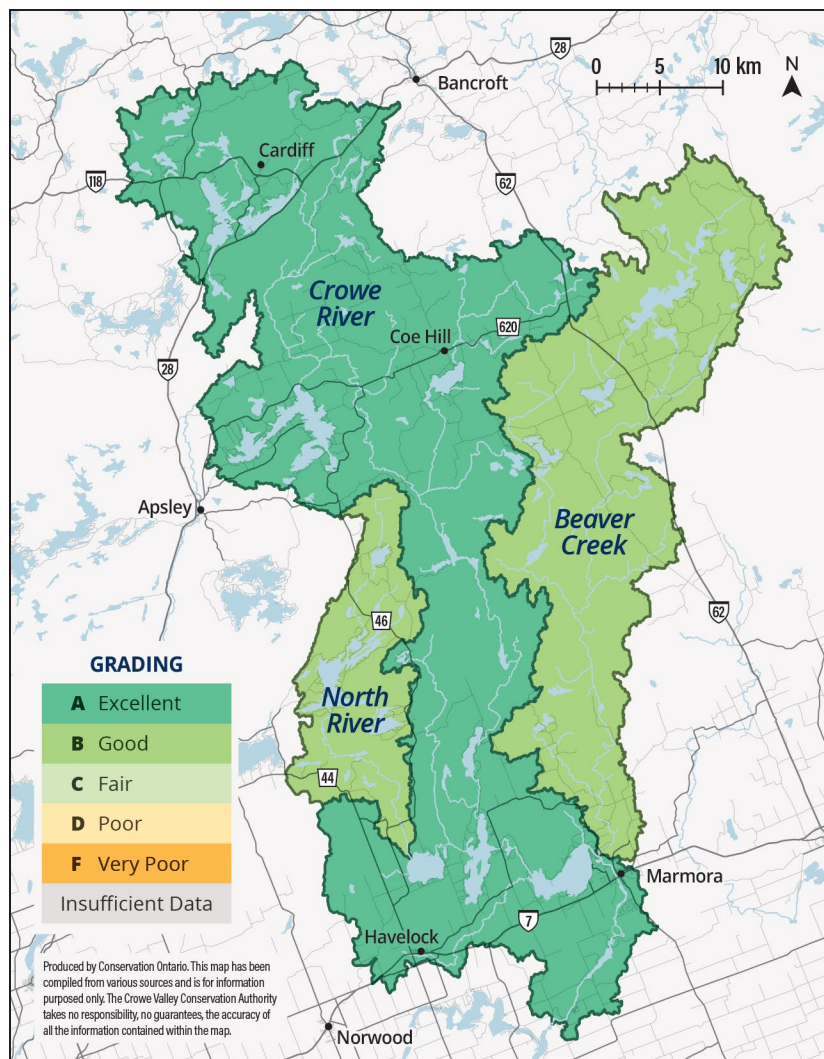
GRADE

A

Concentrations of phosphorus was measured at Ontario Ministry of the Environment and Crowe Valley Conservation stations. Benthic invertebrates (small aquatic animals living in the sediment) were also identified. The type and number of these animals are measures of water quality.

## What Did We Find?

- The North River and Beaver Creek Watersheds achieved grades B compared to grade A in 2018.
- Previous CVCA Watershed Report Cards have used averages to calculate the grade using phosphorus concentrations. This report used the 75th percentile which may be a factor in the change of grades for the North River and Beaver Creek watersheds.
- CVCA does not currently sample for *E.coli*.
- The Crowe River Watershed maintained its grade A achieved in the 2018 watershed report card.





# Crowe Valley Conservation **FOREST CONDITIONS**

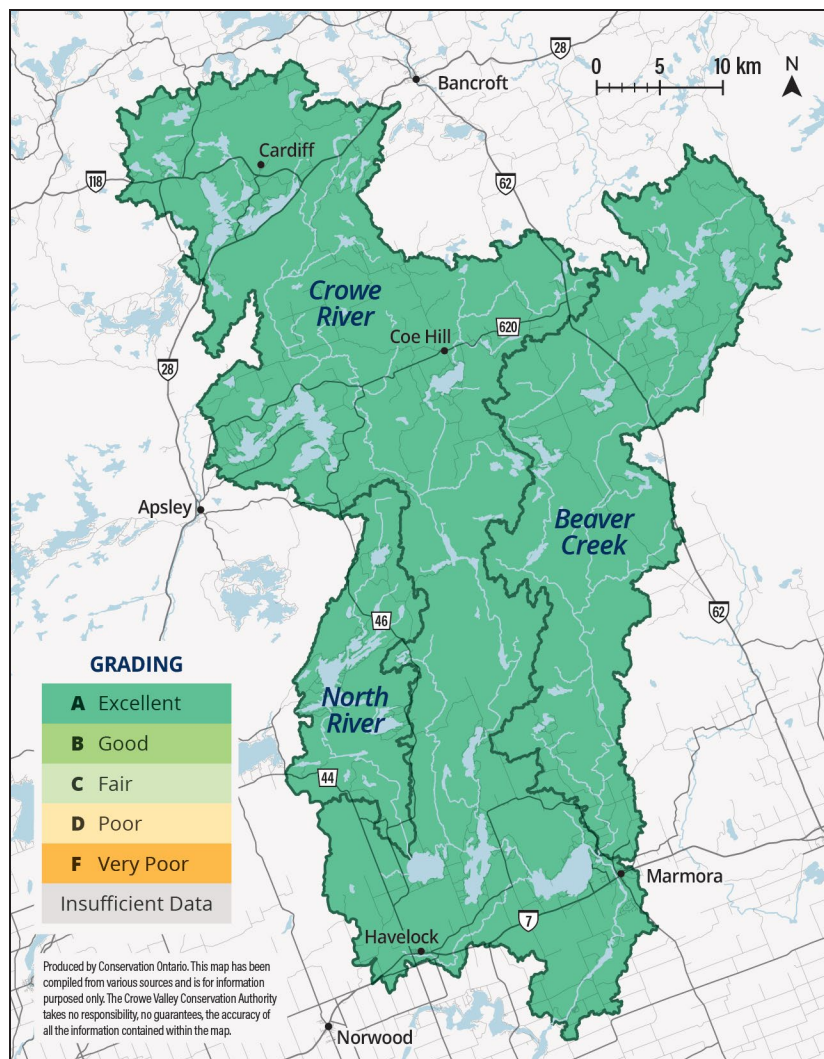
GRADE

**A**

The percentages of forest cover, was measured with Geographic Information Systems (GIS). Due to a lack of resources, CVCA ortho imagery has not been updated. Therefore, the same data was used as the previous watershed report card in 2018 resulting in the same grade being assigned.

## What Did We Find?

- The entire Crowe Valley watershed maintained it's Grade A achieved in 2018's report card.
- Even though ortho imagery has not been updated, CVCA has maintained its high percentage of forested areas throughout the entire watershed during this reporting period.
- 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.





# Crowe Valley Conservation **GROUNDWATER QUALITY**

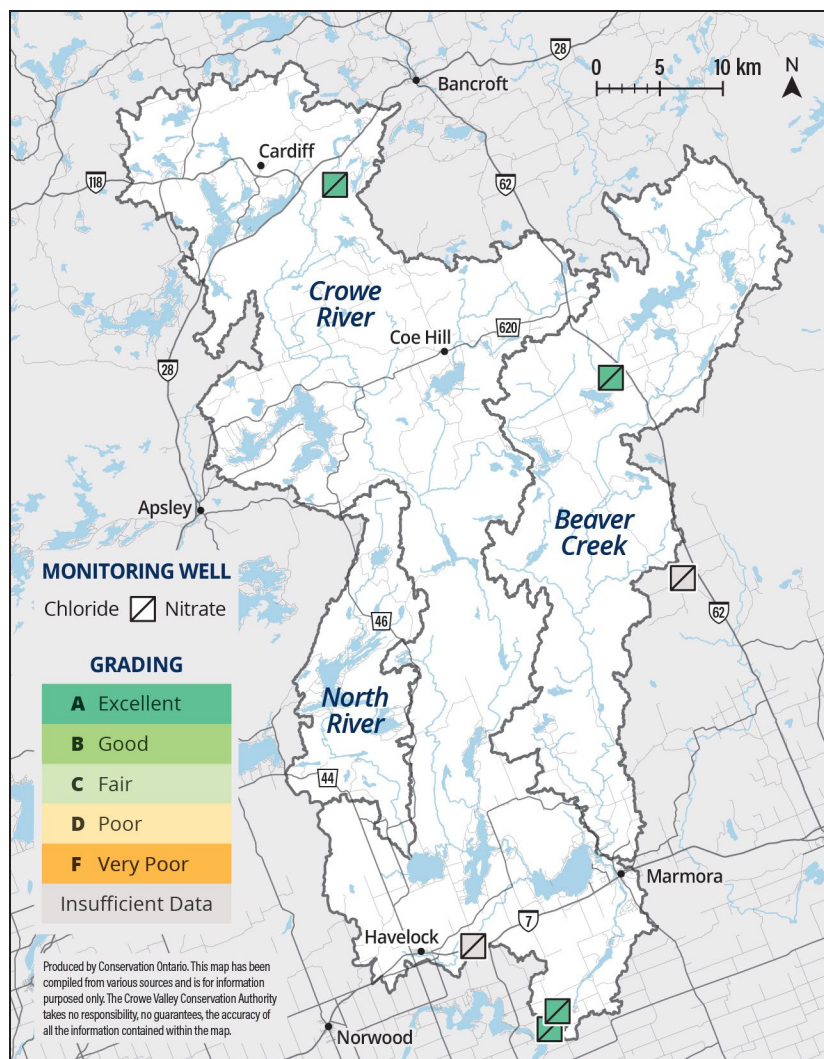
GRADE

**A**

Concentrations of nitrate and chloride were measured at 4 of the 6 Ontario Ministry of the Environment monitoring wells located under CVCA jurisdiction. (Learn about groundwater at [trentsourceprotection.on.ca](http://trentsourceprotection.on.ca))

## What Did We Find?

- Groundwater quality was excellent at the four locations sampled throughout the CVCA watershed.
- Groundwater quality was not measured at two well locations in CVCA watershed.
- 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.







## Crowe Valley Conservation **WATER MANAGEMENT**

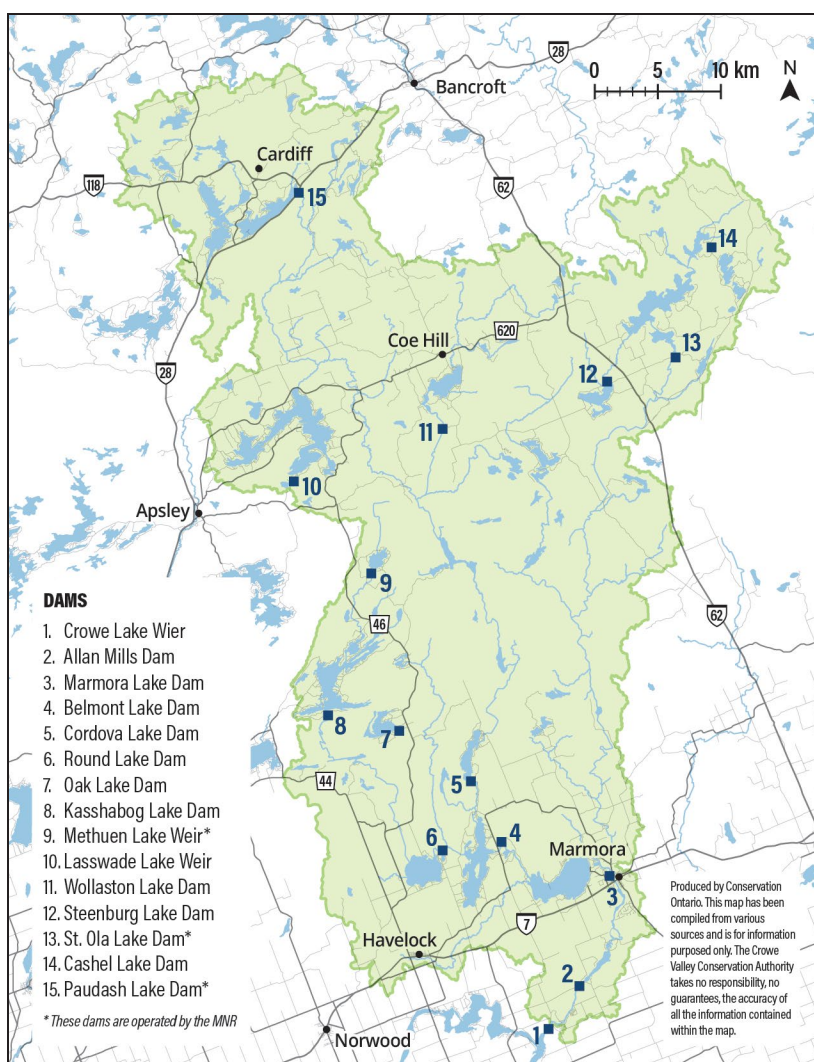
The Crowe Valley Conservation Authority manages fifteen water control structures throughout its 2006 square km watershed to minimize effects of flooding and maintain appropriate lake levels throughout the four seasons. CVCA informs the public of any potential risk of flooding, provides flooding information to its member municipalities and reports on trends during times of flooding. In addition, drought conditions are monitored closely to provide the necessary data for the low water response team.

CVCA operates the majority of the water control structures while some are operated on behalf of the Ministry of Natural Resources and Forestry through operating agreements. Water levels and flows are also managed throughout each sub watershed considering the impact of upstream and downstream conditions. CVCA operates the Marmora Hydro Generation plant as a subcontractor for Orillia Power to help generate more green energy for Ontario.

### What We Do

- Monitor water levels & flows 365 days per year.
- Maintain Summer recreational water levels & monitor for droughts.
- Work closely with member municipalities during floods to increase awareness to protect people and properties.
- Monitoring & manage water levels and flows to help safeguard the public from flooding risks.

*For more details about the information found in these maps, visit [crowevalley.com](http://crowevalley.com) or contact us. You can find our contact information on the back panel.*



# WHAT IS OUR WATERSHED'S KEY ISSUE?



## **Implementing a collaborative approach to maintain and protect natural features (floodplains, wetlands, forests)**

- Preventing habitat loss in the pristine Crowe River Watershed to avoid costly remediation measures.
- Protect sensitive habitat (riparian zones located in floodplains).
- Habitat Loss = Decreased Flood Storage = Negative Impacts on Personal Property and Safety.

## **What actions could you take to help ensure natural features remain unaltered**

- *Help reinvigorate* the conservation movement.
- *Get involved* – collectively speak with a community voice to be heard at the local government level.
- *Acknowledge* all waterbodies (the lakes, rivers, streams and wetlands) are natural infrastructure features which needs to function normally without undue stress or interference from modern societal pressures.

- *Keep development out* of the features that serve society for free.
- *Maintain riparian zones* by making a conscious choice to keep shorelines naturally vegetated with native groundcover, plants and trees – be proud of your decision.
- *Limit your footprint* on the landscape – work with all of the natural features on your property to help shape future development and its location.
- *Support* local organizations (conservation authorities, cottage associations, “Friends of ..... Foundations”).
- *Become an active community member* to encourage the relationship between agencies, municipal governments and the broader community to work toward goals and objectives that cannot be accomplished on their own.
- *Volunteer* – give back to your community and the environment.



# WHAT IS OUR WATERSHED'S KEY ISSUE?



## What local actions have been taken?

- CVCA monitoring and managing water levels and flows to help safeguard the public from flooding risks.
- CVCA's regulations program requires sediment and erosion measures be implemented during construction to prevent sediment and contaminants from entering the water.
- CVCA continues to be part of the Drinking Water Source Protection Program which aims to protect municipal drinking water now and into the future.
- CVCA continues to participate in provincial monitoring programs to identify trends and changes to the environment over time.

## Be a Part of the Solution

Tell us what has been done and we will post your success stories on our website.

A pristine watershed will function the way it is supposed to do. Natural features with little or no negative impact on them will result in a watershed that stores more water and releases it slowly after flooding events. With help from you, a pristine Crowe Valley watershed will help to protect you and future generations in perpetuity. Keeping the environment healthy = everybody and everything wins!

Most importantly, think on a long term horizon and ask your local governments to do the same. We must stop acting for the short term gain or we risk our future.

***Work with nature, not against nature!***





*Do you have questions not answered by this summary document?  
Visit **[crowevalley.com](http://crowevalley.com)** for the full report or contact us for more information:*

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