

Sault Ste. Marie Region Watershed Report Card 2023



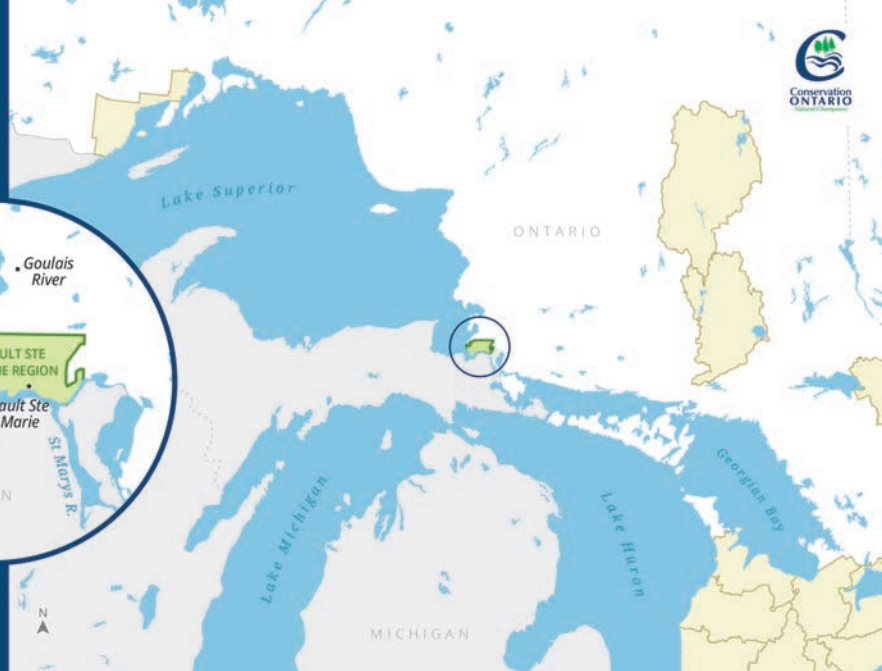
Sault Ste. Marie Region Conservation Authority has prepared this report card as a summary of the state of your forests, wetlands, and water resources.



**Sault Ste. Marie Region
Conservation Authority**



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



Wetland 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.



Concentrations of phosphorus and chloride were measured at Ontario Ministry of the Environment stations.

What Did We Find?

- Grades across the sub-watersheds remained unchanged except for the East Davignon which changed from Grade B to Grade A since the last reporting period. This can be contributed to lower levels of Total Phosphorus (mg/L).
- All of the sub-watersheds sampling sites for chloride fell well below the federal chronic exposure (120 mg/L) and acute exposure (640 mg/L).
- E.coli and Benthic macroinvertebrate data was not included as a factor in the final grading.
- The Provincial Water Quality Monitoring Network (PWQMN) is the source of total phosphorus data for the Sault Ste. Marie Region.

GRADING

A Excellent

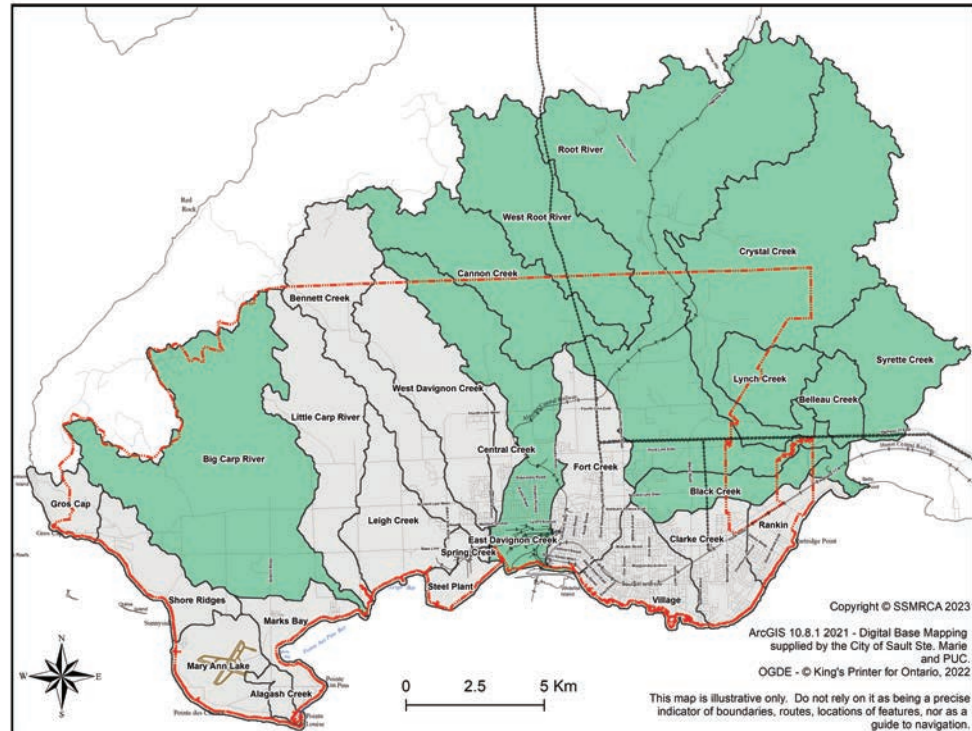
B Good

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Sault Ste. Marie Region **FOREST CONDITIONS**

GRADE

B

The percentages of forest cover, forest interior, and streamside cover were measured with Geographic Information Systems (GIS) using available vegetation and watercourse data from Land Information Ontario (LIO).

What Did We Find?

- In subwatersheds, the grades range from A to F, remain unchanged from the previous reporting period due to insufficient data.
- The Sault Ste. Marie Region Conservation Authority lacks the capacity to do in-house mapping for the regions forest conditions. Best available mapping was used as a source of data from Land Information Ontario (LIO).

Visit ssmrca.ca/watershed-report-card to compare 2018 and 2023 report cards

GRADING

A Excellent

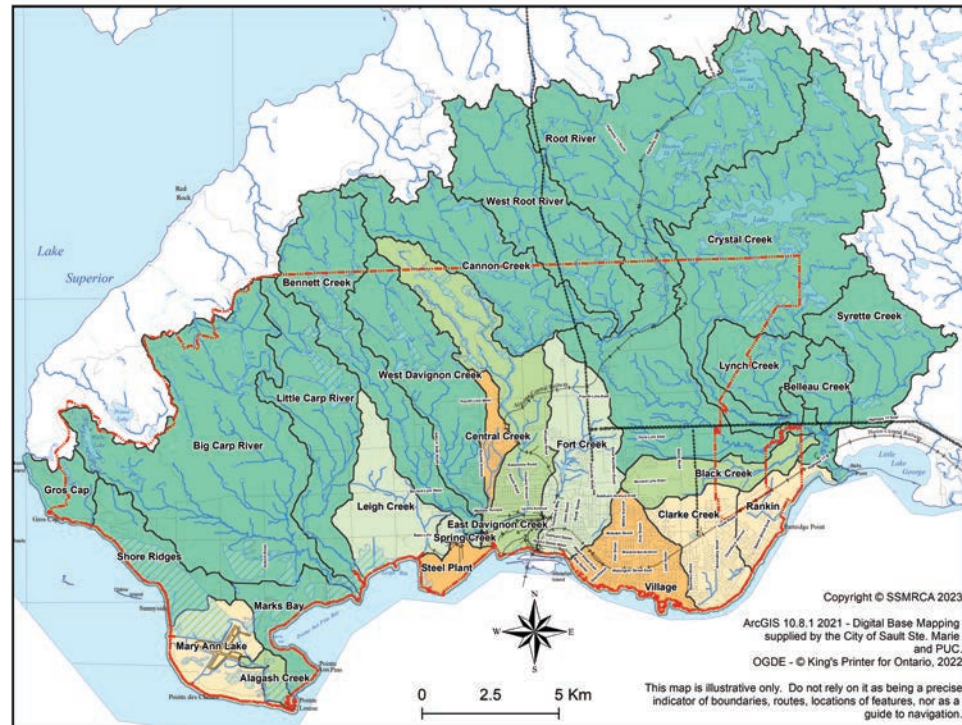
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Sault Ste. Marie Region GROUNDWATER QUALITY

GRADE
A

Concentrations of nitrate and chloride were measured at 14 Ontario Ministry of the Environment monitoring wells.

Learn about groundwater at ssmrca.ca/watershed-report-card

What Did We Find?

- Nitrate and chloride concentrations are better than the drinking water guidelines in most wells (A grade).
- Concentrations of nitrate and chloride approach or exceed the drinking water guidelines at one deep aquifer monitoring well, resulting in a poorer grade (less than A grade).
- Groundwater Quality data for this report remains unchanged and is collected by the Sault Ste. Marie Region Conservation Authority as part of Provincial Groundwater Monitoring Network (PGMN) by the Sault Ste. Marie Region Conservation Authority from 3 deep wells and 6 shallow wells since 2010.

MONITORING WELL

Chloride ☐ Nitrate ☒

GRADING

A Excellent

B Good

C Fair

D Poor

F Very Poor

Insufficient Data

Groundwater Quality Aquifer Class, Chloride/Nitrate grade

Deep, A, A

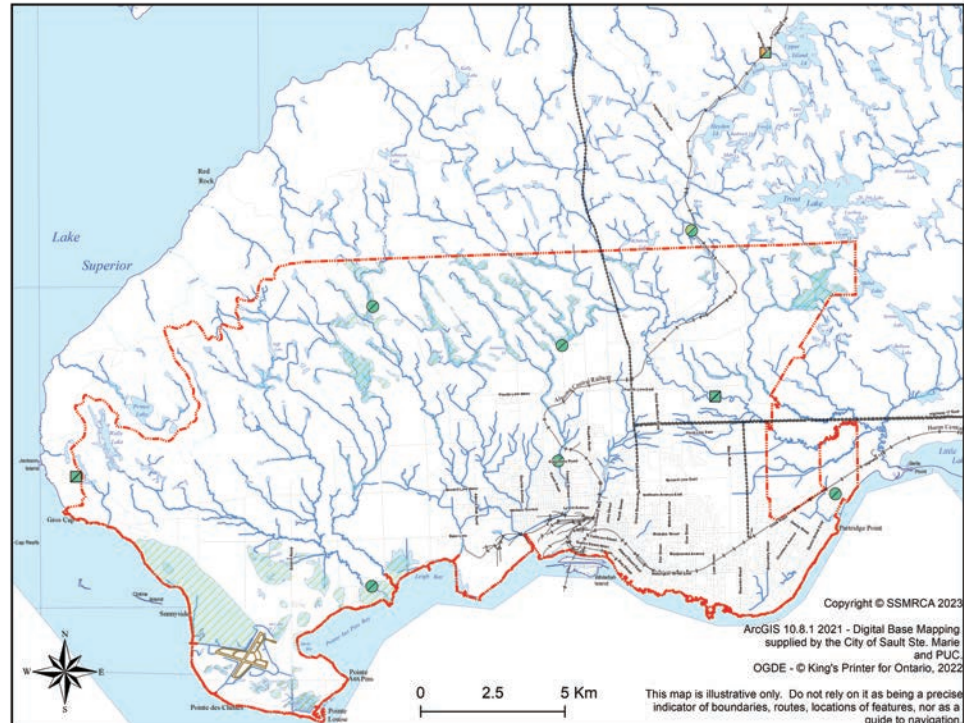
Deep, F, A

Shallow, A, A

Shallow, B, A

SSMRCA Boundary

*Based on concentrations of nitrate and chloride. See full report for details.





Sault Ste. Marie Region **WETLAND COVER**

GRADE

B

The percentage of wetland cover was measured with Geographic Information Systems (GIS) using available vegetation and watercourse data from Land Information Ontario (LIO).

What Did We Find?

- In sub-watersheds, the grades range from A to F, with an overall Grade of B.
- Only 9 per cent of the Sault Ste. Marie Region area is covered by wetlands, which includes two Provincially Significant Wetlands.
- Urban development within the eastern sub-watersheds is highly concentrated, and therefore has a reduced number of wetlands.
- Wetland cover is important for: storing water and absorbing the impact of flooding, maintaining water quality by filtering sediments and toxic substances, supplying vital food and habitat for many species, and providing recreational areas for activities such as birdwatching, fishing and hunting,

GRADING

A Excellent

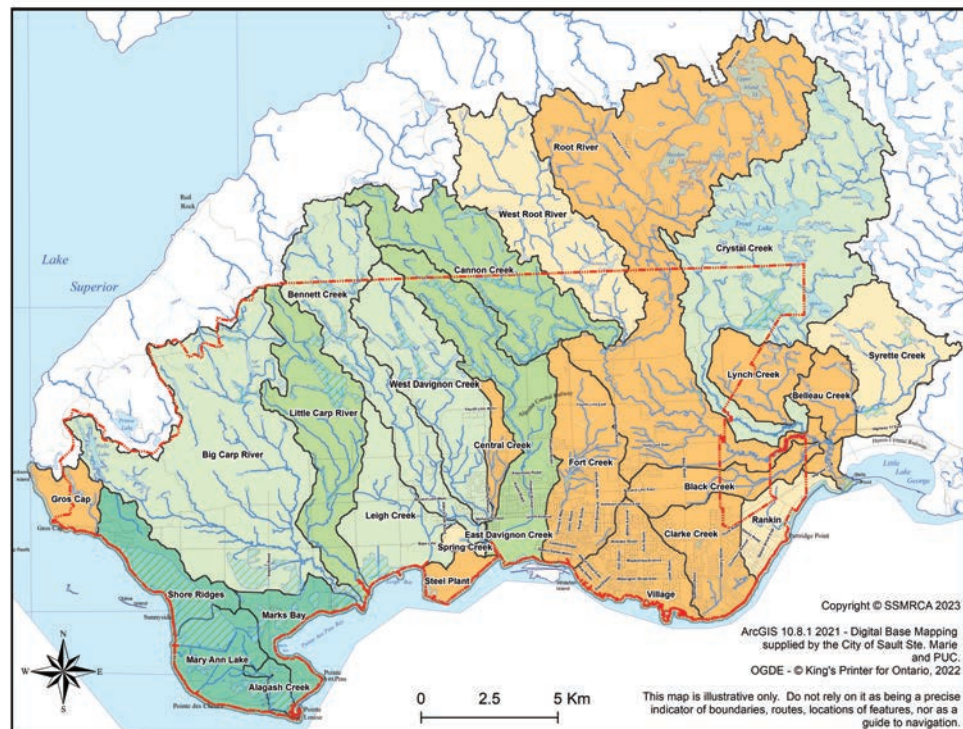
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WHAT IS OUR WATERSHED'S KEY ISSUE?



Non-point source pollution:

- Comes from many sources
- Occurs when rain or snowmelt runs off fields, streets, or yards
- Carries soil particles and pollutants to lakes, rivers, wetlands and even groundwater.

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

- Conserve and connect existing woodlands and wetlands.
- Create natural landscapes to filter stormwater.
- Pick up pet waste
- Reduce the use of lawn and garden chemicals.
- Dispose of household chemicals and hazardous waste properly at the City of Sault Ste. Marie's Household Hazardous Waste Depot.

What local actions have been taken?

- Stormwater Management Ponds throughout our city are used to collect and hold stormwater. These ponds not only reduce flooding potential they also collect and filter pollutants.
- Sault Ste. Marie City Council adopted the "Stormwater Management Master and Guidelines" in 2015.
- The City of Sault Ste. Marie established the Household Hazardous Waste (HHW) Depot for residents to properly dispose of HHW, to protect the health and safety of our community and the environment.

HOW CAN WE ENHANCE THE WATERSHED?



What Can You Do?

- Plant native trees and shrubs.
- Preserve and protect wetlands to hold flood waters and filter water quality.
- Reduce the amount of household chemicals you use and store – such as antifreeze, paint, lawn chemicals, detergents, and cleaners.
- Salt responsibly, use less road salt to help reduce the salt entering our surface and groundwater sources.

What Can Your Community Do?

- Support ongoing improvements to municipal infrastructure.
- Direct development away from areas of environmental significance.
- Support local initiatives to monitor water quality and quantity.

What Can Agencies Do?

- Protect wetlands and environmentally sensitive areas.
- Green their operations.
- Evaluate the effectiveness of environmental programs.



**Sault Ste. Marie Region
Conservation Authority**

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

Sault Ste. Marie Region Conservation Authority

1100 Fifth Line East, Sault Ste. Marie, ON P6A 6J8

E-mail: nature@ssmrca.ca | **Website:** ssmrca.ca

Phone: 705-946-8530 | **Fax:** 705-946-8533

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