# **Grey Sauble**

# **WATERSHED**





Grey Sauble Conservation has prepared this report card as a summary of the state of your forests, wetlands, and water resources.





#### WHERE ARE WE?



#### What is a Watershed?

A watershed is an area of land drained by a creek or stream. Similar to the branch of a tree, creeks empty into streams, which then empty into larger streams, eventually forming one main trunk. Within this system, everything is connected to everything else. In other words, actions which take place at the top of the system can and do affect those downstream.

#### Why Measure?

Measuring helps us better understand our watershed. It helps us to focus our efforts where they are needed most and track progress. It also helps us to identify healthy and ecologically important areas that require protection or enhancement. We measured:



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.



# **SURFACE WATER QUALITY**

Total phosphorus and Escherichia coli (bacteria) were measured. The type and number of Benthic invertebrates (small aquatic animals living in the sediment) were also identified. The results indicate pollution levels and stream health as measures of water quality. High surface water quality supports safe drinking water and provides social, economic and health benefits to people and animals.

#### What Did we Find?

- Watersheds score very well with most watersheds achieving a grade of Excellent or Good.
- Watersheds achieving a lower grade typically have poor forest cover grades as well, specifically poor treed riparian areas along watercourses.





# **FOREST CONDITIONS**

The percentages of forest cover, forest interior, and stream edges forested were measured. Forest interior provides habitat for many species that don't survive in smaller patches of trees. Forested stream edges cool water for native fish, prevent erosion and reduce contaminants entering streams.

## What Did we Find?

- Grades were generally Good to Excellent.
- In areas with more intensive agriculture, grades were lower.
- Forest cover grades take time to improve since after trees are planted it may take years before they form a tree canopy.

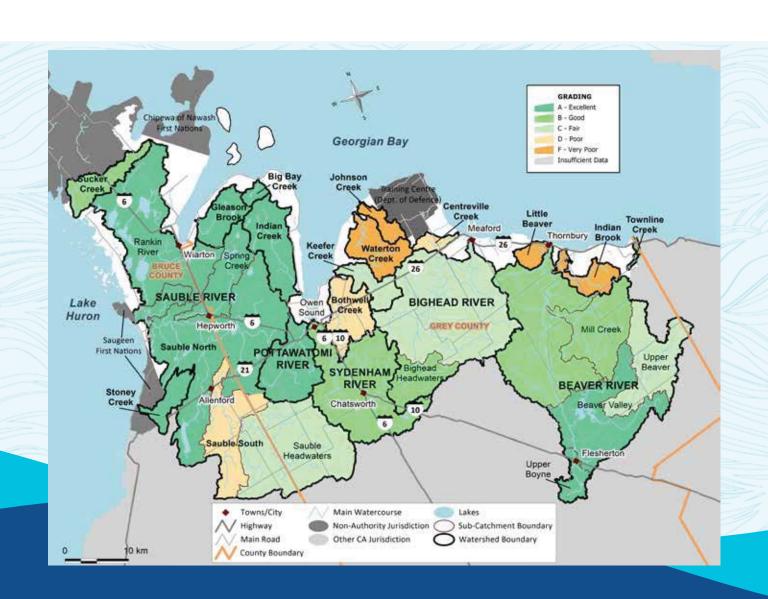


# WETLAND CONDITIONS

The percentage of wetland cover was measured. Wetlands have large biodiversity and mitigate both flooding and droughts downstream.

## What Did we Find?

- · Most of the larger watersheds score very well.
- Some of the smaller high gradient watersheds had poor wetland coverage.
- Drainage improvements for agriculture likely has the greatest impact on wetland coverage.
- It is important to maintain our current wetlands as it is very difficult to increase wetland coverage.



#### **Watershed Features**

Grey Sauble Conservation is a unique area of jurisdiction consisting of 5 major watersheds and many smaller watersheds that outlet directly to Lake Huron and Georgian Bay. The topography ranges from sandy beaches at Sauble Beach, flat agricultural lands, the Niagara Escarpment, and the rolling hills in the Beaver Valley.

#### **Watershed Grades Table**

Watershed Name	Catchment Name	Sub Catchment	Forest Cover Grade	Wetland Grade	Surface Water Grade
Beaver River	Beaver River		Α	В	А
	Beaver Valley	Upper Beaver	В	С	В
		Upper Beaver	В	Α	В
		Upper Boyne	В	А	А
	Mill Creek		А	В	А
Big Bay Creek	Big Bay Creek		А	А	С
Bighead River	Bighead Headwaters		Α	В	А
	Bighead River		В	С	В
Bothwell Creek	Bothwell Creek		В	D	В
Centreville Creek	Centreville Creek		В	D	В
Gleason Brook	Gleason Brook		В	А	А
Indian Brook	Indian Brook		D	SYE.	В
Indian Creek	Indian Creek		В	Α	В
Johnson Creek	Johnson Creek		В	/F/	Insufficient Data
Keefer Creek	Keefer Creek		Α	C	В
Little Beaver River	Little Beaver		D	I F	C
Pottawatomi River	Pottawatomi River		В	Α	В
Sauble River	Rankin River		В	A	Α
	Sauble Headwaters		D	C	С
	Sauble North		Α	Α	В
	Sauble River		В	A	Α
	Sauble South		D	D	В
	Spring Creek		Α	Α	Α
Stoney Creek	Stoney Creek		Α	Α	Insufficient Data
Sucker Creek	Sucker Creek		В	В	Insufficient Data
Sydenham River	Sydenham River		Α	В	В
Townline Creek	Townline Creek		В	Α	C
Waterton Creek	Waterton Creek		C	F	В

### Watershed Report Cards are issued every 5 years.

A five year cycle allows time to understand potential problems, to work with municipalities and others to measurably improve watershed health, and enough data to be a reliable summary of watershed conditions.



# Grey Sauble Conservation (GSC) staff monitor the health of our watershed by collecting data on environmental indicators

- Surface water samples at 27 locations are collected 8 times each year.
- As part of the Biological Monitoring and Assessment Program (BioMAP), benthic samples from 30 long-term monitoring sites are collected.
- Over 5,000 stream crossings have important water quality and quantity information updated by staff and volunteers, which includes stream crossing type and size, flow, water clarity, and the presence of fish.
- Over 900 sites have been classified by water temperature during warm summer days in order to assess watershed health and classify the system as cold water, cool water, or warm water.

# GSC's programs and services contribute to the protection and improvement of watershed health

- To date close to 4 million trees have been planted across our watershed.
- Supporting development in appropriate areas and reducing impacts through environmental planning.
- Landowners and partners have been engaged to help restore and protect natural features and water quality through GSC's stewardship efforts.

## HOW CAN WE ENHANCE THE WATERSHED?

#### What Can You Do?

#### Be a Watershed Steward!

- Plant native species, particularly trees and shrubs along streams, lakes, rivers, and ponds.
- · Learn about invasive species and how you can prevent them from spreading.
- Decommission unused wells, as they provide a direct pathway to our groundwater systems.
- Inspect and pump out your septic system every three to five years.
- Do not dump anything down road side catch basins because they are connected directly to local waterbodies.
- Conserve water by using a rain barrel and low-flow household products.
- Keep livestock out of waterways, employ cover crops to reduce erosion.
- Reduce or eliminate the use of chemicals, pesticides, and fertilizers. Do not let them get into our waterways.
- Keep recreational activities clean! Have your boat motor checked for leaks.



## **What Can Your Community Do?**

- Consider and promote low impact development in your municipality.
- Support local sub-watershed studies.
- Support local initiatives to monitor water quality and quantity.

Do you have questions not answered by this summary document? Visit **greysauble.on.ca** for more information:



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