

Grey Sauble Conservation

Watershed Report Card



Why a Watershed Report Card?

As part of our mandate, Grey Sauble has established programs to "further the conservation, restoration, development and management of renewable natural resources".

This Report Card is a simple tool to evaluate the health of our major watersheds: Sauble River, Pottawatomi River, Sydenham River, Bighead River, Beaver River, as well as other smaller watersheds and subwatersheds.

It is important for our residents to understand factors that impact the health of our streams and to assist Grey Sauble in furthering the mandate of managing and enhancing healthy

What is a Watershed?

A watershed is an area of land drained by a single watercourse. It consists of spring fed streams that drain into a river, emptying into a large body of water.

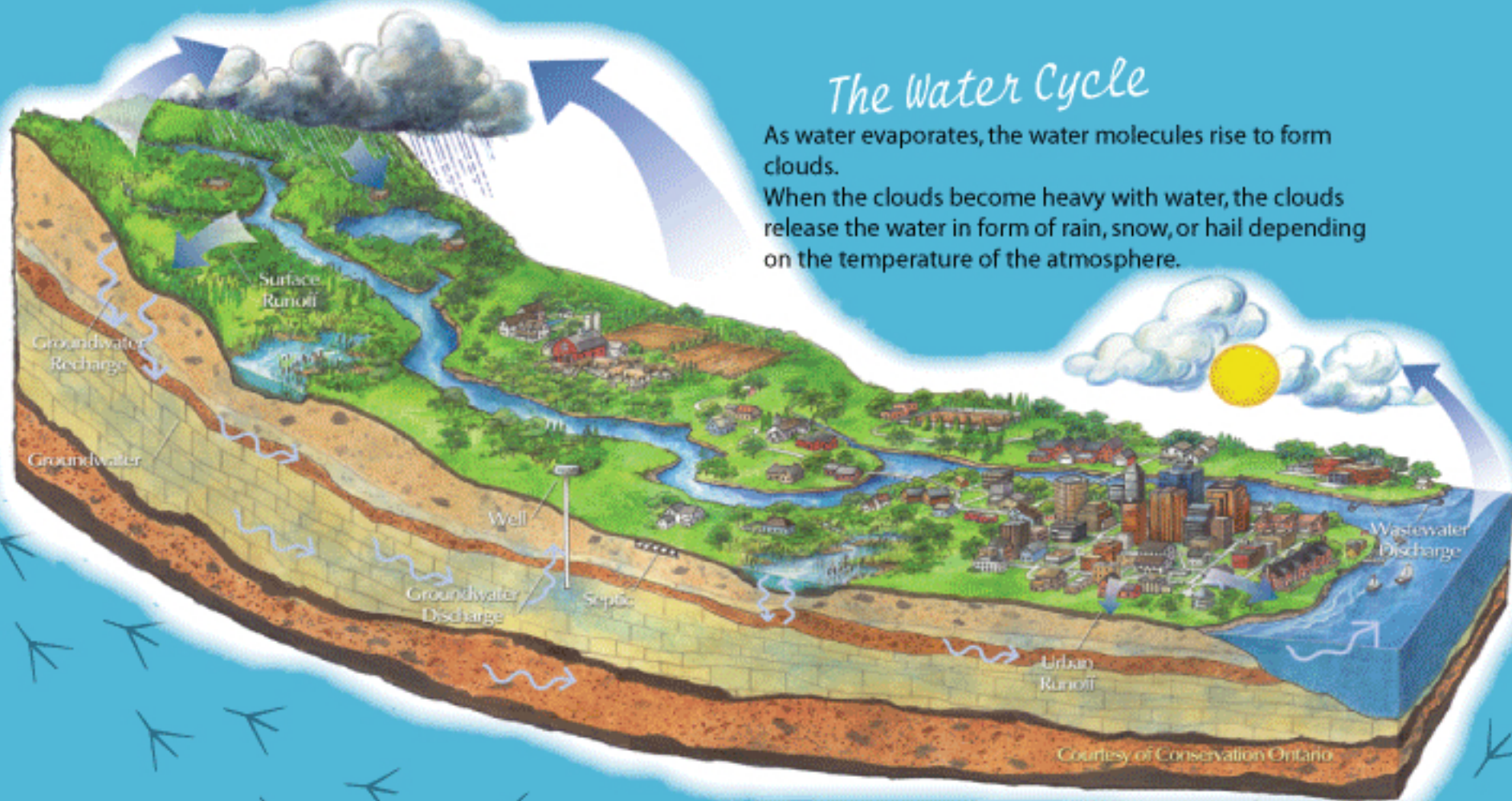
Grey Sauble's jurisdiction is a very unique, diverse area consisting of different types of topography: agricultural lands, wetlands, sinkholes, rolling valleys, sand beaches and the Niagara Escarpment. It encompasses all or parts of eight municipalities in Grey and Bruce Counties, covering 3,146 square kilometres of land and 155 kilometres of shoreline along Lake Huron and Georgian Bay.



The Water Cycle

As water evaporates, the water molecules rise to form clouds.

When the clouds become heavy with water, the clouds release the water in form of rain, snow, or hail depending on the temperature of the atmosphere.



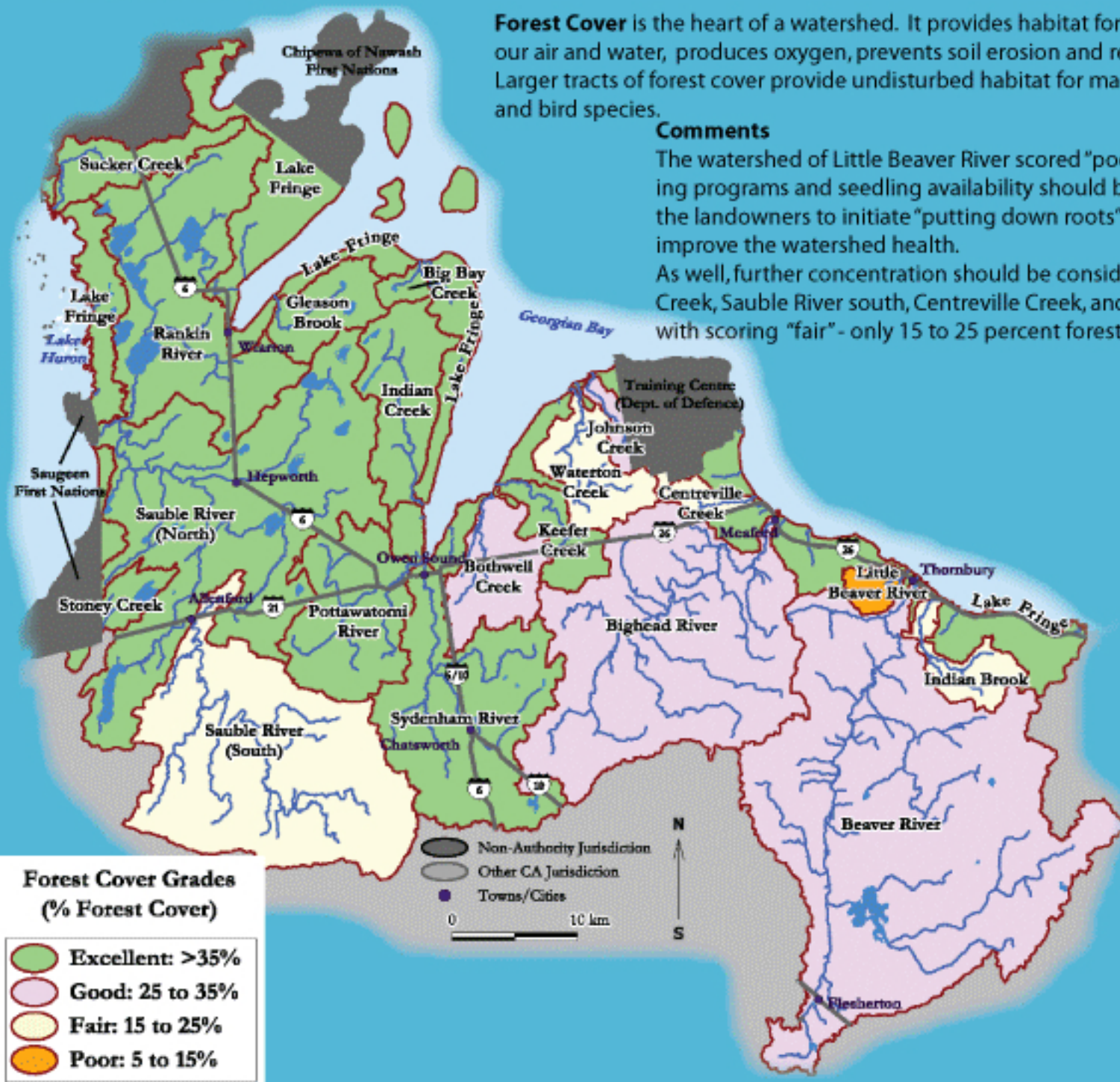
Forest Cover

Forest Cover is the heart of a watershed. It provides habitat for wildlife, cleans our air and water, produces oxygen, prevents soil erosion and reduces runoff. Larger tracts of forest cover provide undisturbed habitat for many native animal and bird species.

Comments

The watershed of Little Beaver River scored "poorly". Tree Planting programs and seedling availability should be promoted to the landowners to initiate "putting down roots" in this area to improve the watershed health.

As well, further concentration should be considered at Waterton Creek, Sauble River south, Centreville Creek, and Indian Brook with scoring "fair" - only 15 to 25 percent forest cover.



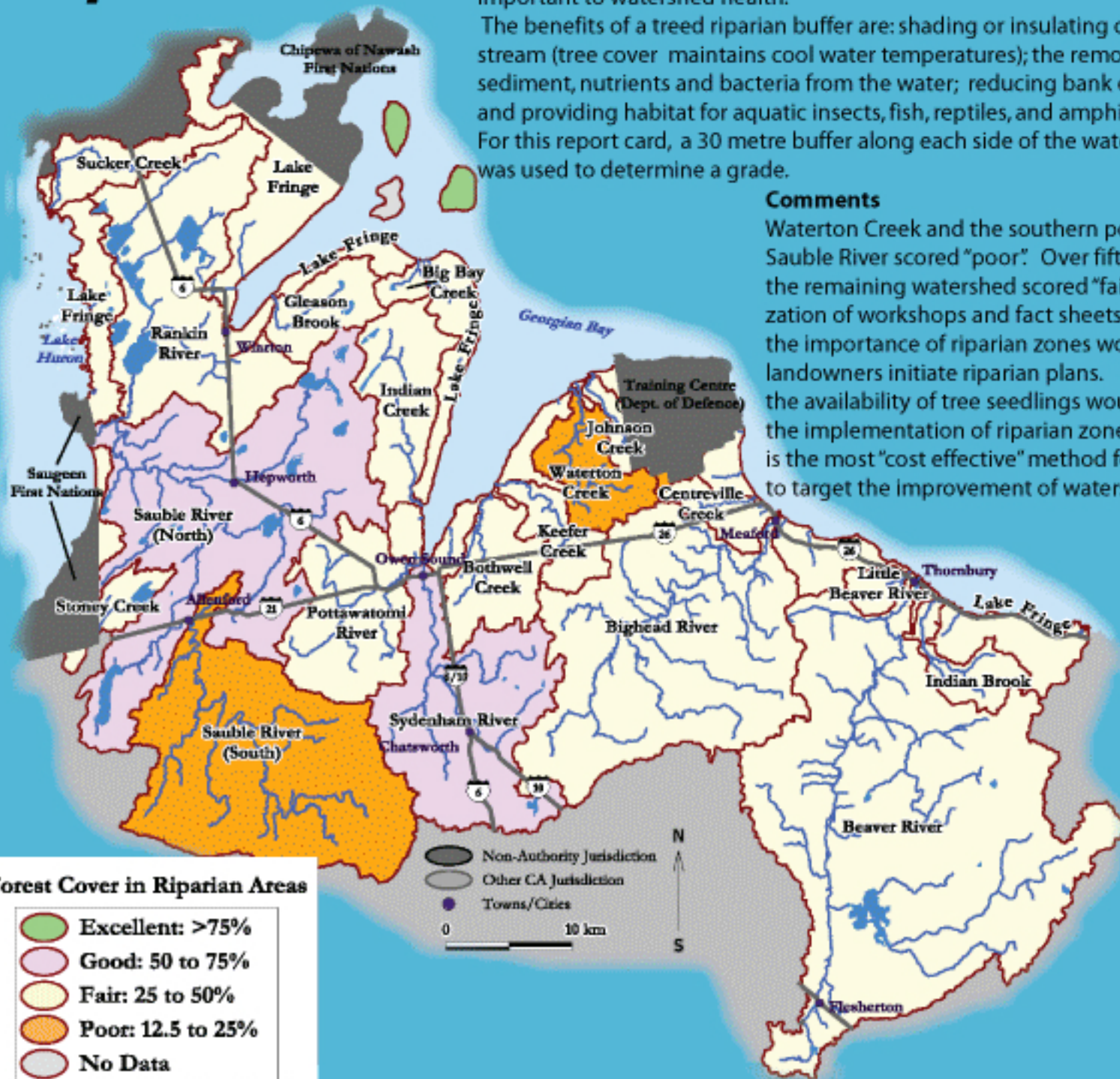
Riparian

Riparian Zones are areas along a river or stream bank and are very important to watershed health.

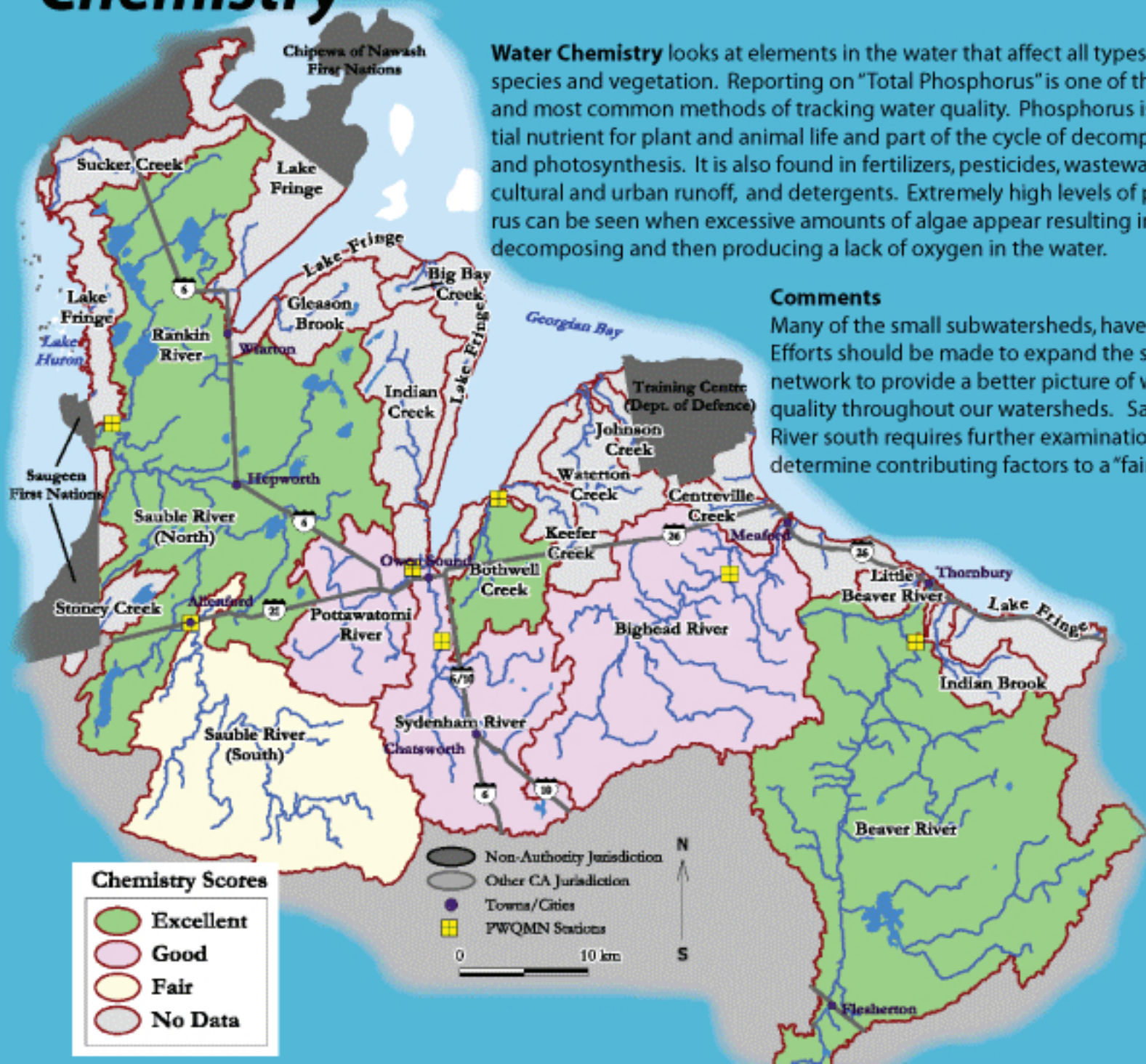
The benefits of a treed riparian buffer are: shading or insulating of the stream (tree cover maintains cool water temperatures); the removing of sediment, nutrients and bacteria from the water; reducing bank erosion and providing habitat for aquatic insects, fish, reptiles, and amphibians. For this report card, a 30 metre buffer along each side of the watercourse was used to determine a grade.

Comments

Waterton Creek and the southern portion of the Sauble River scored "poor." Over fifty percent of the remaining watershed scored "fair." The organization of workshops and fact sheets promoting the importance of riparian zones would help landowners initiate riparian plans. Advertising the availability of tree seedlings would assist with the implementation of riparian zone projects. This is the most "cost effective" method for landowners to target the improvement of watershed health.



Chemistry



Water Chemistry looks at elements in the water that affect all types of aquatic species and vegetation. Reporting on "Total Phosphorus" is one of the simplest and most common methods of tracking water quality. Phosphorus is an essential nutrient for plant and animal life and part of the cycle of decomposition and photosynthesis. It is also found in fertilizers, pesticides, wastewater, agricultural and urban runoff, and detergents. Extremely high levels of phosphorus can be seen when excessive amounts of algae appear resulting in plants decomposing and then producing a lack of oxygen in the water.

Comments

Many of the small subwatersheds, have no data. Efforts should be made to expand the sampling network to provide a better picture of water quality throughout our watersheds. Sauble River south requires further examination to determine contributing factors to a "fair" score.



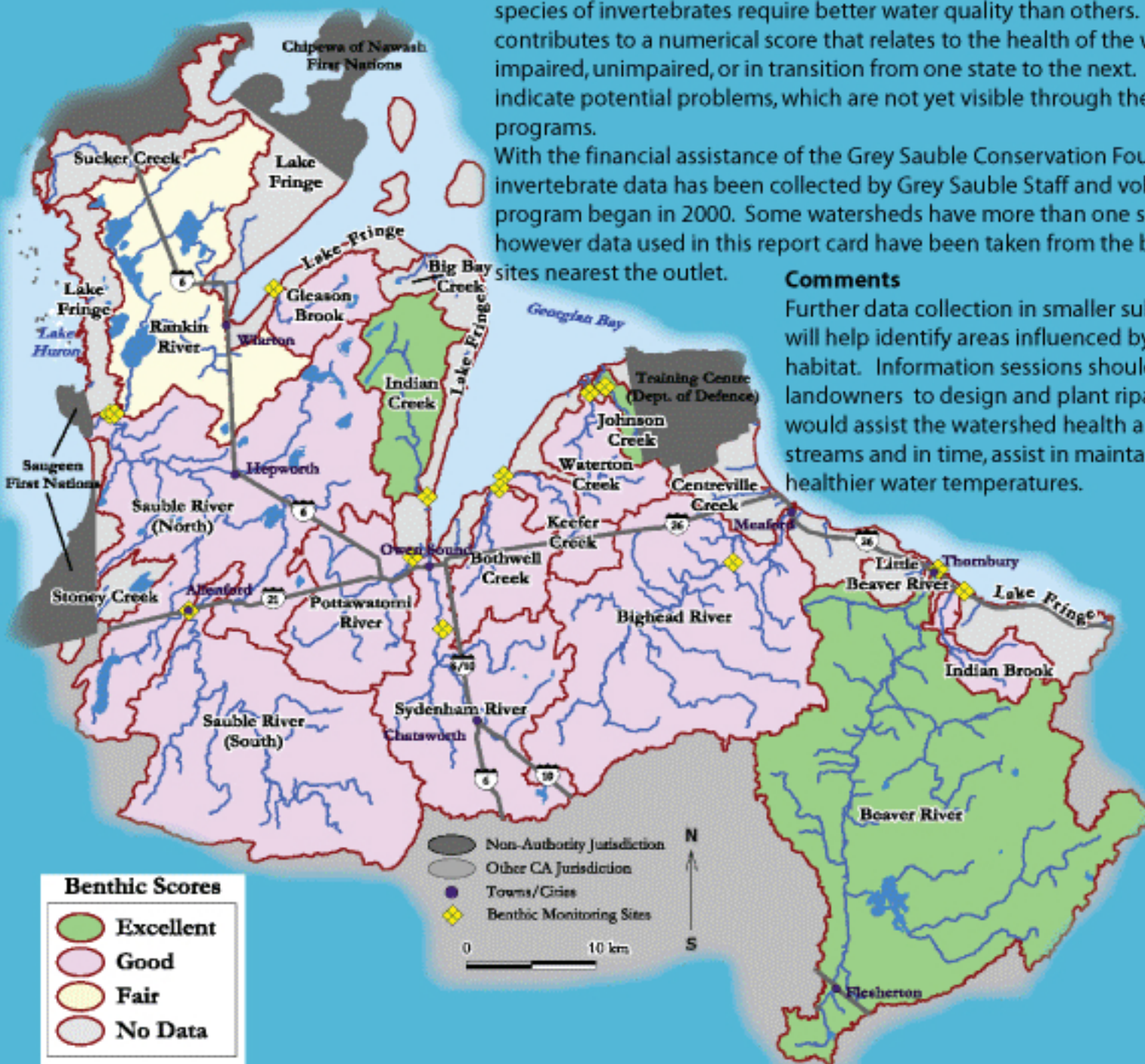
Benthic

Benthic Monitoring is the collecting of invertebrates (insects and other small critters without a backbone) that live at the bottom of rivers or streams. Certain species of invertebrates require better water quality than others. Their presence contributes to a numerical score that relates to the health of the watershed as: impaired, unimpaired, or in transition from one state to the next. The scores may indicate potential problems, which are not yet visible through the other monitoring programs.

With the financial assistance of the Grey Sauble Conservation Foundation, Benthic invertebrate data has been collected by Grey Sauble Staff and volunteers since the program began in 2000. Some watersheds have more than one sampling station, however data used in this report card have been taken from the benthic monitoring sites nearest the outlet.

Comments

Further data collection in smaller sub watersheds will help identify areas influenced by loss of riparian habitat. Information sessions should be offered to landowners to design and plant riparian zones. This would assist the watershed health along the streams and in time, assist in maintaining cooler, healthier water temperatures.





Grey Sauble's Vision and Mission Statement

Vision - "A healthy watershed environment in balance with the needs of society."

Mission "In partnership with stakeholders of the watershed, to promote and undertake sustainable management of renewable natural resources and to provide responsible leadership to enhance biodiversity and environmental awareness."

*Your life revolves around healthy streams which provide us with healthy communities.
It is important for the community to understand the health of our watersheds.*

What can YOU do to HELP our WATERSHEDS?

- 💧 **Protect and enhance riparian areas**
 - naturalize your water's edge, create a buffer by planting native plants, and trees
- 💧 **Conserve Water**
 - don't run the water tap for a cold glass of water instead, have a water pitcher in the refrigerator
 - fix the dripping tap or leaking garden hose
 - turn the tap off when you brush your teeth
- 💧 **Ensure your septic system is working properly**
- 💧 **Use phosphate free soaps**
- 💧 **Plant trees** - it helps fight the carbon debt and helps cool the earth
- 💧 **Don't dump fill along the water's edge**
- 💧 **Reduce or eliminate the use of chemicals and cosmetic pesticides**
- 💧 **Recreation Activities on our waterways should be clean**
 - have your boat motor checked for leaks
- 💧 **Farm Management**
 - Fence livestock out of streams
 - Do not plow to water's edge creating possible sediment runoff into our waterways
 - Do not spread manure too close to our waterways, always leave a buffer area
- 💧 **Well Head Protection**
 - Is there a buffer zone around your well casing?
 - Is the well casing at the proper height above the ground to eliminate surface water contamination?