

Ausable Bayfield

Watershed Report Card 2023 – Summary



This report is about 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 into a river, which then drains into a body of water, such as a pond or lake.

Everything in a watershed is connected.

Our actions upstream 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 the following:



Surface Water Quality



Forest Conditions



Groundwater Quality



Wetland Cover

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 departmental, ministry, agency, and community partners.



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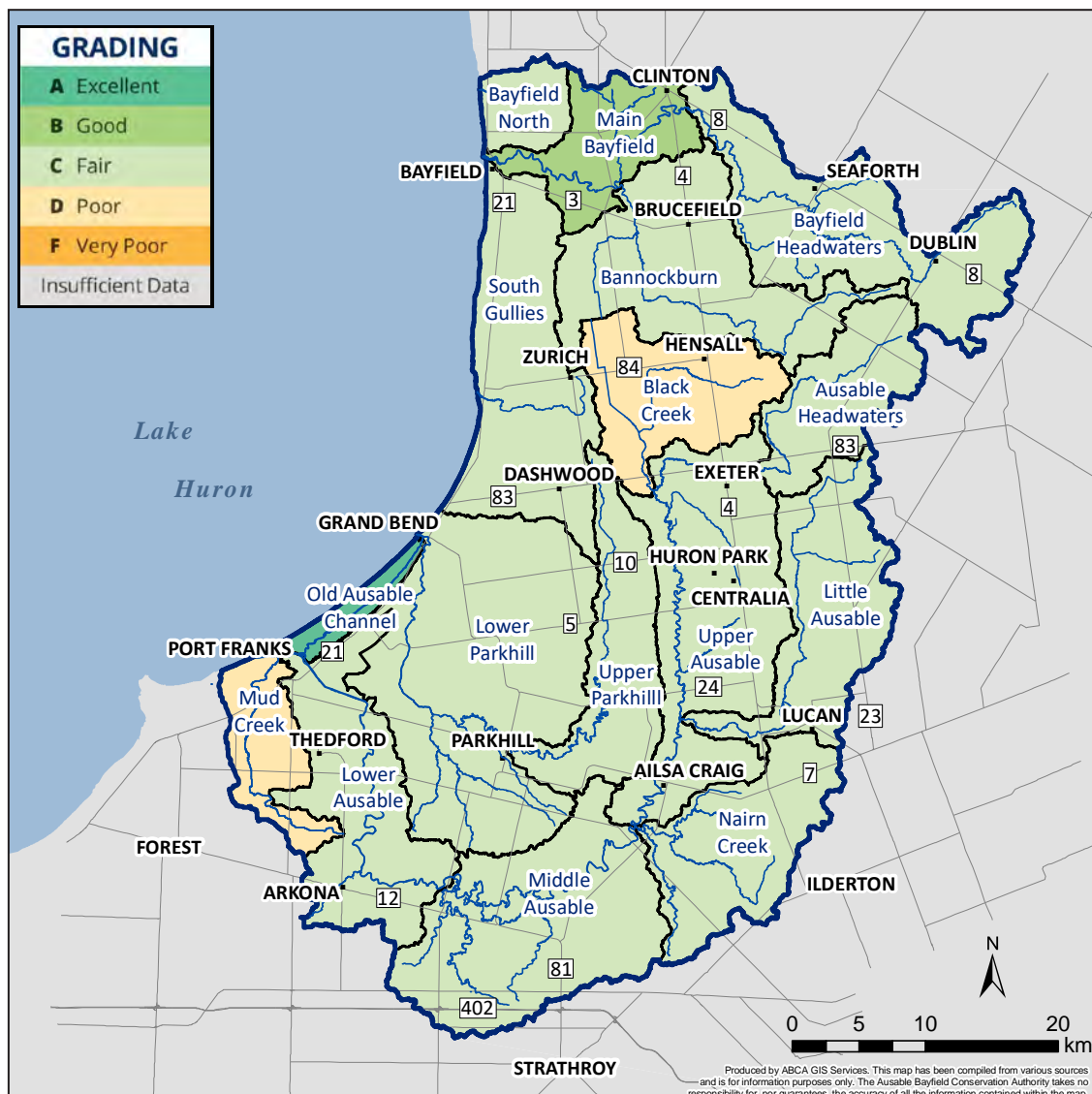
SURFACE WATER QUALITY

We measured phosphorus and *Escherichia coli* (E. coli) bacteria concentrations at 16 sites. We also collected and identified benthic invertebrates (small aquatic animals living in the sediment) as indicators of water quality.

We measured chloride concentrations at nine of the 16 subwatersheds in our area. These sites are part of the Provincial Water Quality Monitoring Network.

What did we find?

- Water quality has remained steady for most subwatersheds.
- Grades ranged from A to D, with most subwatersheds receiving C grades.
- Twelve of 16 subwatersheds received C grades, for 'fair' surface water quality.



Produced by ABCA GIS Services. This map has been compiled from various sources and is for information purposes only. The Ausable Bayfield Conservation Authority takes no responsibility for, nor guarantees, the accuracy of all the information contained within the map.

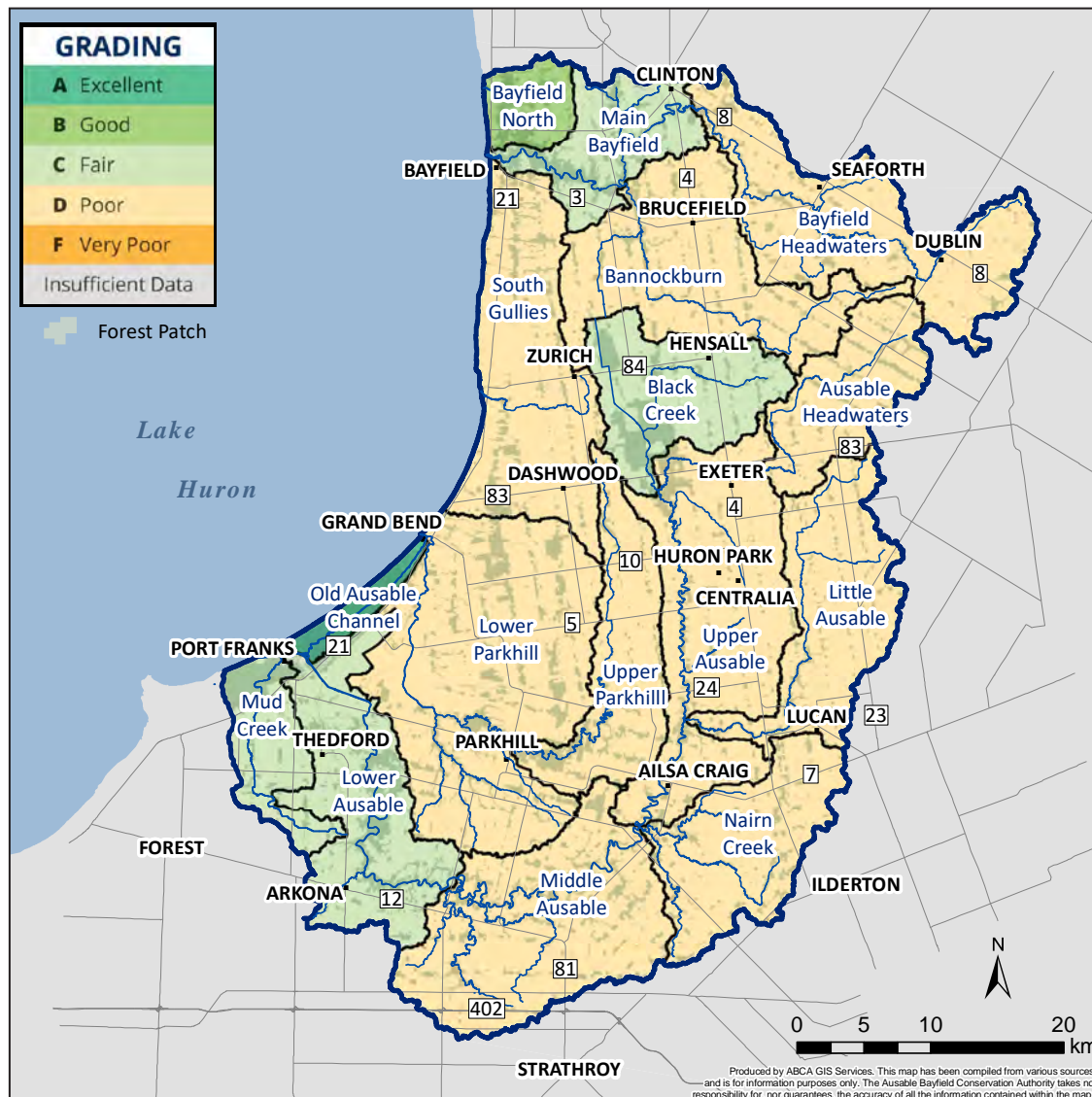


Ausable Bayfield FOREST CONDITIONS

Forests and trees help maintain water quality and manage stormwater. Forests also store carbon and provide habitat. We measured forest cover, forest interior (areas more than 100 metres from the forest edge), and streamside cover (as percentages of the total subwatershed area) using Geographic Information Systems (GIS) digital mapping.

What did we find?

- Ten of the 16 subwatersheds received D grades for overall forest conditions. This indicates 'poor' conditions across much of the area.
- Most subwatersheds received D grades for forest cover, F grades for forest interior, and D grades for streamside cover.
- Grades have remained steady since the initial report in 2007.

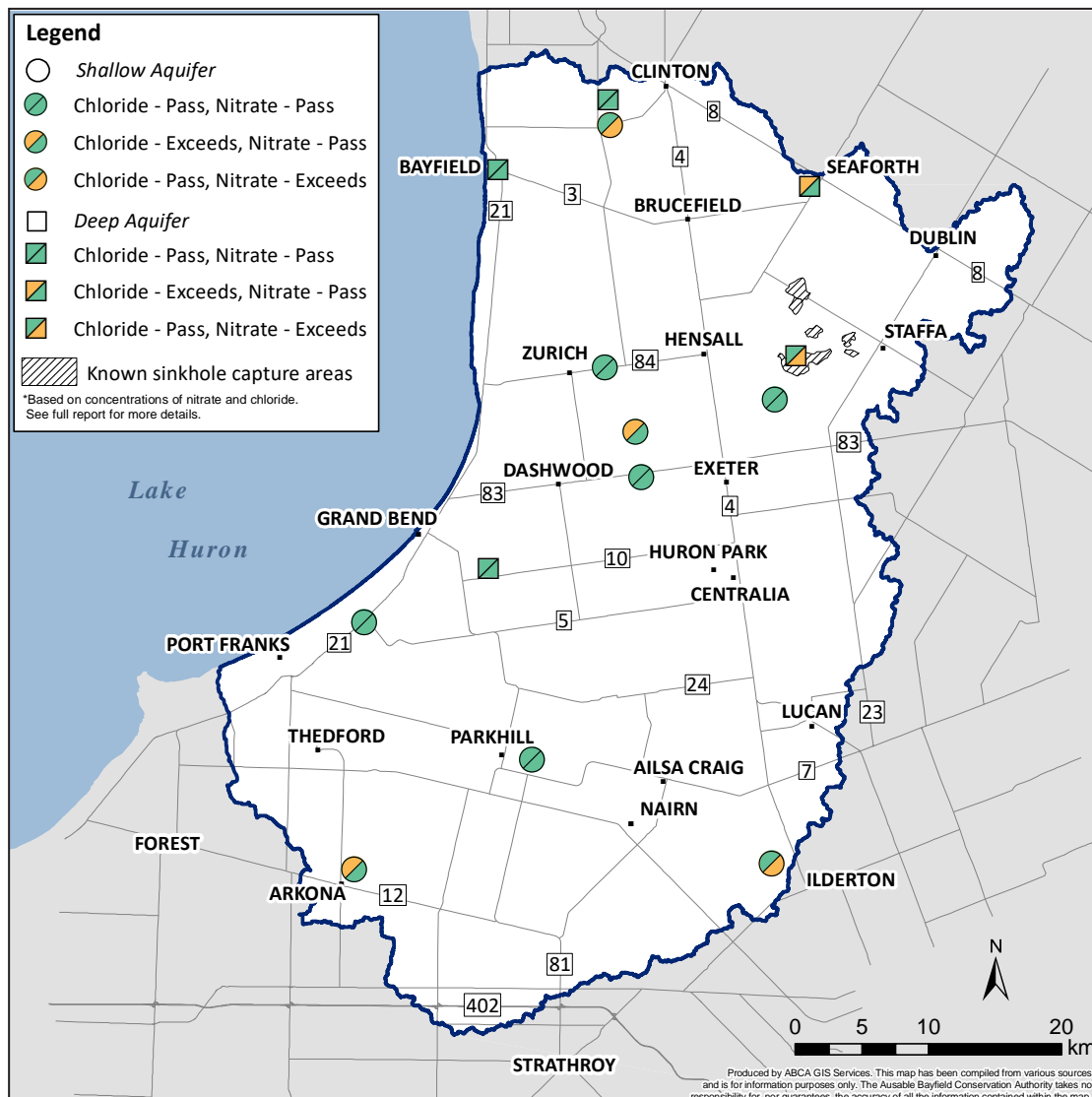




We measured concentrations of nitrate and chloride at 14 monitoring wells in the Provincial Groundwater Monitoring Network. We used two grading categories with a monitoring well receiving either an 'A grade' or 'Less than A grade.' Fertilizers or faulty septic systems (nitrate) and road salt (chloride) are potential sources of contamination in groundwater. Visit sourcewaterinfo.on.ca to learn more.

What Did We Find?

- Groundwater quality is generally very good throughout the Ausable Bayfield Conservation Authority (ABCA) area.
- Some monitoring wells failed to meet the drinking water standard for nitrate and the guideline for chloride, and therefore received a 'less than A grade.'
- The quality of your well water may vary from that of the monitoring wells so it is important to regularly test your well water.





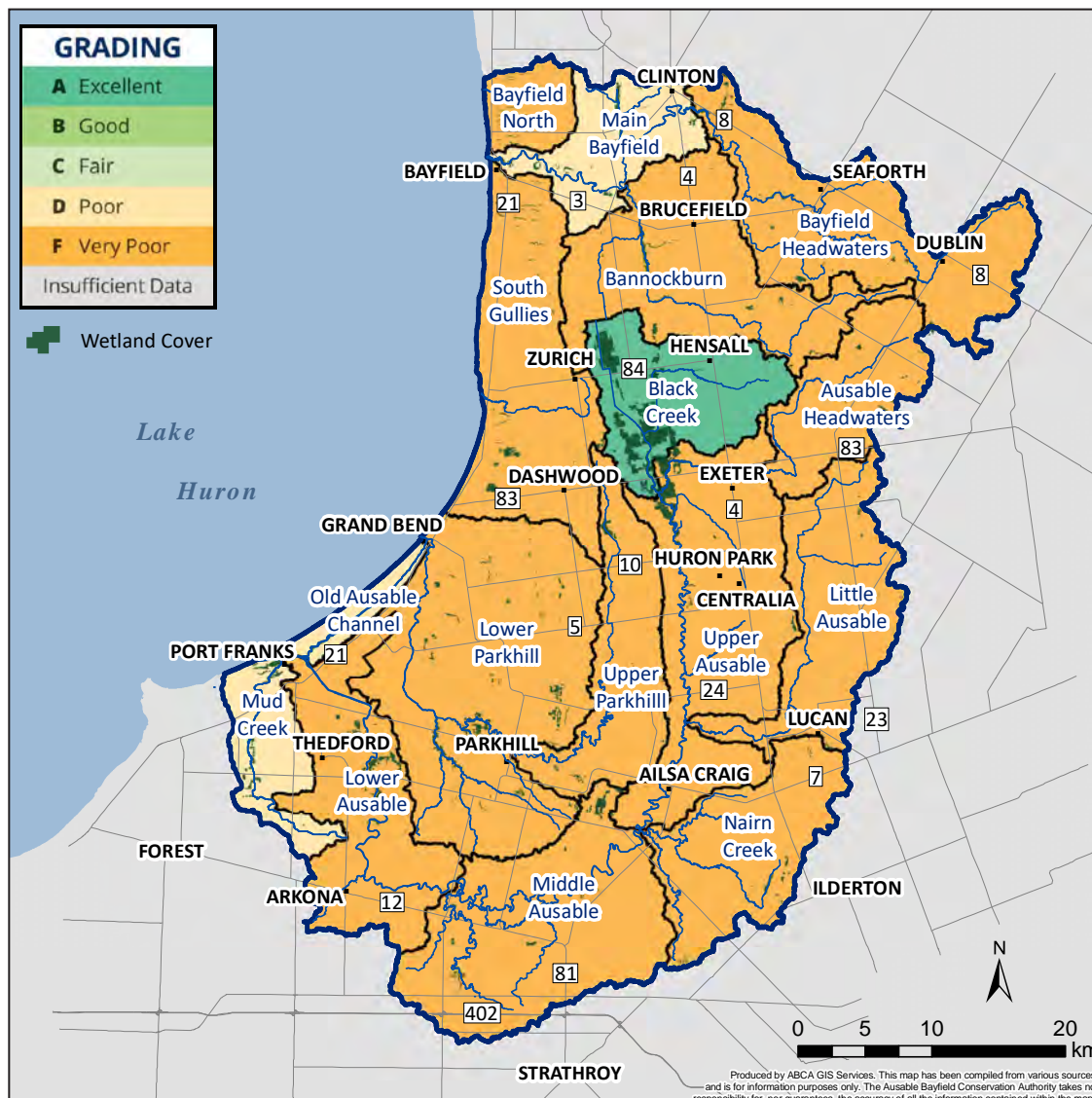
Ausable Bayfield WETLAND COVER

Wetlands temporarily store water and help to mitigate the risk of flooding during wet periods, and slowly sustain flow during drier periods. Wetlands also filter water, store carbon and provide habitat for wildlife.

We measured wetland cover (as a percentage of the total subwatershed area) using GIS digital mapping.

What Did We Find?

- Wetland cover is low at 2% to 3% of most subwatersheds and just 2% of the entire Ausable Bayfield Conservation Authority area.
- The provincially significant Hay Swamp is the largest wetland in the Black Creek subwatershed, which scored an A grade with wetland cover measuring 11.7%.



WHAT IS OUR KEY ISSUE?



Non-point source pollution:

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

What actions could you take to reduce this pollution?

- Dispose of chemicals properly on household hazardous waste days or at approved sites
- Maintain and upgrade septic systems
- Use grassed waterways, berms, cover crops; apply nutrients using 4Rs (right source, right rate, right time, and right place)

What local actions have been taken?

- Local watershed plans developed by communities (e.g., Bayfield, Grand Bend, Port Franks)
- Thousands of acres of cover crops planted

HOW CAN WE ENHANCE THE WATERSHED?



What can your community do?

- Connect natural areas through tree planting and land acquisition
- Support improvements to wastewater treatment, landfills and stormwater management
- Construct wetlands and water retention areas; improve stormwater management

What can agencies (such as municipalities, governments) do?

- Promote native species, forest management, and control of invasive species
- Revisit watershed plans; evaluate stewardship efforts and best management practices
- Assess tributaries for those most prone to erosion; identify stormwater retention options

What can you do?

- Plant trees and shrubs; preserve, restore and enhance wetlands
- Install a rain barrel or rain garden (such as rain gardens in Bayfield, Clinton, or Hensall)
- Use conservation tillage, rotate crops, leave crop residue, and plant cover crops



Do you have questions?

Visit abca.ca 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.