

South Gullies Watershed Report Card 2018



Grades:

- A – Excellent
- B – Good
- C – Fair
- D – Poor
- F – Very Poor

Forest Conditions



Grade:

D

Surface Water Quality



Grade:

C



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.
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Report cards give residents information to protect and enhance watershed resources.

Report card standards were developed for consistent reporting across Ontario.

Top action needed to enhance this watershed:

- Plant Dogwood, Wild Rose, and Honey Locust – these are native shrubs and trees that help to prevent erosion but do not block lake views.

Visit back page for more actions.



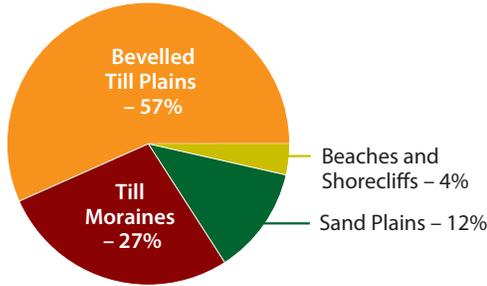
Watershed Features



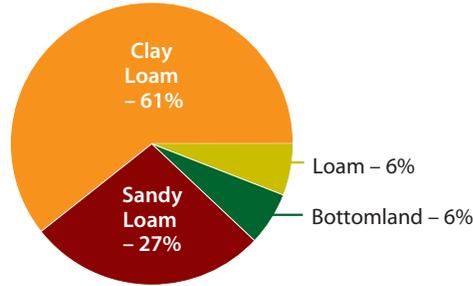
Area: 199 km²

Municipalities: Bluewater, Lambton Shores, South Huron

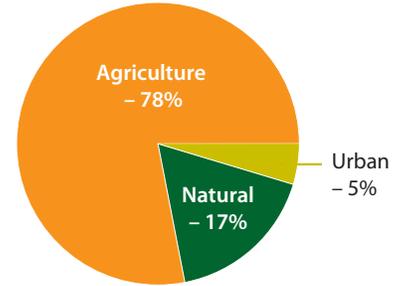
Geology, soil type, and land use help explain surface water and groundwater quality and forest conditions.*



Geology (Chapman and Putnam 1984)



Soils (County Soils Maps 1951-1991)



Land Use (OMAFRA 2015)

Fishable

Fish:

- The fish community is dominated by warmwater baitfish.
- There is potential species-at-risk fish habitat in one of the tributaries.

Species at Risk:

- One bird; two reptiles; one fish; and one plant.*

Did you know?

Without dune grass, our shoreline would look very different. This specialized vegetation traps sand on the beach and the resulting dunes provide valuable shoreline protection and beautiful beaches.



Swimmable at Local Lake Huron Beaches



- To reduce the risk of illness, refrain from swimming for 48 hours after heavy rainfall, especially when you can't see your feet in waist-deep water.
- Water quality at public beaches is monitored from June to Labour Day.
- Find results from your local public health unit and theswimguide.org

Drinkable

Municipal Drinking Water Sources

- Lake Huron (surface water) is the source of raw water for municipal drinking water for many local towns.
- Groundwater from wells is the municipal drinking water source in Brucefield, Clinton, Seaforth, Zurich, and Varna.
- Learn about your municipal well or intake at this link: sourcewaterinfo.on.ca

Private Wells

- Test your well water in spring and autumn.
- Visit ogwa.ca/Well-Wise-Testing for well protection tips.

Groundwater Conditions



- Concentrations of nitrate and chloride are better than the drinking water standard for nitrate and guideline for chloride at the deep provincial monitoring well in this watershed. (*Monitoring well location is shown on map*).
- Your well water quality may differ from that of water quality in provincial monitoring wells.



* Go to abca.ca for the complete Watershed Report Card to learn more.

Watershed Grades



Forest Conditions



| Indicator | Description | Result | | 2017 Grade | |
|-------------------------|--|--------|-------|---------------|-------------|
| | | 2012 | 2017 | South Gullies | Entire ABCA |
| Forest cover | <ul style="list-style-type: none"> Forest cover is a percentage of a watershed that is forested. An A grade is forest covering more than 35% of a watershed. | 11.7% | 11.7% | D | D (14.2%) |
| Forest interior | <ul style="list-style-type: none"> Forest interior is the percentage of a watershed with forest cover that is at least 100 metres from the forest's edge. Some birds need this area to nest and breed. An A grade is forest interior covering more than 11.5%. | 2.0% | 2.1% | F | D (3.3%) |
| Streamside cover | <ul style="list-style-type: none"> Streamside cover is the percentage of the 30-metre area on both sides of open streams that is forested. An A grade is forest covering more than 57.5% of this streamside area. | 24.0% | 24.2% | D | C (32.6%) |



Overwinter Vegetative Cover on Agricultural Lands

- Agriculture comprises 78 per cent of the land use in this watershed.
- A minimum of 30 per cent of overwinter vegetative cover on agricultural lands might be expected if fields were in a corn-soybean-wheat rotation.
- Overwinter vegetative cover on agricultural lands, in this watershed, ranged from 17 to 25 per cent in recent aerial photography.*



Surface Water Quality



| Indicator | Description | Result | | 2017 Grade | |
|-----------------------------------|--|----------------|----------------|---------------|-------------|
| | | 2012 | 2017 | South Gullies | Entire ABCA |
| Total phosphorus | <ul style="list-style-type: none"> Total phosphorus is a nutrient. It enhances plant growth. It contributes to excess algae and low oxygen in streams. An A grade is a 75th-percentile* total phosphorus concentration of less than 0.020 mg/L. | 0.062 mg/L | 0.042 mg/L | C | D (0.073) |
| E. coli (Escherichia coli) | <ul style="list-style-type: none"> <i>E. coli</i> are bacteria found in human and animal waste. Their presence indicates water may contain other disease-causing organisms. An A grade is a geometric-mean* <i>E. coli</i> concentration of no more than 30 colony forming units (cfu) per 100 mL. | 200 cfu/100 mL | 151 cfu/100 mL | C | C (104) |
| Benthic invertebrates | <ul style="list-style-type: none"> Benthic invertebrates are small animals, without backbones, that live in stream sediments. Family Biotic Index (FBI) summarizes the numbers and types of these animals in a sediment sample. Values, from 1 (healthy) to 10 (degraded), reflect stream health. An A grade is an average FBI value of no more than 4.25. | 5.97 | 5.55 | C | C (5.59) |

* The complete *Ausable Bayfield Watershed Report Card* at abca.ca has information on 2007 grades, definitions (such as 75th percentile and geometric mean), methods, and results.

Next Steps

How can you help?

You can:

- Take positive actions on your property – consider native plants on slopes, and inspect and pump out your septic system every 3-5 years.

Your community can:

- Get involved in local water quality monitoring initiatives. Call us to find out more about how to get involved in your community.

Local agencies can:

- Assess tributaries to determine those most prone to shoreline erosion and identify stormwater retention options.

Take action!

We can help you to develop an individual action plan for your property. Interested in monitoring your watershed? Call us to find out how.



Thumbs up!

Hayter Farms Ltd. plants more than 250 hectares (618 acres) of cover crop annually to reduce erosion and improve soil health.

Grants

Funding may be available to help you plant trees, control erosion, and improve water quality.



Call us to find out more.

Links to the Great Lakes

No matter where you live in the watershed, you are linked to the Great Lakes.

We rely on the lake as a source of drinking water, economic activity, and recreation.

Your personal action can make a difference for Lake Huron.

Visit lakehuroncommunityaction.ca



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Visit abca.ca for the complete *Watershed Report Card* for all Ausable Bayfield watersheds.