

Bayfield Headwaters Watershed Report Card 2018



Grades:

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

Forest Conditions



Grade:

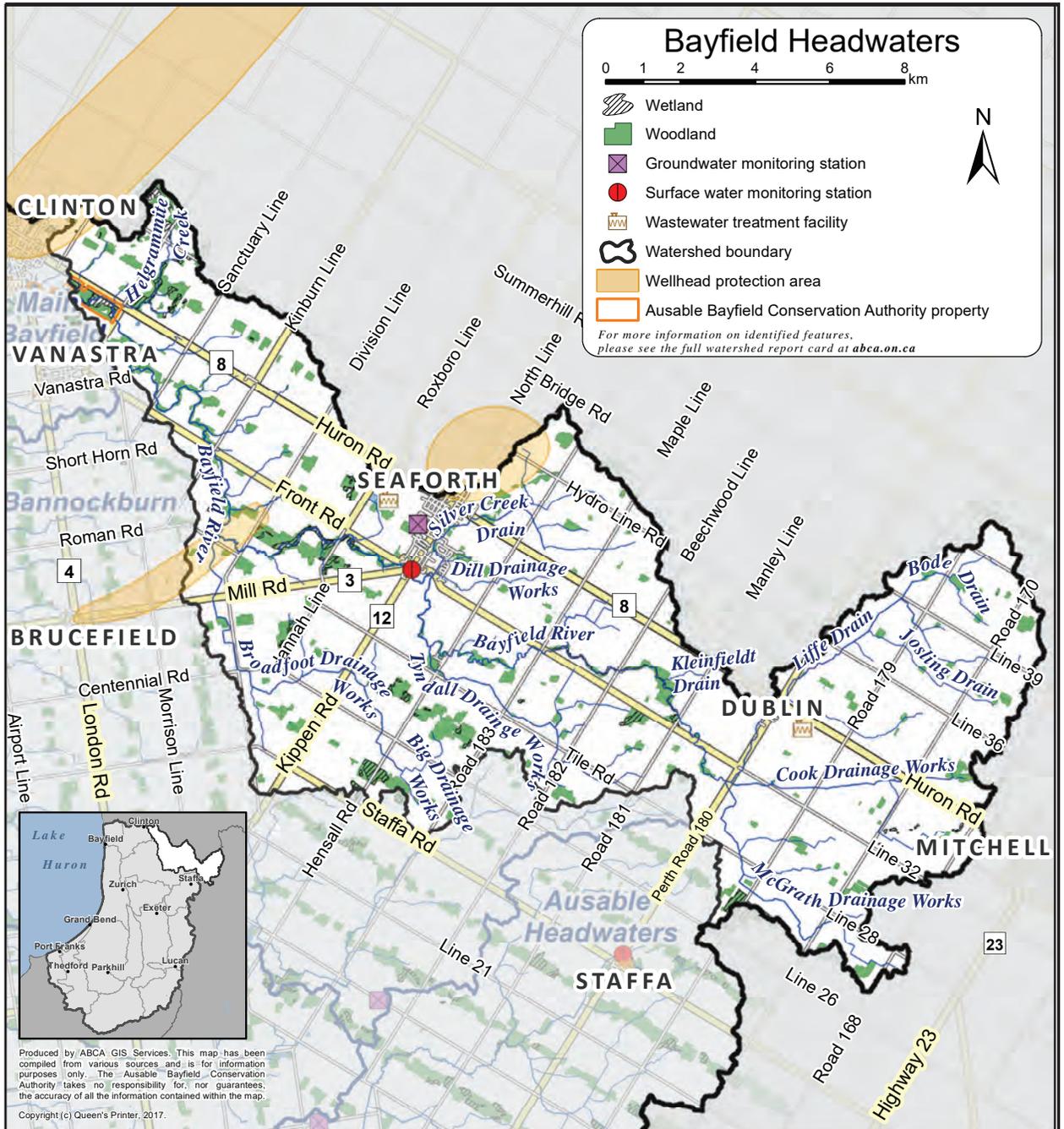
D

Surface Water Quality



Grade:

C



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:

- Protect and expand existing woodlots and enhance small creeks through streamside planting.

Visit back page for more actions.



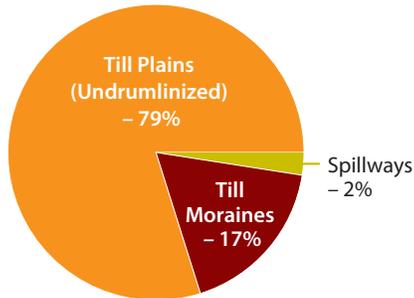
Watershed Features



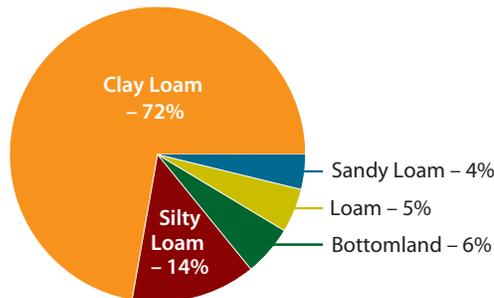
Area: 203 km²

Municipalities: Central Huron, Huron East, West Perth

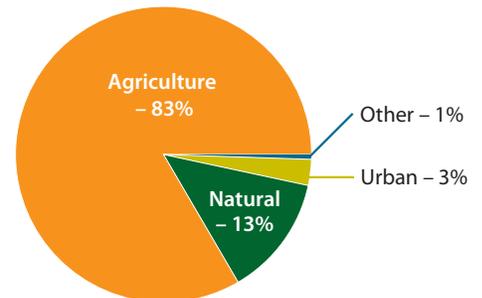
Geology, soil type, and land use help explain surface water and groundwater quality and forest conditions.*



Geology (Chapman and Putnam 1984)



Soils (County Soils Maps 1951-1991)



Land Use (OMAFRA 2015)

Fishable

Fish:

- There are warmwater fish in the main channel that include Smallmouth Bass and Northern Pike.
- There are baitfish and some coldwater fish in the tributaries.

Species at Risk:

- One bird, one reptile, one mussel, and one plant.*

Did you know?

During their migration between North America and Mexico, Monarchs can travel up to 80 kilometres in one day. Consider planting a pollinator garden or milkweed to help them complete their life cycle.



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 are better than the drinking water standard, but chloride concentrations are not as good and have exceeded the guideline 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 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	Bayfield Headwaters	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. 	7.2%	7.6%	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%. 	0.7%	0.7%	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. 	17.6%	17.2%	D	C (32.6%)



Overwinter Vegetative Cover on Agricultural Lands

- Agriculture comprises 83 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 20 to 23 per cent in recent aerial photography.*



Surface Water Quality



Indicator	Description	Result		2017 Grade	
		2012	2017	Bayfield Headwaters	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. 	0.030 mg/L	0.032 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. 	227 cfu/100 mL	179 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. 	5.58	6.18	D	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:

- Use conservation tillage, crop rotation, and grassed waterways to protect your soil.

Your community can:

- Organize a community creek cleanup.

Local agencies can:

- Encourage financial incentive programs, such as county clean water projects.

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!

With funding from the Huron County Clean Water Project, landowners planted more than seven kilometres of windbreaks (approximately 2,300 trees) to create vegetated buffers to reduce erosion.

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.