

Bannockburn Watershed Report Card 2018



Grades:

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

Forest Conditions



Grade:

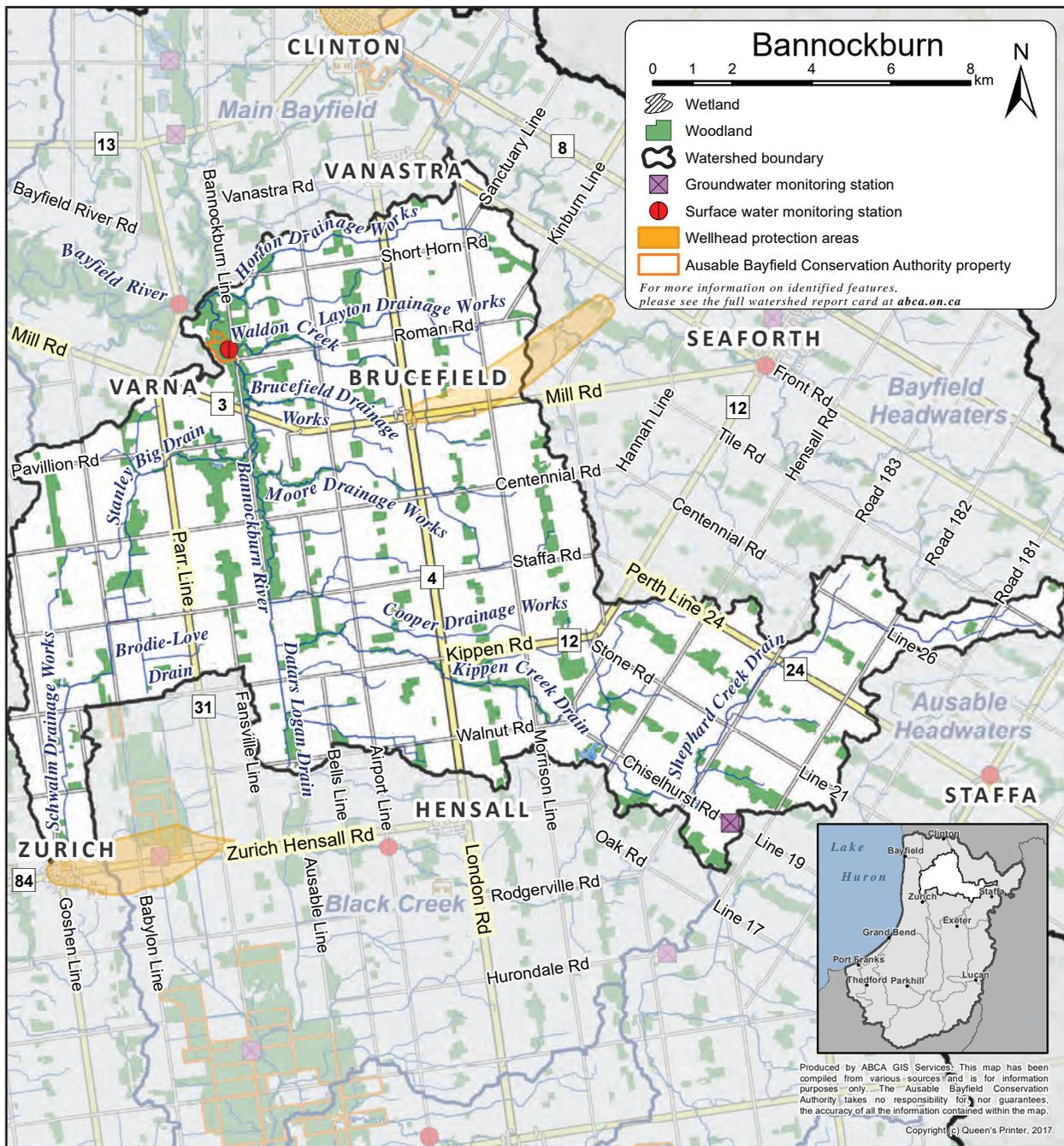
D

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:

- Maximize forest interior by connecting small woodlots to larger tracts and square up existing woodlots by planting trees along the forest edge.

Visit [back page](#) for more actions.



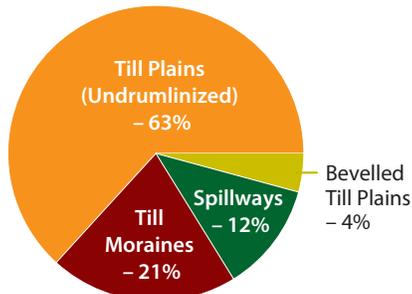
Watershed Features



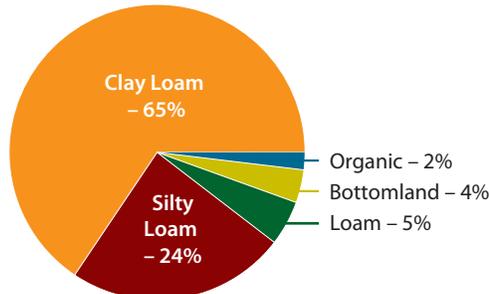
Area: 203 km²

Municipalities: Bluewater, Huron East, West Perth

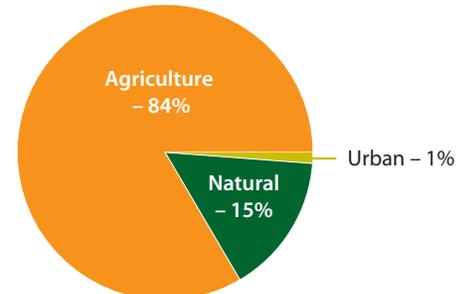
Geology, soil type, and land use help explain surface water and groundwater quality and forest conditions.*



Geology (Chapman and Putnam 1984)



Soils (County Soils Maps 1951-1991)



Land Use (OMAFRA 2015)

Fishable

Fish:

- There are Rainbow Trout in the main channel, with resident Smallmouth Bass.
- The tributaries are primarily warmwater, with limited cold water in the tributaries.

Species at Risk:

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

Did you know?

Snowy Owls, which move south from the Arctic for the winter months, are not exclusively nocturnal like other owls. Males are mostly white, while females and young owls have dark scalloping.



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 chloride are better than the drinking water guideline, but nitrate concentrations are not as good and approach the standard 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	Bannockburn	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. 	10.8%	10.8%	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%. 	1.4%	1.4%	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. 	26.2%	26.3%	D	C (32.6%)



Overwinter Vegetative Cover on Agricultural Lands

- Agriculture comprises 84 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 24 per cent in recent aerial photography.*



Surface Water Quality



Indicator	Description	Result		2017 Grade	
		2012	2017	Bannockburn	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. 	0.032 mg/L	0.038 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. 	152 cfu/100 mL	145 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. 	5.34	5.27	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:

- Contact the Huron-Perth Woodlot Association to help you manage your private woodlots.

Your community can:

- Construct wetlands or water retention areas where possible.

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 support from the Ontario Ministry of the Environment and Climate Change, Environment and Climate Change Canada, and the Fred A. and Barbara M. Erb Family Foundation, the Brucefield Community United Church sold rain barrels to their communities through a fundraising blitz.

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



Ausable Bayfield Conservation Authority (ABCA), 71108 Morrison Line, RR 3 Exeter, ON • N0M 1S5 • Phone: 519-235-2610 • Toll-free: 1-888-286-2610
Facsimile: 519-235-1963 • E-mail: info@abca.ca • Website: abca.ca

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