

Bannockburn WATERSHED REPORT CARD

Forest Conditions



Grade:

D

Wetland Cover



Grade:

F

Surface Water Quality

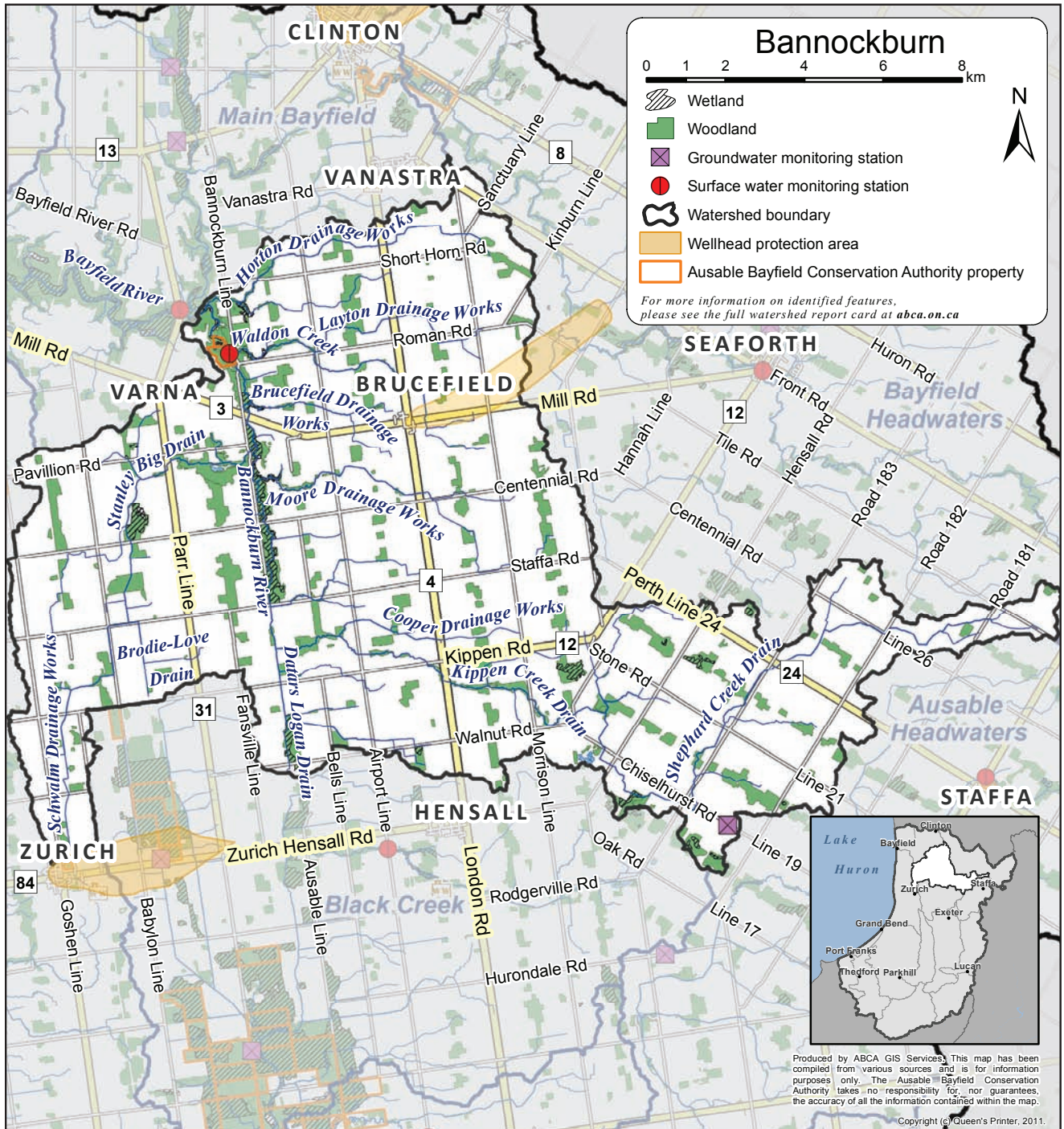


Grade:

C

Grading

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



Top action needed to enhance this watershed:

Connect small woodlots to larger tracts.

For other recommended actions, see back page.

The standards used in this report card were developed by conservation authorities to ensure consistent reporting across the province of Ontario and are intended to provide watershed residents with information to protect, enhance, and improve the precious resources that surround us.



Watershed Features

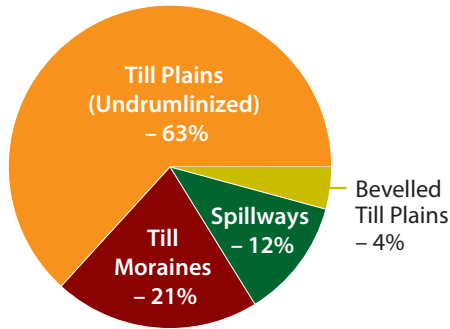
Area: 203 km²

Municipalities: Bluewater, Huron East, West Perth

Watershed features, such as geology, soil type, and land use, help explain forest conditions and the quality of groundwater and surface water.*

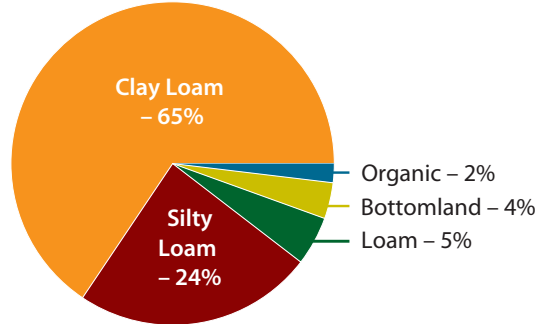
Geology

Chapman and Putnam
1984



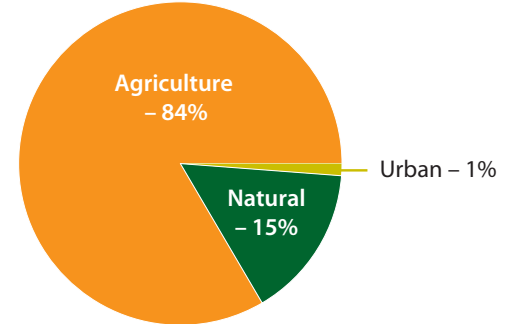
Soils

County Soils Maps
1951-1991



Land Use

Ontario Ministry of Agriculture,
Food and Rural Affairs 2010



Fish:

- There is a warm-water fishery in the main channel.
- The tributaries have baitfish.

Species at Risk:

- One bird, one reptile, one fish, one mussel, and one plant species at risk in this watershed.*

Other Watershed Residents

The Rainbow Darter gets its name from the male's bright colouration during spawning season. The presence of this fish can indicate clear waters, as it is sensitive to sediment in the water.



Watershed Monitoring

Ausable Bayfield Conservation monitors watershed conditions. Look for a dial graphic like this one at abca.on.ca for low-water advisories and flood messages.



For some data collection needs, especially rainfall amounts, local residents are encouraged to help monitor the watershed.

Other monitoring opportunities may exist. Call us if you're interested at **519-235-2610** or toll-free at **1-888-286-2610**.

Groundwater Quality



- Concentrations of chloride are better than the drinking water guideline; however, nitrate concentrations are not as good, and approach the standard at the deep provincial monitoring well in this watershed.
- No grade was assigned at the watershed level because groundwater boundaries differ from surface water boundaries.
- Different types of aquifers exist throughout the region and the quality of your well water may vary from that of the provincial monitoring wells.*

* See the complete *Watershed Report Card* at abca.on.ca for more information.

Forest Conditions and Water Quality



Forest Conditions



Indicator	Description	Result		2012 Grade	
		2007	2012	Bannockburn	Entire ABCA Area
Forest cover	<ul style="list-style-type: none"> Forest cover is the percentage of a watershed that is forested. An A grade is forest covering more than 35% of a watershed. 	9.6%	10.8%	D	D (14.1%)
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% of a watershed. 	1.0%	1.4%	F	D (3.2%)
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. 	N/A	26.2%	D	C (32.7%)



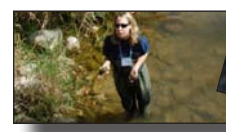
Wetland Cover



Indicator	Description	Result		2012 Grade	
		2007	2012	Bannockburn	Entire ABCA Area
<ul style="list-style-type: none"> Wetland cover is the percentage of a watershed that is covered by wetlands.* An A grade is wetlands covering over 11.5% of a watershed. 	N/A	1.4%	F	F (2.4%)	



Surface Water Quality



Indicator	Description	Result		2012 Grade	
		2007	2012	Bannockburn	Entire ABCA Area
Total phosphorus	<ul style="list-style-type: none"> Total phosphorus is a nutrient that enhances plant growth and 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. 	0.060 mg/L	0.032 mg/L	C	D (0.073)
E. coli (Escherichia coli)	<ul style="list-style-type: none"> E. coli 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* E. coli concentration of no more than 30 colony forming units (cfu) per 100 mL. 	355 cfu/100 mL	152 cfu/100 mL	C	C (113)
Benthic invertebrates	<ul style="list-style-type: none"> Benthic invertebrates are small animals, without backbones, that live in stream sediments. A Family Biotic Index (FBI) summarizes the numbers and types of these animals in a sediment sample. Values reflect stream health, ranging from 1 (healthy) to 10 (degraded). An A grade is an average FBI value of no more than 4.25. 	4.91	5.34	C	C (5.51)

* See the complete *Watershed Report Card* at abca.on.ca for definitions of wetlands, 75th percentile, and geometric mean.



Next Steps



Thumbs up!

A 16-acre parcel of land beside Bannockburn Conservation Area was donated to Ausable Bayfield Conservation by Ralph and Eleanor Smith. This generous donation will help protect the Bannockburn River, which flows into the Bayfield River.

This is just one example in the watershed. Let us know about projects you and your community are doing.

Grants

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



How can you help between now and the next Watershed Report Card?

You can ...

- Have your well inspected and upgraded where necessary.
- Send your e-mail address to wellwater@huroncounty.ca for a free reminder to test your well water.
- Use local resources, such as the Huron Perth Woodlot Association, to properly manage your private woodlots.

Your community can ...

- Support water quality monitoring in sinkhole areas.
- Reduce sediment in municipal drains through effective design (for example, two-stage ditches).
- Restore and enhance wetlands where possible.

Local agencies can ...

- Monitor water quality in relation to sinkholes and report back to residents of capture areas.
- Encourage financial incentive programs, such as county clean water projects.

Take Action! Develop an individual action plan for your property – call us to find out how.

Links to the Great Lakes

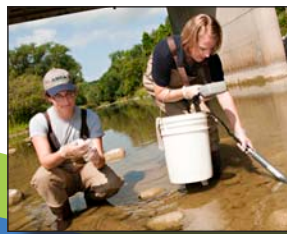
No matter where you live in the watershed, you are linked to the Great Lakes.

The local actions you take make a difference for Lake Huron.

Visit lakehuroncommunityaction.ca



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



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Bannockburn Watershed Report Card