# **Upper Parkhill** Watershed Report Card 2018



#### **Grades:**

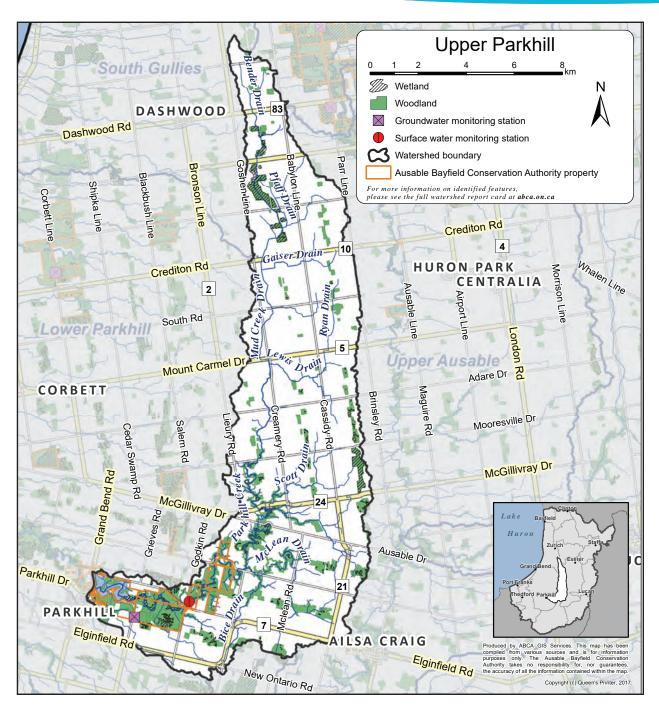
- A Excellent
- B Good
- C Fair
- D Poor
- F Very Poor





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:

• Practise conservation tillage, particularly on cropped and sloped lands upstream of the Parkhill Reservoir.

Visit back page for more actions.



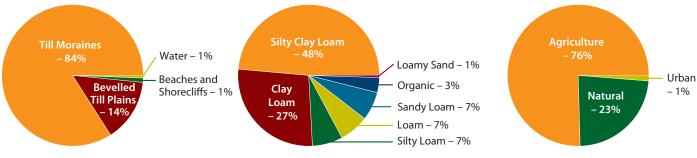
### **Watershed Features**



**Area:** 127 km<sup>2</sup>

Municipalities: Bluewater, North Middlesex, 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**

• There are warmwater fish in the main channel.

#### Fish:

- Parkhill Reservoir provides angling opportunities for White Crappie, Yellow Perch, Largemouth Bass, and Common Carp.
- There are baitfish in the tributaries.

# Species at Risk:

One bird; one reptile; and six plants.\*

### Did you know?

As their name suggests, Gray Treefrogs live in trees and have specialized



Brian Lasenby Photo

toe-pads that act like suction cups.
They are able to change the colour of their skin to camouflage against trees and lichens.

### 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 approach the guideline at the shallow provincial monitoring well. (Monitoring well location is shown on map).
- Your well water quality may differ from that of water quality in provincial monitoring wells.



<sup>\*</sup> Go to abca.ca for the complete Watershed Report Card to learn more.

### **Watershed Grades**



### **Forest Conditions**



Indicator	Description	Result		2017 Grade	
		2012	2017	Upper Parkhill	Entire ABCA
Forest cover	<ul> <li>Forest cover is a percentage of a watershed that is forested.</li> <li>An A grade is forest covering more than 35% of a watershed.</li> </ul>	13.9%	14.1%	D	D (14.2%)
Forest interior	<ul> <li>Forest interior is the percentage of a watershed with forest cover that is at least 100 metres from the forest's edge.</li> <li>Some birds need this area to nest and breed.</li> <li>An A grade is forest interior covering more than 11.5%.</li> </ul>	2.3%	2.3%	F	D (3.3%)
Streamside cover	<ul> <li>Streamside cover is the percentage of the 30-metre area on both sides of open streams that is forested.</li> <li>An A grade is forest covering more than 57.5% of this streamside area.</li> </ul>	39.4%	40.3%	С	C (32.6%)



### **Overwinter Vegetative Cover** on Agricultural Lands

- Agriculture comprises 76 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 9 to 19 per cent in recent aerial photography.\*



### **Surface Water Quality**



Indicator	Description	Result		2017 Grade	
		2012	2017	Upper Parkhill	Entire ABCA
Total phosphorus	<ul> <li>Total phosphorus is a nutrient. It enhances plant growth. It contributes to excess algae and low oxygen in streams.</li> <li>An A grade is a 75th-percentile* total phosphorus concentration of less than 0.020 mg/L.</li> </ul>	0.117 mg/L	0.105 mg/L	D	D (0.073)
E. coli (Escherichia coli)	<ul> <li>E. coli are bacteria found in human and animal waste. Their presence indicates water may contain other disease-causing organisms.</li> <li>An A grade is a geometric-mean* E. coli concentration of no more than 30 colony forming units (cfu) per 100 mL.</li> </ul>	100 cfu/ 100 mL	94 cfu/ 100 mL	В	C (104)
Benthic invertebrates	<ul> <li>Benthic invertebrates are small animals, without backbones, that live in stream sediments.</li> <li>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.</li> <li>An A grade is an average FBI value of no more than 4.25.</li> </ul>	5.17	5.31	С	C (5.59)

<sup>\*</sup> 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:

 Plant windbreaks and cover crops, and maintain residue cover to protect soil.

### Your community can:

 Continue to attend local events and talks, such as local library programs.

### Local agencies can:

 Develop a healthy forest management strategy for remediating the impacts of invasive pests.

### 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!

Forests Ontario, the Middlesex
Stewardship Council, and the Ontario
Community Environmental Fund
helped McGillivray Central School plant
28,000 native trees on Ausable Bayfield
property (Kime Tract).

### **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.