

# Middle Ausable Watershed Report Card 2018



## Grades:

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

## Forest Conditions



Grade:

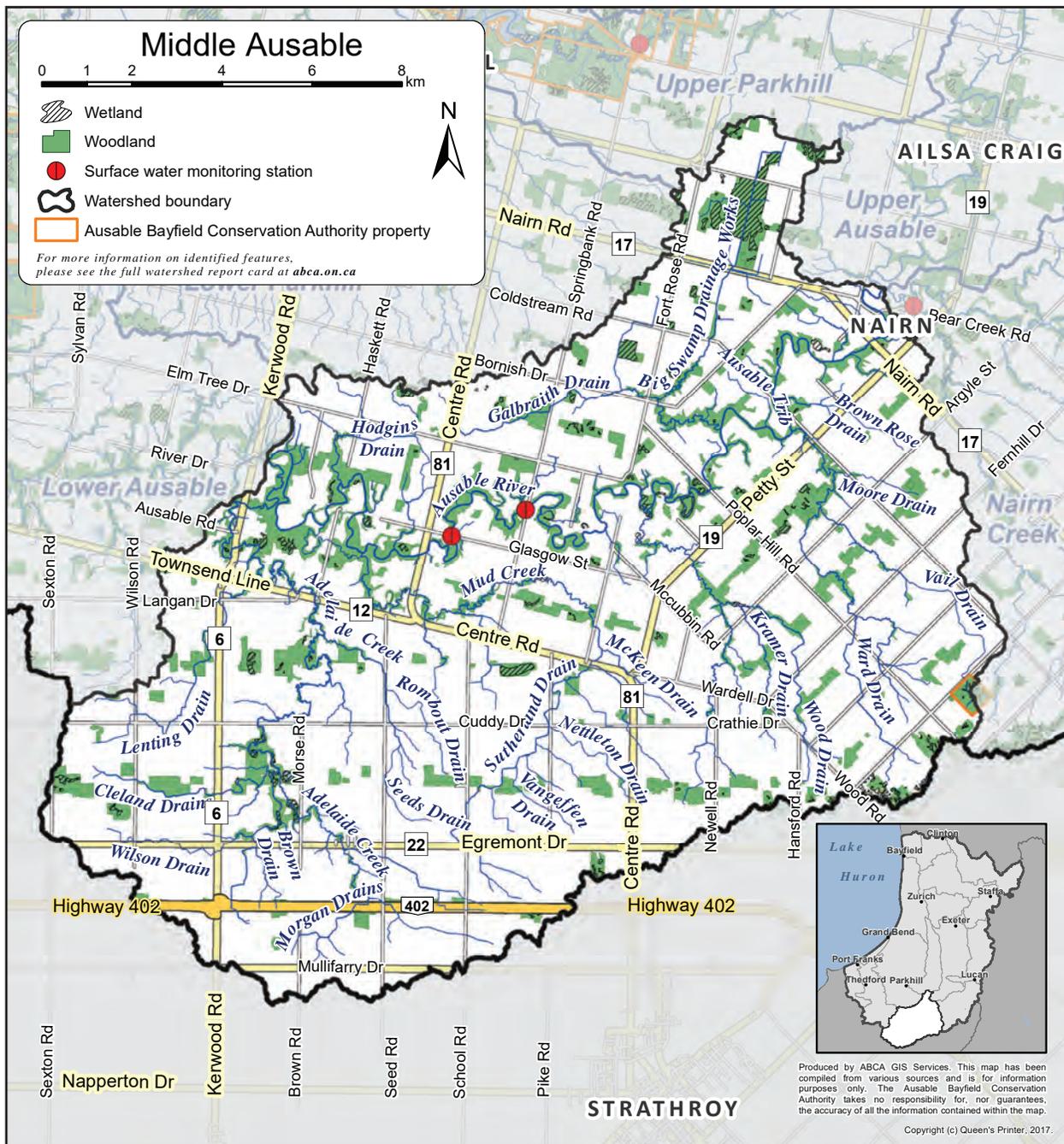
**D**

## 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:

- Plant cover crops, rotate crops, and maintain crop residue on agricultural lands to reduce field erosion.

*Visit back page for more actions.*



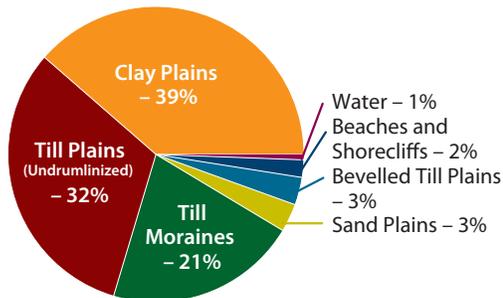
# Watershed Features



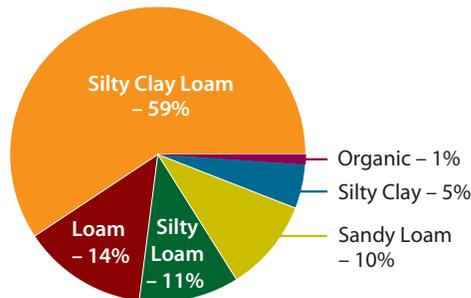
Area: 231 km<sup>2</sup>

Municipalities: Adelaide Metcalfe, North Middlesex, Middlesex Centre

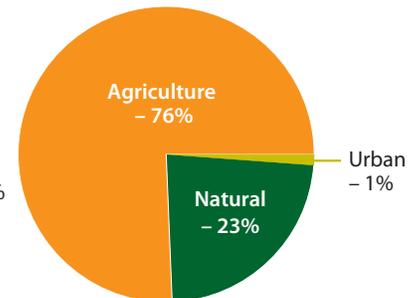
Geology, soil type, and land use help explain surface water and groundwater quality and forest conditions.\*



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 with Smallmouth Bass and Walleye.
- There are baitfish in the tributaries.
- Potential habitat for fish species at risk.

### Species at Risk:

- One mammal; three birds; four reptiles; and six mussels.\*

## Did you know?

Popular with anglers, Walleye (also known as Pickerel) have specialized eyes like cats. A reflective layer allows them to see well in low-light and rough water conditions, giving them an advantage over their prey.



## 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](http://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](http://sourcewaterinfo.on.ca)

### Private Wells

- Test your well water in spring and autumn.
- Visit [ogwa.ca/Well-Wise-Testing](http://ogwa.ca/Well-Wise-Testing) for well protection tips.

### Groundwater Conditions



- A provincial monitoring well does not exist in this watershed, but groundwater may be similar to wells near Arkona, Parkhill, and Shipka. Nitrate concentrations are better than the drinking water standard at these provincial monitoring wells, but chloride concentrations are not as good and approach the guideline at the shallow monitoring wells near Arkona and Parkhill.
- Your well water quality may differ from that of provincial monitoring wells.

\* Go to [abca.ca](http://abca.ca) for the complete Watershed Report Card to learn more.

# Watershed Grades



## Forest Conditions



Indicator	Description	Result		2017 Grade	
		2012	2017	Middle Ausable	Entire ABCA
<b>Forest cover</b>	<ul style="list-style-type: none"> <li>Forest cover is a percentage of a watershed that is forested.</li> <li>An <b>A</b> grade is forest covering more than 35% of a watershed.</li> </ul>	13.6%	13.6%	D	D (14.2%)
<b>Forest interior</b>	<ul style="list-style-type: none"> <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 <b>A</b> grade is forest interior covering more than 11.5%.</li> </ul>	1.9%	1.9%	F	D (3.3%)
<b>Streamside cover</b>	<ul style="list-style-type: none"> <li>Streamside cover is the percentage of the 30-metre area on both sides of open streams that is forested.</li> <li>An <b>A</b> grade is forest covering more than 57.5% of this streamside area.</li> </ul>	43.2%	42.7%	B	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 7 to 17 per cent in recent aerial photography.\*



## Surface Water Quality



Indicator	Description	Result		2017 Grade	
		2012	2017	Middle Ausable	Entire ABCA
<b>Total phosphorus</b>	<ul style="list-style-type: none"> <li>Total phosphorus is a nutrient. It enhances plant growth. It contributes to excess algae and low oxygen in streams.</li> <li>An <b>A</b> grade is a 75th-percentile* total phosphorus concentration of less than 0.020 mg/L.</li> </ul>	0.094 mg/L	0.076 mg/L	D	D (0.073)
<b>E. coli (Escherichia coli)</b>	<ul style="list-style-type: none"> <li><i>E. coli</i> are bacteria found in human and animal waste. Their presence indicates water may contain other disease-causing organisms.</li> <li>An <b>A</b> grade is a geometric-mean* <i>E. coli</i> concentration of no more than 30 colony forming units (cfu) per 100 mL.</li> </ul>	70 cfu/100 mL	92 cfu/100mL	B	C (104)
<b>Benthic invertebrates</b>	<ul style="list-style-type: none"> <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 <b>A</b> grade is an average FBI value of no more than 4.25.</li> </ul>	4.47	4.51	B	C (5.59)

\* The complete *Ausable Bayfield Watershed Report Card* at [abca.ca](http://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:

- Reforest less agriculturally productive land and extend forests along fencerows.

### Your community can:

- Attend and participate in local events, such as the Ailsa Craig fishing derby, and Ailsa Craig Gala Days.

### Local agencies can:

- Promote reintroduction of native species and other forest management practices such as prevention and control of invasive species.

## 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!

Species at risk in the Ausable River have benefitted from partnerships between Fisheries and Oceans Canada and the Municipality of North Middlesex. The Ailsa Craig community raised awareness about local turtle species with a new sign at Ailsa Craig Community Park.

## 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](http://lakehuroncommunityaction.ca)



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Visit [abca.ca](http://abca.ca) for the complete *Watershed Report Card* for all Ausable Bayfield watersheds.