Top action needed to enhance this watershed:

- Improve water quality by keeping soil covered, reducing tillage, rotating crops, and reducing lawn, farm, and garden fertilizers.

Visit back page for more actions.
**Watershed Features**

**Area:** 241 km²  
**Municipalities:** Bluewater, South Huron, North Middlesex

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

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**Geology** *(Chapman and Putnam 1984)*  
**Soils** *(County Soils Maps 1951–1991)*

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**Fishable**

- **Fish:**
  - There are warmwater fish, including Smallmouth Bass; Channel Catfish (below Ailsa Craig); and migratory Rainbow Trout.
  - There are baitfish in the tributaries.
  - Potential habitat for fish species at risk.

- **Species at Risk:**
  - Two birds; two reptiles; one fish; five mussels; and four plants.*

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**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

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**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.

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**Groundwater Conditions**

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

---

**Upper Ausable Watershed**

*Go to abca.ca for complete Watershed Report Card.*
## Forest Conditions

**Grade:** D

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Result 2012</th>
<th>Result 2017</th>
<th>2017 Grade</th>
<th>Entire ABCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest cover</td>
<td>• Forest cover is a percentage of a watershed that is forested.</td>
<td>10.6%</td>
<td>10.7%</td>
<td>D</td>
<td>D (14.2%)</td>
</tr>
<tr>
<td></td>
<td>• An A grade is forest covering more than 35% of a watershed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest interior</td>
<td>• Forest interior is the percentage of a watershed with forest cover that is at least 100 metres from the forest's edge.</td>
<td>2.0%</td>
<td>2.2%</td>
<td>F</td>
<td>D (3.3%)</td>
</tr>
<tr>
<td></td>
<td>• Some birds need this area to nest and breed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• An A grade is forest interior covering more than 11.5%.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streamside cover</td>
<td>• Streamside cover is the percentage of the 30-metre area on both sides of open streams that is forested.</td>
<td>31.8%</td>
<td>31.0%</td>
<td>C</td>
<td>C (32.6%)</td>
</tr>
<tr>
<td></td>
<td>• An A grade is forest covering more than 57.5% of this streamside area.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 11 to 26 per cent in recent aerial photography.*

## Surface Water Quality

**Grade:** C

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Result 2012</th>
<th>Result 2017</th>
<th>2017 Grade</th>
<th>Entire ABCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total phosphorus</td>
<td>• Total phosphorus is a nutrient. It enhances plant growth. It contributes to excess algae and low oxygen in streams.</td>
<td>0.266 mg/L</td>
<td>0.170 mg/L</td>
<td>D</td>
<td>D (0.073)</td>
</tr>
<tr>
<td></td>
<td>• An A grade is a 75th-percentile* total phosphorus concentration of less than 0.020 mg/L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. coli (Escherichia coli)</td>
<td>• <em>E. coli</em> are bacteria found in human and animal waste. Their presence indicates water may contain other disease-causing organisms.</td>
<td>100 cfu/100 mL</td>
<td>101 cfu/100 mL</td>
<td>C</td>
<td>C (104)</td>
</tr>
<tr>
<td></td>
<td>• An A grade is a geometric-mean* <em>E. coli</em> concentration of no more than 30 colony forming units (cfu) per 100 mL.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benthic invertebrates</td>
<td>• Benthic invertebrates are small animals, without backbones, that live in stream sediments.</td>
<td>5.46</td>
<td>5.58</td>
<td>C</td>
<td>C (5.59)</td>
</tr>
<tr>
<td></td>
<td>• 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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• An A grade is an average FBI value of no more than 4.25.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 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.
How can you help?

You can:
• Cover the soil, rotate crops, and reduce tillage to prevent field erosion.

Your community can:
• Construct erosion control projects and plant vegetation where possible.

Local agencies can:
• Continue to work with the community to enhance the local trail network.

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!

Peter Darbishire supported the South Huron Trail by donating access to his land and planting trees.

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.

Upper Ausable Watershed