



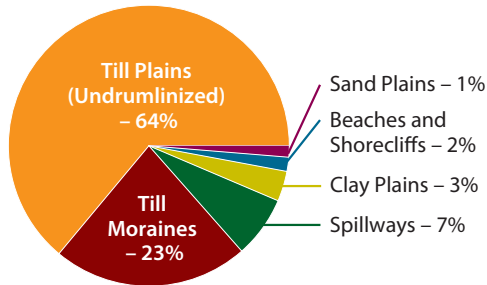
# Watershed Features



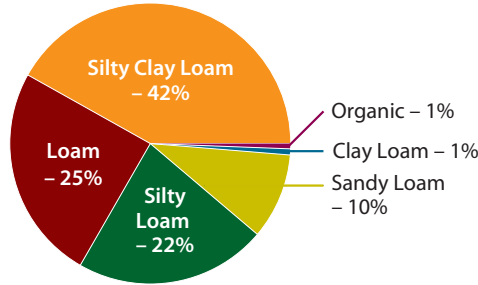
Area: 139 km<sup>2</sup>

Municipalities: Lucan Biddulph, Middlesex Centre, North Middlesex

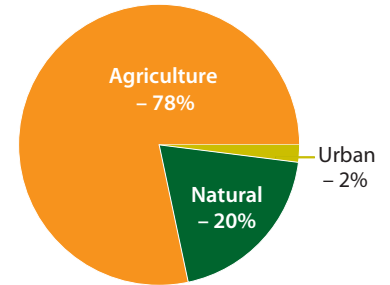
Geology, soil type, and land use help explain surface water and groundwater quality and forest conditions.\*



Geology (Chapman and Putnam 1984)



Soils (County Soils Maps 1951-1991)



Land Use (OMAFRA 2015)

## Fishable

### Fish:

- There are migratory Rainbow Trout in the main channel.
- There are coldwater tributaries.

### Species at Risk:

- Five birds; one reptile; three mussels; and three plants.\*

## Did you know?

The endangered Kidneyshell Mussel filters its food (bacteria and algae) from the water. Protect these important water purifiers by protecting wetlands, planting cover crops and streamside buffers.



## 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



- Concentrations of chloride are better than the drinking water guideline but nitrate concentrations are not as good and approach the standard at the shallow provincial monitoring well. (*Monitoring well location is on map*).
- Your well water quality may differ from that the water quality 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	Nairn Creek	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>	9.6%	9.7%	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>	1.0%	0.9%	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>	27.6%	28.8%	C	C (32.6%)



## Overwinter Vegetative Cover on Agricultural Lands

- Agriculture comprises 78 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 8 to 18 per cent in recent aerial photography.\*



## Surface Water Quality



Indicator	Description	Result		2017 Grade	
		2012	2017	Nairn Creek	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>	0.031 mg/L	0.035 mg/L	C	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>	104 cfu/100 mL	114 cfu/100 mL	C	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>	4.96	4.70	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:

- Plant streamside vegetation.

### Your community can:

- Protect wetlands and investigate the purchase of key wetlands that preserve coldwater flow.

### Local agencies can:

- Evaluate areas of significance to enhance coldwater fish habitat.

## 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 funding from Environment and Climate Change Canada, Ducks Unlimited, and the Ontario Ministry of the Environment and Climate Change, Ruth and Greg Strapp constructed a wetland and planted two acres of Tallgrass Prairie.

## 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.