

# Ausable Headwaters WATERSHED REPORT CARD

## Forest Conditions



Grade:



## Wetland Cover



Grade:



## Surface Water Quality



Grade:



## Grading

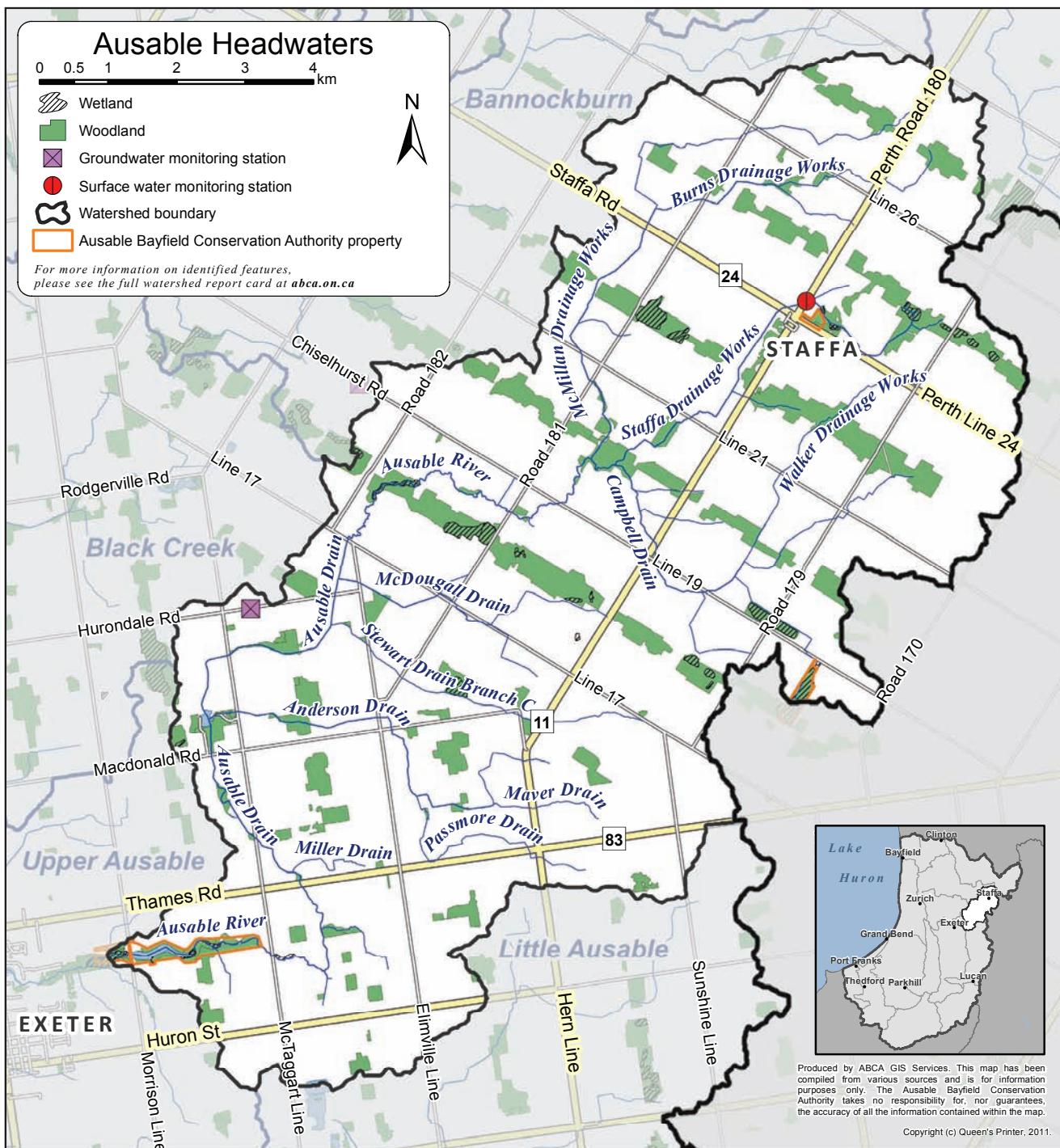
**A** Excellent

**B** Good

**C** Fair

**D** Poor

**F** Very Poor



## Top action needed to enhance this watershed:

Control soil erosion and exclude livestock from watercourses with fencing.

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

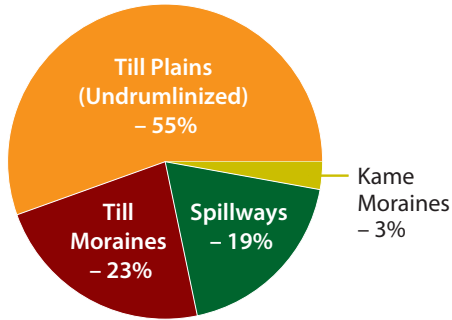
**Area:** 104 km<sup>2</sup>

**Municipalities:** South Huron, West Perth

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

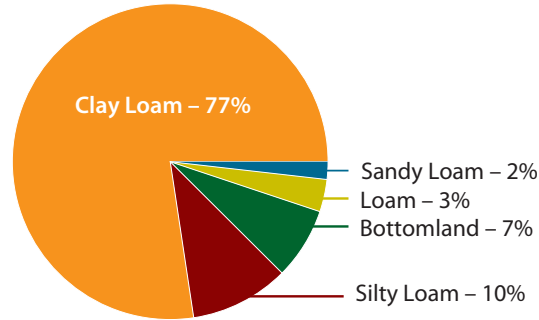
## Geology

Chapman and Putnam  
1984



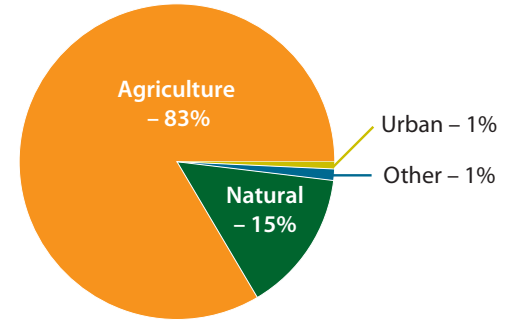
## Soils

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, and one plant species at risk in this watershed.\*

## Other Watershed Residents

Owls, such as the Great Horned Owl, shown here, help keep food webs balanced and healthy. Come learn more about these incredible hunters at the annual Ausable Bayfield Owl Prowl held in early November.



# Watershed Monitoring

Ausable Bayfield Conservation monitors watershed conditions. Look for a dial graphic like this one at [abca.on.ca](http://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 nitrate and chloride are better than the drinking water standard for nitrate and guideline for chloride at the shallow 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](http://abca.on.ca) for more information.

# Forest Conditions and Water Quality



## Forest Conditions



| Indicator               | Description  | Result |       | 2012 Grade         |                  |
|-------------------------|--|--------|-------|--------------------|------------------|
|                         |  | 2007   | 2012  | Ausable Headwaters | Entire ABCA Area |
| <b>Forest cover</b>     | <ul style="list-style-type: none"> <li>Forest cover is the percentage of a watershed that is forested.</li> <li>An A grade is forest covering more than 35% of a watershed.</li> </ul>   | 9.0%   | 10.2% | D                  | D (14.1%)        |
| <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 A grade is forest interior covering more than 11.5% of a watershed.</li> </ul> | 0.9%   | 1.2%  | F                  | D (3.2%)         |
| <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 A grade is forest covering more than 57.5% of this streamside area.</li> </ul>  | N/A    | 18.9% | D                  | C (32.7%)        |



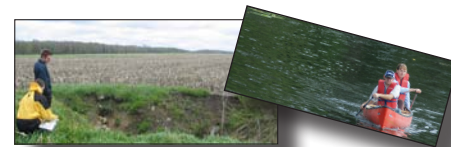
## Wetland Cover



| Indicator  | Description | Result |      | 2012 Grade         |                  |
|--|-------------|--------|------|--------------------|------------------|
|  |             | 2007   | 2012 | Ausable Headwaters | Entire ABCA Area |
| <ul style="list-style-type: none"> <li>Wetland cover is the percentage of a watershed that is covered by wetlands.*</li> <li>An A grade is wetlands covering over 11.5% of a watershed.</li> </ul> | N/A         | 0.9%   | F    | F (2.4%)           |                  |



## Surface Water Quality



| Indicator                         | Description  | Result         |                | 2012 Grade         |                  |
|-----------------------------------|--|----------------|----------------|--------------------|------------------|
|                                   |  | 2007           | 2012           | Ausable Headwaters | Entire ABCA Area |
| <b>Total phosphorus</b>           | <ul style="list-style-type: none"> <li>Total phosphorus is a nutrient that enhances plant growth and 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>   | 0.034 mg/L     | 0.033 mg/L     | C                  | D (0.073)        |
| <b>E. coli (Escherichia coli)</b> | <ul style="list-style-type: none"> <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>   | 623 cfu/100 mL | 599 cfu/100 mL | D                  | C (113)          |
| <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>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).</li> <li>An A grade is an average FBI value of no more than 4.25.</li> </ul> | 5.42           | 5.88           | D                  | C (5.51)         |

\* See the complete *Watershed Report Card* at [abca.on.ca](http://abca.on.ca) for definitions of wetlands, 75th percentile, and geometric mean.



# Next Steps



## Thumbs up!

The Ausable Headwaters watershed is receiving the benefits of windbreaks that residents planted through the 1980s and 1990s. This tree planting has reduced wind erosion and increased soil conservation.

*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 ...

- Ensure that abandoned wells are properly decommissioned.
- Apply manure at rates and times to optimize crop uptake of nutrients and prevent runoff, and ensure manure storage facilities are adequate.



### Your community can ...

- Enhance coldwater streams by planting trees along them.
- Support water quality monitoring in sinkhole areas.
- Reduce sediment in municipal drains through effective design (for example, two-stage ditches).

### Local agencies can ...

- Practise innovative, low-maintenance drainage techniques.
- Look into links between the Ausable Headwaters and remnant woodlots in the Hibbert Environmentally Sensitive Area (ESA).
- 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](http://lakehuroncommunityaction.ca)



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



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