

South Gullies WATERSHED REPORT CARD



Forest Conditions



Grade: D

Wetland Cover



Grade: F

Surface Water Quality



Grade: D

Grading

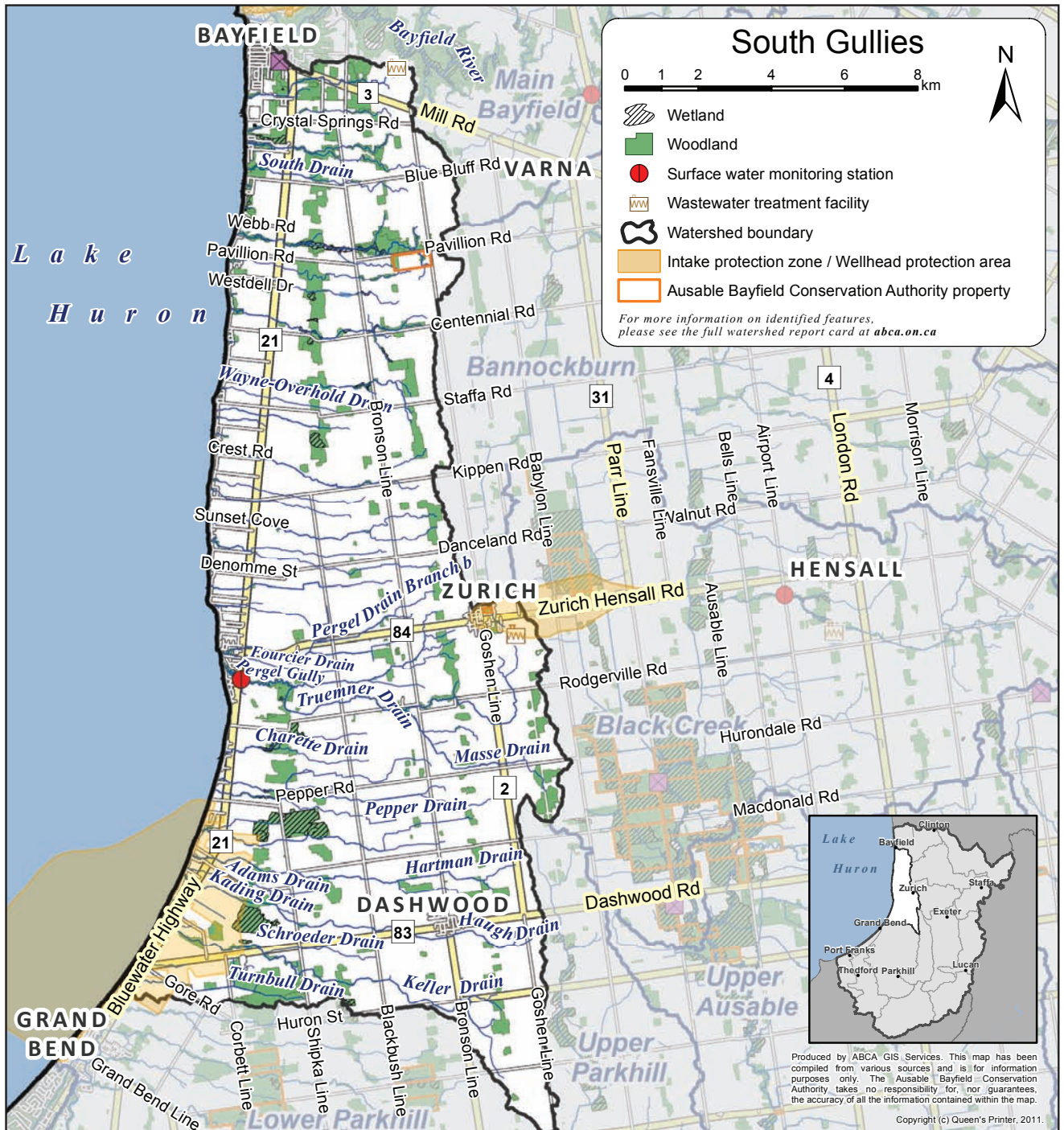
A Excellent

B Good

C Fair

D Poor

F Very Poor



Top action needed to enhance this watershed:

Recognize that actions taken on your property have the potential to quickly impact the lake. For example, inspect and pump out your septic system every three to five years to prevent contamination that could reach the lake.

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

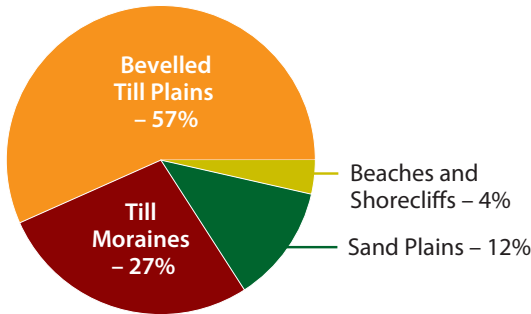
Area: 199 km²

Municipalities: Bluewater, Lambton Shores, South Huron

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

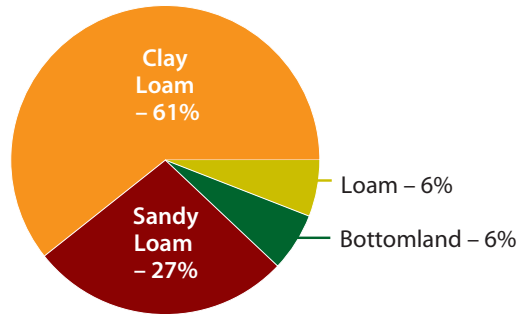
Geology

Chapman and Putnam
1984



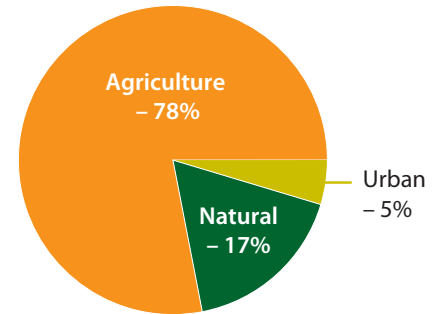
Soils

County Soils Maps
1951–1991



Land Use

Ontario Ministry of Agriculture,
Food and Rural Affairs 2010



Fish:

- The fish community in the South Gullies watershed is dominated by warm-water baitfish.

Species at Risk:

- One bird, three reptile, one fish, and one plant species at risk in this watershed.*

Other Watershed Residents

The Redside Dace leaps out of the water to catch insects flying just above the water surface. Some lakeshore gullies provide the clear, cool waters this fish prefers.



Watershed Monitoring

Ausable Bayfield Conservation monitors watershed conditions. Look for a dial graphic like this one at 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 deep 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 for more information.

Forest Conditions and Water Quality



Forest Conditions



Indicator	Description	Result		2012 Grade	
		2007	2012	South Gullies	Entire ABCA Area
Forest cover	<ul style="list-style-type: none"> Forest cover is the percentage of a watershed that is forested. An A grade is forest covering more than 35% of a watershed. 	9.8%	11.7%	D	D (14.1%)
Forest interior	<ul style="list-style-type: none"> Forest interior is the percentage of a watershed with forest cover that is at least 100 metres from the forest's edge. Some birds need this area to nest and breed. An A grade is forest interior covering more than 11.5% of a watershed. 	1.7%	2.0%	F	D (3.2%)
Streamside cover	<ul style="list-style-type: none"> Streamside cover is the percentage of the 30-metre area on both sides of open streams that is forested. An A grade is forest covering more than 57.5% of this streamside area. 	N/A	24.0%	D	C (32.7%)



Wetland Cover



Indicator	Description	Result		2012 Grade	
		2007	2012	South Gullies	Entire ABCA Area
<ul style="list-style-type: none"> Wetland cover is the percentage of a watershed that is covered by wetlands.* An A grade is wetlands covering over 11.5% of a watershed. 	N/A	1.4%	F	F (2.4%)	



Surface Water Quality



Indicator	Description	Result		2012 Grade	
		2007	2012	South Gullies	Entire ABCA Area
Total phosphorus	<ul style="list-style-type: none"> Total phosphorus is a nutrient that enhances plant growth and contributes to excess algae and low oxygen in streams. An A grade is a 75th-percentile* total phosphorus concentration of less than 0.020 mg/L. 	0.071 mg/L	0.062 mg/L	D	D (0.073)
E. coli (Escherichia coli)	<ul style="list-style-type: none"> E. coli are bacteria found in human and animal waste. Their presence indicates water may contain other disease-causing organisms. An A grade is a geometric-mean* E. coli concentration of no more than 30 colony forming units (cfu) per 100 mL. 	236 cfu/100 mL	200 cfu/100 mL	C	C (113)
Benthic invertebrates	<ul style="list-style-type: none"> Benthic invertebrates are small animals, without backbones, that live in stream sediments. 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). An A grade is an average FBI value of no more than 4.25. 	4.66	5.97	D	C (5.51)

* See the complete *Watershed Report Card* at abca.on.ca for definitions of wetlands, 75th percentile, and geometric mean.



Next Steps



Thumbs up!

The Municipality of Bluewater has upgraded the Zurich wastewater treatment lagoons and continues to support community monitoring of the lake.

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 ...

- Plant dogwood, wild rose, and honey locust. These are native shrubs/trees that help to prevent erosion, but do not block lake views.
- Get involved in work by the community to prepare and implement watershed plans.

Your community can ...

- Get involved in local water quality monitoring initiatives.
- Be aware of rural stormwater management options for the enhancement and protection of shoreline tributaries.



Local agencies can ...

- Host beach nights to inform lakeshore residents about water quality and quantity issues and management.
- Assess the gullies to determine which tributaries are most prone to severe erosion issues and identify stormwater retention options to prevent erosion.

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



Visit abca.on.ca for the complete **Watershed Report Card** for all Ausable Bayfield watersheds.



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