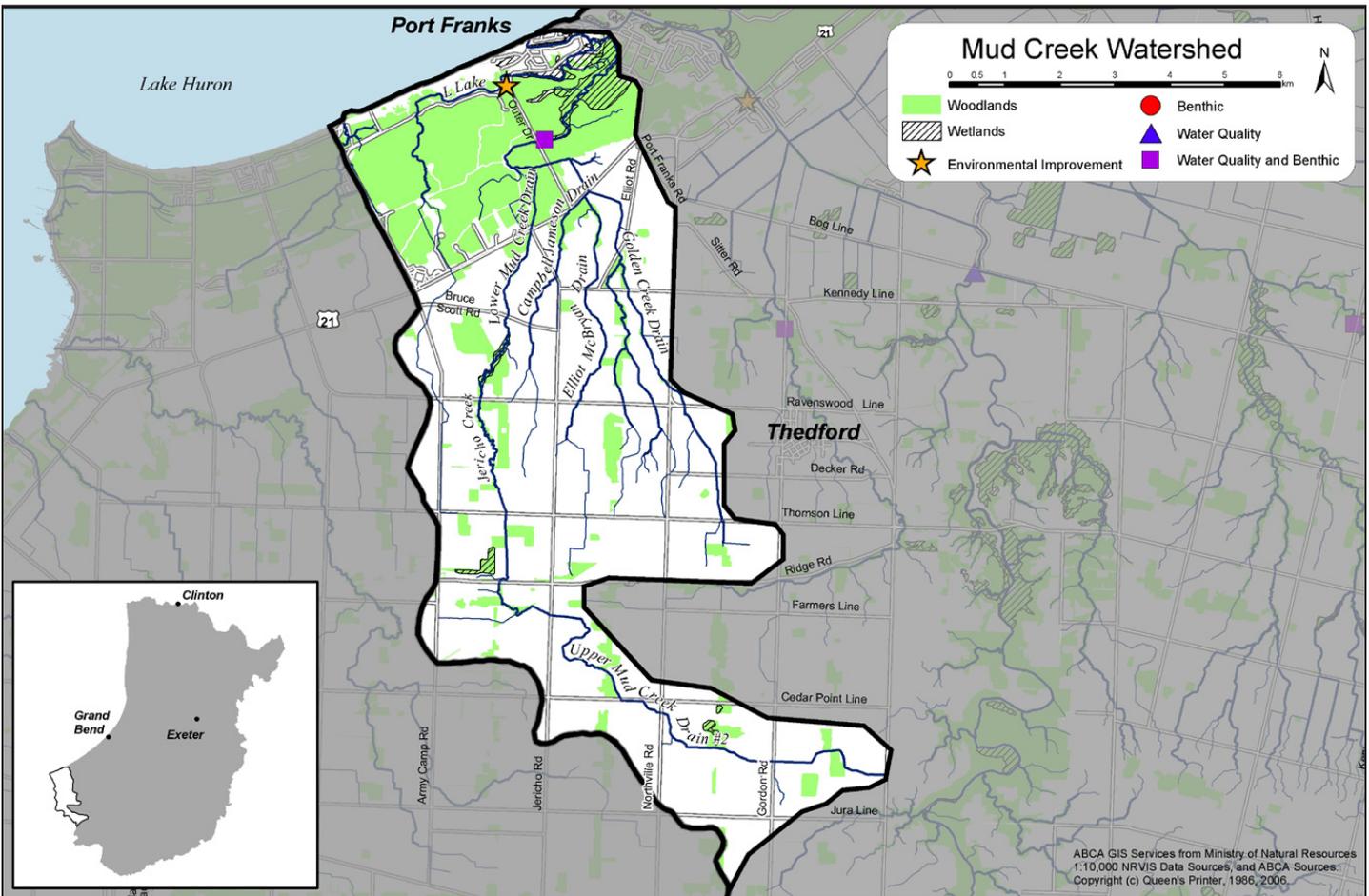




# Mud Creek Watershed Report Card

Grades:	
Forest Conditions	A
Surface Water Quality	C

This report card summarizes water quality and forestry information for the Mud Creek watershed (*the highlighted area on the map below*). This map also shows water quality stations and example environmental improvement locations. For consistency across watersheds, Conservation Ontario has recommended the use of specific water quality and forestry indicators that are described in the following tables. The summary is intended to provide landowners, groups, municipalities and agencies with information to protect, enhance and improve natural features of the watershed. The ongoing monitoring will be reported on a five-year cycle which will help local people manage their natural features. This report card is part of a larger report entitled **The Ausable Bayfield Conservation Authority Watershed Report Card** available at: [www.abca.on.ca](http://www.abca.on.ca). Further information, including methodology, comparisons to the other 15 Ausable Bayfield watersheds and references are also found in the report.



## Priority Strategy for Mud Creek Watershed

**Protect:** Dunes ecosystem along Lake Huron needs protection.





# Mud Creek Forest Cover, Surface Water Quality

	Indicator and Description	Mud Creek		Ausable Bayfield Area	
		Result	Grade	Result	Grade
Forest Conditions	<b>Forest Cover</b> is the percentage of the watershed that is forested. Environment Canada recommends <b>30%</b> of a watershed should be in forest cover.	23.7%	B	12.6%	C
	<b>Forest Interior</b> is the area inside a woodlot that some bird species need for breeding. Environment Canada recommends <b>10%</b> of a watershed should be in forest cover that is at least 100 m from the forest edge.	9.4%	A	2.8%	D
Water Quality	<b>Total Phosphorus</b> is an element that enhances plant growth and contributes to excess algae and low oxygen in streams and lakes. The Ministry of the Environment has established an environmental health objective concentration of <b>0.03 mg/L</b> .	0.09	B	0.08	B
	<b>E. coli</b> ( <i>Escherichia coli</i> ) are bacteria found in human and animal waste. Their presence in water indicates the potential for the water to have other disease-causing organisms. The Ministry of Health has established a guideline of <b>100 cfu</b> (colony forming units)/ <b>100 mL</b> in recreational waters.	117	C	233	C
	<b>Benthic Invertebrates</b> are small animals without backbones that live in stream or lake sediments. The Family Biotic Index ( <b>FBI</b> ) summarizes the information about the numbers and types of these animals in a sediment sample. FBI values provide stream health information and values range from <b>1 (healthy) to 10 (degraded)</b> .	7.9	F	5.6	C

Grade	Explanation
A	Indicates excellent ecosystem conditions and protection may be required. Some areas may require enhancement.
B	Indicates good ecosystem conditions. Some areas may require enhancement.
C	Indicates ecosystem conditions that need to be enhanced.
D	Indicates poor ecosystem conditions that need to be improved.
F	Indicates degraded ecosystem conditions that need considerable improvement.



# Mud Creek Next Steps and Local Successes



## To improve forest conditions ...

- High forest scores are related to the Port Franks Forested Dunes and Wetland Complex. Headwater forests are extremely limited in this watershed. Plant trees and shrubs along the headwaters of Mud Creek.

## To improve water quality ...

- Protect all wetlands.
  - Monitor water quality in the area to ensure that increased domestic water supply does not result in private septic system over-usage and water contamination.
  - Plant windbreaks and practise conservation tillage on erosion-prone soils (Programs available through ABCA).
  - Fix faulty septic systems and establish a septic maintenance plan.
  - Decommission abandoned wells and upgrade existing wells to prevent groundwater contamination.
- Manure Management:
    - Apply manure at rates and times to optimize crop uptake of nutrients and prevent runoff.
    - Monitor tile outlets for contaminants during and following manure application and implement spill contingency plans if necessary.
    - Ensure manure storage facilities are adequate and properly functioning.
    - Keep records; develop a nutrient management plan (Environmental Farm Plan funding may be available).

## Other recommendations

- Dunes are a dynamic ecosystem. In periods of low lake levels, sand may build up in front of your residence. These dunes may protect your residence in times of higher lake levels. Check with the ABCA, work around the dunes may require a permit.
- Link the natural areas of the Ausable Gorge with The Pinery Provincial Park and Port Franks.
- ABCA should co-ordinate its efforts with Lambton Wildlife Inc. in this area.
- Continue to support the province's natural heritage policies through local official plans and zoning by-laws (i.e., storm water management, tree cutting bylaw).
- Complete Environmental Action Plans (Farmers see Environmental Farm Plan; Lakeshore residents see Lakeshore Stewardship Manual). A stewardship manual for rural non-farm landowners should be completed by 2007. Contact the ABCA for more information.



## Thumbs up!

A multi-agency (Lambton County, Ausable Bayfield Conservation Authority and Lambton Wildlife Inc.) land acquisition has secured the Port Franks Forested Dunes and Wetland Complex.

*This is just one example in the watershed – give us a call and tell us about your project.*



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