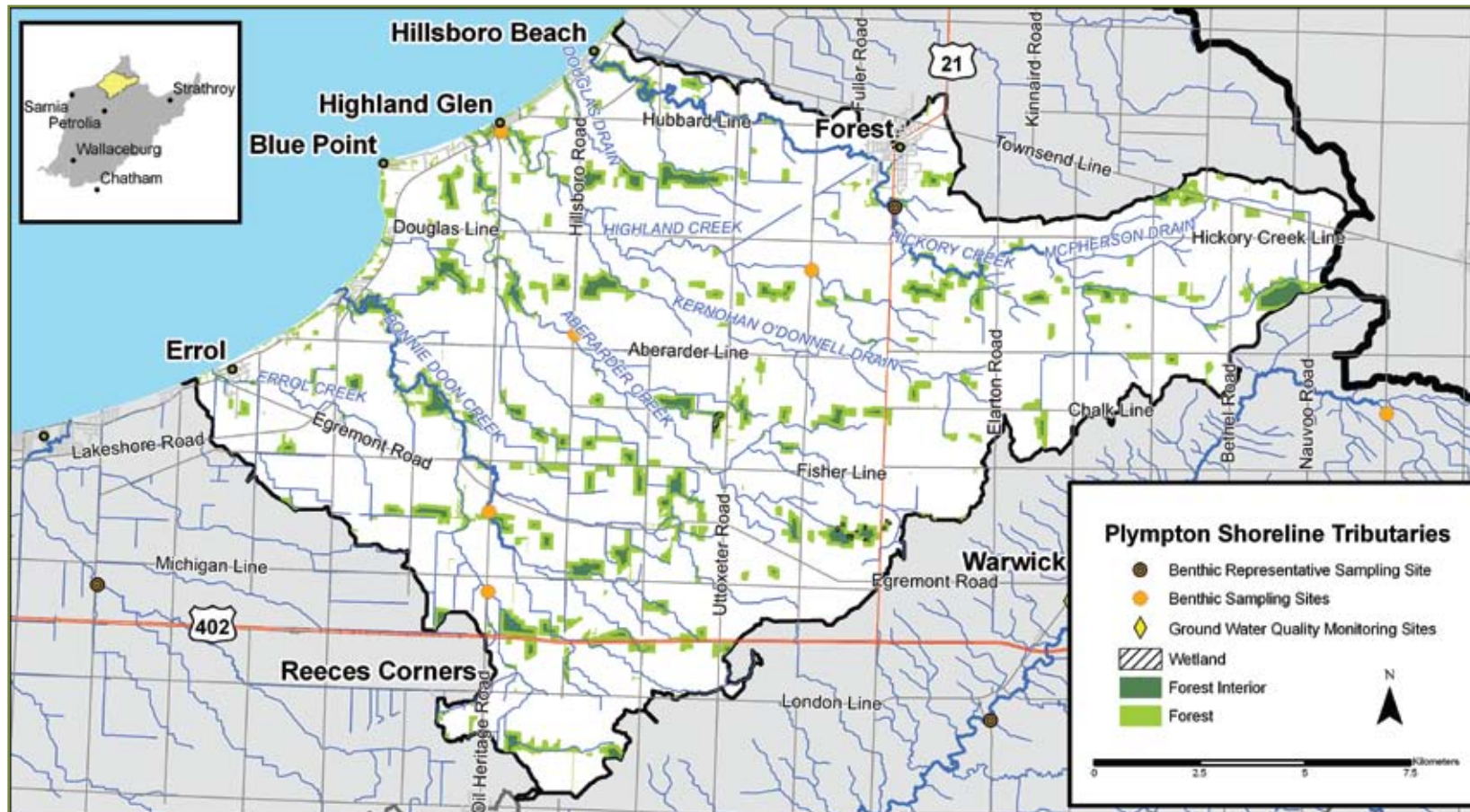




Plympton Shoreline Tributaries

Watershed Report Card



This report card summarizes water quality and forest conditions for these watersheds within the St. Clair Region Conservation Authority jurisdiction. 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 St. Clair Region Conservation Authority Watershed Report Card available at: www.scrca.on.ca. Further information, including methodology, comparisons to the other 13 St. Clair Region watersheds, and references are also found in the report.

Grades:
Forest Conditions - D
Surface Water Quality - B





Plympton Shoreline Tributaries

Watershed Features

Area	239 sq km or 58 960 acres or 92 square miles
Municipalities	Plympton-Wyoming, Warwick, Lambton Shores
First Nations	none
Watercourses	Hickory Creek, Douglas Drain, Highland Creek, Aberarder Creek, Bonnie Doon Creek, Errol Creek
Land Use	86% agriculture; 11% woodlot; 2% urban/industrial; 1% other (OMAFRA 1983)
Geology	63% bevelled till plain; 37% till moraines (GIS derived from physiographic maps)(Chapman and Putnam 1984)
Soils	90% silt and clay; 4% sand loams; 3% bottom land and beach; 3% loam
Streamside Cover	22% of the 15 metre area on both sides of open streams is vegetated (SOLRIS Woodlands OMNR 2005, SCRCA 2007)
Wetlands	0% (SOLRIS Wetlands OMNR 2005)
Groundwater	There is a deep aquifer at the interface between the overburden and the bedrock, known as the Fresh Water Aquifer, which has high sodium and chloride and is of limited quantity. Most of the residents are supplied by municipal piped water from Lake Huron.
Natural Areas	Locally Significant Wetlands: Uttoxeter Swamp, Plympton/Warwick Woods and Wetland Significant Natural Areas: Aberarder Creek Woods, Egremont Road Woods, Blue Point Woods, Highland Creek Conservation Area, Dodge Conservation Area, McEwen Conservation Area
Fishes	Warm water fish communities with 23 species including Northern Pike, Smallmouth Bass and sunfish.
Waste Water Treatment Plants	Forest Lagoons; Plympton Lakeshore WWTP
Species at Risk Sources: NHIC, 2007; SCRCA, 2007	Vegetation: Green Dragon, Shumard Oak, Butternut Reptiles: Milksnake, Butler's Gartersnake Birds: Loggerhead Shrike Fishes: None known at this time Mussels: None known at this time Mammals: None known at this time



Plympton Shoreline Tributaries

Forest Condition and Water Quality

Indicator and Description

FOREST CONDITIONS	Plympton Shoreline Tributaries Result Grade	SCRCA Area Result Grade
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Forest Cover is the percentage of the watershed that is forested. Environment Canada recommends 30% of a watershed should be in forest cover.

10.9% D

11.5% D

Forest Interior is the area inside a woodlot that some bird species need for breeding. Environment Canada recommends 10% of a watershed should be in forest cover that is at least 100 m from the forest edge.

1.6% F

1.8% D

SURFACE WATER QUALITY	Plympton Shoreline Tributaries Result Grade	SCRCA Area Result Grade
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Total Phosphorus 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 0.03 mg/L.

No Data

0.14 mg/1 C

E. coli (Escherichia coli) are bacteria found in human and animal waste. Their presence in water indicates the potential for water to have other disease-causing organisms. The Ministry of Health has established a guideline of 100 cfu (colony forming units)/100 mL in recreational waters.

No Data

181 cfu C

Benthic Invertebrates are small animals without backbones that live in stream or lake sediments. The Family Biotic Index (FBI) 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 1 (healthy) to 10 (degraded).

5.7 FBI B

6.1 FBI C

Data collected 2001 - 2005, printed 2008



Plympton Shoreline Tributaries

Local Solutions



Local Solutions to Improve Forest Conditions:

- Encourage landowners to use native species, including Carolinian species, for landscaping. Dogwood and wild rose can help prevent erosion along the shoreline without blocking lake views.
- Conserve woodlands on private properties, including subdivisions along the shoreline
- Encourage woodlots in headwater areas and along watercourses

Thumbs Up!

- Landowners who have Environmental Farm Plans

Local Solutions to Improve Water Quality:

- Assess the streams to determine what options exist to provide upland storage, including grassed waterways, drop-tube inlets, French drains and sediment control ponds
- Encourage lakeshore residents to use the Rural Landowner Stewardship Manual
- Plant buffers (trees, grasses) along open watercourses to provide shade and filter pollutants



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