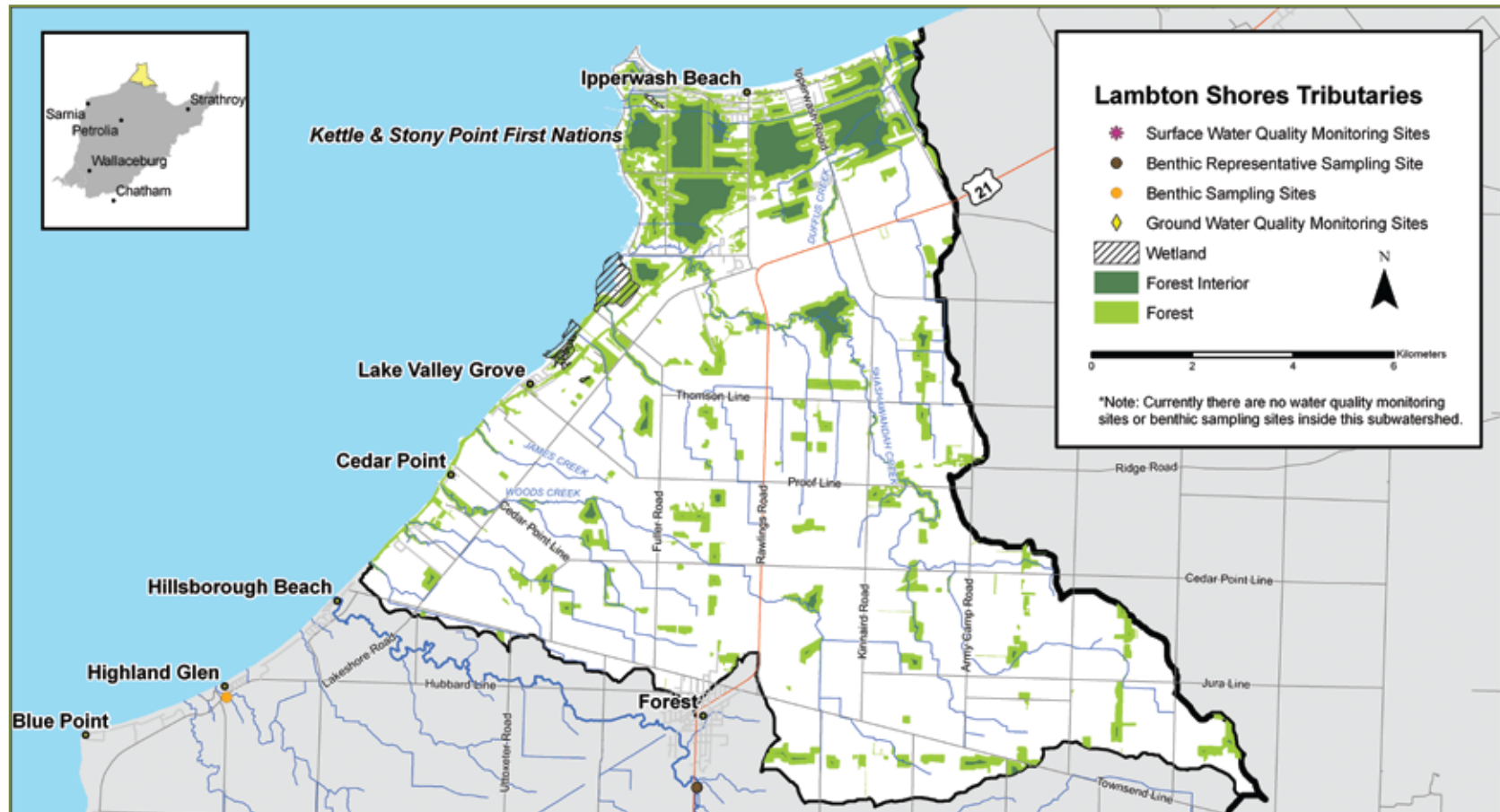




Lambton Shores Tributaries

Watershed Report Card



This report card summarizes water quality and forest conditions for these watersheds within the St. Clair Region. 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 - C
Surface Water Quality - No Data





Lambton Shores Tributaries

Watershed Features

Area	127 sq km or 31 280 acres or 49 square miles
Municipalities	Lambton Shores, Plympton-Wyoming
First Nations	Kettle and Stony Point First Nation
Watercourses	Duffus Creek, Shashawandah Creek, James Creek, Woods Creek
Land Use	77% agriculture; 19% woodlot; 3% urban/industrial; 1% other (OMAFRA 1983)
Geology	54% bevelled till plains; 26% till moraines; 20% sand plains (GIS derived from physiographic maps)(Chapman and Putnam 1984)
Soils	80% silt and clay; 9% silt and clay loams; 6% loam; 3% bottom land and beach; 2% sand loams
Streamside Cover	34% of the 15 metre area on both sides of open streams is vegetated (SOLRIS Woodlands OMNR 2005, SCRCA 2007)
Wetlands	0.6% (Evaluated Wetlands OMNR 2005)
Groundwater	There is a shallow sand aquifer from Kettle Point to Ipperwash which has high levels of iron and manganese and is vulnerable to surface land use influences. The deep aquifer at the interface between the overburden and the bedrock is known as the Fresh Water Aquifer, has high sodium and chloride and is of limited quantity. The residents along the lake and in Forest are supplied by municipal piped water from Lake Huron.
Natural Areas	Significant Natural Areas: Cedar Point, Ipperwash Natural Areas, Shashawandah Creek / Lakeshore Marsh Complex, Jericho Creek/Mud Creek Woods, Port Franks Natural Areas
Fishes	No information available
Waste Water Treatment Plants	none
Species at Risk Sources: NHIC, 2007; SCRCA, 2007	<p>Vegetation: Bluehearts, Dune Thistle, Dense Blazingstar, Broad Beech Fern, Heartleaf Plantain, Shumard Oak</p> <p>Reptiles: Eastern Foxsnake, Blanding's Turtle, Northern Map Turtle, Eastern Hognose Snake, Milksnake, Eastern Ribbonsnake</p> <p>Birds: Acadian Flycatcher, Forster's Tern, Hooded Warbler</p> <p>Fishes: None known at this time</p> <p>Mussels: None known at this time</p> <p>Mammals: None known at this time</p>



Lambton Shores Tributaries

Forest Condition and Water Quality

Indicator and Description

FOREST CONDITIONS	Lambton Shores Tributaries Result Grade	SCRCA Area Result Grade
-------------------	---	-------------------------

Forest Cover is the percentage of the watershed that is forested. Environment Canada recommends 30% of a watershed should be in forest cover.

17.8% C

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.

4.3% C

1.8% D

SURFACE WATER QUALITY	Lambton Shores Tributaries Result Grade	SCRCA Area Result Grade
-----------------------	---	-------------------------

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/l 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).

No Data

6.1 FBI C

Data collected 2001 - 2005, printed 2008

Lambton Shores 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.
- Landowners should retain qualified consultants to prepare Forest Management Plans, especially before logging a woodland
- Conserve woodlands through designation in Official Plans, enforcement of the Tree Conservation Bylaw and landowner incentives and education

Local Solutions to Improve Water Quality:

- Encourage lakeshore residents to use the Rural Landowner Stewardship Manual
- Plant buffers (trees, grasses) along open watercourses to provide shade and filter pollutants
- Encourage municipalities and landowners to follow Best Management Practices on open drains, including buffer strips to stabilize the banks

Thumbs Up!

- All those landowners who have Environmental Farm Plans
- Lambton Shores, for starting a surface water sampling program



St. Clair Region Conservation Authority
205 Mill Pond Crescent, Strathroy ON N7G 3P9
E-mail: scrca@scrca.on.ca
Web site: www.scrca.on.ca
Phone (519) 245-3710