

# Watershed Report Card



## Little Maitland River Sub-Basin

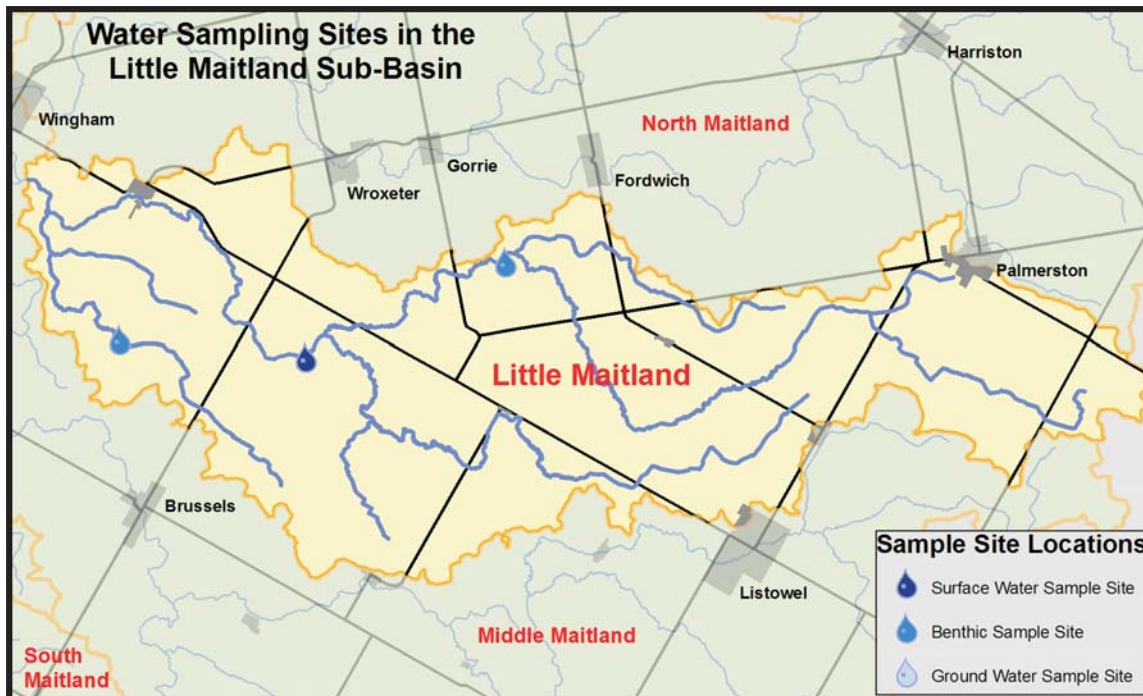
This report describes the conditions of the river and forests in the Little Maitland River watershed. It is one component of the Maitland Valley Conservation Authority's (MVCA) overall watershed report card that assesses surface and groundwater quality and forest conditions across the Maitland valley. The Little Maitland River is one of seven major sub-basins that comprise the Maitland watershed.



**WATER QUALITY B**

**FOREST CONDITIONS C**

Basin Ranking **6 out of 7**



## Watershed Description

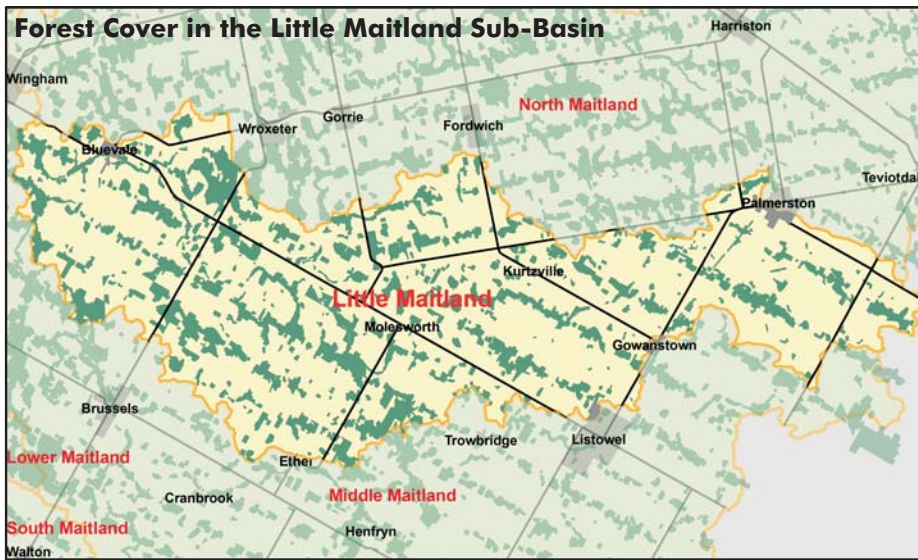
The Little Maitland River sub-basin is a narrow, linear watershed. The headwaters of the river are near the hamlet of Trecastle in the Township of Mapleton. The river generally flows east to west and the sub-basin encompasses Gowanstown, Kurtzville, Molesworth and Bluevale. The Little Maitland River flows into the Middle Maitland River just south of Wingham.

The predominant landuse is agriculture with rich, productive farmland found in the area. There is more forest cover and some wetland areas in the west side of the watershed.

## Surface Water Quality Indicators

Indicator	Sub Basin Result	Grade	Overall MVCA Result	Overall MVCA Grade
Phosphorus	.036 mg/L	<b>B</b>	.0317 mg/L	<b>B</b>
Nitrate	6.79 mg/L	<b>B</b>	5.76 mg/L	<b>B</b>
Benthics	4.93	<b>A</b>	5.218	<b>B</b>
E. coli	201.04 cfu/100ml	<b>C</b>	133.1 cfu/100ml	<b>C</b>

Groundwater summary results for the watershed are included in the overall MVCA report card.



## Forest Condition Indicators

Indicator	Sub Basin Result	Grade	Overall MVCA Result	Overall MVCA Grade
Forest Cover	17.72 %	<b>C</b>	16.72 %	<b>C</b>
Forest Interior	3.8 %	<b>C</b>	3.06 %	<b>D</b>
Marginal Land in Production	20.54 %	<b>B</b>	18.39 %	<b>A</b>

## Sub-basins are Unique

There are several sub-basin characteristics that have an impact on the health of a given area. These include:

- geology and landform - permeability of the soil, slope, geology below the soil, elevation
- drainage modifications
- land use and land management - activities occurring on the land
- sensitive areas - areas with highly erodable soils, steep slopes, high water tables are more likely to contribute sediments and nutrients to watercourses

There are significant differences between the sub-basins that make up the Maitland watershed. The unique nature of each sub-basin means that comparing report card results is not particularly useful. Instead the focus of the report card process is on monitoring trends over time to determine if conditions within a sub-basin are improving.



## Improving Watershed Health

Suggested actions to improve the health of the Little Maitland watershed:

- Create more natural infrastructure such as forested areas, buffer strips, windbreaks and wetlands to help protect the landscape from the extremes of heat, wind and runoff.
- The amount of forest cover in this sub-basin is low so there is a need for more trees to be planted. Given the extent of highly productive farmland in the area it makes sense to focus on creating forest linkages, windbreaks and buffer strips as opposed to large scale reforestation efforts.
- The retirement of marginal land to trees and shrubs or permanent pasture will help to protect water and soil resources in the sub-basin.
- Protect existing forest cover and wetlands.
- Increase residue cover and organic matter on fields.
- Ensure proper storage and applications of manure, fertilizers and pesticides.

More information on activities to improve watershed health are available on the My Land, Our Water website (<http://myland.mvca.on.ca>)



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