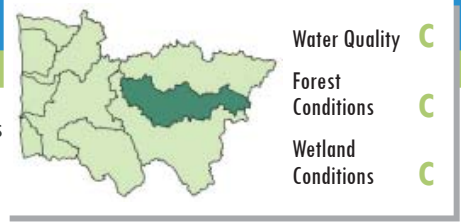


Little Maitland River Sub-basin

WATERSHED

Report Card 2013



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

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.

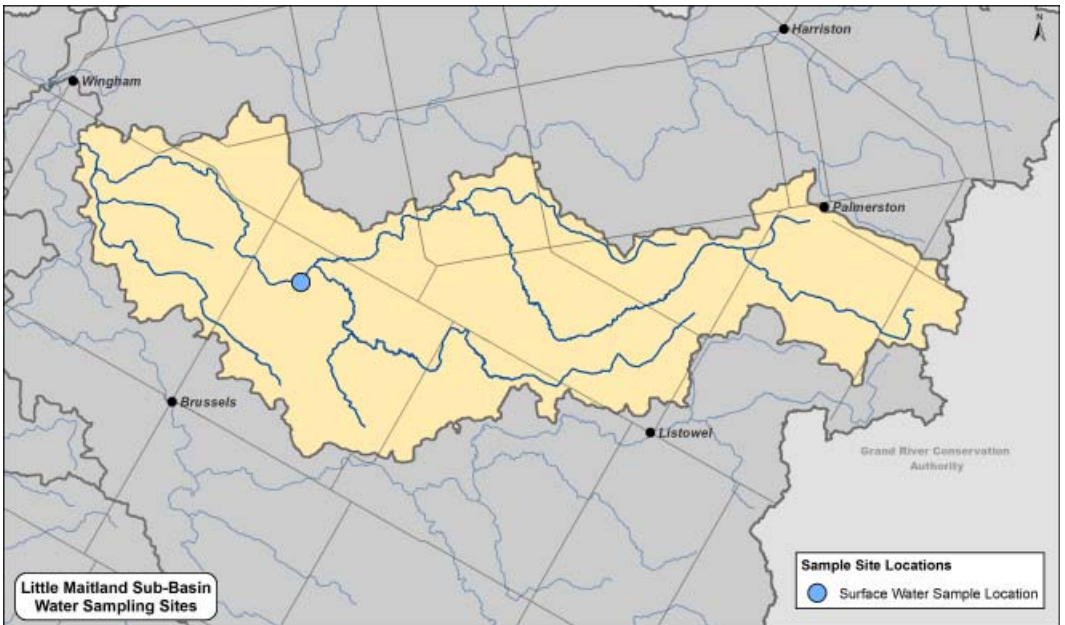
The predominant landuse is agriculture with rich, productive farmland found in the area. There is more forest cover and some wetland areas in the west side



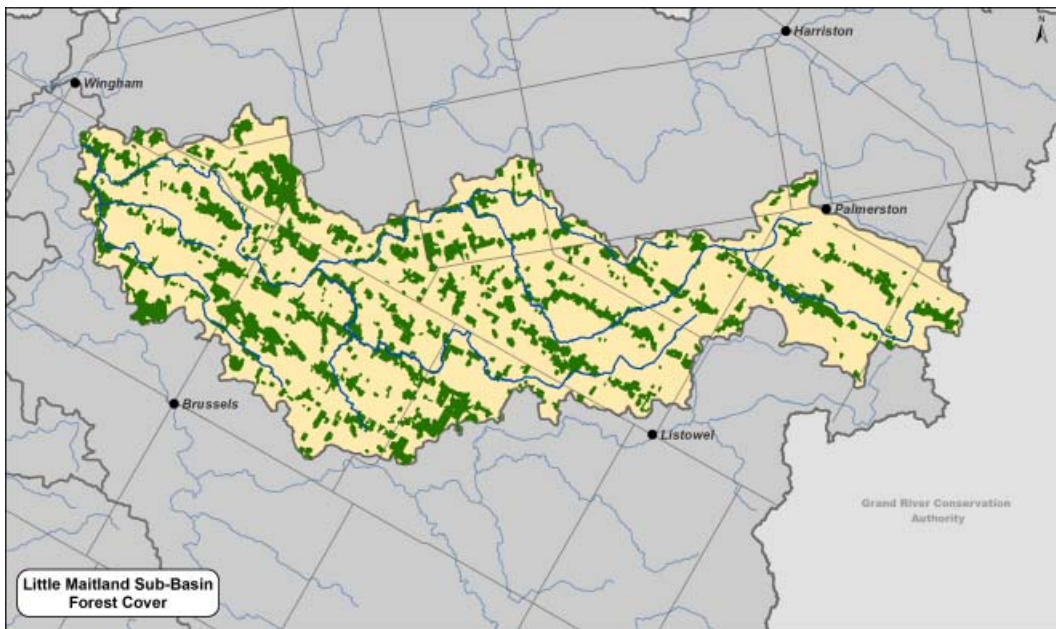
Water Quality Results

Surface Water Indicators	Little Maitland 2007-2011 Results	Little Maitland Grades 2007-2011	Overall MVCA Grades 2007-2011
Phosphorus	.0387 mg/L	C	B
Benthics	4.93	B	B
E.coli	143.323 cfu/100ml	C	C

Note - There are no groundwater sampling sites located in the Little Maitland River watershed.



Forest and Wetland Results



Forest Condition Indicators	Little Maitland 2007-2011 Results	Little Maitland Grades 2007-2011	Overall MVCA Grades 2007-2011
Forest Cover	17.47 %	C	C
Forest Interior	3.34 %	D	D
Riparian Cover	32.65 %	C	C

Wetland Indicator	Little Maitland Grade 2007-2011	Overall MVCA Grade 2007-2011
% of area identified as wetland	C	C

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 soil, elevation
- Drainage modifications
- Land use/land management - activities occurring on the land
- Sensitive areas - areas with highly erodible 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 MVCA's report card process is on monitoring trends over time to determine if conditions within the sub-basin are improving

Improving Watershed Health

The health of the Little Maitland watershed will be improved by:

- Creating 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. Incorporating rural stormwater management in farm planning. Increasing residue cover and organic matter on fields. Ensuring proper storage and applications of manure, fertilizers and pesticides.
- Planting trees. 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.
- Protecting existing forest cover and wetlands. Natural areas are regulated by Conservation Authorities. Contact the MVCA before undertaking building or drainage projects.

Notes on Report Card Scores

Due to financial and staffing constraints, comprehensive sampling is not done for every indicator in every sub-basin. In some cases only base information is collected. As a result the indicators and grades generalize watershed conditions. Local conditions may be worse or better than the grades suggest. There are some regional concerns that are not factored into the report card including:

- High nitrate and nitrite levels in surface water
- Algal fouling of beaches
- Poorly managed forests
- Soil erosion

The report card information gives us a glimpse of current watershed conditions. The real value of the report cards will come in the future as we look for trends in indicator scores. This information will help the MVCA to target services in priority areas and be more proactive in addressing emerging trends. The next edition of the report card will cover the period from 2012 to 2016 and it will be released in 2017.

More information on the report card sampling and data analysis is available on the MVCA website



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