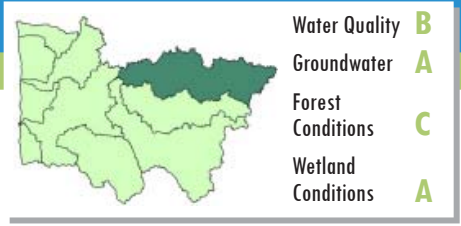


North Maitland River Sub-basin

WATERSHED

Report Card 2013

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



Watershed Description

The North Maitland River sub-basin features a rolling landscape with more forest cover than is found in the southern section of the Maitland watershed. The rolling topography of the area means that a significant amount of marginal land is found in this sub-basin.

The Blind Lake Bog at the north edge of the Township of Howick is a significant headwaters area for the North Maitland River. The area consists of 110 ha of bog, swamp and upland forest on kame moraine. It features an extensive open bog (30 ha) floating and filling in around a small lake. A narrow fringe of wet coniferous and mixed forest separates the open bog from adjacent farmland.

The North Maitland River sub-basin encompasses the communities of Harriston, Fordwich, Lakelet, Gorrie and Wroxeter. The MVCA maintains a dam at the mill pond in Gorrie. It is not a flood control structure. There is also a small recreational dam in Wroxeter that is maintained by the community.

The North Maitland River meets the Middle Maitland River in Wingham.

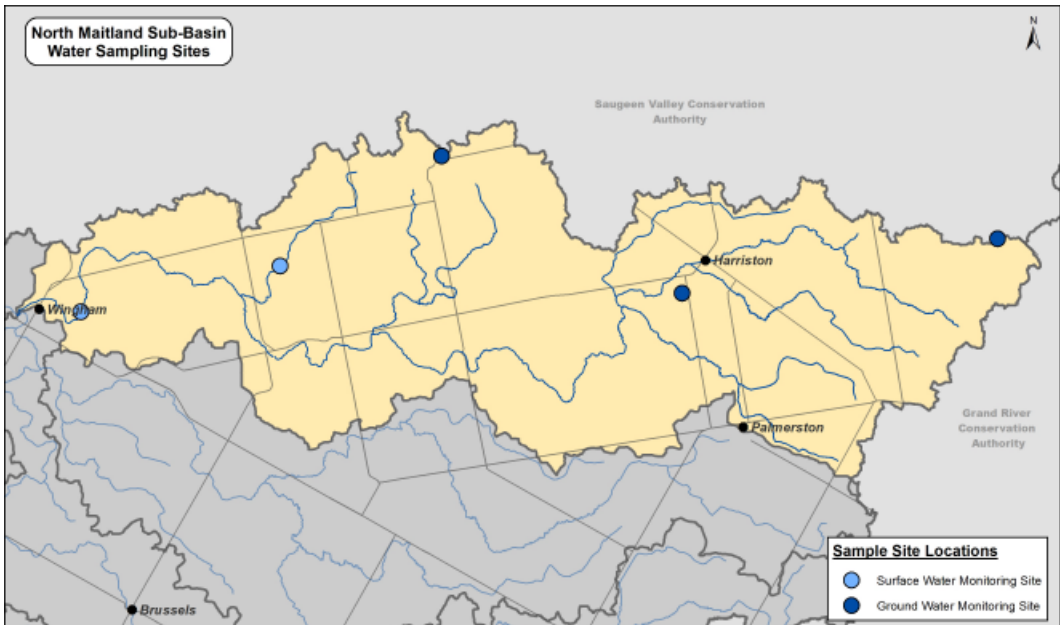


Water Quality Results

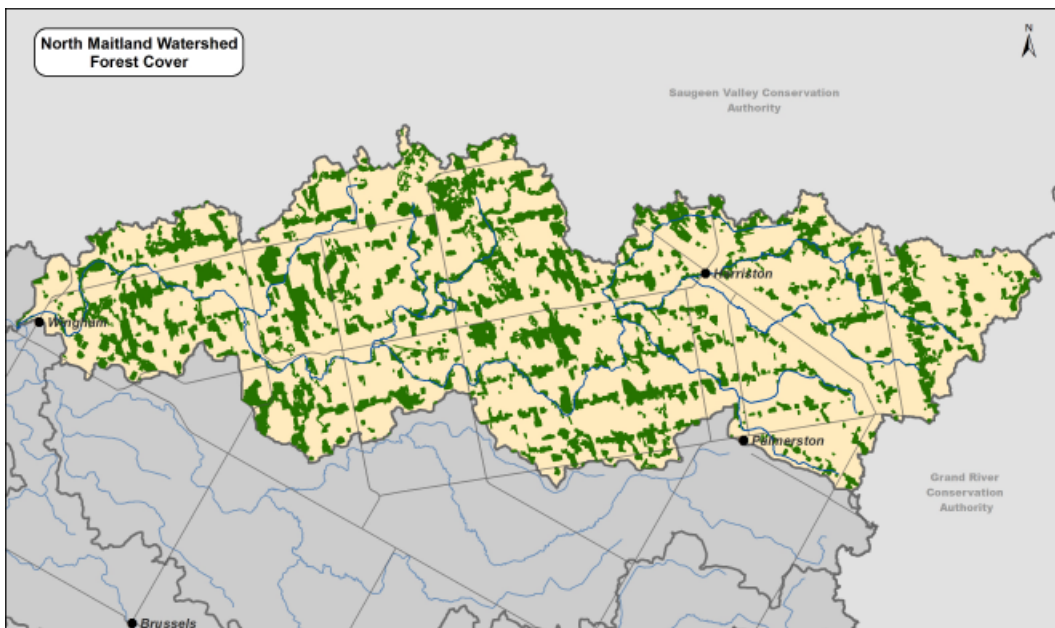
Surface Water Indicators	North Maitland 2007-2011 Results	North Maitland Grades 2007-2011	Overall MVCA Grades 2007-2011
Phosphorus	0.0212 mg/L	B	B
Benthics	4.39	B	B
E.coli	88.960 cfu/100ml	B	C

Groundwater Indicators	North Maitland 2007-2011 Grades	Overall MVCA Grades 2007-2011
Nitrate + Nitrite	A	A
Chlorid	A	A

Groundwater sampling sites are located in different aquifers. For specific sampling results please email the MVCA at maitland@mvca.on.ca.



Forest and Wetland Results



Forest Condition Indicators	North Maitland 2007-2011 Results	North Maitland Grades 2007-2011	Overall MVCA Grades 2007-2011
Forest Cover	17.42 %	C	C
Forest Interior	1.66 %	D	D
Riparian Cover	19.18 %	C	C

Wetland Indicator	North Maitland Grade 2007-2011	Overall MVCA Grade 2007-2011
% of area identified as wetland	A	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 North Maitland watershed will be improved by:

- Creating more natural infrastructure including forested areas, buffer strips, windbreaks and wetlands to protect the land from extremes of heat, wind and runoff.
- Planting trees and protecting existing forest cover and wetlands. The score for forest cover has dropped from a B to a C over the past 5 years. The forest interior score is also poor. Wetlands are regulated areas. Landowners should contact the MVCA before undertaking any projects near a wetland or watercourse.
- 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.
- On-going community efforts to naturalize Gorrie Conservation Area to improve water quality, create wildlife habitat and reduce maintenance costs at the site.

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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