

Nine Mile River Sub-basin

WATERSHED

Report Card 2013



Water Quality	B
Groundwater	A
Forest Conditions	C
Wetland Conditions	A

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

Watershed Description

The Nine Mile River sub-basin is 243 square km in size with a rolling landscape and extensive forest cover. The steep slopes found in parts of the sub-basin reduces the amount of marginal land in agricultural production. This contributes to the good forest conditions ranking for the sub-basin.

The headwaters of the Nine Mile River are found north of Whitechurch. Both the Luknow River and Patterson Creek flow into the Nine Mile in Lucknow. St. Helens Creek is also a significant contributor to the Nine Mile River. Lake Wawanosh Conservation Area, a day use area featuring a small lake, is located near the headwaters of St. Helens Creek.

The Nine Mile River empties into Lake Huron at Port Albert. Between Port Albert and Lucknow the Nine Mile is a cold water river that provides excellent fish habitat. A run of migratory rainbow trout occurs in spring while chinook and coho salmon move through the area in the fall.

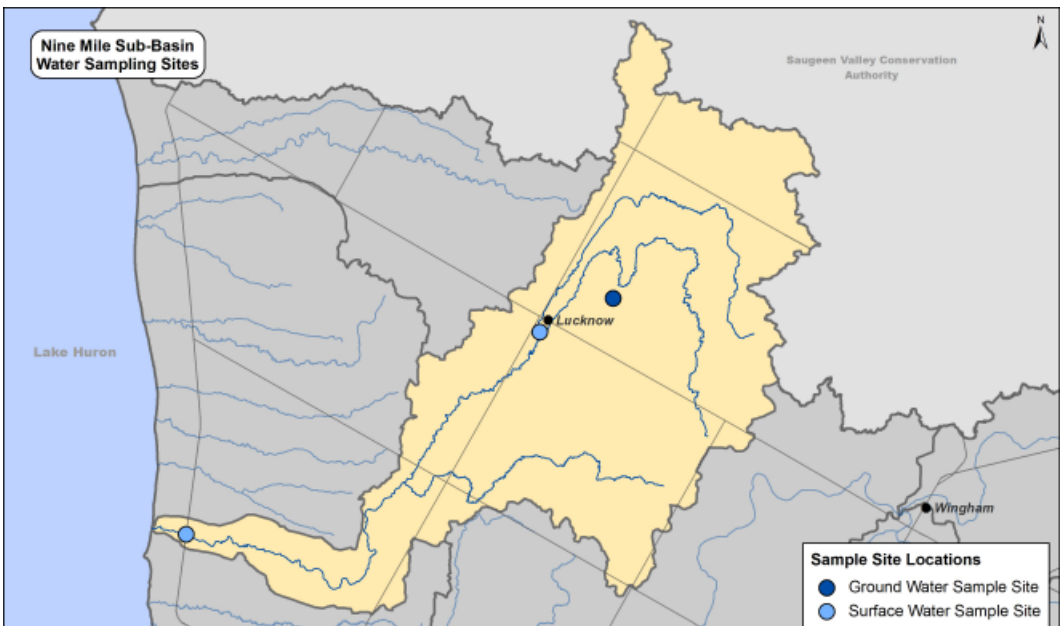


Water Quality Results

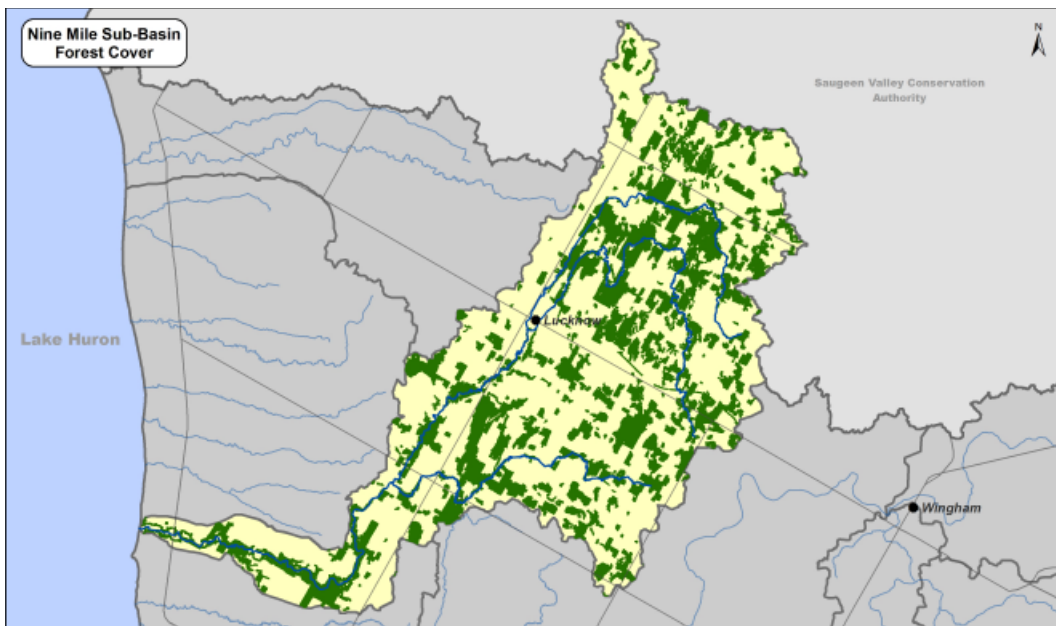
Surface Water Indicators	Nine Mile 2007-2011 Results	Nine Mile Grades 2007-2011	Overall MVCA Grades 2007-2011
Phosphorus	0.0201 mg/L	B	B
Benthics	4.92	B	B
E.coli	110.93 cfu/100ml	C	C

Groundwater Indicators	Nine Mile 2007-2011 Grades	Overall MVCA Grades 2007-2011
Nitrate + Nitrite	A	A
Chlorid	A	A

For specific sampling results please email the MVCA at maitland@mvca.on.ca.



Forest and Wetland Results



Forest Condition Indicators	Nine Mile 2007-2011 Results	Nine Mile Grades 2007-2011	Overall MVCA Grades 2007-2011
Forest Cover	26.83 %	B	C
Forest Interior	5.77 %	C	D
Riparian Cover	46.28 %	B	C

Wetland Indicator	Nine Mile 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 an A to a B over the past 5 years. 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.

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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