



Watershed Report Card

Nine Mile River Sub-Basin

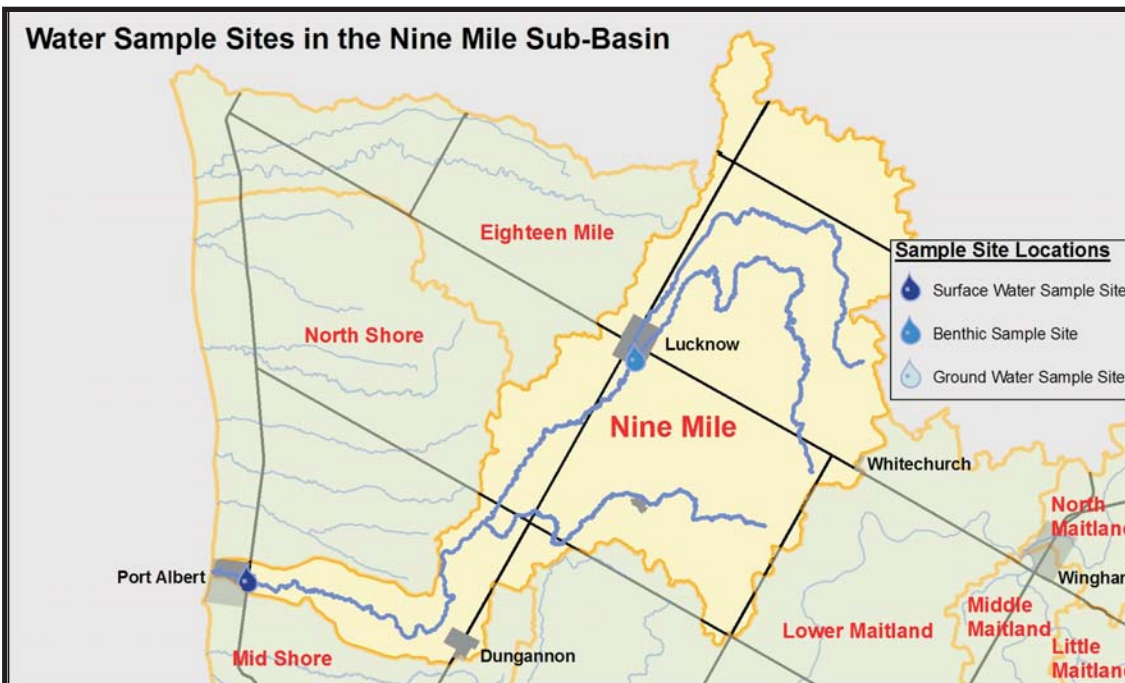
This report describes the conditions of the river and forests in the Nine Mile River watershed. It is one component of the Maitland Valley Conservation Authority's (MVCA) overall watershed report card that assesses surface and groundwater quality and forest conditions across the Maitland valley. The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



WATER QUALITY A

FOREST CONDITIONS A

Basin Ranking **2 out of 7**



Mouth of the Nine Mile River in Port Albert

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.

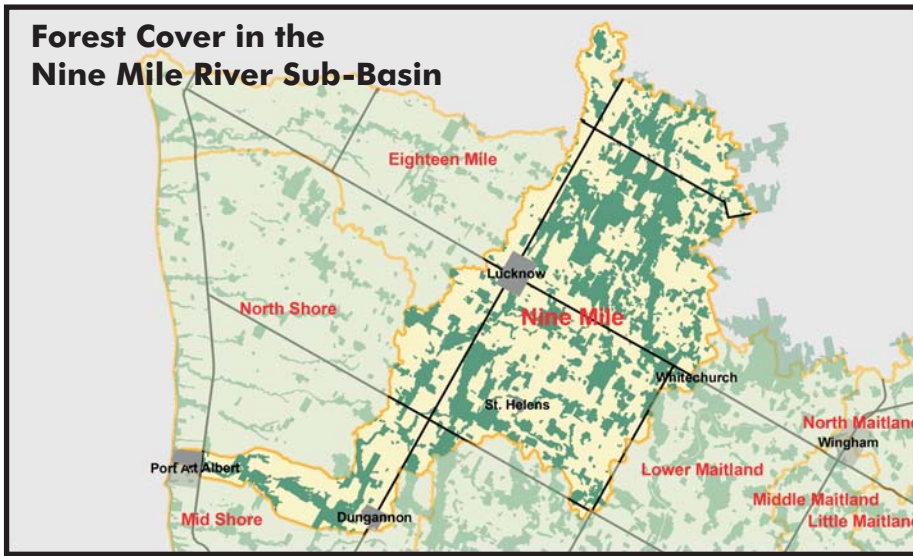
Between Port Albert and Lucknow the Nine Mile is a cold water river that provides excellent fish habitat. A run of migratory rainbow trout occurs in spring while chinook and coho salmon move through the area in the fall.

Surface Water Quality Indicators

Indicator	Result	Grade	Overall MVCA	Overall MVCA
Phosphorus	.0247 mg/L	A	.0317 mg/L	B
Nitrate	2.71 mg/L	A	5.76 mg/L	B
Benthics	4.171	A	5.218	B
E. coli	144.01 cfu/100ml	C	133.1 cfu/100ml	C

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

Forest Cover in the Nine Mile River Sub-Basin



Forest Condition Indicators

Indicator	Result	Grade	Overall MVCA	Overall MVCA
Forest Cover	27.47 %	A	16.72 %	C
Forest Interior	7.4 %	B	3.06 %	D
Marginal Land in Production	16.98 %	A	18.39 %	A

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 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 report card process is on monitoring trends over time to determine if conditions within a sub-basin are improving.



Lake Wawanosh Conservation Area



Improving Watershed Health

Suggested actions to improve the health of the Nine Mile River 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.
- Although the score for forest cover in the Nine Mile River sub-basin is an A the forest interior score was only a B. Expansion of woodlots will help improve this score as well as providing much needed wildlife habitat.
- 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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