WHAT IS OUR WATERSHED'S **KEY ISSUE?**



Non-point source pollution:

- Comes from many sources.
- Occurs when rain or snowmelt runs off fields, streets, or backyards.
- · Carries soil particles and pollutants to water bodies and groundwater.

What actions could you take to reduce non-point source pollution?

- · Conserve existing woodlands.
- Create natural buffers to filter stormwater.
- Control soil erosion through the use of grassed waterways, berms, cover crops, and crop residue.
- Apply nutrients at rates and times that optimize crop uptake.
- Dispose of chemicals properly through household hazardous waste days or drop-off locations.
- See the back panel for more actions to reduce non-point source pollution.

What local actions have been taken?

- Community-based watershed plans and strategies in the Mississippi and Carp River watersheds have highlighted actions for local agencies and individuals.
- Please see:

www.mvc.on.ca/watershed-watch-program www.mvc.on.ca/stewardship www.mvc.on.ca/city-stream-watch

HOW CAN WE ENHANCE THE WATERSHED?

What Can You Do?

- Increase natural vegetation, especially along shorelines.
- Maintain septic systems and wells.
- Redirect roof runoff onto permeable surfaces such as grass.
- Pick up litter.
- · Conserve water, use a rain barrel.
- Join a lake association or field naturalist club



What Can Your Community Do?

- Support ongoing municipal improvements related to green infrastructure.
- Direct development away from areas of environmental significance.
- Support local initiatives to monitor water quality and quantity.

What Can Agencies Do?

- Encourage the protection of wetlands.
- Green their operations.
- Evaluate the effectiveness of environmental programs.

Do you have questions not answered by this summary document? Visit **mvc.on.ca** for the full report or contact us for more information.



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Mississippi Valley WATERSHED Report Card 2018





Mississippi Valley Conservation Authority has prepared this report card as a summary of the state of your forests, wetlands and water resources.





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What is a Watershed?

A watershed is an area of land drained by a creek or stream into a river which then drains into a body of water such as a lake or pond. Everything in a watershed is connected. Our actions upstream can affect conditions downstream.

Why Measure?

Measuring helps us better understand our watershed. We can target our work where it is needed and track progress. We used Geographic Information Systems (GIS) to measure:



Wetland Cover

GRADING A Excellent

В	Good
С	Fair
D	Poor

F Very Poor

What is a watershed report card?

Ontario's Conservation Authorities report on watershed conditions every five years. The watershed report cards use Conservation Ontario guidelines and standards developed by Conservation Authorities and their partners.

WATERSHED WATCH

SURFACE WATER QUALITY

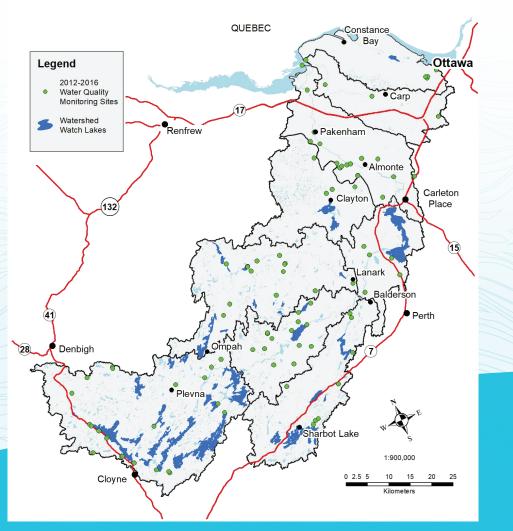
What We Do

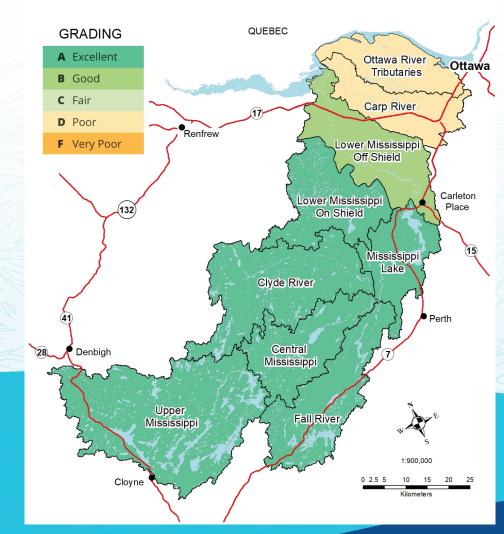
- The Mississippi Valley has more than 200 inland lakes. MVCA has long recognized the recreational and aesthetic value of lakes within the watershed and are committed to maintaining and protecting water quality and fish habitat.
- Sixty lakes* are monitored on a five year cycle and sampled for total phosphorus and chlorophyll *a*, water clarity, invasive species and fish species. (**based on size and population density*)
- Reliable environmental information is collected to document current water quality conditions. The information is used to encourage sound stewardship practices to help preserve and protect water quality.

Clean water is essential for a healthy watershed. It supports good quality drinking water, a diverse aquatic habitat and vibrant recreational areas. Total phosphorus concentrations measured at Ontario Ministry of the Environment and MVCA stations provide a good measure of the overall water health.

What Did we Find?

- Grades range from A to D, with mostly A grades.
- Water quality across the watershed scores quite well, with some lower ratings moving downstream from the rural west end of the watershed to the more urbanized east end.
- While the total phosphorus data shows that there has been little change in water quality scoring since the 2013 report, some results remain close to grade thresholds.





THESE MAPS ARE PRODUCED IN PART WITH DATA PROVIDED BY THE ONTARIO GEOGRAPHIC DATA EXCHANGE UNDER LICENCE WITH THE ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY AND THE QUEEN'S PRINTER FOR ONTARIO, 2018.

FOREST CONDITIONS

WETLAND COVER

Forested areas provide habitat for wildlife, purify the air and filter the water that soaks into the ground supplying wells and underground drinking water systems. The percentages measured included forest cover, forest interior and streamside cover.

What Did we Find?

- Grades range from A to C, with mostly A grades.
- Forest cover transitions from "excellent" to "fair" moving west to east, from the Canadian Shield to the more agricultural and urbanized off shield areas.
- Forests grow slowly, but environmental benefits begin as soon as trees are planted. Changes in forest cover will be noticed in five years or more.

Wetlands are an essential part of a healthy, balanced ecosystem. They reduce flooding and erosion, ease drought impacts, recharge and discharge groundwater and improve water quality. Wetlands are valuable in providing resilience to climate change.

What Did we Find?

- A and B grades, with subwatershed wetland cover ranging from 10 to 28%.
- Environment Canada recommends that the greater of 10% wetland cover for major watersheds, 6% for subwatersheds, or 40% of historic coverage, should be protected or restored.
- We are approaching the minimum threshold with five subwatersheds close to 10% cover. Historic losses are estimated at 65% overall, and higher in some subwatersheds.

