

2014 MUSKOKA WATERSHED

REPORT CARD

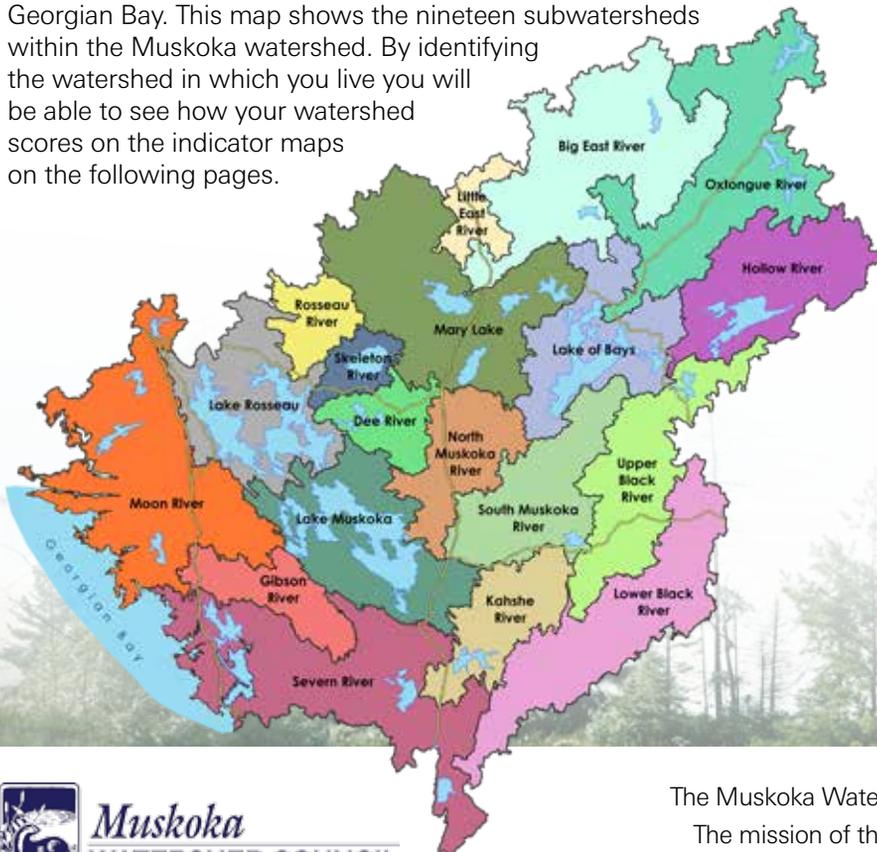
Stewardship works: how healthy is our land and water?

“The natural environment, especially water, is Muskoka’s key asset and it will be protected, both to support functioning ecosystems and for future generations.”

(OPA #42 Environmental Guiding Principle)

Subwatersheds of Muskoka

A watershed is as an area of land that drains to a river, lake or stream. The Muskoka watershed refers to all watersheds lying totally or partially within The District Municipality of Muskoka and includes areas in Algonquin Park, the Township of Seguin and the Township of Algonquin Highlands. All water in the Muskoka watershed eventually flows into Georgian Bay. This map shows the nineteen subwatersheds within the Muskoka watershed. By identifying the watershed in which you live you will be able to see how your watershed scores on the indicator maps on the following pages.



How are we doing?

This Report Card gives you a snapshot of the environmental health of our watersheds, summarizing measurements of the condition of water quality, natural areas, wetlands, and biodiversity across Muskoka.

What we don't measure we can't manage

These measurements help us focus our efforts where they are needed most. They also allow us to distinguish ecologically important areas that are currently healthy but require protection from those that need enhancement. While our watersheds are in good condition compared to areas to the south of us, they are still under pressure from stressors such as calcium decline, climate change, invasive species, and other human influences.

Stewardship is the key

While there is good monitoring and research occurring across the watersheds, there is need for more coordinated programs. Look for stewardship programs that you can join with your family and your neighbours.

We all live, work or play in the watersheds across Muskoka. Let's protect them for us and for future generations.

Grading Muskoka's subwatersheds

The Watershed Report Card presents the results of monitoring the health of our watersheds. It has established benchmarks that use the best available science to give a snapshot of the current condition of our land, water, and wetland resources, in addition to the biodiversity of the watershed. Muskoka's benchmarks are considerably higher than those used in southern Ontario, and this is to reflect the healthier condition of our watershed.

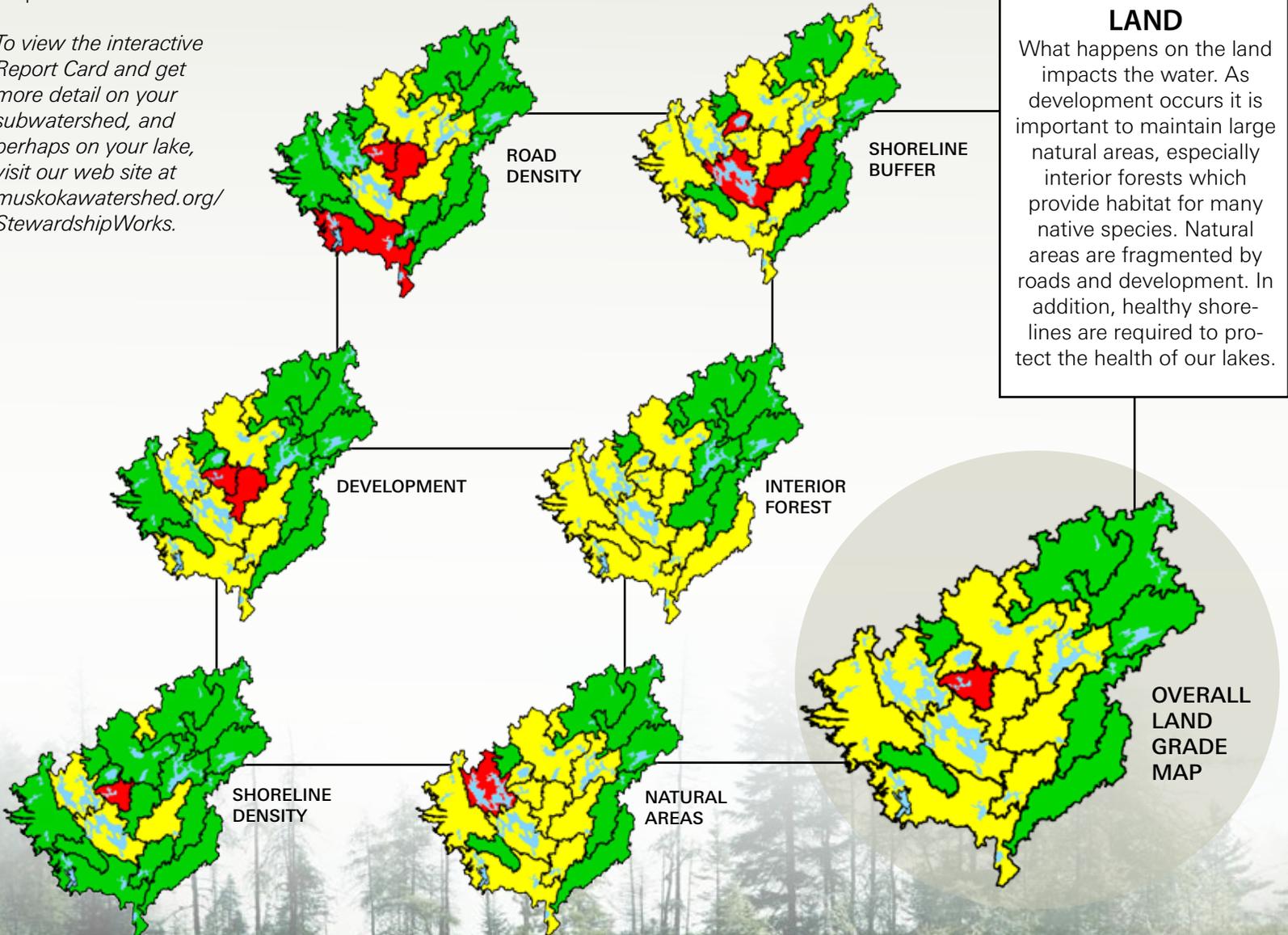
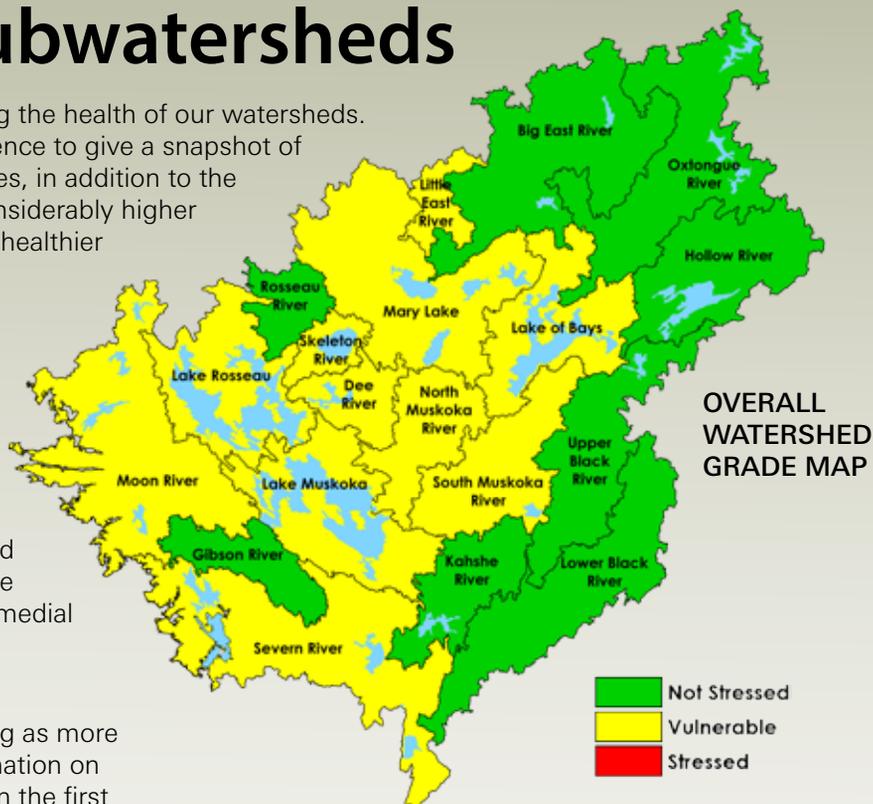
New indicators

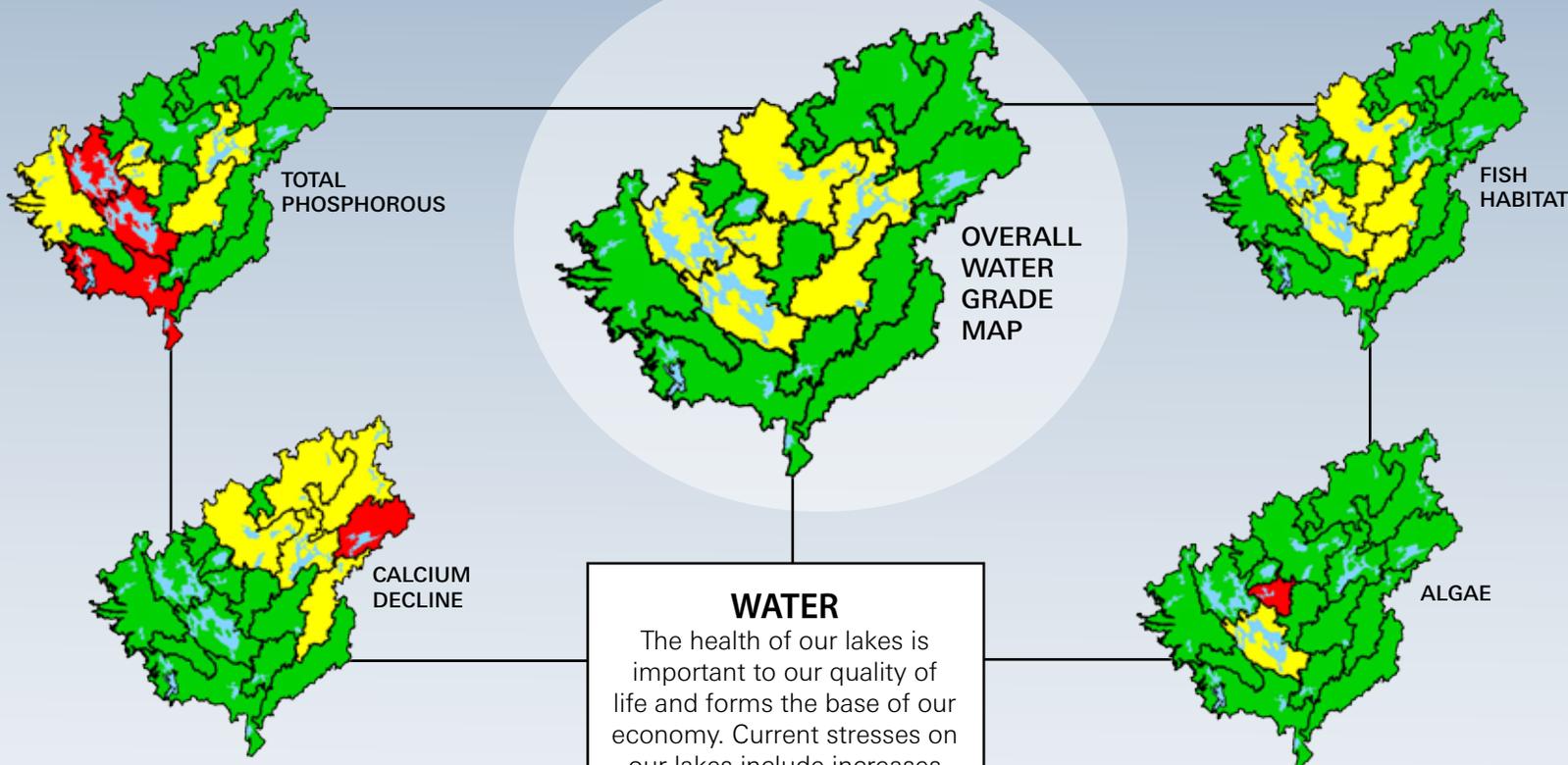
The longer you look the more change you see; some good and some bad. Monitoring across the watershed has identified new stressors that are impacting the health of the area. This year the Report Card has added an evaluation of calcium decline, shoreline density, propensity for algal blooms, road density, habitat diversity and species diversity. By reporting on a broader range of indicators, this Report Card becomes a more sensitive evaluation tool. It makes it possible both to detect changes, and to highlight the need to apply remedial actions sooner, where necessary.

Report on a subwatershed basis

Our understanding of the health of our watershed is improving as more data become available. Here we provide more detailed information on a subwatershed basis. Find your subwatershed on the map on the first page. Then determine its health based on the indicators shown on the maps below.

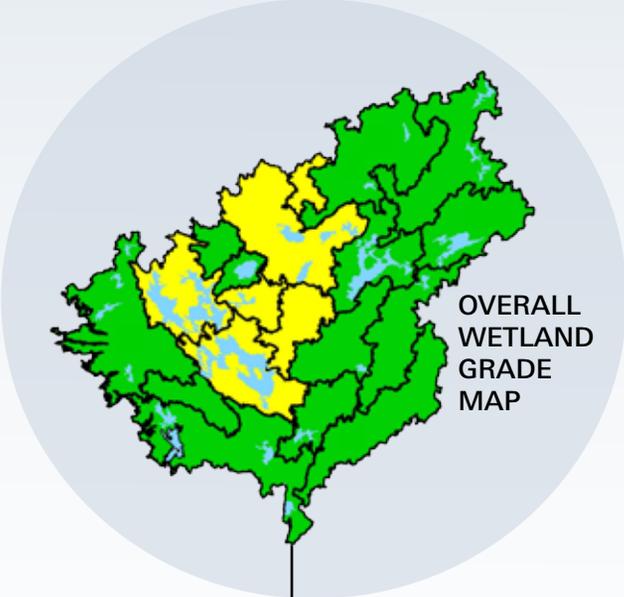
To view the interactive Report Card and get more detail on your subwatershed, and perhaps on your lake, visit our web site at muskokawatershed.org/StewardshipWorks.



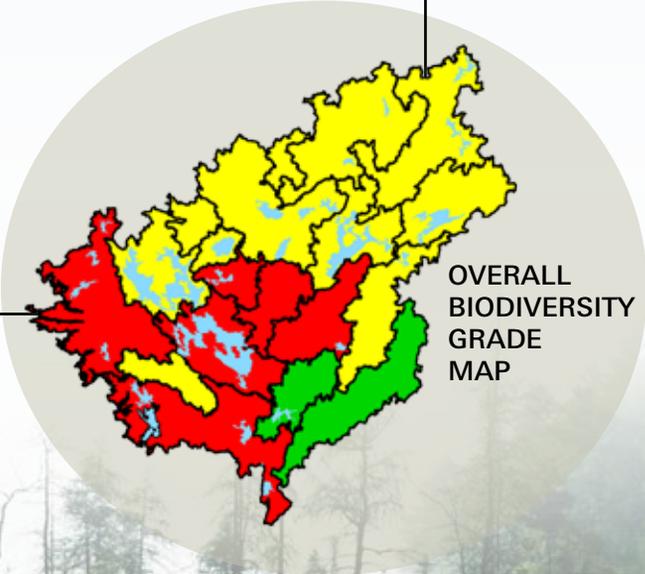
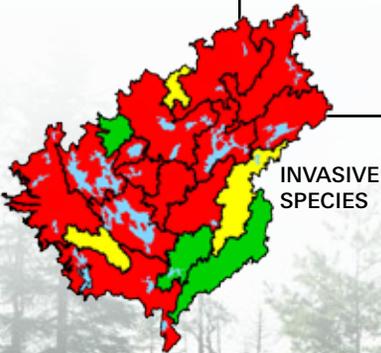
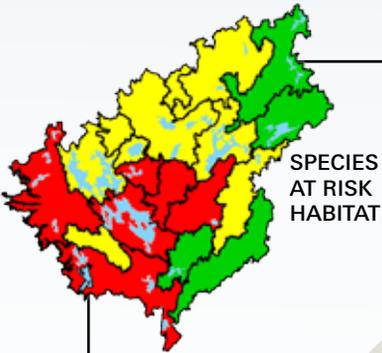


WATER
 The health of our lakes is important to our quality of life and forms the base of our economy. Current stresses on our lakes include increases in nutrient, changes in algal communities, destruction of fish habitat and a decline in calcium. Careful stewardship is required to protect the health of our lakes.

BIODIVERSITY
 Biodiversity describes the variety of life on Earth. It refers to the wide variety of ecosystems and living organisms: animals, plants, their habitats and their genes. Biodiversity confers ecosystem resilience, which can help our environment resist current shocks, and speed recovery from future shocks and changes.

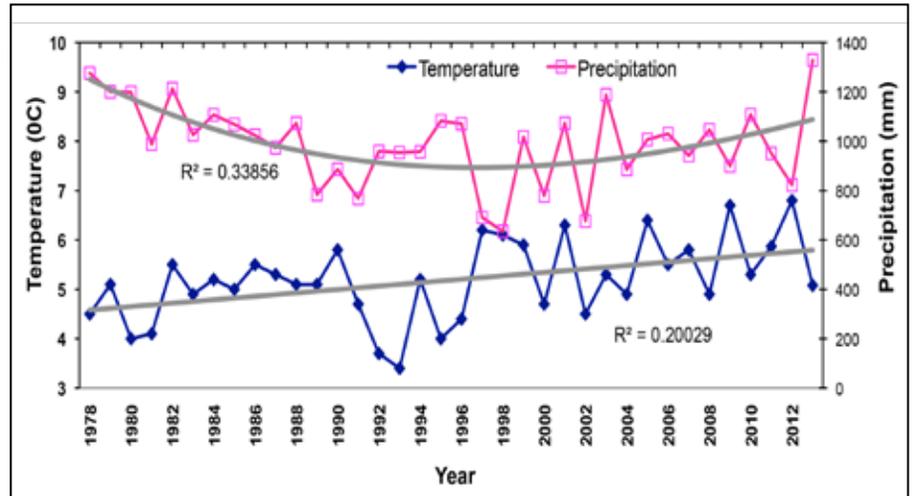


WETLANDS
 Wetlands are an integral part of the hydrological system of a watershed and are home to many of our species at risk. Among other services, they help clean the water, reduce flooding, enhance late summer flow, provide preferred habitat for many species of both plants and animals, and replenish our groundwater supplies.



Changing climate: temperatures are on the rise

The mean temperature showed a clear and moderate increase or warming over 1978 to 2013, about 0.35 degree increase per 10 years, or a warming of 1 degree within 30 years. The annual precipitation had a significant decrease during 1978-1998 and then a weak increase during 1999-2013. (Dorset Environmental Science Centre)



Stewardship Works: help protect the watershed

When all is said and done, the fate of sustainable management of Muskoka's watersheds lies in large part in the hands of local residents as they go about their day-to-day lives. It is the citizens of Muskoka who must generate the interest and enthusiasm to create, continue and expand local projects which lead to positive actions and results.

Stop the spread of invasive species

- Purchase non-invasive or native plants from a reputable dealer.
- Never dispose of domestic plants or animals into the wild.
- Inspect and wash your boat, ATV and other equipment and let dry for at least 6 hours before moving to a new lake or area.
- Do not move species from one area to another.

Retain buffers and leave shorelines in a natural state

- Maintain a wide buffer of native plants and trees around shorelines of lakes and rivers.
- Minimize boat speed (eliminate wake) in all near-shore areas and particularly in areas with known loon nests.
- Avoid grassed lawns in the waterfront area and minimize use of fertilizers.

Protect wetlands

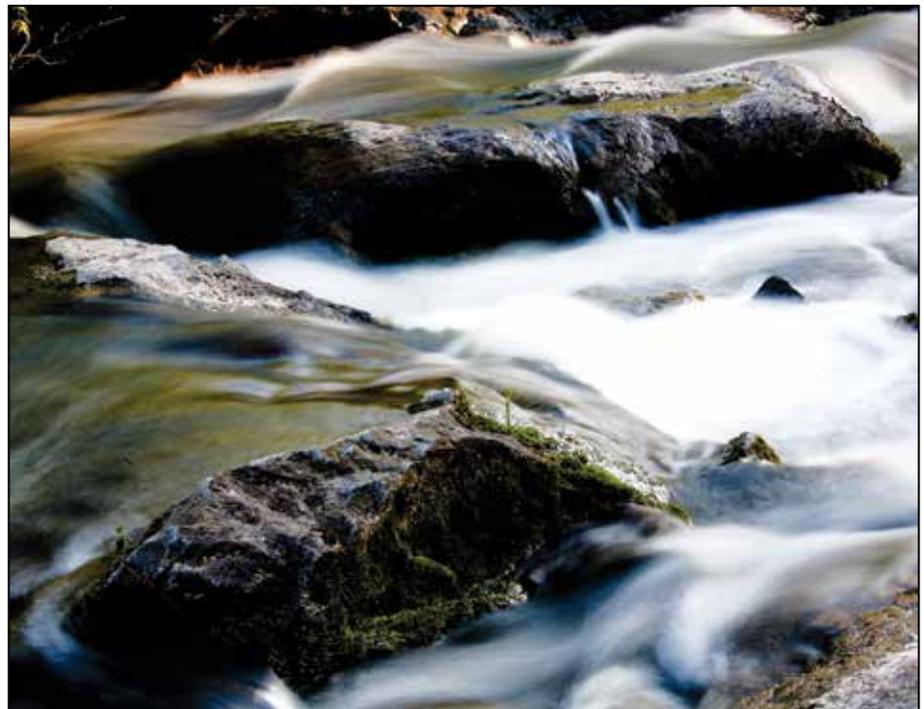
- Leave wetlands alone.
- Keep recreational vehicles out of wetlands. Explore by kayak or canoe instead.

Maintain natural areas

- Limit cleared areas in the rural and waterfront area.
- Do not create new roads.

Reduce your personal impact

- Reduce your use of electricity and fossil fuels.
- Maintain your septic system.
- Improve the energy efficiency of your home and vehicle. Treat electricity as a luxury.
- Reduce waste by reusing, reducing, composting and refusing to buy items with excess packaging.



The 2014 Muskoka Watershed Report Card was made possible with the support of:



Township of Algonquin Highlands
Town of Bracebridge
Township of Georgian Bay
Town of Gravenhurst
Town of Huntsville

Township of Lake of Bays
Township of Muskoka Lakes
Township of Seguin
Public support