

MANAGING OUR WATERSHED



The 2018 Watershed Report Card (WRC) provides an average grade for groundwater quality, surface water quality, forested areas and wetland coverage for the Lakehead Watershed. The grade scores were calculated based on data collected between 2013 – 2017 through LRCA Watershed Assessments, and programs in partnership with the Ministry of Environment, Conservation and Parks.

The Lakehead Region Conservation Authority (LRCA) is a community-based environmental agency that provides value-added services to our watershed residents. We are responsible for the wise management of renewable natural resources in our watershed. Conservation Authorities undertake a broad range of programs, including: watershed management, erosion control, flood forecasting & warning, recreation, water level monitoring, plan input & review, environmental education and stewardship. We improve quality of life by actively providing Conservation Areas for passive recreation and environmental education opportunities.

Vision:

A healthy, safe and sustainable Lakehead Watershed for future generations.

Mission:

To lead the conservation and protection of the Lakehead Watershed.

LRCA Five-Year Strategic Plan 2018 - 2022

The LRCA's Strategic Plan provides a trail map to build and enhance all facets of our organization with a focus on four priorities:

- Conserve and Sustain
- Protect and Support
- Connect and Explore
- Govern and Enhance

HOW CAN WE ENHANCE THE WATERSHED?

What Are We Doing?

- Over 143,000 tree seedlings planted in the Lakehead Watershed as part of the Private Landowner's Tree Seedling Assistance Program since the program's inception in 2009.
- Over 2,900 participants in the LRCA's various Living Classroom environmental education programs during 2018.
- Assessing and delineating wetland boundaries in the Lakehead Watershed.
- Monitor weather, water levels, flows, snow pack and ice conditions to help protect life and property from natural hazards.
- Updating floodplain mapping within the Lakehead Watershed.

What Can You Do?

- Plant native trees, shrubs and pollinator plants on your property.
- Inspect and pump out your septic system every three to five years.
- Return unused household chemicals such as anti-freeze, paint, and detergents to the Household Hazardous Waste Depot.
- Do not dump anything down municipal storm drains. All stormwater flows directly to Lake Superior.
- Pick up after your pets; dog feces can carry harmful bacteria and parasites that could contaminate waterways.
- Support green infrastructure, such as rain gardens, bioswales and permeable pavement, to help reduce runoff.

What Can Agencies Do?

- Protect wetlands and other natural heritage features.
- Green their operations, and develop environmental policies.
- Work with local community groups.
- Utilize grant and funding programs to support local environmental initiatives, including partnerships.
- Evaluate the effectiveness of their internal environmental programs.
- Minimize road salts and explore new alternatives for winter maintenance.

Contact us for more information:



Lakehead Region Conservation Authority
130 Conservation Road, Box 10427
Thunder Bay ON P7B 6T8
E-mail: info@lakeheadca.com
Website: www.lakeheadca.com
Phone: (807) 344-5857 | Fax: (807) 345-9156

The Watershed Report Card is available on-line and in other formats upon request.

Lakehead Region WATERSHED Report Card 2018



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



WHERE ARE WE?



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 measured:



Groundwater Quality



Surface Water Quality



Forest Conditions



Wetland Conditions

GRADING

- A** Excellent
- B** Good
- C** Fair
- D** Poor
- F** Very Poor

Insufficient Data

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.

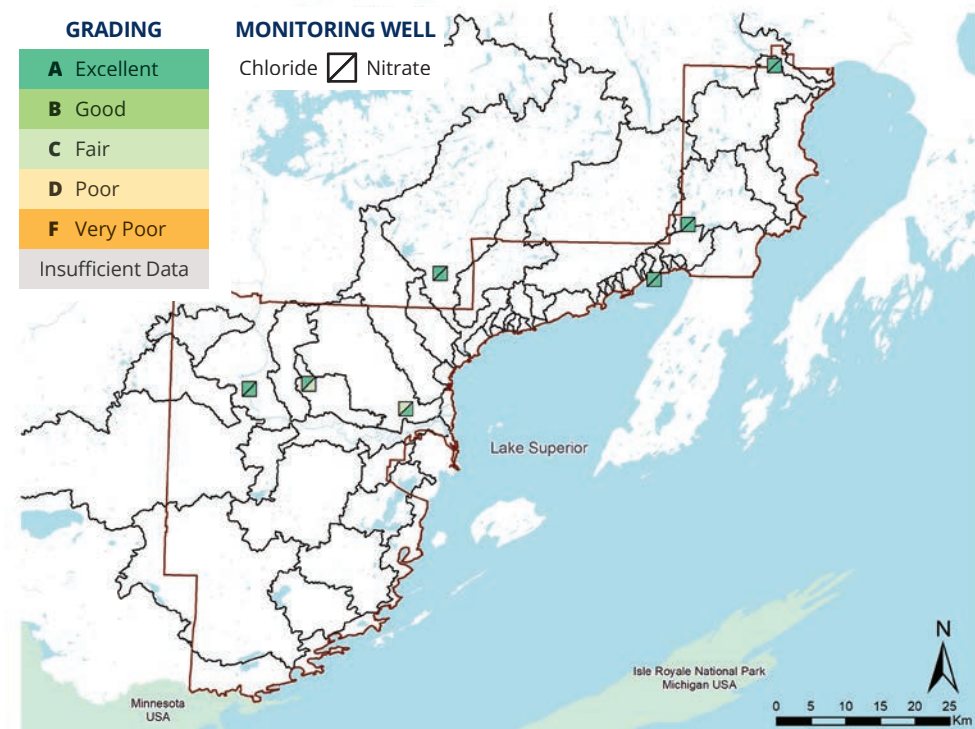


GROUNDWATER QUALITY

Groundwater is found below the earth's surface in soil and in permeable rocks called aquifers. The LRCA collects groundwater quality data in partnership with the Ministry of Environment, Conservation and Parks (MECP) through the Provincial Groundwater Monitoring Network (PGMN) program. Concentrations of nitrate, nitrite and chloride were monitored at seven groundwater wells in the Lakehead Watershed.

What Did we Find?

- The Lakehead Watershed groundwater quality is in overall excellent condition based on the data collected from 2013 to 2017.
- Overall concentration of Nitrate + Nitrite in all groundwater monitoring wells scored a grade of 'A', except one that scored a grade of 'C'.
- Overall concentration of Chloride in all groundwater monitoring wells scored a grade of 'A', except one that scored a grade of 'C'.
- Generally, nitrate, nitrite and chloride concentrations were low in LRCA monitored wells.

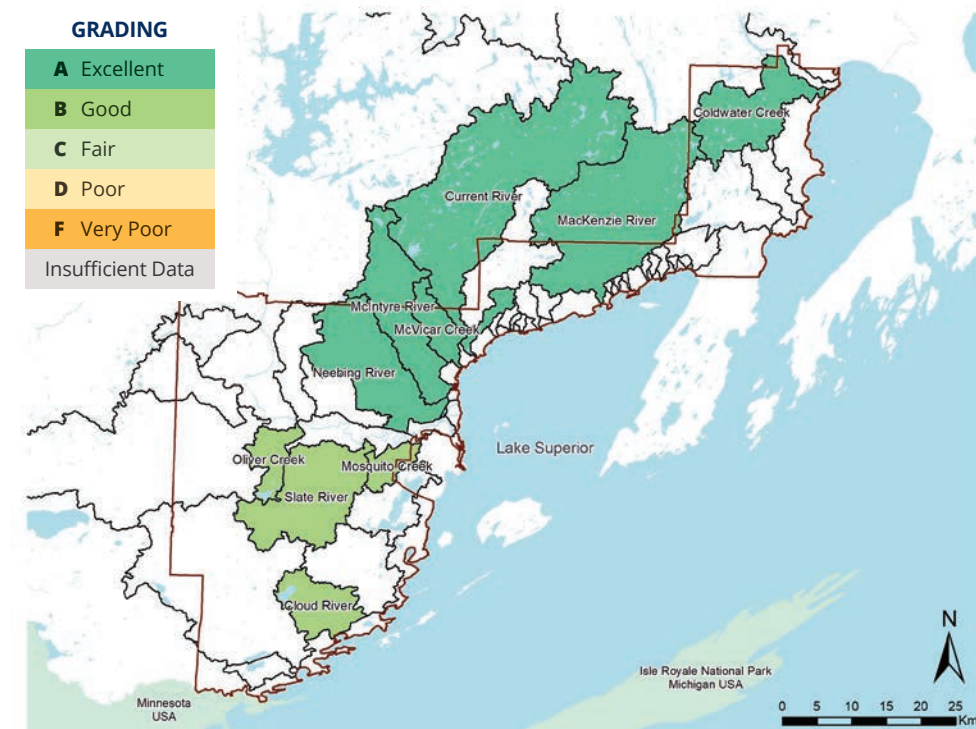


SURFACE WATER QUALITY

Report card grades for surface water quality are based on chemical (total phosphorous concentrations) and bacteriological (*E. coli* concentrations) indicators of water quality across the watershed. The LRCA collected surface water quality data in partnership with the Ministry of Environment, Conservation and Parks (MECP) through the Provincial Water Quality Monitoring Network (PWQMN) program, as well as in completed Watershed Assessments.

What Did we Find?

- The Lakehead Watershed surface water quality is in overall excellent condition and scored an average grade of 'A' based on the data collected annually between 2013 and 2017.
- Within the Lakehead Watershed, six subwatersheds scored a grade of 'A' and four scored a grade of 'B'.
- Generally, phosphorous and *E. coli* concentrations are low within the Lakehead Watershed.

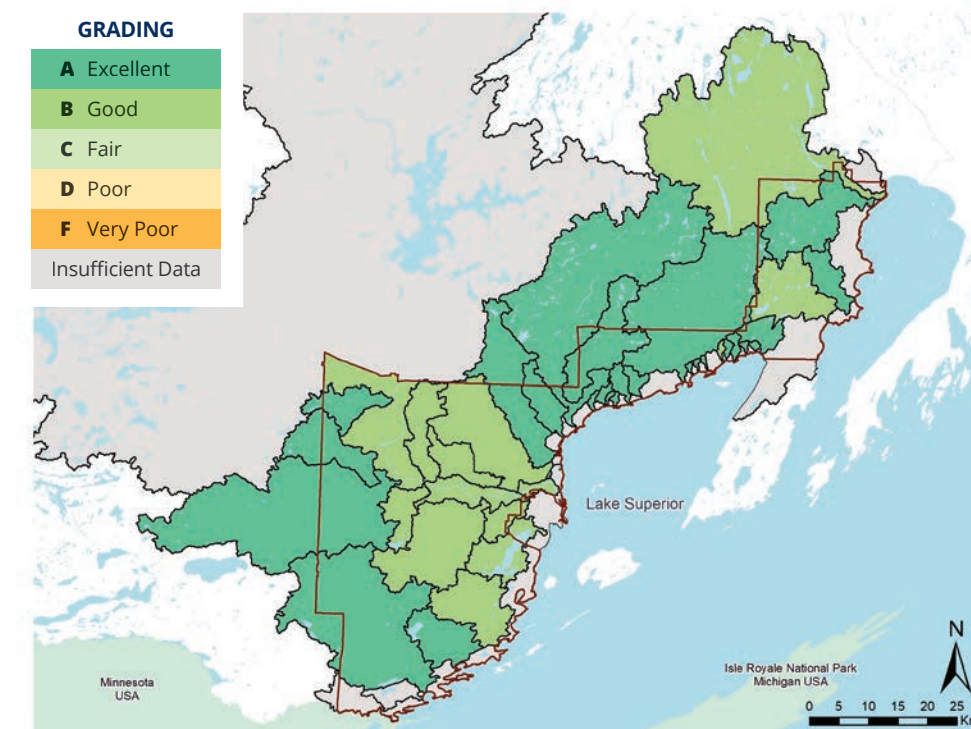


FOREST CONDITIONS

Forest cover is needed to sustain a healthy level of biodiversity within the Lakehead Watershed. The quality of the Lakehead Watershed forest is measured by calculating the area of forest cover, forest interior and forested riparian zones. The Forest interior is the wooded area that is more than 100 metres from a forest's edge. Forest riparian zone is the area of forest 30 metres on either side of a watercourse.

What Did we Find?

- The Lakehead Watershed forest is in overall excellent condition and scored an average grade of 'A' based on the 2017 data collected.
- The Lakehead Watershed is comprised of approximately 75% forest cover. The Lakehead Watershed's forest interior is approximately 52%, which provides valuable wildlife habitat.
- The Lakehead Watershed riparian zone is 57% forested. Riparian zones help to improve water quality, provide habitat, and prevent streambank erosion.



WETLAND COVER

Wetlands are a critical part of our natural environment. They mitigate floods and droughts, protect our shorelines, reduce erosion, absorb pollutants, improve water quality and provide rich habitats for numerous species. The four main types of wetlands are bogs, fens, marshes and swamps.

What Did we Find?

- The Lakehead Watershed Wetlands are in overall good condition, and scored an average grade of 'B' based on the mapping provided by the Ministry of Natural Resources and Forestry.
- Environment Canada suggests that 10% wetland cover is important for a healthy watershed.
- The wetlands in the Lakehead Watershed comprise approximately 8.8% of the total watershed area.

