



# *Muskoka*

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## WATERSHED COUNCIL

### Minutes

Friday, March 25, 2022  
1:00 pm  
Zoom Online Meeting

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#### Present

|                            |                 |                 |
|----------------------------|-----------------|-----------------|
| Peter Sale (Interim Chair) | Nancy Alcock    | Patricia Arney  |
| David Bywater              | Margaret Casey  | Chris Cragg     |
| Louise Cragg               | Kathleen Hedley | Richard Lammers |
| Pete LeMoine               | Daryle Moffatt  | David Parsons   |
| Michael Peppard            | Geoff Ross      | Kevin Trimble   |
| Cameron von Bratt          |                 |                 |

#### MWC Staff

|                   |               |                  |
|-------------------|---------------|------------------|
| Samantha Hastings | Christy Doyle | Rebecca Willison |
|-------------------|---------------|------------------|

#### DMM Staff

|                 |                    |             |
|-----------------|--------------------|-------------|
| Cassie Emms     | Glenn Cunnington   | Alana Perez |
| Brittany Manley | Christiane Masters |             |

#### Presenters

|  |   |
|--|---|
| Dr. Neil Hutchinson<br><i>Hutchinson Environmental Sciences Ltd.</i> | Dr. Norman Yan<br><i>Friends of the Muskoka Watershed</i> |
|--|---|

#### Guests

|                      |               |                        |
|----------------------|---------------|------------------------|
| Kieran Molony        | Bill Heatlie  | Ramien Sereshk (SMDHU) |
| Cathy Oakden         | Andrew Fyfe   | Bet Smith              |
| Margarete Cameron    | Rachel Plewes | Ken Riley              |
| Esther Giesbrecht    | Steve Rohacek | Carmen Pereira         |
| Caroline Konarzewski |               |                        |

#### Welcome

Interim Chair Peter Sale called the meeting to order at 1:00 pm with an addition to the agenda of an update on the Muskoka Summit on the Environment and a report from the Nominations Committee. He invited Patricia Arney to give the Indigenous Land Acknowledgement.

#### Confirmation of Minutes

#### MOTION

THAT the minutes of the Muskoka Watershed Council meeting dated February 25, 2022 be approved.

**CARRIED (by Consent)**

## Presentation

[Climate Change as a Stress Multiplier Governing Algal Blooms in Oligotrophic Lakes](#) – Dr. Neil Hutchinson (Hutchinson Environmental Sciences Ltd.) and Dr. Norman Yan (Friends of the Muskoka Watershed)

The classic management approach to cyanobacterial blooms in fresh water is based on reducing surplus phosphorus loading from human activities to maintain total phosphorus concentrations below thresholds that increase the probability of blooms. This paradigm has been challenged recently by the increasing number of cyanobacterial blooms in lakes with low phosphorus levels and lakes with no human phosphorus sources. Although the increasing risk of blooms can be driven by more phosphorus loading and greater algal growth; more suitable cyanobacterial habitat and decreased algal grazing by zooplankton may also increase the risk of blooms.

Warmer waters and increasing thermal stability of lakes in response to climate change favour cyanobacterial habitat and reduce grazing by heat sensitive zooplankton. Internal loading of phosphorus is increased as greater stability increases hypolimnetic anoxia in a warmer climate. More severe storms mobilize more phosphorus from the watershed, where tree health has been reduced through acid rain-induced calcium loss. Zooplankton populations are reduced in lakes where calcium has declined while increased road salt application in a warmer winter climate increases chloride toxicity to zooplankton to reduce filter feeding.

Multiple stressors of temperature, chloride, low calcium and invasive zooplankton predators therefore interact to reduce zooplankton grazing of algae while climate change increases phosphorus loading and favours cyanobacteria habitat. Examples of all of these mechanisms were presented using case studies from south-central Ontario lakes.

Following a question and answer period, Peter thanked Neil and Norm for their excellent presentation.

## Muskoka Watershed Report Card

Rebecca Willison introduced the Muskoka Watershed Report Card, one of the most notable activities undertaken by MWC. She gave a [brief presentation](#) on the structure of the 2018 Muskoka Watershed Report Card, ending with a call for volunteers to sit on the Report Card Sub-committee. Cameron von Bratt and Rachel Plewes volunteered to join the Sub-committee.

Peter noted the difficulty in keeping the Report Card fresh.

## Project Updates

- **MWC Governance** – Interim Chair Peter Sale reported that the lawyer MWC retained has provided advice on revising the By-laws and that the Governance Committee is meeting next week to finalize the changes. The AGM is scheduled for April 22<sup>nd</sup> and the By-laws will be voted on at that meeting.
- **Community Round Table** – Kevin Trimble reported that the CRT met this week and that there are currently 45 members with a number from the business sector and Indigenous Communities. There has been much discussion about the need for education on IWM and input into the 12 District of Muskoka (DMM) projects. They are still waiting to hear about funding requests to the Province and

DMM. He noted the high level of engagement with the group and that regular monthly meeting will be scheduled. MWC members are always welcome to attend.

- **Algae Monitoring Program** – Peter Sale reported that data analysis is being undertaken and the final report is being drafted. Peter will be giving a more in-depth presentation at the Working Group meeting next week. The Algae Sub-committee will be meeting soon and the program is expected to be rolled out for broader participation this summer. Peter would like some additional sub-committee members to help with promotion, training, etc.
- **Love Your Lake Program** – Rebecca Willison reported that four lakes have confirmed their participation this summer: Ril Lake and Echo Lake in Lake of Bays, Bass Lake in Muskoka Lakes, and Morrison Lake in Gravenhurst. Approximately 700 properties are expected to be assessed on these four lakes.
- **Nominations Committee** – Kevin Trimble provided an update on the Committees' efforts to recruit a Chair, Vice-chair and directors to sit on the board. He invited MWC members to send nominations to the Committee for consideration.
- **Communications** – Pete LeMoine reported that materials were developed and released for three awareness days last week: [World Frog Day](#) (March 20) by Caroline Konarzewski, [International Day of Forests](#) (March 21) by Javier Cappella, and [World Water Day](#) (March 22) by David Parsons. The media release was taken up by many print media outlets, and the Moose radio station had a news item for the three days combined. Volunteers have signed up for future awareness days, but there are more available. There will be a more detailed discussion on communications at the Working Group next week.

### Partner Updates

- **District of Muskoka** – Christy Doyle introduced Alana Perez, who just started in the IWM Program Coordinator role, and Brittany Manley, who joined the District as a Planner and will be involved with the District's causation studies.

### New Business

- Spring Freshet – Chris Cragg noted that the spring freshet is underway and that water levels are up on the big lakes. However, the weather forecast is favourable for a slow melt.
- Muskoka Lakes Official Plan – Patricia Arney reported that a meeting was recently held to discuss the latest draft of the Official Plan (OP) and that a recording is available. She encouraged people to review the draft and submit comments for consideration by the TML Council. Kevin Trimble noted the steep learning curve necessary for these OP reviews. The OP may or may not be approved before the municipal election this fall. Patricia noted that there seems to be a lack of attention to land cover outside of the waterfront area. There is a call for a natural heritage inventory, but no timeline given. Peter noted the intention to present to each watershed municipal council on MWC and CRT initiatives.
- Watershed Mapping – Cameron von Bratt noted that the watershed mapping boundaries have been updated which has resulted in some modifications to the watershed boundaries.

- Ecological Sub-committee – Cameron suggested establishing an Ecological Sub-committee to look at ways to better integrate water, land and wetlands. This may be discussed more at upcoming Working Group meetings.

### **Next MWC Meeting**

Friday, April 22<sup>nd</sup> at 1:00 pm through Zoom. This meeting will be MWC's Annual General Meeting and will feature a presentation by RTO12 staff Kate Monk and James Murphy on effective strategies for communication and promotion. The MWC membership will also vote on changes to MWC's By-laws.

### **Adjournment**

Peter Sale adjourned the meeting at 3:00 pm.



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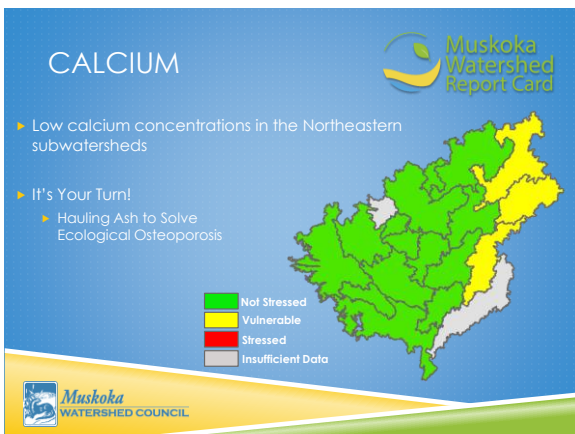
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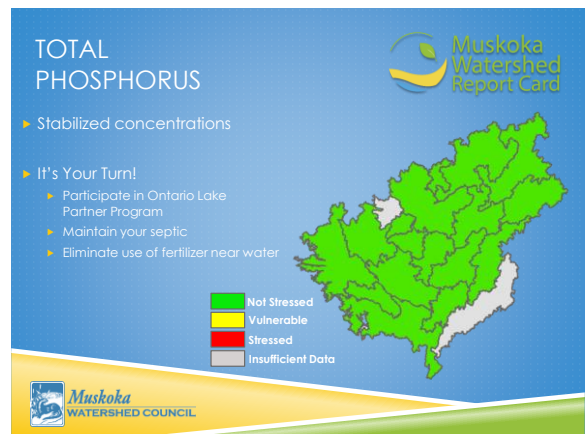
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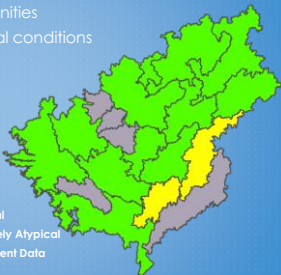
### BENTHIC MACROINVERTEBRATES

**Muskoka Watershed Report Card**

- Most lakes show typical communities
- Reflects good aquatic biological conditions

**It's Your Turn!**

- Participate in the District of Muskoka Benthic Monitoring Program



■ Typical  
■ Atypical  
■ Extremely Atypical  
■ Insufficient Data

**Muskoka WATERSHED COUNCIL**

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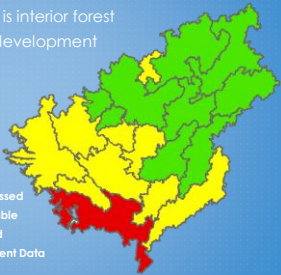
### INTERIOR FOREST

**Muskoka Watershed Report Card**

- 46% of the Muskoka Watershed is interior forest
- Supports high biodiversity, but development pressure are threatening

**It's Your Turn!**

- Maintain your woodlot



■ Not Stressed  
■ Vulnerable  
■ Stressed  
■ Insufficient Data

**Muskoka WATERSHED COUNCIL**

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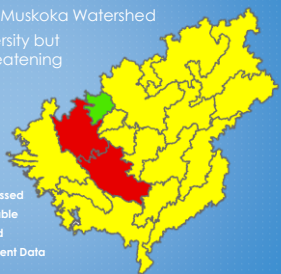
### FRAGMENTATION

**Muskoka Watershed Report Card**

- Natural areas cover 82% of the Muskoka Watershed
- Supports habitat & species diversity but development pressures are threatening

**It's Your Turn!**

- Be a land steward
- Review Living in Cottage Country Handbook



■ Not Stressed  
■ Vulnerable  
■ Stressed  
■ Insufficient Data

**Muskoka WATERSHED COUNCIL**

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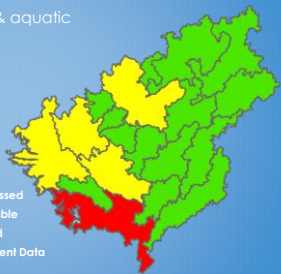
### INVASIVE SPECIES

**Muskoka Watershed Report Card**

- Have established in terrestrial & aquatic ecosystems
- Spread is likely

**It's Your Turn!**

- Report your sightings to EDDMaps



■ Not Stressed  
■ Vulnerable  
■ Stressed  
■ Insufficient Data

**Muskoka WATERSHED COUNCIL**

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### SPECIES AT RISK

**Muskoka Watershed Report Card**

- 46 Species at Risk in Muskoka

**It's Your Turn!**

- Report your sightings
- Help turtles off the road

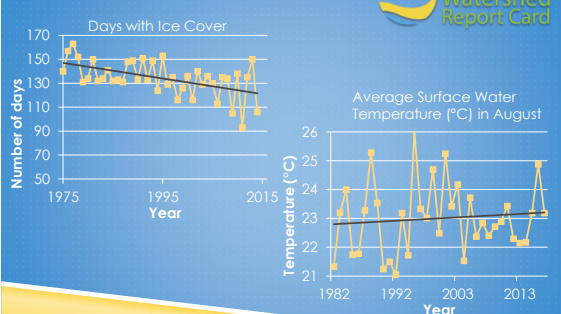


**Muskoka WATERSHED COUNCIL**

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### CLIMATE CHANGE

**Muskoka Watershed Report Card**



**Muskoka WATERSHED COUNCIL**

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