

Minutes

Friday, October 29, 2021 1:00 pm Zoom Online Meeting

Present

Geoff Ross (Chair) Patricia Arney John Cooper Chris Cragg (@ 2 pm) Jo-Anne Goodwin Richard Lammers Jess Lario Pete LeMoine Karen Maxwell David Parsons Daryle Moffatt Michael Peppard Peter Sale Helen Thompson Kevin Trimble

Staff

Christy Doyle Rebecca Willison Glenn Cunnington Cassie Emms Stuart Paul Kevin Boyle

Presenters

Brittany Welsh Trent University

Guests

Andrew Paterson Peter Stolpmann Wendy Somerville Ken Turner Catherine Oakden Kathy Dyer Caleb Timmermann Cameron von Bratt Susan Mazan Piret Hurrell Sarah Warren (SMDHU) Nancy Thompson

Welcome

Chair Geoff Ross called the meeting to order at 1:00 pm. He invited Karen Maxwell to open the meeting with a Land Acknowledgement. He invited other MWC members wishing to make a land acknowledgement at future meetings to let him know. An item on Governance was added to the agenda under Project Updates.

Confirmation of Minutes

Kevin Trimble noted that he provided a longer report about the CRT than was included in the minutes.

MOTION

THAT the minutes of the Muskoka Watershed Council meeting dated September 24, 2021 be approved.

CARRIED (by consent)

Presentation

<u>Microplastics in Muskoka-Haliburton headwater lake catchments</u> – Brittany Welsh, PhD student, Trent University

Christy Doyle introduced Brittany Welsh and welcomed her to the MWC meeting.

Microplastics are pervasive contaminants of concern, but the fate of microplastic pollution in headwater lakes, especially in more remote regions, remains relatively unknown. This is evident by the lack of field studies to quantify the inputs, outputs and movement of microplastics to lakes at the watershed level.

In this study, microplastics (MP) were identified and quantified over a 12-month period for three headwater lake catchments in Muskoka-Haliburton. These three study lake catchments have been part of a long-term monitoring program by the Ministry of the Environment, Conservation and Parks at the Dorset Environmental Science Centre for more than four decades. A mass-balance approach was used, meaning that microplastics entering and leaving the lake catchment were accounted for in order to determine how much accumulates in the study lakes. This approach incorporates inputs from the atmosphere and inflow streams and weighs these against losses to lake outflows and sediment.

The results showed that the atmosphere had the highest daily rate of microplastics coming into the catchment (3.84 - 8.04 MP particles/m²/day) compared to the inflow streams (2.11-2.34 MP particles/m²/day). This suggests that atmospheric deposition is an important source of microplastics to remote regions, with 41-73% of the microplastic that fall from the atmosphere being retained in the terrestrial area surrounding the lake. On a daily basis, between ~1.5 million MP particles and 8.5 million MP particles are retained in the lake suggesting that lakes are a large storage area for microplastics. The quantity of microplastics lost to lake sediments is a small percent (7-17%) compared to the quantity of microplastics leaving the lake through the outflow, suggesting that lake sediments are a relatively small sink for microplastics.

Fibres were the dominant microplastic shape identified in atmospheric deposition, lake water and inflow/outflow streams, with lake sediment having a higher proportion of fragments. This suggests that fragments may settle at a greater rate than fibres.

Improving our understanding of microplastics in the environment is the first step towards mitigating the impacts of microplastics and will help guide the management of plastic pollution.

Following an engaging question and answer period, Geoff thanked Brittany for her presentation.

Project Updates

- November. Deb Martin-Downs gave a presentation at the September CRT meeting about the structure of watershed plans and integrated watershed management processes and he would like to continue the educational theme at future meetings. He is currently looking for help and input from MWC members on what IWM topics would be most valuable to put forward. The CRT's short-term mandate is to provide the District with input on their twelve IWM projects. The CRT currently has 23 standing members and is ready to work with the district when they ask for input. The CRT is also continuing to develop material to help broaden the representation of the CRT. Kevin would like CRT meeting information shared with all MWC members similar to the process used for the Working Group so MWC members can participate and learn from invited speakers. Kevin noted that the CRT is still in need of outside expertise to help with outreach and to develop a communications plan and so the MWC Board of Directors met with District staff to discuss available resources and what might be available to allocate to the CRT.
- MWC Strategic Plan Karen Maxwell reported that the information from all of the surveys have been amalgamated into one document. Land use planning, wetlands, water quality and forest health are the top four priorities identified through the surveys. She noted that there is also good information gathered for the SWOT analysis. A working session will be held at the Working Group on Thursday, the first of several that will take place. The goal is to have the Strategic Plan finalized for the AGM in January.
- Official Plan Responses Karen Maxwell reported that the project is nearing completion with a set of final documents (that incorporated several rounds of comments) to be distributed to the relevant parties very soon. She noted that it's an interim approach until the IWM process releases a list of recommendations.
- MWC Communications Pete LeMoine reported that an article on The Natural Edge and IWM
 written by Cassie Emms was published last month. He noted that volunteers are welcome to submit
 articles on topics related to watershed health for publication in local papers. He plans to follow up
 with the Parry Sound Metroland paper to see if the articles are published there, as well. He would
 like to do an article on the aquatic invasive species information added to the DMM website.

Cassie Emms reported that a promotional video is being developed for MWC and asked for MWC members to volunteer to be featured in the video to talk about their experience with MWC and why they volunteer. Email Cassie at Cassie.Emms@muskoka.on.ca if interested.

Peter Sale would like MWC to communicate in a more coordinated manner to the community. Geoff called for volunteers willing to assist with this.

• MWC Governance Changes – Geoff Ross gave a brief presentation on the proposed changes to the governance structure of MWC. His proposal is to have a six member Board of Directors (5 elected by MWC and 1 appointed by DMM) and to dissolve the Executive Committee. A call for volunteers to sit on a Governance Sub-committee was put forward. Patricia Arney noted that there should be more Board Members than five or six. John Cooper noted that keeping distance from DMM may help with getting donations.

Partner Updates

- District of Muskoka Kevin Boyle asked for a member of MWC to sit on the Community Working
 Group (CWG) that will help to develop a <u>community Greenhouse Gas reduction strategy</u> called
 the Climate Action Plan (CAP). The first workshop is scheduled to take place in November to
 undertake a vulnerability assessment. Geoff is coordinating the recruitment of a volunteer.
- Township of Muskoka Lakes Councillor Susan Mazan reported that the second open house
 meeting for the Township's Official Plan review was held today. The Township is also undertaking a
 District service review and she questioned how the environment can become more prominent
 (referring to the DMM infographic at https://www.muskoka.on.ca/en/area-municipalities/area-municipalities.aspx).

New Business

None.

Next MWC Meeting

Friday, November 26th at 1:00 pm through Zoom. It will feature a presentation about the Committee on the Status of Species at Risk in Ontario (COSSARO) by Tom Hilditch, Chair of COSSARO.

Adjournment

Geoff Ross adjourned the meeting at 2:55 pm.