MUSKOKA WATERSHED COUNCIL
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# Agenda

Date: **Friday, January 28, 2022**
Time: **1:00 – 3:00 pm**
Location: **Zoom**
https://us02web.zoom.us/j/82739871685?pwd=S3dGVlZOeWxMQlIUNmdDZUd3MWVBdz09 Meeting ID: 827 3987 1685 Passcode: 593409

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1. **Welcome and Opening Remarks** – *Chair Geoff Ross (5 min)*
   - 1.1. Indigenous Land Acknowledgement
   - 1.2. Approval of Minutes (by consent)

     THAT the Minutes of the Muskoka Watershed Council meeting dated November 26, 2021 be approved.

2. **Recognition of MWC Chair Geoff Ross** *(5 min) – MWC Director Kevin Trimble*

3. **MWC Leadership** – January 2022 Elections for Chair and Vice-chair *(15 min) – MWC Director Kevin Trimble*

4. **Presentation** *(45 min)*
   - 4.1. **Freshwater Biodiversity Assessment at the Watershed Scale** – *Cameron von Bratt, Freshwater Ecosystem Services*

     Presentation summary available below.

5. **MWC 20th Anniversary** *(25 min)*
   - 5.1. Congratulatory Remarks from DMM Chair John Klinck
   - 5.2. Remarks and Major MWC Accomplishments – *MWC Director Peter Sale*
   - 5.3. MWC @ 20 Promotional Video – *Cassie Emms*

6. **Project Updates** *(3-5 min each)*
   - 6.1. Community Roundtable Update – *Kevin Trimble*
   - 6.2. MWC Strategic Plan – *Karen Maxwell*
   - 6.3. MWC Communications – *Pete LeMoine*

7. **Partner Updates** *(5 min each)*
   - 7.1. Government Updates – *Open to elected municipal representatives and staff*

7.2. Partner Updates (e.g., Province, Health Unit, Lake Associations, Community Organizations) – *Open to All*

8. **New Business**

9. **Adjournment**

**Upcoming Meetings**

- **Working Group:** Thursday, February 3rd at 2:00 pm through Zoom.
- **Muskoka Watershed Council:** Friday, February 25th at 1 pm through Zoom.
  - This meeting will include a presentation by Javier Capella from Westwind Forest Stewardship Inc.

**Presentation Summary**

**Title:** Freshwater Biodiversity Assessment at the Watershed Scale
**Speaker:** Cameron von Bratt, Freshwater Ecosystem Services, Seguin ON
**Description:**
Freshwater biodiversity is a complex and often poorly defined concept. Currently, freshwater biodiversity is not assessed directly, but is based on inferred information from collections of data sets - spanning multiple scientific disciplines and methodologies. This is often incompatible across regions and territories, and inaccessible to scientists, government agencies, industry, and the public.

Freshwater biodiversity data collection is further limited because it requires field intensive, lengthy, costly, and complex methods to find, identify and document all the species that rely on or interact with fresh water. In addition, the collection of species data is limited due to access and the remoteness of some areas or habitats, as well as a lack of requirement for assessment and monitoring in most parts of the watershed. As a result, freshwater biodiversity is not being measured at any scale. Where data is measured, it is further limited to a few locations, a few select/targeted species or groups of species, or is based on habitat or distribution information.

As part of the global eBioAtlas program, the Great Lakes eBioAtlas Project aims to provide the tools, training, and methods needed for the collection of both terrestrial and freshwater biodiversity data, at the watershed scale. By collecting water samples across the watershed, in wetlands, rivers and lakes, trace amounts of environmental DNA (eDNA) of vertebrates will be sequenced and analysed using a novel metabarcoding method, to provide accurate and detailed detections of numerous freshwater and terrestrial species. This new transformative technology enables biodiversity data to be gathered by anyone anywhere in the world, by filtering water with a simple kit. Surveys conducted over a matter of days can provide data that would take decades to gather using current field methods.

This presentation will firstly highlight some recent global successes of using eDNA metabarcoding to assess vertebrate biodiversity at various freshwater ecosystem scales. It will then provide an

overview of the currently sampling methods, future research and methods in development, and the implementation partner system. Finally, it will highlight how, through collaboration across the Muskoka watershed using the implementation partner system, MWC could lead the collection of biodiversity information at the appropriate watershed scale, contribute to the Great Lakes eBioAtlas Project, and be able to use this data to accurately inform biodiversity and conservation action - moving beyond inferred information, to actual measurement.