

Executive Summary – Peatlands and Permafrost Workshop

For the November 2025, Regional Assessment Working Group (RAWG) meeting in Thunder Bay, members identified the need for a technical workshop focused on peatlands and permafrost. To support this priority, two partnered communities were invited to present on their peatlands and permafrost research. Five experts from the Roster of Expert Support were also invited to provide presentations and participate in discussions. The workshop took place on November 25, 2025 in Timmins, Ontario, as part of RAWG’s regular in-person monthly meeting.

Each presenter was asked to prepare a brief presentation on one of the topics of interest identified by the RAWG beforehand. These topics were:

- Ecological significance of peatlands
- Mining and its impact on peatlands
- Considerations for industrial development on peatlands and permafrost (feasibility, engineering practices, etc.)
- Peatlands and climate change (carbon storage, emissions sources)
- Restoration and protection of peatlands
- Community-led stewardship and monitoring

Two presentations on community-led research on peatlands and permafrost were shared by Weenusk First Nation and Moose Cree First Nation. These were followed by presentations from the five roster experts, who each shared their research and relevant knowledge on one of the topics of interest.

In the afternoon, the RAWG split into thematic breakout groups to allow for deeper discussion. The breakout group topics were as follows:

1. Climate change and peatlands
 - a. Carbon and methane storage, emissions
2. Peatland hydrology
 - a. The role of peatlands in water, aquifers, and rivers
 - b. Impacts on water from disturbing peatlands
3. Peatland protection, conservation, and restoration
 - a. Community monitoring
4. Online station with subject matter experts from Natural Resources Canada and Environment Canada
 - a. Federal experts attended an online group and explained the types of contributions they can make to the RAWG.