

Executive Summary

In the fall of 2023, the CMOS Council brought on an outside consultant to explore how CMOS could grow its impact and improve its value to members. The project aimed to better understand how CMOS could better serve Canada's atmospheric and oceanographic science (and related fields) community. Key findings and recommendations include:

Findings: Value Proposition

CMOS needs to demonstrate a stronger value proposition to attract and retain more members. Key challenges include visibility (both internal and external) and perceptions/misconceptions related to a lack of valuable activities or benefits beyond the Congress, the CMOS scientific scope (leaving many feeling CMOS is not relevant to their field), and a feeling that CMOS is a somewhat archaic organization that is unable to respond to the current needs of its community. Consultation identified a number of pathways for CMOS to add value to its membership. The top three included: (1) adding more content and specialized events, (2) extending the CMOS focus to more disciplines (especially applied and interdisciplinary fields), and (3) providing access to career and professional development resources and content.

Findings: Stakeholder Priorities

Those interviewed and surveyed identified the following as areas of work CMOS should prioritize to grow its value and impact:

Top CMOS Priorities

(as identified by all those interviewed and surveyed)

1. Serve as a voice for the Canadian atmospheric and oceanographic community
2. Increase the visibility and perceived importance of the atmospheric and oceanographic sciences
3. Foster collaboration and knowledge exchange

Top Student CMOS Priorities

(as identified by interviewed and surveyed students)

1. Promote study and careers in CMOS disciplines
2. Improve public understanding of weather, water, climate and environment
3. Support career progression of CMOS members

Findings: Impact

CMOS is primarily having impact through five pathways:

- **Speaking on behalf of the CMOS scientific community:** CMOS is having little meaningful impact in this area, however stakeholders consistently identified this as a top priority for CMOS. The Scientific Committee is best positioned to fill this gap but will require a restructure and updated mandate.
- **Networking, Collaboration and Knowledge Exchange:** This is by far the area where CMOS is having its greatest impact, primarily through the Congress, however there is substantial room for growth. There is strong interest in CMOS offering more events and content, especially those that cross sectors and disciplines. There is also wide interest in CMOS becoming more inclusive of the applied and interdisciplinary sciences (not only the fundamental/research sciences) and becoming more active in facilitating collaboration and discourse that helps address scientific and societal challenges.
- **Communications:** Fragmented, uncoordinated, and often outdated communications are contributing to widespread issues with internal and external visibility and reputation. CMOS needs to build staff capacity in communications, and create a strategic and coordinated approach to communications, to address these issues. Priority areas include improving member communications, creating a well populated and professional e-newsletter, overhauling CMOS communication channels, and developing a strategic approach to improving visibility and reputation.
- **Workforce and Professional Development:** The Society is having some impact in this area, primarily through awards and scholarships, student involvement at Congress, and activities of the Student Committee. However, there is substantial room for growth. Students and early career professionals in particular want CMOS to provide more career related resources and activities. In parallel, there is a shortage of qualified candidates for CMOS related employment and graduate programs, particularly in the atmospheric sciences. There is strong interest from members, and potential funders, in CMOS developing workforce development and career exposure initiatives, especially those targeting equity-deserving youth.
- **Outreach and Youth Education:** CMOS efforts in this area are predominantly led by the Student and Professional Education Committee (SPEC), who have actively developed partnerships with youth and educator serving organizations to build capacity in CMOS areas of science. Beyond the SPEC, outreach and youth education activities are sparse and largely ad hoc. More direction and coordination in this area would greatly improve the Society's external reach and impact.

Findings: Barriers to Impact

Internal barriers are significantly reducing the Society's ability to drive impact, including:

- issues with governance and structure,
- a lack of scientific direction and voice,
- significant challenges with visibility and communications, and
- a revenue model that will not sustain additional staff and initiatives.

Recommendations

CMOS should focus its impact activities into the three areas identified below:

Impact Focal Areas

- **Collaboration & knowledge mobilization**, with an emphasis on crossing discipline and sectoral divides, and including the fundamental, applied, and interdisciplinary sciences,
- **Workforce development**, with a priority on career exposure for youth and post-secondary students and an emphasis on those from equity-deserving groups,
- **Serving as a voice for the scientific community**, with an emphasis on addressing topics and issues of societal relevance.

The Society should place a strong initial focus on reducing barriers to impact, as mitigating barriers will improve the efficacy of impact-oriented activities. Project recommendations fall into the following four themes. Specific recommendations are found on page 24, and an action plan for Phase I recommendations is provided in Appendix A.

Priority Recommendations

- **Build capacity**: with priority on hiring staff to build communications and operations capacity, as well as staff with expertise in partnership development to grow the CMOS revenue model and mobilize funding to support additional staff.
- **Improve governance and structure**: with an emphasis on modernizing the Society's structure, and creating better mechanisms for internal communication, strategic direction, workload distribution and accountability.
- **Strengthen scientific direction and voice**: primarily by restructuring and empowering the Scientific Committee and putting a stronger focus on fostering scientific discourse that addresses scientific and societal challenges.
- **Grow impact and value**: initially by improving the quality, scientific scope and visibility of existing activities. As operational capacity grows, work in this area will include more activities aligned with the impact focal areas noted above.