

2025 Report of MEQ

Purpose of Annual Reports: Since PICES-2022, Committees/FUTURE are requested to hold **at least one virtual business meeting before the Annual Meeting**. Committees/FUTURE (mandatory) and Expert Group (optionally upon request) will have **an in-person business meeting during the Annual Meeting**. This Annual Report is to record the discussion items and outcomes of these business meetings.

Context:

In 2025, AP-NIS held two business meetings in addition to conducting some activities by correspondence. A virtual business meeting was held Thursday, October 30, 2025 and chaired by MEQ Chair Dr. Therriault (Canada). An additional in-person business meeting was held Sunday, November 9, 2025 at PICES-2025 in Yokohama, Japan and chaired by Dr. Therriault. For both meetings, the chair welcomed participants (*Endnote 1*) and adopted the draft agenda that was circulated to MEQ members in August 2025 for review and comment (*Endnote 2*). Members present for the in-person meeting are shown in *Endnote 3*.

VIRTUAL MEETING

AGENDA ITEM 1

Welcome, Introductions, Opening Remarks

Dr. Therriault welcomed meeting participants and asked if there were any changes or modifications required of the agenda. No changes were needed and the agenda was adopted.

AGENDA ITEM 2

Invited Presentation from GESAMP

GESAMP has had a long-standing relationship with PICES having been present at PICES annual meetings for decades with many areas of interest overlapping with MEQ. GESAMP works at the science-policy interface and is supported by 10 sponsoring UN organizations to provide analysis and advice on specific questions of interest. Dr. Therriault (PICES) and Dr. Watson-Wright (GESAMP) discussed mutual areas of interest and potential for collaboration intersessionally via correspondence, and it was decided that it would be logistically easy for Dr. Gilardi to provide an overview of GESAMP activities at the MEQ virtual business meeting with continued discussions expected into 2026. Dr. Gilardi's presentation provided an overview of the structure and functioning of GESAMP and highlighted that PICES scientists could be nominated to GESAMP expert groups. There were clear overlapping interests on invasive species, marine plastics and debris, harmful algae, and various contaminants, and emerging topics including energy/resource extraction, anthropogenic noise and light pollution, and building toward an overarching strategy to assess cumulative anthropogenic impacts with a focus on ocean, human, and animal health. MEQ discussed many specific areas of interest and will review a GESAMP correspondence group report expected in 2026 on how their organization might implement this broader strategy. This would serve as a basis for broader engagement between PICES and GESAMP on specific work topics.

AGENDA ITEM 3

Updates from MEQ Expert Groups (S-HAB, AP-NIS, and S-MPP)

This agenda item covered critical updates from PICES expert groups parented by MEQ. Details of each expert group's annual activities can be found on the PICES website, so this agenda item is intended to provide high-level feedback on issues or challenges encountered and if MEQ members have any suggestions to improve productivity, participation, etc.

S-HAB: One of the major challenges noted by S-HAB was the decline in active members over the past few years which has decreased the number of activities that are being undertaken by S-HAB. S-HAB requested, and MEQ endorsed, the need for each PICES member country to review and update membership. In the context of the next integrated science program or other PICES activities (e.g., NPESR 4, UNDOS, etc.) S-HAB would like to promote how to become a member and contribute to ongoing S-HAB activities that are likely to support broader PICES activities. It was noted that S-HAB just produced an open access journal article that was co-authored by many S-HAB members.

AP-NIS: This PICES advisory panel also noted challenges with respect to membership with two US federal representatives having to step down and a long-time contributor from Japan also needing to step away from PICES expert groups. It is expected contracting parties will appoint new members prior to PICES 2026 in Nanaimo. It also was noted that NOWPAP, a long-time PICES collaborator on a number of MEQ topics, still have yet to resume activities due to geopolitical challenges. However, this organization is developing its next strategy document, and activities could resume in 2026. Finally, when discussing the AP-NIS financial request to support the International Conference on Aquatic Invasive Species (ICAIS), all MEQ members liked the idea that PICES support (pending GC approval) would be highly visible at the meeting providing an excellent opportunity to showcase the organization.

S-MPP: This was the first year for this section, but it was noted that Russian members had not yet been named and their request to have MEQ raise this issue with SB was fully supported. It was noted that their session at PICES 2025 was over-subscribed and was extended and they expect similar engagement for PICES 2026. Like S-HAB, this new section noted that they see a clear role for them in the next integrated science program and other PICES activities (e.g., NPESR 4, UNDOS, etc.). Specific activities could include developing standards and providing advice to PICES member countries on plastic pollution issues.

AGENDA ITEM 4

MEQ Decisions for SB based on Requests in Agenda Item 3

MEQ discussed each of the specific requests made by the three expert groups that report to the committee. It was noted that S-HAB requests were anticipatory in that the section was unable to organize a virtual meeting in 2025 and was only planning to meet in Yokohama after the MEQ business meeting. Other than membership noted above, the only financial request was from AP-NIS that was supported by MEQ.

AGENDA ITEM 5

Discuss Potential Topic Session and Workshop Proposals for PICES-2026

It was noted that the online submission for topic sessions or workshops being proposed for PICES 2026 in Nanaimo would be open until November 24, 2025. Both S-HAB and S-MPP were developing proposals that they were looking to have supported by MEQ. AP-NIS was less clear if they would be developing a proposal given how much effort has been devoted to eDNA sessions and workshops since 2020 and that a new topic might be considered.

AGENDA ITEM 6

Other Business

No other business was raised. Dr. Therriault concluded the virtual portion of the MEQ business meeting.

AGENDA ITEM 7

Adjourn

IN-PERSON MEETING

AGENDA ITEM 8

Welcome, Introductions, Opening Remarks

Dr. Therriault welcomed meeting participants and meeting participants conducted a round of introductions. The agenda was reviewed and with no changes required, the agenda was adopted.

AGENDA ITEM 9

MEQ membership

MEQ typically reviews its membership list at the annual meeting to ensure accuracy and active participation. It was noted that most member countries did not have the maximum number of committee members (3) and that some countries did not participate in the virtual meeting, the in-person meeting, or both (see *Endnote 1*). MEQ deals with a broad range of ecosystem stressors, most arising or exacerbated by human use of marine ecosystems. Thus, having broad input on priorities and direction of sponsored expert groups is essential. MEQ strongly suggests SB recommend GC review membership and replace inactive members.

AGENDA ITEM 10

MEQ Best Oral and Best Poster awards for PICES 2025

Dr. Therriault reviewed the judging instructions provided by the PICES Secretariat with MEQ members. It was decided that at least two MEQ members would be responsible for judging each ECOP oral or poster presentation. In general, MEQ members agreed to judge presentations in sessions they were already planning on attending with the few remaining presentations assigned to MEQ Chair and Vice Chair. It was decided that MEQ awards would only be presented to highly qualified presentations and giving no award was an option. MEQ did note the significant burden of judging compared to previous years with considerably more ECOP submissions at PICES 2025.

AGENDA ITEM 11

Action items from ISB-2025 and IGC-2025 for MEQ

Dr. Therriault reviewed intersessional decisions from SB and GC with MEQ members. It was noted from S-HAB that an approved request for open access fees for a PICES-related publication was no longer required as this funding was secured by S-HAB members outside of PICES.

AGENDA ITEM 12

Interactions with other groups/organizations (NOWPAP, GESAMP, etc.)

MEQ parents three expert groups dealing with critical marine stressors—HABs, invasive species, and plastic pollution. To accomplish Terms of Reference, these groups need to work with other intergovernmental or international organizations. Historically for MEQ this has included close collaboration with NOWPAP, ICES, and GESAMP. PICES and NOWPAP have a collaboration framework, but NOWPAP activities have been paused for geopolitical reasons. Thus, expected collaborations on eDNA methods for detecting invasive species (with AP-NIS) and understanding and forecasting HAB events (with S-HAB) are on hold. It was noted that NOWPAP is working on their next strategy document and that several important areas of collaboration with PICES were expected to remain. MEQ will continue to monitor the situation and engage when appropriate. ICES has been a long-time collaborator with PICES on several topics. Of interest to MEQ is shared work on harmful algae, invasive species, and plastic pollution and MEQ will strive to maintain existing working relationships with various ICES working groups on these topics. In addition, it was noted that emerging MEQ-related topics might arise as ICES implements its latest strategy. As noted in Agenda Item 2, there is immense potential for collaboration with GESAMP, and this will be explored further in the coming year. It is premature to know if an official framework for collaboration would be helpful. Finally, it was noted by members of S-MPP that there are several active plastic pollution groups that provide a collaborative environment for PICES activities. One that may require further exploration is the Arctic Council that has multiple expert groups related to MEQ areas of interest.

AGENDA ITEM 13

Discuss emerging MEQ issues and possible new expert groups

No specific requests were made to MEQ this year to support new expert groups. S-MPP met for the first time this year (emerging from a previous MEQ-sponsored working group) so their focus was to have members from Russia identified but to continue to advance their Terms of Reference via sessions and workshops before

requesting any new expert group. Both S-HAB and AP-NIS noted significant changes or variable interest among appointed members and requested additional active members be identified as suggested. In general, the committee felt that not having active members from China or Russia present made this agenda item challenging recognizing that many areas of interest for MEQ, including past topics like radionuclides, persistent pollutants, oil spill, etc. would benefit from their input.

AGENDA ITEM 14

Discuss strategy for ranking session and workshop proposals for PICES-2026

Both S-HAB and S-MPP indicated they were planning on submitting proposals for PICES 2026. AP-NIS indicated they may work with S-HAB to refine a proposal of mutual interest if there was time. MEQ was supportive of trying to provide at least a session or workshop for each expert group depending on specific requests received. As to the suggested structure of the annual meeting, MEQ strongly supported a shorter meeting with more time for topic sessions. It was noted that if SB retained S1 then MEQ wanted to ensure something related to MEQ would be included in the session as members felt past S1 session lacked items of interest to the committee. In addition, several MEQ members requested that evening meetings be eliminated or reduced, if possible, given the length of each working day during the annual meeting. Some members requested no virtual meetings, but Dr. Therriault noted this was unlikely to be approved. Finally, MEQ had considerable discussion about the order of events leading up to the annual meeting and strongly supported the concept that expert groups meet before the committee (and the committees meet before SB). It was noted that scheduling in the early fall makes this challenging, but members felt that MEQ meeting before reporting expert groups was immensely problematic (something that has had to happen since COVID). It was specifically requested that PICES identify non-overlapping windows for these meetings with “hold the date” windows identified well in advance similar to the annual meeting. It was further suggested by some that reviewing proposals in the current format, virtually after the annual meeting, was not inclusive and requested SB consider a deadline prior to the annual meeting so proposals could be reviewed in-person. Finally, it was noted that many MEQ members felt the current structure reduces the roles of committees and possibly expert groups in the decision-making process. This may arise in part due to most decisions for SB being made at the virtual meeting prior to the annual meeting where MEQ had the lowest level of participation.

AGENDA ITEM 15

Update on PICES FUTURE Program, including UN Decade for Ocean Science

Dr. Therriault provided an update on the status and future direction of FUTURE and other relevant changes happening within the organization. MEQ is expected to have a role in NPESR-4 as the stressors in impacts related to MEQ topics would produce actionable scientific information.

AGENDA ITEM 16

Update on PICES Expert Groups Relevant to MEQ (AP-ARC, AP-ECOP, SG-NPESR 4, SG-ERRR, etc.)

Dr. Therriault provided an update on the status of these groups with possible overlapping interests with MEQ, but no specific action items were identified.

AGENDA ITEM 17

Other business

No other new business was identified.

AGENDA ITEM 18

Adjourn

MEQ Endnote 1**MEQ participation list (both online and in-person meetings)**Members

Dr. Therriault (Canada, Chair)
 Dr. Yoshida (Japan, Vice Chair)
 Dr. Ross (Canada)
 Dr. Nagai (Japan)
 Dr. Park (Korea, In-person ONLY)
 Prof. Lee (Korea, In-person ONLY)
 Dr. Savoca (USA)
 Dr. Peacock (USA)

Members unable to attend

Canada: N/A
 China: Dr. Huo, Dr. Li
 Japan: Dr. Kasai
 Korea: Prof. Kim
 Russia: Dr. Belan, Dr. Maximovna
 USA: N/A

Observers

Dr. Wang (China, Virtual ONLY)
 Dr. Gilardi (GESAMP, Virtual ONLY)
 Dr. Kurnosova (Russia, In-person ONLY)
 Yuuka Murayama (Janus, Japan)

PICES

None

MEQ Endnote 2

MEQ meeting agenda

DRAFT AGENDA for MEQ VIRTUAL and IN-PERSON MEETINGS

MEQ Pre-PICES 2025 Meeting

Virtual (Oct 30, 2025 @ 1600 PDT)

MEQ In-person PICES-2025 Meeting

Yokohama, Japan

Sun Nov 9, 2025 @ 1800 (Icho Room)

Virtual Meeting Agenda

- 1) Welcome, Introductions, Opening Remarks
- 2) Invited Presentation from GESAMP (~15 min)
- 3) Updates from MEQ Expert Groups (S-HAB, AP-NIS, and S-MPP - max 15 min per group)
 - a. Review main activities and progress
 - b. High priority items for MEQ/SB/GC approval
 - c. Challenges or issues requiring MEQ feedback/guidance
 - d. Other
- 4) MEQ Decisions for SB based on Requests in Agenda Item 3
 - a. Membership request
 - b. New EG Chair appointment
 - c. Change of TOR and/or Action Plan
 - d. Extension of Working Group term
 - e. Event proposal, e.g. summer school
 - f. Travel support request
 - g. Other requests/proposals
- 5) Discuss Potential Topic Session and Workshop Proposals for PICES-2026 (Nanaimo, Canada) – Due Nov 24, 2025 (online)
- 6) Other Business
- 7) Adjourn

In-Person Meeting Agenda

- 8) Welcome, Introductions, Opening Remarks

- 9) MEQ Membership
 - a. Review participants and make recommendations to fill any gaps
- 10) MEQ Best Oral and Best Poster awards for PICES 2025
 - a. Discuss approach for judging MEQ Presentations
 - b. Need at least 2 Judges per ECOP
 - i. MEQ-P: 4 oral and 4 posters
 - ii. S9: 10 oral and 2 posters
 - iii. S14: 12 oral and 6 posters
 - iv. W11: 1 poster
- 11) Action Items from ISB-2025 and IGC-2025 for MEQ
- 12) Interactions with other groups/organizations (NOWPAP, GESAMP, etc.)
- 13) Discuss Emerging MEQ Issues and Possible new Expert Groups
- 14) Discuss Strategy for Ranking Session and Workshop Proposals for PICES-2026
 - a. Submissions close a week after PICES-2025
- 15) Update on PICES FUTURE Program, including UN Decade for Ocean Science
- 16) Update on PICES Expert Groups Relevant to MEQ (AP-ARC, AP-ECOP, SG-NPESR 4, SG-ERRR, etc.)
- 17) Other Business
- 18) Adjourn

MEQ Endnote 3
MEQ members present for the in-person meeting in Yokohama.

