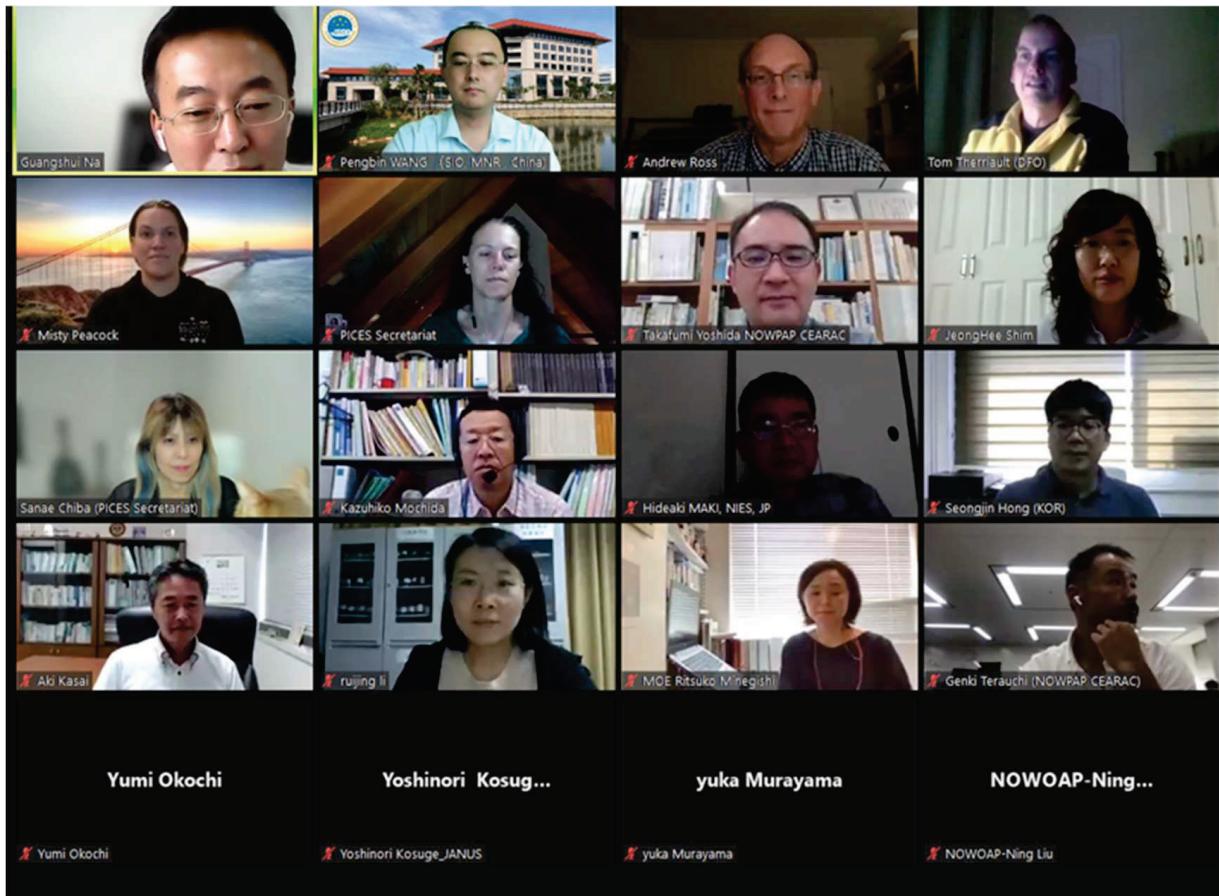


2021 Report of the Marine Environmental Quality Committee

A Zoom meeting of the Marine Environmental Quality Committee (MEQ) was held from 17:00 to 20:00 on September 29, 2021 (Eastern Pacific Time). Six member countries, except Russia, sent members to the meetings. Twenty-five participants were in attendance (*MEQ Endnote 1*).



Participants at MEQ virtual meeting at PICES-2021.

AGENDA ITEM 1

Welcome and adoption of agenda

MEQ Chair Guangshui Na called the meeting to order and welcomed all participants. MEQ members and observers were asked to give self-introduction and to provide a brief statement about their interests and expertise. All participants reviewed the agenda which was adopted without revisions (*MEQ Endnote 2*).

AGENDA ITEM 2

Implementation of PICES-2020 decisions

Dr.Na introduced the progress made by MEQ in the past year, including the topic sessions, workshops and MEQ-P session in PICES-2020, and the important decisions in ISB-2021. Moreover, one MEQ-sponsored topic session will be held in PICES-2021:

- MEQ Topic Session (S8), “*Using environmental indicators to assess baselines, targets, and risk of plastic pollution in the North Pacific*” (October 27) Co-Convenors: Chengjun Sun (China), Sang-Hee Hong (Korea); Matthew Savoca (USA).

AGENDA ITEM 3

Reports from MEQ Expert Groups

1. Section on *Ecology of Harmful Algal Blooms in the North Pacific (S-HAB)*

S-HAB Co-Chair, Dr. Pengbin Wang (China) introduced the main activities of S-HAB in 2021, including TOR and Action Plan update, progress on member country reports, Global HAB Status Report, and *Nature Communications* publication. Co-Chair, Dr. Mark Wells (USA) provided an update on the PICES-MAFF Ciguatera (Building Local Warning Networks for the Detection and Human Dimension of Ciguatera Fish Poisoning in Indonesian Communities) project, as well as GlobalHab Best Practices Manual.

For the joint PICES/ICES-endorsed UN Decade Program SMARTNET, Dr. Vera Trainer led a publication on “*Championing ocean diversity*” in which the previous PICES-MAFF project was highlighted, and a Working Group within this program on Climate Extremes (a proposed UN project) is being proposed. Dr. Seung Ho Baek, Dr. Mark Wells and Dr. Pengbin Wang were put forward by S-HAB as members.

The 19th International Conference on Harmful Algae will take place virtually on October 10–15 in La Paz, Mexico. Several S-HAB members are attending, one (Vera Trainer) as ISSHA President, and two S-HAB members (M. Wells and C. Trick) are leading a virtual session on “*Impacts of HABs on fish farms: Addressing industry and global insurance needs*”.

In PICES-2022, S-HAB plans to convene 1 session and 1 workshop postponed from PICES-2020:

- ½-day Topic Session on “*The effect of ocean acidification on harmful algal species growth and toxicity*” at PICES-2021 (postponed from PICES-2020);
- 1-day Workshop on “*The Expansion of Harmful Algal Blooms (HABs) from lower to higher latitudes*” at PICES-2021 (postponed from PICES-2020);

2. Advisory Panel on *Marine Non-indigenous Species (AP-NIS)*

Dr. Therriault reported on the main activities of AP-NIS in 2021, including the AqaNIS database, and policies and trends in aquatic indigenous species spread and abundance. AP-NIS intends to host an MEQ/FUTURE-sponsored topic session (S6) on “*Using eDNA to assess and manage non-indigenous species in the North Pacific*” at PICES-2022 to complement a related virtual session. In addition, AP-NIS asked MEQ to support a request to Science Board that the USA Governing Council delegates consider a replacement for AP-NIS member Jeanette Davis as soon as possible.

3. Working Group on *Indicators of Marine Plastic Pollution (WG 42)*

Dr. Jennifer Lynch described the significant progress made on four review articles about plastic pollution in seawater, shoreline, sediment and biota ingestion, and one overview summary paper for *Environmental Pollution*. WG 42 requests a one-year extension to continue publishing the review articles and finishing their final report. They would then like to consider transitioning to another type of Expert Group, given the ongoing importance of plastic pollution. In addition, WG 42 requested continuing approval of funds to pay for open access fees for at least one of five companion review articles, and travel support for members to attend the UN Ocean Decade at the Ocean Sciences Meeting (February 24–March 4, 2022).

AGENDA ITEM 4

Election of MEQ Chair and Vice-Chair

Since the current 3-year terms of the MEQ Chair and Vice-Chair are coming to an end, the Secretariat organized the election of MEQ members to both positions. Drs. Guangshui Na and Andrew Ross were re-elected as MEQ Chair and Vice-Chair, respectively, for another term with a unanimous vote of MEQ representatives from all member countries.

AGENDA ITEM 5

Proposals for new MEQ-parented Expert Groups

A new Expert Group on “(Potential) fate and impacts of radioactive water released from the Fukushima Daiichi nuclear power plant” was proposed by Dr. Andrew Ross. The aim of proposed Study Group (1-year) or Working Group (3 years) would be to address concerns associated with the planned discharge of water from holding tanks at the Fukushima Daiichi nuclear power plant (FDNPP). Dr. Ross introduced the background and scope of the proposed Expert Group and how it aligns with elements of the MEQ Action Plan and recommendations from disbanded WG 30 on the Assessment of MEQ of Radiation around the North Pacific. Former WG 30 member Dr. Wen Yu suggested that such an Expert Group should be considered but not until further consultation has taken place. Those MEQ members who expressed an opinion agreed to further discuss creation of the new Expert Group in 2022.

AGENDA ITEM 6

MEQ Best Presentation award and Best Poster award for PICES-2021

Dr. C. Anela Choy (USA) was presented with the Best Oral Presentation award for the report on “Widespread plastic ingestion in an abundant pelagic fish species, *Alepisaurus ferox*, across the subtropical North Pacific” in the MEQ Topic session (S8) on “*Using environmental indicators to assess baselines, targets, and risk of plastic pollution in the North Pacific*”. The Best Poster Presentation award was given to Dr. Mi Jang (Korea) for the poster on “*A close relationship between microplastic contamination and coastal area use pattern*” from the MEQ paper session.

AGENDA ITEM 7

Relations with other groups/organizations

Drs. Takafumi Yoshida, Yegor Volovik, Genki Terauchi and Ning Liu were represented at the meeting on behalf of NOWPAP. Dr. Yoshida introduced the main activities of NOWPAP, especially the areas relative to MEQ, such as microplastics pollution, e-DNA, and the HAB database. Dr. Hideaki Maki introduced activities of the 13th International Conference on the Environmental Management of Enclosed Coastal Seas (EMECS-13), and looked forward to cooperating with PICES at EMECS-14 to be held September 23-28, 2024 in Murmansk, Kola Peninsula, Russia.

AGENDA ITEM 8

Other business

None

MEQ Endnote 1

MEQ participation list

Members

Guangshui Na (China, Chair)
Andrew Ross (Canada, Vice-Chair)
Akihide Kasai (Japan)
Hideaki Maki (Japan)
Kazuhiko Mochida (Japan)
Jeong Hee Shim (Korea)
Seongjin Hong (Korea)
Misty Peacock (USA)
Thomas Therriault (Canada)

Members unable to attend

Canada: Peter Ross
China: Chuanlin Huo, Chunhou Li
Korea: Tae-Hoon Kim
Russia: Tatyana A. Belan, Elena
Maximovna Latkovskaya
USA: Staci Simonich

Observers

Jennifer Lynch (WG 42 Co-Chair/USA)
Mark Wells (S-HAB Co-Chair/USA)
Pengbin Wang (S-HAB Co-Chair/China)
Ning Liu (NOWPAP)
Genki Terauchi (NOWPAP)
Takafumi Yoshida (NOWPAP)
Yegor Volovik (NOWPAP)
Yoshinori Kosuge (Japan NUS Co., Ltd.)
Yumi Okochi (Japan NUS Co., Ltd.)
Yuka Murayama (Japan NUS Co., Ltd.)
Ritsuko Minegishi (MoE/Japan)
Ruijing Li (China)
Wen Yu (China)

PICES

Sanae Chiba (Deputy Executive Secretary)
Alexander Bychkov (Past Executive Secretary)
Julia Yazvenko (Web Administrator)

MEQ Endnote 2

MEQ meeting agenda

Eastern Pacific, Wednesday, September 29, 2021, 17:00-20:00

1. Welcome and adoption of agenda (Na)
2. Implementation of PICES-2020 decisions (Na)
3. Reports from MEQ Expert Groups and discussion (S-HAB, AP-NIS, WG 42)
4. Election of MEQ Chair and Vice-Chair (Chiba)
5. Proposals for new MEQ-parented Expert Groups (Ross)
6. MEQ Best Presentation award and Best Poster award for PICES-2021
7. Relations with other groups/organizations
8. Other business (All)