

Marine Environmental Quality (MEQ) Committee ACTION PLAN 2022 –

MEQ Mission Statement

To promote and coordinate interdisciplinary scientific research on marine environmental quality, improve understanding of the impacts of anthropogenic and natural stressors on living marine resources (including plastics and other contaminants, harmful algae and biotoxins, marine aquaculture and non-indigenous species), and increase societal awareness about human activities and ecological impacts in North Pacific coastal and marine environments.

Goal 1: Understand the functioning, resilience, and vulnerability of marine ecosystems.

Action 1.1 Identify emerging environmental threats and vulnerable marine ecosystems and species.

Task 1.1.1 Convene topic sessions and workshops to characterize the source, status, trends and geographical distributions of emerging environmental stressors and their impacts on marine ecosystems and the coastal communities they support.

Goal 2: Understand and quantify how marine ecosystems respond to human activities and natural forcing.

Action 2.1 Improve understanding of the complex interactions between anthropogenic and natural stressors and their impacts.

Task 2.1.1 Convene science sessions and workshops to describe how multiple stressors affect coastal and marine ecosystems in the North Pacific.

Goal 3: Provide scientific advice pertinent to North Pacific ecosystems.

Action 3.1 Provide advice and share data on anthropogenic and natural stressors of coastal and marine ecosystems of the North Pacific Ocean.

Task 3.1.1 Contribute information to PICES Data on the status and trends of natural and anthropogenic stressors in the North Pacific.

Task 3.1.2 Contribute data to new and existing databases developed and used by MEQ expert groups.

Task 3.1.3 Convene an annual MEQ Contributed Paper (MEQ-P) session to foster information exchange on a diversity of marine environmental quality topics.

Goal 4: Ensure that PICES products are relevant, timely, and broadly accessible.

Action 4.1 Publish products related to the FUTURE Science Plan and ongoing MEQ activities in PICES.

Task 4.1.1 Routinely publish products of MEQ activities, such as papers from MEQ topic sessions, in special issues of peer-reviewed journals and working group reports.

Task 4.1.2 Work with the PICES Secretariat to ensure that published products and data are readily available to the PICES community.

Goal 5: Collaborate with organizations and scientific programs relevant to PICES.

Action 5.1 Establish and maintain linkages with organizations that share common interests with MEQ.

Task 5.1.1 Invite representatives from such organizations to attend and make presentations at MEQ business meetings, sponsored workshops and sessions.

Task 5.1.2 Periodically sponsor PICES scientists to join organizing committees and to give presentations at international symposia of mutual interest and relevance to MEQ.

Goal 6: Strengthen communication and engagement with users of PICES scientific products.

Action 6.1 Identify and engage users of MEQ-related products.

Task 6.1.1 Work to engage indigenous groups, traditional knowledge holders, and stakeholders in MEQ activities including, but not limited to, business meetings, expert groups, topic sessions and workshops.

Goal 7: Advance methods and tools to improve and enhance scientific activities.

Action 7.1 Develop new tools to monitor and to expand historical records of variability in North Pacific marine environmental quality.

Task 7.1.1 Convene a topic session or workshop to explore new methods for monitoring natural and anthropogenic stressors in the marine environment.

Task 7.1.2 Work with relevant international organizations to establish inter-calibration activities for techniques and methods to measure/monitor MEQ variables in coastal and marine ecosystems.

Task 7.1.3 Convene a workshop to explore alternative ways of deriving value from historical records of marine environment quality in the North Pacific.

Goal 8: Foster collaboration among scientists within PICES.

Action 8.1 Increase participation in MEQ activities.

Task 8.1.1 Actively engage ECOPs in MEQ activities including but not limited to business meetings, expert groups, topic sessions and workshops.

Task 8.1.2 Encourage representation and active participation by member states in MEQ activities.

Task 8.1.3 Seek opportunities to work more closely with other PICES Expert Groups.

Goal 9: Promote education and training.

Action 9.1 Create education and training opportunities relating to MEQ.

Task 9.1.1 Organize training courses, summer schools, student engagement and other outreach activities in relation to marine environmental quality topics.