

Opening Remarks
PICES 31st Annual Governing Council Meeting
Held in Busan, Republic of Korea
October 1st and 2nd 2022

Andrew Thomson
Canada Governing Council Member

Mr. Chair, Executive Secretary and Fellow Governing Council Members,

Canada would like to thank and commend the PICES Secretariat for this return to form of organizing a very successful in-person Annual Meeting. Canada would also like to thank Korea, the Korean Ministry of Ocean and Fisheries and the Korean Institute of Ocean Science and Technology for being excellent hosts and inviting us all to this beautiful city.

I would be remiss in not acknowledging that yesterday was the second anniversary of the establishment of Canada's Truth and Reconciliation Day, a National holiday in Canada to honour and acknowledge a tragic chapter in Canada's history and the strength of our indigenous peoples to persevere through it. We look forward to more engagement with Indigenous and local communities through PICES to learn and incorporate their first-hand knowledge of the changing marine environment and its impacts.

The theme of this year's annual meeting, Sustainability of Marine Ecosystems through Global Knowledge Networks for the United Nations Decade of Ocean Science for Sustainability ideally and succinctly captures the critical question ahead of us and the role that PICES plays in answering it. We continue to observe and reflect on the massive changing environmental, social, and economic conditions of our world, and the need to support collaborative process like PICES to understand, address and communicate the issues facing the North Pacific, and the world. In this past year, Canada's Minister of Fisheries and Oceans, The Hon. Joyce Murray lead engagement sessions on a Blue Economy Strategy for Canada. What was heard in those sessions, beyond economic and ecological issues, was a recognition of the importance of data and knowledge sharing, and about the need to make data accessible and understandable, themes that weave well into the fabric of PICES.

It was encouraging to see the efforts of the cohort of Early Career Scientists at this meeting, not only for what they had chosen for their focus of research, or the youthful drive and zeal that they put towards it, but also how they were finding ways to explain complicated matters and results in understandable ways. The fostering and celebration of these Early Career Scientists is one of the most impactful activities that PICES undertakes and Fisheries and Oceans Canada is pleased by the success of 4th ICES PICES Early Career Scientist Conference that was hosted earlier this year in St. John's, Newfoundland

It is obvious that the PICES Secretariat has been agile and adaptable, learning from the challenges of the COVID-19 pandemic. The virtual meetings of the last two years have illustrated the possibility of using

technology to participate virtually in intersessional meetings, business meetings, and workshops which is a remarkable tool to have at our disposal. It has also shown that there are limitations to virtual meetings that technology cannot overcome with respect to networking and cross-collaboration and I think that is borne out by the experiences at this meeting and the large number of in-person participants.

Finally, on behalf of all Canadian members of PICES, I extend our thanks and sincere appreciation to all those who participated and collaborated over the past week to make this meeting such a success and we look forward to next year in Seattle.

Thank-you

Mr. Ishikawa Katsutoshi
Japan Governing Council Member

Dear Mr. Chairman,
Distinguished Governing Council members,

It is my great pleasure to attend the PICES Governing Council Meeting here in the Republic of Korea. I would like to express my sincere appreciation to the Secretariat and the Korean delegation for preparing this meeting. I am very thrilled to be able to attend the meeting in person and meet my fellow Governing Council members since, as all of us are aware, the last two meetings were held virtually due to COVID-19. I am sure that this session will be successful under the chairman's able leadership. You have full support of our delegation.

Japan highly values PICES' role in developing international scientific cooperation. Japan commends PICES' engagement in the field of ocean science.

We have taken the view that ocean science has become more important than ever as resource management in global population growth and monitoring and combating climate change have risen in its importance. Indeed, the United Nations has determined 2021-2030 as the UN Decade of Ocean Science for Sustainable Development. Japan has established a national committee to promote UN Ocean Decade and has held liaison meetings to share information regularly and exchange opinions on domestic and international trends related to UN Ocean Decade.

It is crucial to further accelerate global climate action. The latest report of the IPCC assesses for the first time that it is "unequivocal" that human influence has warmed the atmosphere, ocean and land. In addition, the report points out that the extent and magnitude of climate change impacts on a wide range of areas including ecosystems are larger than estimated in previous assessments.

In this context, I would like to briefly touch upon the recent situation we face and our contributions towards PICES' activities.

In Japan's case, environmental changes associated with global warming have seemed to lead to

serious decline of catches of important fishery resources such as saury, salmon, and squid. July and August 2021 saw the strongest and largest marine heat wave in recorded history occur in the northwestern Pacific Ocean, including the waters adjacent to Hokkaido. In addition, approximately one month after this marine heat wave withdrew, an unprecedented large-scale red tide occurred along the Pacific coast of eastern Hokkaido, causing extensive fishery damage and generating concerns about the impact on the marine ecosystem and associated fishery production, which could eventually cause negative effects on the regional socio-economy. It is highly assumed that the occurrence of this red tide was triggered by this marine heat wave.

Given these circumstances, more scientific knowledge on the effects of such environmental changes on fishery resources is needed, and Japan will continue to support PICES' research in this field as well as other areas.

Japan has also continuously supported capacity building through the PICES framework, and the Ciguatera project, funded by the Japanese government in line with previous capability-building projects, is entering its final year. Japan will continue to contribute actively and cooperate with the capability-building activities of PICES.

Last but not least, I hope today and tomorrow's discussions further promote mutual understanding on enhancing various processes to ensure the activities of PICES and further promote future cooperation among our members.

Thank you very much.

Antao Wang

People's Republic of China Governing Council Member

Distinguished Chair of PICES, Members of GC and Colleagues,

Good morning!

My name is Wang Antao. It is my pleasure to attend the Governing Council Meeting of the PICES 2022 Annual Meeting. First of all, on behalf of the Department of International Cooperation of the Ministry of Natural Resources of China, please allow me to thank Korea and PICES Secretariat for organizing this meeting. Although the Chinese delegates were not able to attend the meeting in person, we deeply felt the careful arrangements made by the organizers of the conference and understood the enthusiasm of scientists from different countries to participate in PICES meeting, and hoped we could attend the annual meeting of PICES offline as early as possible.

71% of the earth is ocean. Ocean is the natural basis for human survival and provides important resources and opportunities for human development. At the same time, we are also facing serious problems such as degradation of marine ecosystem functions and biodiversity loss, and frequent marine disasters due to global climate change and human activities. The international community is generally concerned about the health and sustainable development of the oceans, and as the UN 2030 Agenda for Sustainable

Development points out, the world is now more interdependent and interconnected than ever before, and the SDGs can only be achieved with an emphasis on global cooperation and partnership. Chinese President Xi Jinping proposed Global Development Initiative at the UN General Assembly last September, calling on the international community to pay attention to development issues, strengthen the global partnership for development, promote cooperation, and make new contributions to achieving the 2030 Agenda for Sustainable Development and promoting the building of a community of human destiny.

In 2022, a number of important international conferences related to the sea were held, including the United Nations Ocean Conference, and the "UN Decade of Ocean Science for Sustainable Development" initiative has received positive responses from the international community, which has become the most important global ocean program for the following decade. In this context, the field of marine science should also work together to strengthen the knowledge of the ocean and enhance mutual understanding through scientific research and cooperation, and jointly promote marine science to contribute to the orderly and sustainable use of the ocean, protection and conservation of the ocean, and ocean sustainable development. We feel that PICES, as an important marine science organization, could play more important role to put forward more scientific initiatives and ideas, carry out more scientific research cooperation and projects, provide more scientific basis for global ocean governance and policy advice, contribute more to the capacity building of member countries, and implement the 2030 Agenda for Sustainable Development from the perspective of marine science.

The Chinese government attaches great importance to the UN 2030 Agenda, focusing on the implementation of Goal 14, exploration of scientific governance models and practices, and willingness to provide public goods for ocean science and build blue partnerships with countries around the world to promote cooperation and common development. As a member of PICES, China actively participated in various activities under the framework of PICES. China appreciates the efforts and attempts of PICES to develop cooperation in Interdisciplinary scientific research and frontier science in the ocean, and is glad to see PICES promote the Ocean Decade projects and cooperate with many international organizations to share experiences and results. We also appreciate the hard work of PICES Secretariat in promoting exchange and cooperation and capacity building among member countries. In the future, we hope to better promote the participation of Chinese scientists in the scientific activities of PICES, as well as to promote more practical and diversified cooperation among all parties concerned in the field of marine science. We hope that PICES will continue to provide assistance and support capacity building and training of young scientists.

Last but not least, I wish you a very successful meeting.

Jae-ok Roh

Republic of Korea Governing Council Member

Greetings, members of the Governing Council at PICES.

This is Jae-ok Roh, the Director of Marine Development Division at the Republic of Korea Ministry of Oceans and Fisheries.

I am delighted to see you here together in this Annual Meeting after three years of interruption due to COVID-19.

On behalf of the delegation from the Republic of Korea, I sincerely thank the PICES Secretariat, KIOST, and those involved in the meeting.

2022 was a year when we could closely feel the climate crisis more than ever. Nations around the world suffered from heat waves, draughts, and heavy rains. This means we do not have much time left.

To respond to climate change, UNESCO and IOC have launched the UN Ocean Decade last year with the goal of sustainable development of the ocean.

Ocean scientists and policymakers from all over the world are getting involved in this project to achieve the sustainable development of the ocean. The Republic of Korea is also participating in the UN Ocean Decade in many ways, including funds-in-trust support and joining the Decade Alliance. That being said, the theme of 2022-PICES Annual Meeting, which is “Sustainability of marine ecosystems through global knowledge networks during UN Decade of Ocean Science” is a very timely title and has significant implications to everyone here.

Most of all, PICES has focused on the research of the effects of marine organisms, climate change, and human activities on marine ecosystem in the North Pacific Ocean over the last thirty years. The information we have acquired from the marine ecosystem, and the experiences from international cooperation will definitely become a big help to the UN Ocean Decade.

In order to support such activities of PICES, the government of the Republic of Korea will fully support scientific research activities based on the PICES Convention, and provide the adequate environment for scientists and professionals in many fields to participate in PICES.

Once again, I deeply thank the PICES Secretariat, KIOST for making this Annual Meeting successful, and also the PICES researchers who strive to make an offering to the scientific community.

I hope that you've made good memories in Busan during the last week, and see you all in the United States next year.

Thank you.

Aleksei Baitaliuk

Russian Federation Governing Council Member

Dear Mr. Chairman, distinguished national delegates from PICES member-countries, ladies and gentlemen!

On behalf of the Russian Federation I would like to express deep gratitude to Republic of Korea for making it possible to successfully organize and host the PICES-2022 Annual Meeting in Busan in a hybrid format, and in spite of evident logistical and technical difficulties associated with the on-going COVID-19 pandemic. And of course, it is due to hard and highly professional work of the PICES Secretariat staff under the leadership of Executive Secretary, which made it possible to prepare and smoothly run the 31st Annual Meeting in unprecedentedly complicated background.

Rather eventful PICES-2022 Annual Meeting Program included traditionally large number of science and business meetings in the last few days, and right now, at the beginning of the Governing Council meeting, it is clear to all the participants that the 31st PICES Annual Meeting is a success.

Numerous presentations within the Science Program of this Annual Meeting suggested that there is an evident need to use our expanding knowledge of (climate and human driven) changes in marine ecosystems on biological resources for practical purposes of their conservation and sustainable use by fisheries.

Implementation of the integrative PICES Science Program FUTURE will be analyzed at the up-coming Open Science meeting, which will show us what we have achieved under our flagship Science Program recently, and suggest new prospective for the Third phase.

PICES recently became involved in the UN Decade of Ocean Science for Sustainable Development (UNDOS), which is oriented towards wide exchange of data and technologies by creation of digital ecosystem. PICES successfully organizes collection, share and joint use of enormous database on physical and biological variability in the North Pacific ecosystems, and a

new initiative on the Data Mobilization and Synthesis among member-countries will undoubtedly add to that important field of our fruitful scientific cooperation. In view of the expanding Human Dimension activity within PICES, there exists a prospective to develop sociological datasets and relate them to the natural variability datasets.

PICES is traditionally known for its activity on establishing scientifically based cooperation with other international scientific and fisheries organizations in the North Pacific and far beyond. We as an organization successfully organize capacity building by raising new generation of young scientists in various fields of ocean sciences, which we now call Early Career Ocean Professionals (ECOP).

In spite of rather complicated times we are experiencing, PICES nowadays appears as a stable successfully functioning international scientific organization. I believe that Member states will continue to do all the best for further successful cooperation within PICES for the benefit of human communities and the Ocean they are living with!

Mike Seki and Jack Barth

USA Governing Council Members

Good morning, PICES Chair, Madam Executive Secretary and fellow Governing Council members.

We begin with our appreciation of PICES Chair, Prof. Enrique Curchitser, as he ably led PICES through these recent years of the COVID-19 pandemic. We look forward to a favorable response to our nomination of Dr. Curchitser to serve a second term, one when we can hopefully conduct PICES business in person, so that he can advance his vision for the organization's future.

After enduring the impact of COVID-19 pandemic for a second year in 2021, we are pleased to take part in an in-person Annual Meeting here in Busan, Korea. We thank our Korean colleagues for hosting a wonderful conference in the vibrant coastal city of Busan and congratulate the recent PICES award winners recognized at the annual meeting here in Busan. We further acknowledge and applaud the tremendous job that the PICES Secretariat has done this past year, exemplified by the virtual intersessional Science Board, working group and committee meetings, and virtual summer schools.

The United States reiterates its commitment to furtherance of open exchange of ideas within the international science and technology community. In coordination with our partners, we will uphold our commitments to ensuring the sustainment of international scientific and technical fora dedicated to fostering international collaboration.

We continue to be impressed by efforts of the PICES Advisory Panel on Early Career Ocean Professionals (ECOP), who highlight the PICES investment in the next generation of scientists, and advances made towards the recruitment of new PICES professionals. We also recognize the important progress of the PICES Advisory Panel on Scientific Communications (SciCom), who are taking a series of steps to help all of PICES better communicate our important work to the world and look forward to the ideas and recommendations that come out of the new Study Group on Generating Recommendations to Encourage Environmentally-Responsible Networking (SG-GREEN). The USA is proud to support these expert group efforts.

Addressing climate change impacts on society remains among the top priorities of the current United States national leadership. Recently passed legislation in the United States contributes significant financial resources to both ocean and coastal infrastructure, and to addressing climate change. Scientists across the country are focusing efforts on monitoring, prediction, and mitigation in the oceans and on coastal communities. We see PICES well positioned to be a critical partner in advancing the climate change charge and we're committed to investing in PICES to achieve shared goals. The United States affirms its participation in the UN Decade of Ocean Science for Sustainable Development, especially through work of PICES Advisory Panel on UNDOS and by participation of PICES in several UNDOS-recognized programs like SmartNet. While we applaud the interest of PICES in activities and networking at the global scale, we suggest that PICES not lose focus on issues in the North Pacific and connected Arctic Ocean as there is not another organization as capable as PICES for leading in this key region.

The United States is proud to host the 2023 PICES Annual Meeting (“Connecting Science and Communities for Sustainable Seas”) in Seattle, Washington. We look forward to engaging with the Secretariat in the ongoing preparations for this most important and anticipated meeting, and to welcoming all of you to Seattle in fall 2023.

Lastly, we congratulate Dr. Michael Seki on his planned retirement from the National Oceanic and Atmospheric Administration at the end of 2022 and thank him for his service on the Governing Council. His continued participation in PICES is most welcome.

On behalf of the entire USA delegation, we again thank the Secretariat for their resilience and dedication to our shared vision for PICES. We look forward to a most productive 2023.

Thank you.