

Opening Remarks
PICES 30th Annual Governing Council Meeting
Held Virtually November 1-2, 2021

Kim Houston

Canada Governing Council Alternate Member

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

Canada would like to thank and commend the PICES Secretariat for their continued success in hosting the second, fully virtual Annual Meeting. Canada would also like to thank the Ministry of Natural Resources of China, and the Chinese delegation, for their significant support and effort to ensure an excellent program. The COVID-19 pandemic has challenged all of us in diverse ways, but the adaptability of IT teams, communications, and PICES members to host intersessional meetings, business meetings, and workshops is exceptional – let us hope that next year we will be able to meet in person.

These past couple years have allowed us to reset and reflect on changing environmental, social, and economic conditions of our world, and begin to come together in spaces such as this year’s annual meeting to collaborate on the issues facing the North Pacific, and the world. Underlining this has also been the UN Decade of Ocean Science for Sustainable Development, launched this year to bring awareness to the health and future of our oceans.

These past couple years have also clearly demonstrated to the world that the climate is changing rapidly and affecting all corners of our planet. 2021 brought record breaking heatwaves in the western United States, Canada, and parts of Siberia and Europe; as well as typhoons and tropical storms, extreme rainfall and flooding events in Korea, Japan, China and Europe. These examples and others from around the globe highlight that future conditions are uncertain; making the need for predicting extreme events and incorporating them into management strategies all the more relevant and important. Tools that can combine machine learning and modelling and those that can enhance our ability to network remotely, coupled with the strong commitment shown by PICES members to collaborate, engage, and share knowledge will help to build resilience into ocean management systems.

As described during this year’s annual meeting, PICES research has strongly contributed to address UN Decade of Ocean Science challenges related to pollution, fisheries and ocean-climate interactions, and physical oceanography; and more recently has increased focus on links between science and society. These areas of cooperative research will continue to serve both PICES and our global partners to help grapple with challenges on both global and local scales. It has never been more important to advance collaborative efforts to achieve a shared vision of sustainable marine ecosystems. Many of the presentations this year have advanced our understanding of how to achieve that goal of long-term sustainability for environmental, social, and economic wellbeing.

The International Year of the Salmon, that has been a topic at PICES annual meetings for the past few years has highlighted the critical role that salmon plays for so many Indigenous communities globally, and is considered a keystone species in Canada. This work contributes to Canada's commitment to securing the livelihoods of communities that rely on our oceans while ensuring that there are ample resources for the future; work that is reflected in Canada's Blue Economy Strategy.

Dr. Sanae Chiba encouraged us to 'Be brave and to ask questions', and acknowledged that our diversity is our strength. Canada also acknowledges the immeasurable importance of intergenerational diversity to developing long-term sustainability. We are committed to providing support for early career scientists and their futures to ensure we continue to have collaborative and informative meetings such as this. In particular, Canada is pleased to be hosting the 4th ICES-PICES Early Career Scientists Conference in St. John's, Newfoundland in May 2022 which will provide a platform to expand their knowledge and professional networks.

Canada looks forward to our continued cooperative relationship with PICES as we work together to support a shared approach to sustainable marine ecosystems, working together with our international colleagues and friends to address the challenges and opportunities that arise in a changing ocean environment.

Finally, on behalf of all Canadian members of PICES, I extend gratitude to Professor Enrique Curchitser, who is beginning his first term as our Chairman at this meeting. Thank you to the great leadership of this organization that has put together this program and delivered this excellent virtual event.

Thank you and regards,

Kim Houston

Chen Danhong

Advisor to China Governing Council members

Distinguished Chair of PICES, Members of the GC and colleagues, Good morning and Good afternoon.

I'm Chen Danhong, Deputy Director General of the Department of International Cooperation, Ministry of Natural Resources of China. Please allow me to express our welcome to all the participants in this year's Annual Meeting, since it is the turn for China to be the host country. Though it is a virtual meeting, but I believe it will not affect our communication and cooperation. This is my second time to attend the GC Meeting, and I'm very glad to join with you today. I am inspired by the passion shown by the participants under the pressure of COVID-19 pandemic. I

appreciate PICES Secretariat's and FIO of my Ministry to organize the Annual Meeting and all the PICES scientific activities by online connections.

In recent years, PICES has been actively exploring interdisciplinary cooperation, responding to the initiatives of the United Nations and relevant international programs. This year the UN Decade of Ocean Science for Sustainable Development is launched to address the 10 main challenges of the ocean while expecting 7 fruits. The Ocean Decade is also an important issue for the future work within PICES. Now, we are also doing the research and preparations for how to join the Ocean Decade and how to improve our efforts for its initiatives and activities. China attaches great importance to practical marine cooperation under the framework of PICES and would like to work with the contracting parties of PICES for the call of the Ocean Decade and improve cooperative mechanisms and deepen the practical cooperation in various fields. Last but not least, I wish the Annual Meeting a great success and hope to see you in person next time. Thank you.

Hideki Uezono

Japan Governing Council Member

Mr. Chairman, Distinguished Governing Council members, it is my great pleasure to attend the PICES Governing Council Meeting. I would like to express my sincere appreciation to the Chairman and the Secretariat for convening this annual meeting, virtually held in two consecutive years, and convey my warm congratulations to all the members on outstanding performance of PICES amid the COVID-19 pandemic. I strongly hope that the next GC will be held in person in order to discuss and exchange closely.

As you all know, the UN Decade of Ocean Science for Sustainable Development has started this year. This movement clearly indicates that Ocean Science and relevant researches have become more and more important for human beings and sustainable development of the planet. In Japan, the National Committee for the "Decade" was established this February and studies on SDG14, so-called the Ocean Goal has been implemented through a number of projects under the Cabinet Office. I hope the PICES will continue to lead research activities with a view to address long-term global challenges and further

contribute to sustainable development in the Oceans in coordination with like-minded countries and relevant organizations.

Mr. Chairman, according to the Intergovernmental Panel on Climate Change, it is certain that human activities have affected global warming and caused widespread and rapid changes including those in the ocean. This year, the Nobel Prize in Physics was timely awarded for the research on *the physical modelling of Earth's climate, quantifying variability and reliably predicting global warming*. The PICES has also continuously invested in researches on the effects of climate change in the ocean. Japan will continue to support the PICES's research and communication activities in this field in order to address the complex global challenges of climate change.

Mr. Chairman, I would like to congratulate the researchers and the staff members involved in the “*North Pacific Ecosystem Status Report 3: Synthesis Report*” on its publication. As the report contains a lot of scientifically valuable data and analysis, I sincerely hope that many scientists from all over the world will read it and commend PICES’s important work.

Last but not least, I hope that today and tomorrow’s discussions will reach a common understanding on enhancing various processes to ensure the activities of the PICES and further promote future cooperation among the members.

Thank you very much.

Jinsil Hwang
Korea Finance and Administration Committee Member

Greetings, PICES Governing Council members,

First of all, on behalf of the Korean Delegation, I would like to thank the Secretariat and the Chair for preparing the online annual meeting despite the difficult situation due to the COVID-19 pandemic. I look forward to seeing you in person in Busan at the upcoming Annual Meeting next year once the situation gets better.

In 2021, we made outstanding efforts to overcome climate change in the middle of COVID-19 pandemic. With the release of the 6th IPCC Report, I believe that many people have realized we are running out of time, leading to a growing consensus that we must overcome this crisis.

PICES has been focusing on the impact of current environment, climate change, and human activity to the ecosystem in the North Pacific region for the past 30 years. Now more than ever, it is time when we can make use of marine science information we have accumulated for the benefit of the international community.

In this regard, it is very encouraging that the project jointly submitted by PICES and ICES on establishing a network to share ocean science information obtained from the North Pacific and Atlantic Oceans has been approved by the UN Decade of Ocean Science for Sustainable Development.

I am convinced that by sharing information about the two oceans with the international community, we will find solution to cope with the climate and ocean crisis, such as global warming, ocean acidification, and ocean deoxygenation.

From the bottom of my heart, I would like to express my sincere gratitude to all the researchers, members of the Science Board, and the expert groups within PICES who continue to are research, devoted to their research even at this very moment.

Once again, I would like to thank everyone at the PICES Secretariat for their efforts to make the successful hosting of the General Council possible. I hope to see you next fall, in the beautiful city of Busan, Korea.

Oleg Katugin

Russia Governing Council Alternate Member

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

On behalf of the Russian Federation I would like to express deep gratitude to our colleagues and friends from China for hosting the 30th PICES Annual Meeting, and to PICES Secretariat for providing organizational and technical support of our second Annual Meeting, which has been held virtually in rather difficult times of the COVID-19 pandemic.

Irrespective of certain restrictions and limitations, which were imposed on such a big and diverse organization as PICES by the new format of running annual meetings, this year, we managed to hold all the pre-planned and obligatory business meetings and a wide array of scientific sessions. We now have every reason to state that PICES-2021 was a success.

In the epoch of changing environment and numerous associated challenges which appeared in front of PICES member-states and other countries and communities across the North Pacific Rim, our

diverse, friendly and highly professional science community continues to attract people who work in various fields of ocean sciences and expand our understanding of marine and oceanic ecosystems, their structure, function and resilience, as well as the source of numerous priceless benefits and services for humans.

At this Annual Meeting, there were numerous interesting talks, some of which clearly suggested that we all live in single World, and different countries and regions are inter-connected by the Ocean through its structure and function, whether these are various extreme events, ocean deoxygenation and acidification, or harmful algal blooms. Due to collective efforts of PICES scientists we significantly improved our ability to understand and forecast ecosystem change in the Ocean through the framework of SEES (Social-Ecological-Environmental System), which is based on a combination of Physical, Biological and Human systems. The SEES approach is planned to be broadly used during Phase III of the PICES Integrative Science Program FUTURE (2021-2025) to “effectively mitigate climate-driven and anthropogenic impacts on North Pacific ecosystems and communities”.

PICES continues to successfully communicate and closely collaborate with its strategic partners, among which are regional fisheries management and marine scientific organizations, such as NPFC, NPAFC, ICES and many others. PICES has been involved in planning activities for the UN Decade of Ocean Science for Sustainable Development (UNDOS). Together with NPAFC and IYS (International Year of the Salmon) Initiative, PICES is now developing a Special Project proposal. This will add up to the array of Special Projects, in which PICES has been actively involved, such as FishGIS, SEATurtle and Ciguatera. All these Projects utilize PICES as a basic platform for solid scientific expertise and knowledge, and show the applicability of PICES science to technology-involved and practical needs of human communities that live back-to-back with oceanic environment.

PICES continues to invest in the Capacity building by providing a wide variety of opportunities to young scientists. To support that, there is an idea to establish Advisory Panel on Early Career Ocean Professionals (ECOP), which aims at more effective involvement of early career scientists from different areas of expertise and different countries into PICES research activities and PICES organizational structure. Such a Panel is worth to support!

The remaining few days are for decisions-making. Hopefully, we will work productively and effectively, and our decisions will provide the basis for perfect functioning and further development of our Organization!

Michael Seki and Jack Barth
USA Governing Council Members

Good morning, good afternoon, good evening Mr. Chairman, Madam Secretary and fellow Governing Council members wherever in the world that you may be.

We begin with a warm welcome to the new PICES Chair, Prof. Enrique Churchitser. Certainly not a newcomer to PICES, his decades of science contribution will attest to his commitment to PICES and we look forward to his vision for the organization's future. Secondly, we offer an equally warm welcome to Dr. Sanae Chiba in her role as the new PICES Deputy Executive Secretary. Also no stranger to PICES, we look forward to great engagements with Dr. Chiba.

The impact of COVID-19 pandemic continues to plague the world and we find ourselves this year in another round of virtual meetings. Operating in this environment has been a true challenge and we 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 especially the just completed Annual Meeting. Even still in staffing transition, their accomplishments are admirable.

We further acknowledge this year's efforts by the PICES Early Career Ocean Professionals (ECOP) Study Group, 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 Scientific Communications (SciCom) Study Group, who outline a series of steps to help all of PICES better communicate our important work to the world. The USA is proud to support both of these Study Group efforts.

Addressing climate change impacts on society sits among the top priorities of the current USA National Leadership. 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 invest in PICES to achieve shared goals. The timely global recognition of the UN Decade of Ocean Science further keeps the focus on this tremendous challenge.

Finally, we hope that the worse of the COVID pandemic is behind us and look forward to the 2022 PICES Annual Meeting in Busan, ROK. As the proud hosts for the first ever joint ICES-PICES Annual Meeting in 2023, we look forward to engaging with the Secretariat in the required preparatory work to be taken up in 2022 for this most important and anticipated meeting.

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 2022.

Thank you.

Michael Seki and Jack Barth

USA Governing Council Delegates to PICES

Delegation list of participants for the 2021 Governing Council meeting

<p><u>Canada</u> Bernard Vigneault Kim Houston (Alternate for Andrew Thomson) Lesley MacDougall (Advisor)</p>	<p><u>Russian Federation</u> Oleg Katugin (Advisor)</p>
<p><u>Japan</u> Tetsuo Fufii Hideki Uezono Kazuya Takahashi (Advisor and Alternate Delegate) Yosuke Ochi (Advisor) Hidetada Kiyofuji (F&A Member) Yugo Shimizu (Advisor) Shota Sato (F&A Member) Ms. Ami Yumitate (Advisor)</p>	<p><u>USA</u> Mike Seki Jack Barth Kristen Koch (F&A Member)</p>
<p><u>People's Republic of China</u> Fangli Qiao Antao Wang Chen Danhong (Advisor) Rui Zheng (Alternate)</p>	<p><u>Other</u> Enrique Curchitser (PICES Chair) Chul Park (PICES Past Chair) Vera Trainer (Science Board Chair) Sonia Batten (Executive Secretary) Sanae Chiba (Deputy Executive Secretary) Lori Waters (Science Board support)</p>
<p><u>Republic of Korea</u> Do-Hyung Koo Se-Jong Ju Jinsil Hwang (F&A Member) Suk-Jae Kwon (Advisor) Junhyung Kim (Advisor) Joongho Moon (Advisor) Sangseop Beom (Advisor)</p>	<p>Jörn Schmidt (ICES) Awnesh Singh (APN) Yukihiro Imanari (APN)</p>