

Opening Remarks

PICES 26th Annual Governing Council Meeting

Vladivostok, Russia

September 30, 2017

Carmel Lowe

Canadian Governing Council Member

Mr. Chair, Governing Councillors, PICES Secretariat and other guests,

On behalf of Canadian Council member, Dr. Arran McPherson, who sends her regrets as not being able to attend, and our colleagues Andrea White and Lesley MacDougall, I would like to acknowledge our pleasure to be with you at this PICES 26th annual meeting.

But, I would like to begin by extending our deep appreciation to the hosts of this year's meeting – Russia -, to the local organizing committee, to the management and staff at TINRO, the Federal Far Eastern University and the PICES Secretariat for making this event both scientifically exciting and memorable. The venue is superb, the organizing and running of the event has been flawless and the science that we have heard throughout the meeting has been high quality and stimulating.

Canada is very concerned with the changes in biological resources that are occurring in our marine environments and the direct and indirect impacts these changes are having on the ecosystem services they provide to our citizens, but in particular, our Indigenous Peoples and rural coastal communities. As such, the theme of this year's PICES meeting is one of high interest to us. It seems that in almost every year of last decade we have documented species not seen previously or very rarely seen in our waters, dramatic shifts in the spatial and temporal distribution, the abundance and the health of many of our native species, and other unusual phenomena including larger and more persistent harmful algal blooms that extend far deeper into the water column than any previously documented. And we know that our PICES partners are seeing similar phenomena in their jurisdictions. In Canada, the concern is such that our Government has made the single biggest ever investment in our marine environment to tackle the anthropogenic drivers of these environmental changes, strengthen environmental protections and the resilience of our marine-dependent populations. They recognize that we cannot solve these issues by working in isolation and that we must partner with organizations beyond our borders to achieve these objectives. When it comes to issues in our Pacific waters PICES is clearly a critical partner.

At this meeting we heard about the progress that has been made across many fronts to fill key gaps in our scientific understanding related to these issues. Some of the most exciting for me have been the recent developments in the application of 1-5 year forecasts of climate change to predictions of impacts on physical and biological processes and systems. Similarly, the new insights into the individual drivers of ecosystem change at local to regional scales, their interplay and relative importance that are emerging from the application of ensembles of ecosystem models is remarkable.

But we also heard of some outstanding challenges including some significant gaps that must be filled in order to demonstrate the *relevance* of our scientific advances to clients and stakeholders within our jurisdictions, our convention area and globally so that the outcomes we seek to achieve can be realized more quickly and effectively. Despite recent progress, our flagship FUTURE project continues to struggle with defining the suite of products that will most effectively enable marine resource managers and others to develop the most appropriate management and adaptation strategies for the environmental changes we can now predict will happen. And although our new Human Dimensions Committee is capable of providing some guidance in this regard, its progress has been limited by a lack of appropriate representation from several of the Parties, including my own, Canada. As Governing Council I believe we need to take near-term action to address these deficiencies.

The RFMO's operating in the North Pacific are acutely aware of the need to incorporate environmental change into their stock assessment and management advice but most lack the expertise to do this and are reaching out to PICES and others for support. NPAFC's *International Year of the Salmon* initiative is one such example. I believe it is important that PICES be responsive to these requests for our expertise, and be proactive in reaching out to other priority end users of our science to ensure they understand the implications of our findings and that we are delivering products that are useable for their purposes. In addition to our regular business agenda, I look forward to discussing these issues with you during the next two days as I believe these discussions are central to sustaining the relevance of PICES into the future and ensuring continued support for it from our governments.

Thank you Mr. Chair and colleagues.

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Rui Zheng

China Governing Council Advisor

Distinguished Chair of PICES, Past Chair, Executive Secretary and all the Governing Council members and colleagues:

Good Morning ! It's my pleasure to address this remarks on behalf of the Governing Council members of China. We are glad to be here, the beautiful harbor city of Vladivostok and the quiet and enthusiastic Far East Federal University campus to attend to this year's PICES Annual Meeting. First of all, please allow me to express our congratulations and appreciation to the Secretariat and local organizers for your excellent work and good arrangements for the meeting.

PICES is an important inter-governmental organization in the field of marine science in North Pacific region, which has just celebrated its 25th anniversary last year. It is committed to promoting interdisciplinary exchanges and cooperation in the North Pacific region and brings many of the world's top marine experts and young scientists on a platform for discussion, showing and sharing. PICES has become one of the most influential international marine scientific organizations in the region and even in the world. The PICES Annual Meeting is a great event to convene the scientists and administrative officers together in the field of marine science to exchange their achievements and share their experiences.

All of us can feel PICES's improving influence and attractions in the marine scientific community. China, as one of the contracting parties, joined PICES when it established and keep efforts to make our contributions and fulfill our responsibilities. Over the years, Chinese scientists have taken an active part in the international marine scientific research, projects and plans launched by the PICES, they have worked with Member States together to promote marine science and technology development in the region.

As the leading agency for marine affairs of China, State Oceanic Administration (SOA) attaches great importance to cooperate with PICES. Recently, we improved our inner framework for the Chinese scientists who would like to join PICES activities through the China PICES Committee, which is responsible for organizing the members from relevant agencies and institutes in China, such as the Ministry of Agriculture, Ministry of Education, Chinese Academy of Sciences and several universities, etc. We just held an Experts Meeting of China PICES committee members in this August.

China would like to fulfill our obligations and play an active role in PICES. We have already encouraged more Chinese scientists, especially young scientists to participate in PICES activities. We will keep efforts for the development of the organization, deepen understanding of human society towards ocean knowledge and

promote the level of marine science. We believe that PICES will be advanced by all the members efforts hand in hand.

Finally, I wish the Governing Council meeting has great success and all of my colleagues in the health and smooth work! Thank you.

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Junichiro Otaka

Japan Governing Council Member

Mr. Chairman,

Distinguished members of the Governing Council of PICES,

On behalf of Japanese delegation, first I would like to give my sincere appreciation to the Government of the Russian Federation, the Pacific Research Fisheries Center (TINRO), The Far East Federal University and the Secretariat of PICES, for all the tiring work to prepare for this annual meeting at Vladivostok.

I would also like to express my appreciation and gratitude to the PICES Members and the Secretariat of PICES for the success achieved in PICES activities, including special project “Assessing the Debris Related Impact from Tsunami”, project that began in 2014 with Japanese funding.

The theme of this year’s annual meeting is “Environmental Changes in the North Pacific and Impacts on Biological Resources and Ecosystem Services” and fruitful discussions have been held during several scientific sessions.

Great changes which have been observed on biological resources in the North Pacific in recent years are of great interest to many, including Japan’s society and its citizens. This year’s meeting has served to recognize once more the magnitude and complexity of the effects of the climate change and to acknowledge that PICES is an important forum to enable international collaboration among researchers from different countries in order to understand those changes.

As Ocean is a key driver of sustainable human wellbeing, as a source of economy, food, energy, environment, innovation, among others. The 2030 Agenda for Sustainable Development Goals (SDGs) adopted by the United Nations includes in its goals 13 and 14 the climate change and the use of oceans, seas and marine resources for sustainable development. In this context, the role and the task of PICES which handle those themes is even more meaningful.

Next year, we will host the annual meeting in Yokohama. The meeting will be from the late October to early November under the theme “Toward integrated understanding of ecosystem variability in the North Pacific”. The preparation for the meeting is ongoing, the venue of the meeting is decided and we will do our utmost so that the result of this Vladivostok meeting will be reflected and that the discussions of the Scientific North Pacific meeting will be fruitful and efficient.

Lastly, I hope that today's discussion of the Governing Council Meeting will promote the mutual understanding of the member countries and to the activities of PICES.

Thank you.

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Man Wook Heo

Korea Governing Council Member

First of all, on behalf of Korean government, I would like to express my special thanks to Russian Government and PICES Secretariat for all their efforts to host the PICES Annual Meeting this year.

In particular, I want to deliver sincere gratitude to the Federal Agency for Fisheries of the Russian Federation and the Pacific Research Fisheries Center for supporting this event.

In addition, I extend my sincere thanks to the Past Chair, Dr. Laura Richards for her excellent job until the 2016 Annual Meeting and congratulate the new Chair, Dr. Chul Park, who is leading the 2017 Annual Meeting successfully.

It is an honor that Wooster Award came to a Korean scientist this year. The Republic of Korea will devote to the development of PICES by active participation in integrative science program like FUTURE program and by contribution to capacity building programs such as internship program.

Lastly, I wish 2017 Annual Meeting to be successful.

Thank you.

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Oleg Bulatov

Russia Governing Council Member

Mr. Chairman, distinguished delegates, ladies and gentlemen!

First of all, I would like to welcome all of you to the city of Vladivostok, the largest seaport in the Russian Far East! This area produces more than 70% of the total fish catch in Russia. And given the enormous interest in the East Asian marginal seas and North Pacific Ocean with the respect to marine biological resources, in particular, fish resources, the issues associated with environmental changes and their impact on marine communities are of prime importance to us and to our Pacific Rim neighbors from the PICES countries.

PICES achievements in the field of ocean sciences are numerous and diverse which was clearly evidenced by the science program of this meeting and a variety of specialists from different disciplines present here. PICES has grown up into a dynamic and perspective international scientific community, and attracts to its meetings leading scientists from all over the world!

PICES scientific interests cover not only the North Pacific Ocean but also wide areas beyond, which is evidenced by multiple contacts with other international organizations, such as ICES, IOC, etc. We have also established productive scientific relationships with regional fishery management organizations in the North Pacific, such as NPAFC, NPFC, WCPFC for our mutual benefit.

PICES pays special attention to capacity building, including raising new generation of scientists. At this meeting, all PICES best presentation awards were given to early career scientists who indeed made very interesting and high-level scientific talks. This is our best investment into the future science.

Our integrated scientific program FUTURE is fully mature now and we expect positive results from its development. We are looking forward to products with respect to various key themes under FUTURE umbrella, especially to human dimensions, which is a new field in PICES science.

The scientific program of our annual meeting is complete and I believe that the remaining two days will be productive and successful as well.

Thank you!

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Enrique Curchitser

USA Governing Council Member

Mr. Chairman, Executive Secretary and fellow Council members:

Last year, the United States had the honor of hosting the PICES 25th anniversary meeting, in San Diego. The theme of that meeting was "*Celebrating the Past, Imagining the Future*". In that meeting, we recognized the many significant achievements of PICES, while charting future activities that will keep the organization at the forefront of Marine Science in the North Pacific. This year, Russia are the hosts of the first year of that future. We begin by thanking Russia, the local organizing committee from TINRO, and the PICES secretariat for the excellent organization and execution of this meeting. They exceeded the high-bar they set for themselves. Again, on behalf of the U.S., we extend our heartfelt congratulations and warmest thank you to all.

The contributions at this year's Annual Meeting highlighted cutting edge science from the use of genetics to define populations and eco-geographic regions, to the impacts of fine-scale ocean fronts on the transport of nutrients. We continue to see growing and exciting activities from the section on human dimensions along the PICES working groups and other committees.

Recent extreme events in the Atlantic Ocean remind us of the importance of marine and climate science to our societies. We witnessed multiple hurricanes and the impacts they brought upon human communities. As tragic as these storms were, they could have been much worse, had it not been for the accurate predictions of the intensity, and path of the storms. These predictions, made possible only because of coordinated global observational and modeling efforts, helped save 1000's of lives in Caribbean nations and in the US.

In the oceans, we have also witnessed extreme events: in the North and South Pacific, we experienced marine heatwaves lasting from 10 months to 3 years, the nature of which had not been seen during the past century of observations. In the North Pacific and North Atlantic, we have observed, among others, rapid rates of biogeographic shifts of marine populations, and changes in biodiversity and community structure, that have resulted in losses to the ecosystem and the services they provide to human coastal communities. These events have pushed the limits of our scientific knowledge, and challenged our ability to develop the management advice needed to respond to changing conditions.

We face a future where we can expect continued rapid changes. As such, PICES must remain a leader in the development of the understanding of marine systems whose trajectories may, or perhaps more likely, will take them outside their historically observed ranges of variability. We must also anticipate feedbacks on human communities, and thereby help devise effective mitigation and adaptation strategies. These are tall tasks, but PICES is uniquely positioned to promote scientific knowledge on prediction of marine systems that consider the human dimension as an integral component.

More than ever, we recognize that we live in an inter-connected world. In the past 25 years we have learnt that the problems facing our oceans were not made in isolation from one another and neither will be the science-based solutions and policies for our common future. PICES, as an inter-governmental science-based organization, needs to pursue the science that will inform the conservation and sustainable use of marine resources in the North Pacific and communicate our findings not only to the scientific community, but also to other organizations and policy makers in need of this knowledge.

