

PICES contribution to the report of the Secretary-General on oceans and the law of the sea.

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The North Pacific Marine Science Organization (PICES) is an intergovernmental science organization comprising six member countries that border the North Pacific (Canada, Japan, People's Republic of China, Republic of Korea, Russian Federation and the United States of America). PICES has continued to implement the vision of its strategic plan in striving to engage scientists in trans-disciplinary multi-national collaborations to further our collective understanding of the North Pacific's natural systems and enhance ecological and social resilience of our coasts and oceans.

A significant contribution to this goal was the convening by PICES, co-sponsored by ICES (International Council for Exploration of the Seas) the UN bodies of FAO and IOC, and the local host, the Institute of Marine Research, Bergen, Norway, of the 5th "Effects of Climate Change on the World's Ocean" Symposium, April 17-21, 2023. The ECCWO5 symposium brought together over 700 experts from 71 countries around the world, in person and online, to better understand climate impacts on ocean ecosystems, the ecosystem services they provide, and the people, businesses and communities that depend on them. It highlighted the latest information on how oceans are changing, what is at risk, responses that are underway, and strategies for increasing climate resilience, mitigation and adaptation. It aimed to identify key knowledge gaps, promote collaborations, and stimulate science and actions. Over 50% of attendees were female and 44% were Early Career Ocean Professionals (ECOP). An ECOP is someone who self-identifies as an early career professional in the beginning of their career, with ten years or less of professional experience. Developing capacity in the next generation of ocean science practitioners and fostering long-lasting global relationships is an essential part of building a community to address ocean sustainability and resilience in the face of a changing climate.

PICES has convened new expert groups recently which address topics that further the mission of PICES and address the challenges of the United Nations Decade of Ocean Science for Sustainable Development. Full details of all past and active expert groups can be found here [Members - PICES - North Pacific Marine Science Organization](#). Of particular relevance to General Assembly resolution 77/248 is the [Working Group on the Ecology of Seamounts](#). Seamounts are unique and abundant vulnerable marine ecosystems in the open North Pacific that provide critical habitat for an array of ocean species, many of which may be endemic. The WG will gather data on their biodiversity to provide to appropriate biodiversity databases, as well as data on key environmental variables that may influence the distribution and diversity of species associated with seamounts. A workshop was convened by the WG in Busan, Korea in September 2022, in collaboration with the North Pacific Fisheries Commission, to further this topic: "Distributions of pelagic, demersal, and benthic species associated with seamounts in the North Pacific Ocean and factors influencing their distributions". Subsequent work by the WG will focus on identifying predictors, appropriate modeling approaches and indicators for ongoing assessment and monitoring of seamount biodiversity.

PICES member countries and member scientists have contributed to the 1st and 2nd World Ocean Assessments (WOA I and II) through the work of the Group of Experts and Pool of Experts (approximately 170 experts from 6 countries among the total of about 600 worldwide). PICES is committed to contributing to the third WOA (WOA III) to provide relevant scientific information about the North Pacific.