



The PICES Strategic Plan

The Nations surrounding the North Pacific Ocean depend on these waters for food, economic benefit and recreation, primarily through the abundant living marine resources. The ocean also provides transportation, while the coastal areas afford desirable locations for human habitation. Human health, pollution, aquaculture, overfishing and the effects of geo-tectonic processes are becoming major issues. The importance of the oceans in climate, and the effects of variability in climate on weather and on living marine resources are now recognized. Yet integration of scientific knowledge on the North Pacific Ocean, along with its marginal seas, has not occurred as a coherent effort in the past. The North Pacific Marine Science Organization (PICES) has undertaken this task, by bringing together scientific expertise from the Contracting Parties to synthesize and disseminate knowledge and design appropriate multi-national research programs in response to identified needs. PICES is working to advance knowledge and develop an integrated understanding about how the Pacific Ocean works, so that we can make predictions and improve human conditions among the Contracting Parties.

The PICES Mission

To promote and coordinate marine scientific research in the North Pacific Ocean in order to advance scientific knowledge of the area concerned and of its living resources

The goal is to advance scientific knowledge and capacity available to the Contracting Parties, including information on human activities affecting, and affected by marine ecosystems, and to provide a mechanism for collaboration among scientists in addressing timely and critical scientific questions.

The PICES Mission calls for:

- Providing leadership on scientific issues and identifying research priorities and problems pertaining to the North Pacific Ocean, as well as appropriate methods for their solution
- Promoting the collection and exchange of data related to marine scientific research in the North Pacific Ocean
- Recommending coordinated research programs and related activities pertaining to the North Pacific Ocean to be undertaken through the national efforts of the participating partners
- Establishing effective arrangements for scientific consultation and exchange
- Coordinating and enhancing physical, chemical, biological, and interdisciplinary research
- Developing and implementing large-scale research
- Synthesizing scientific information regarding the regions, and making the results widely available
- Responding to requests from the Contracting Parties to provide advice on scientific issues relating to the North Pacific Ocean
- Building capacity within the scientific communities of the Contracting Parties
- Fostering partnerships with other organizations that share a common interest
- Informing interested parties and the public about marine ecosystem issues

The PICES Strategy

The PICES mission is built upon five central themes: (A) Advancing scientific knowledge; (B) Applying scientific knowledge; (C) Fostering partnerships; (D) Ensuring a modern organization in support of PICES activities; and (E) Distributing PICES scientific knowledge. Specific goals are identified within each of these themes. The actions and activities required to meet each of these goals will change over time, and will be described and updated regularly in a separate PICES Action Plan.

Theme A. Advancing scientific knowledge

Goals 1 and 2 address our need to understand the Pacific Ocean system, a need that can only be addressed by multi-national scientific cooperation. Effective resource management by each member country requires comprehensive scientific understanding, including, for example, the role of the ocean in climate. Furthermore, human populations residing in coastal regions are growing, and the sustainable use of marine resources is a priority. The potential for disrupting the marine ecosystems is increasing, but mitigation and effective use is possible with sufficient information on the impacts of human activities.

Goal 1. Understand the physical, chemical, and biological functioning of marine ecosystems

The PICES scientific program is dedicated to understanding and quantifying the physical, chemical and biological processes of the North Pacific Ocean, including the oceanographic and ecological responses to climate variability. Understanding biological diversity, life histories and trophic relationships depend on the development of modern technologies for sampling the marine environment.

Goal 2. Understand and quantify the impacts of human activities and climate on marine ecosystems

PICES recognizes that humans are part of the ecosystem of the North Pacific Ocean. They are affected by climate scale variability, and in turn conduct activities that impact marine ecosystems. This goal addresses the ecosystem effects of fishing, mariculture, contamination and eutrophication on the marine ecosystem, and also includes physical habitat changes and accidental introduction of non-native species.

Goal 3. Provide advice on methods and tools to guide scientific activities

The quality of our science benefits from comparable methods and techniques. PICES provides workshops on, and opportunities for, inter-calibration of methodology and sampling equipment, as well as collaborative opportunities to develop new, creative methodologies.

Theme B. Applying scientific knowledge

Scientific knowledge can be applied to address societal needs. This activity follows logically from the previous theme, in that it demonstrates how scientific understanding can assist with societal problems related to the North Pacific Ocean.

Goal 4. Provide scientific advice towards wise use of the North Pacific Ocean

PICES provides periodic reports dealing with critical issues, including a comprehensive assessment of the Status of the North Pacific Ecosystem. Information needed in support of sound utilization and sustainable development of the marine environment is a PICES priority.

Theme C. *Fostering partnerships*

Collaboration and communication lies at the heart of creating scientific knowledge and using it effectively. PICES creates a forum that enhances international collaboration in the North Pacific region, as well as with similar organizations throughout the world.

Goal 5. Promote collaboration with organizations, scientific programs, and stakeholders that are relevant to the PICES goals

PICES develops close relationships with scientific organizations and commissions that have shared goals, and also exchanges observers and carries out joint activities. Close collaboration with regional and international programs is critical to PICES success. PICES activities provide an opportunity for capacity building through internships and expediting the involvement of young scientists in PICES activities.

Goal 6. Promote collaboration among scientists within PICES

PICES must continue to widen the appeal of the PICES Annual Meeting, broaden the scope and readership of publications, and continually develop new partnerships to address emerging issues. PICES must be open to non-governmental scientists, and must ensure the participation of under-represented groups.

Theme D. *Ensuring a modern organization in support of PICES activities*

The activities in support of the primary mission of PICES require effective support and implementation, as well as broad participation from the scientific communities of the Contracting Parties.

Goal 7. Provide an effective infrastructure to support PICES programs

An effective Secretariat that supports the mission and goals of the organization is essential to its success.

Theme E. *Distributing PICES scientific information*

PICES has an important role in making information resulting from the Organization's activities available.

Goal 8. Make the scientific products of PICES accessible

PICES needs to communicate the results of its scientific activities broadly, through high quality publications, the PICES website, and production and dissemination of educational materials. PICES will maximize the use of electronic media as a vehicle, to allow updates as new information is produced.