



POC Committee Action Plan (2012-2015)

Mission

To promote and coordinate physical and geochemical oceanography, atmospheric science, and interdisciplinary research in the northern North Pacific. The impacts of climate variability and the physical dynamics in coastal, shelf and open ocean areas will be considered with emphasis on processes that relate to living marine resources and environmental quality.

Broad scientific issues that POC wants to address in the next five years are:

- coordination of carbon-related issues in the North Pacific;
- improved understanding of climate variability and change and the provision and assessment of regional climate projections in the North Pacific.

Key scientific questions, issues, or topics that POC plans to address in the next five years are:

- What are the pivotal mechanisms of North Pacific climate variability and change that are linked to and required to predict changes in marine ecosystems of the North Pacific?
- What are the major circulation and physical/geochemical changes that the latest basin-wide and regional climate change models foresee for the North Pacific and its marginal seas?

Providing a summary of these changes in a manner that will be useful to other PICES committees and groups.

Strategy of the POC Committee

In executing its mission, the POC Committee will address each of the five central themes of PICES: (A) Advancing scientific knowledge; (B) Applying scientific knowledge; (C) Fostering partnerships; (D) Developing capacity; and (E) Ensuring a progressive organization. Specific goals within each of these themes are as follows.

Theme A *Advance scientific knowledge*

Goal 1. Understand the functioning, resilience, and vulnerability of marine ecosystems.

Action 1.1 At upcoming PICES meetings, convene sessions and workshops to address important physical and chemical processes that underlie the structure and function of marine ecosystems.

Task 1.1.1 Continue to support Working Group 27 “North Pacific Climate Variability and Change”.

Task 1.1.2 Convene topic session(s) and workshop(s) at PICES annual and inter-sessional meetings related to activities of Working Group 27.

Task 1.1.3 Facilitate future workshops of POC subsidiary groups such as the CREAMS advisory panel, Section on Climate Change Effects on Marine Ecosystems, and Section on Carbon and Climate.

Task 1.1.4 Convene a POC paper session at all PICES annual meetings.

Task 1.1.5 Continue to convene workshops and summer schools as proposed by CREAMS and other POC subsidiary groups.

Goal 2. Understand and quantify how marine ecosystems respond to human activities and natural forcing.

Action 2.1 Assess the regional climate projections focusing on but not limited to the North Pacific and their impact on marine ecosystems in collaboration with other committees and expert groups.

Task 2.1.1 Continue to support Working Group 29, “Regional Climate Modeling”.

Task 2.1.2 Convene topic session(s) and workshop(s) at PICES annual and inter-sessional meetings related to activities of Working Group 29.

Task 2.1.3 Analyze CMIP5 climate projections.

Theme B *Applying scientific knowledge*

Goal 3. Provide scientific advice pertinent to North Pacific ecosystems.

Action 3.1 Provide necessary information for FUTURE Implementation Strategy.

Task 3.1.1 Provide the PICES Science Board and its subsidiary groups with information about physical forcing and its climate modulation necessary for PICES actions regarding North Pacific ecosystems.

Goal 4. Ensure that PICES products are relevant, timely, and broadly accessible.

Action 4.1 Publish reports and workshop proceedings from POC subsidiary groups.

Task 4.1.1 Provide “Outlooks” of the North Pacific physical and chemical changes in conjunction with other PICES expert groups.

Task 4.1.2 Publish final reports from the climate working groups.

Task 4.1.3 Publish a report and/or review paper on best practices for regional coupled modeling.

Task 4.1.4 Publish reports arising from S-CC data synthesis and other activities.

Theme C. *Foster partnerships*

Goal 5. Collaborate with organizations and scientific programs relevant to PICES.

Action 5.1 Collaborate with organizations with goals related to POC Committee and its subsidiary groups.

Task 5.1.1 Coordinate North Pacific CO₂ issues through the CC-S section with international projects such as CLIVAR, IMBER, SOLAS, and GEOTRACES.

Task 5.1.2 Continue support for PICES-CREAMS advisory panel and S-CCME.

Task 5.1.3 Continue support for NEAR-GOOS and the GOOS Regional Alliances Networking Development (GRAND) project.

Task 5.1.4 Continue support for capacity building programs convened by subsidiary groups.

Task 5.1.5 Collaborate with CLIVAR and other international programs on the new climate working groups.

Task 5.1.6 Continue working relationship with the Pacific Coastal Ocean Observing System (www.pacoos.org).

Goal 6. Strengthen communication and engagement with users of PICES scientific products.

Action 6.1 Characterize North Pacific climate variability and change and their future outlooks, and communicate their possible impacts on marine ecosystems.

Task 6.1.1 Participate actively in PICES’ public outreach activities in disseminating products.

Task 6.1.2 Establish web pages for participating in working group activities.

Theme D. *Develop capacity*

Goal 7. Advance methods and tools to improve and enhance scientific activities.

Action 7.1 Provide lessons learned from regional ocean climate projections.

Task 7.1.1 Publish reports and/or review papers on the best practices in regional climate modeling.

Task 7.1.2 Provide the requirements for regional ecosystem modeling studies.

Goal 8. Foster collaboration among scientists within PICES.

Action 8.1 Encourage active participation from all PICES countries in the POC Committee and its subsidiary groups.

Task 8.1.1 Include participants from all PICES member countries in new climate working groups and subsidiary groups.

Action 8.2 Encourage communication with subsidiary groups and other committees.

Task 8.2.1 Convene joint sessions and workshops with other committees at PICES annual meetings.

Goal 9. Create education and training opportunities.

Action 9.1 Participate actively in developing PICES training courses.

Task 9.1.1 Support 2013 (and subsequent) PICES summer school(s) by participating as organizing committee members.

Theme E. *Ensure a progressive organization*

Goal 10. Provide an effective infrastructure to support PICES activities.

Action 10.1 Create and oversee expert groups to support FUTURE and other scientific activities.

Task 10.1.1 Make recommendations to the Science Board on the establishment of new expert groups to support FUTURE and other scientific activities.

Task 10.1.2 Delegate representatives as members of the FUTURE Advisory Panels to effectively communicate with the FUTURE Advisory Panels.

Task 10.1.3 Oversee and coordinate the activities of the daughter expert groups through communication with the FUTURE Advisory Panels.