PICES Report to the Tenth Session of the Global Ocean Observing System Scientific Steering Committee (GSSC-X) Seoul, Korea, 13 – 16 March 2007

The North Pacific Marine Science Organization (PICES) is an international intergovernmental scientific organization established by convention in 1992 to promote and coordinate marine scientific research in the northern North Pacific and adjacent seas. Its current members are Canada, Japan, People's Republic of China, Republic of Korea, the Russian Federation, and the United States of America.

This report initiates an exchange of information between the Global Ocean Observing System Scientific Steering Committee (GSSC) and PICES, as many of its activities are related to ocean observing activities. The expectation is that the exchange of information will be mutually beneficial by furthering the shared goal of developing ocean observing capabilities in the North Pacific region. The report is also intended to serve GSSC as a reference to ocean observing activities of PICES. Following are descriptions of the PICES standing committee that is assigned to work with GOOS-related issues, the MONITOR projects relevant to GOOS, and contact information for associated personnel.

PICES MONITOR

MONITOR - Technical Committee on Monitoring

Following the first PICES-GOOS workshop on October 8, 1999, in Vladivostok, Russia, it was proposed that the terms of reference for the PICES MONITOR Task Team be modified to include the requirement for the Task Team to develop an action plan for how PICES should take an active and leading role in further development and implementation of GOOS at a North Pacific level. The action plan would: 1) identify existing ocean observations in the coastal and open North Pacific that are relevant to GOOS; 2) develop a PICES-GOOS implementation plan based on existing routine observations and augmented by new observations as appropriate; and 3) provide a structured plan on how to transfer relevant CCCC Program activities to a PICES-GOOS program.

The Technical Committee on Monitoring (MONITOR) was established by PICES at the recommendation of its Science Board in October 2004 to replace the MONITOR Task Team with a standing committee. MONITOR (http://www.pices.int/members/committees/MONITOR.aspx) is charged with identifying principal monitoring needs of the PICES region and developing approaches to meet these needs, including training and capacity building. The terms of reference call for MONITOR to serve as a forum for coordination and development of the PICES components of the Global Ocean Observing System (GOOS), including possible method development and inter-comparison workshops. In cooperation with the Technical Committee on Data Exchange (TCODE), MONITOR is to facilitate calibration, standardization and harmonization of data sets. Its members serve as the senior editorial board of the North Pacific Ecosystem Status Report (NPESR). MONITOR also recommends meetings to address monitoring needs, PICES-GOOS activities, and development of the NPESR. MONITOR is also responsible for overseeing the ocean observing activities of PICES on vessels of opportunity.

SG-GOOS, MONITOR Study Group to develop a strategy for GOOS

The Study Group was approved in October 2005 for a term of two years. The terms of reference (http://www.pices.int/members/study_groups/SG-GOOS.aspx) call for SG-GOOS to identify and describe the major observing systems (present and proposed) in the PICES region, including description of general

data types, contact information, and data transmission (real-time *vs.* delayed), and to provide a recommendation and justification to MONITOR on whether or not PICES should propose a North Pacific GOOS pilot project to I-GOOS. In its October 2006 report to MONITOR, SG-GOOS recommended against the pilot project, but presented a number of recommendations for closer relations between PICES and I-GOOS. Those recommendations identified a need to contact the Chairman of GSSC (Dr. John Field) to make him aware of PICES' wish for a closer working relationship. A recommendation was also made to continue to improve working relationships with existing observing systems in the North Pacific (*i.e.*, NEAR-GOOS and IOOS). Dr. Vyacheslav Lobanov of SG-GOOS attended the most recent Eleventh Session of IOC/WESTPAC Coordinating Committee for NEAR-GOOS (NEAR-GOOS-CC-XI) held January 18-19, 2007, in Bangkok, Thailand as a PICES representative. A further recommendation was for PICES to be represented at Tenth Session of GSSC to be held March 13-16, 2007, in Seoul, Korea., which is the impetus for this report. The Co-Chairman of GSSC (Dr. Dong-Young Lee) is aware of these recommendations, as he is also a member of SG-GOOS.

<u>CPR - AP - MONITOR Advisory Panel on the Continuous Plankton Recorder Survey in the North Pacific</u>

In the late 1990s, funding for a pilot project to operate a continuous plankton recorder (CPR) survey in the North Pacific was obtained from the *Exxon Valdez* Oil Spill Trustee Council. PICES formed the CPR Advisory Panel in October 1998 (http://www.pices.int/members/advisory_panels/CPR.aspx) to review and advise PICES on the most appropriate locations, timing and frequency of CPR routes for "A Continuous Plankton Recorder Monitoring Program for the eastern North Pacific and Southern Bering Sea". The terms of reference call for CPR-AP to provide technical advice on parameters to be measured for additional monitoring initiatives and to advise on linkages to other potential initiatives in the North Pacific and elsewhere. The experts on CPR-AP have been influential in securing funding for the project, an element which has been crucial to its success, as the sources of funding have changed several times since the survey was initiated 1997 by the Sir Alister Hardy Foundation for Ocean Science, SAHFOS. In addition the panel has been consulted by program scientists on developing routes and the types of observations collected.

MONITOR Facilitated Projects

Continuous Plankton Recorder Survey of the North Pacific

PICES has facilitated the funding and operation of the North Pacific CPR, which is operated by the Sir Alister Hardy Foundation for Ocean Science, SAHFOS (Sonia Batten) and funded from a number of sources, including the *Exxon Valdez* Oil Spill Trustee Council and the North Pacific Research Board. Established in 1997, the NPCPR currently occupies two routes, the AT and the VJ. The AT route lies between Tacoma (Washington) and Anchorage (Alaska). In 2005, the *Horizon Kodiak* made six sets of three tows each on this route, with a total of 7946 nm being logged. The VJ route from Vancouver (Canada) to Japan, as towed by the *Skaubryn* in 2005, executed seven 500 nm tows. At 3500 nm VJ is the longest CPR route in the world. In 2005, total length of VJ tows was 10.500 nm. Information on NPCPR project can be found on the SAHFOS website at http://192.171.163.165/pacific_project.htm, and on the PICES website at http://www.pices.int/projects/tcprsotnp/CPR_Description.pdf.

North Pacific Ecosystem Status Report

PICES will be reporting on North Pacific marine ecosystems periodically to review and summarize their status and trends, and to consider the factors that are causing or are expected to cause change in the near future. The first report, "Marine Ecosystems of the North pacific" was published in late 2004 (http://www.pices.int/publications/special_publications/NPESR/2005/npesr_2005.aspx). It is based

largely on geographic locations and subjects for which time series data or information was readily available. In addition, the report identifies locations and subjects where data were collected but are not yet available.

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