

REPORT OF MONITOR TASK TEAM

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The MONITOR Task Team met from 08:30-12:30 hours on October 17, 2004, to review accomplishments of the preceding year and the status of various national and regional monitoring programs, and to discuss future activities of MONITOR as a Technical Committee. The Co-Chairmen, Drs. Phillip R. Mundy and Sei-ichi Saitoh called the meeting to order and welcomed the participants (*MONITOR Endnote 1*). The proposed agenda was reviewed and adopted (*MONITOR Endnote 2*).

Reports on ongoing monitoring efforts and new developments in monitoring activities (Agenda Item 3)

Reports were received from Task Team members and guests (*MONITOR Endnote 3*). Power Point presentations will be posted on the MONITOR page on the PICES website when permission is given by authors.

North Pacific Ecosystem Status Report stewardship for MONITOR (Agenda Item 4)

Dr. Skip McKinnell reviewed the approach taken for the development of the North Pacific Ecosystem Status Report (pre-publication is now available on the PICES website). There was consensus among the participants regarding the value of the report and the role of the new MONITOR Technical Committee in having the report periodically updated. A publication interval of 3 – 5 years was suggested for the production of the printed report, with interim updates being made electronically on the PICES website or as shorter reports in the PICES Scientific Report Series.

Technical Committee status for MONITOR (Agenda Item 5)

At the second interim meeting, Science Board approved the proposed structural changes to the

CCCC Program, including moving the MONITOR Task Team outside the CCCC Program to become a Technical Committee directly under Science Board, with terms of reference as presented in *SB-IM Endnote 4*.

The Technical Committee status for MONITOR was discussed, and the Task Team members and guests unanimously supported the action. It was noted that the change to a Technical Committee gives MONITOR:

- a broader view and responsibilities;
- a longer (“on-going”) time frame;
- membership on Science Board; and
- a possibility to convene its own scientific sessions at Annual Meetings.

The following important implications for the membership of MONITOR were also indicated:

- Contracting Parties need to review and confirm their national membership; and
- MONITOR is to consider the transition of Task Team Co-Chairmen to Chairman and Vice-Chairman of the Technical Committee.

Drs. Mundy and Saitoh have agreed to serve as Chairman and Vice-Chairman for the Committee, respectively. These nominations will be submitted to Science Board and then Governing Council for approval.

The draft terms of reference were reviewed and forwarded to Science Board as final (*MONITOR Endnote 4*).

On behalf of the Continuous Plankton Recorder (CPR) Advisory Panel, Dr. Charles B. Miller has requested that the CPR Panel be placed under the new Technical Committee when that is established. The Task Team unanimously endorsed his proposal that the CPR-AP would remain as constituted, reporting to the MONITOR Technical Committee.

Scientific and methodological issues, and inter-comparisons of methodologies (Agenda Item 6)

Dr. Saitoh briefed the Task Team on past discussions of scientific, logistic and methodological issues, and inter-comparisons of methodologies (sampling and data processing) for primary productivity. Monitoring of primary productivity is important to the understanding of not only bottom-up control but also biogeochemical processes in marine ecosystems. At the present time, there are many methods to measure primary productivity such as C¹³, C¹⁴, isotopes, satellite observations and others. For the purposes of quantitative analysis, inter-comparison of methodologies is one of the most important issues. It was proposed that the inter-comparison of methods for primary productivity be discussed at an inter-sessional MONITOR workshop in 2005 or 2006.

Discussion of MONITOR's role in GOOS and consideration of recommendations on PICES' role in GOOS coordination (Agenda Item 7)

The GOOS Regional Policy is now available at <http://ioc.unesco.org/goos/key3.htm#reg>. The main building blocks are the GOOS Regional Alliances (GRA). Recent consolidation of these Alliances and the GRA Networking Development (GRAND) project were presented by Dr. Vyacheslav Lobanov.

Regional coastal observing systems are emerging around the Pacific Rim in PICES member nations. There was consensus among the participants that PICES should be playing a facilitating role in GOOS implementation. Coordination among AOOS and other U.S. regional observing systems and the western Pacific entities such as NEAR-GOOS, is viewed as a logical activity for the new MONITOR Technical Committee. There are several approaches that might be taken in this regard:

- continue to follow the route of ICES coordination now underway (MONITOR has established a closer link with the ICES Steering Group on GOOS in the last two years);
- create a Sub-arctic Pacific GOOS;

- push for a Pacific GOOS; or
- as a start, commit some of MONITOR's activities to GOOS (*e.g.*, develop PICES-sponsored GOOS pilot projects as is being done in the EuroGOOS area).

Perhaps a North Pacific GOOS Advisory Panel could be established under MONITOR to review these approaches and make recommendations to Science Board.

Nomination of workshops and meetings to be held under the auspices of PICES (Agenda Item 8)

- A MONITOR workshop on "North Pacific Ecosystem Status" was recommended to be convened at PICES XIV. This workshop would stress new developments in the monitoring of ecosystem status, and be directed at filling gaps in the current NPESR (*MONITOR Endnote 5*). The report of the workshop published by PICES would serve as addenda to the NPESR. Holding this meeting inter-sessionally would provide more time for discussions and allow time for preparation of the report for PICES XIV.
- A workshop on linking the regional observing systems of the Global Ocean Observing System (GOOS) in Asia and North America was proposed by Dr. Jeffrey Napp. The meeting would discuss approaches to establishing a broader regional alliance under GOOS. Comments from a number of members indicated that this workshop might be held in 2006, in conjunction with PICES XV.
- An inter-sessional workshop was suggested on the development of sensors, sensor platforms and data communications that stresses issues common to multiple technologies and disciplines. A number of members commented that this purpose might be well served by a workshop in conjunction with PICES XIV, where more people may be able to attend.
- An inter-sessional workshop on "Inter-comparison of methods of primary productivity" was proposed to be held in 2005 or 2006 (see Agenda Item 6 for details).

MONITOR Endnote 1

Participation List

Members

Vyacheslav B. Lobanov (Russia)
Phillip R. Mundy (U.S.A., Co-Chairman)
Jeffrey M. Napp (U.S.A.)
Thomas C. Royer (U.S.A.)
Sei-ichi Saitoh (Japan, Co-Chairman)
William J. Sydeman (U.S.A.)

Observers

Jack Barth (NANOOS)
Harold P. Batchelder (CCCC-IP Co-Chairman)
Sonia D. Batten (UK/Canada)
Robin M. Brown (Canada)
William Fox (PaCOS)
John Gould (Argo)
Loh-Lee Low (NPAFC)
Thomas Malone (GOOS)
Molly McCammon (AOOS)
Charles B. Miller (U.S.A.)
James E Overland (U.S.A.)
Clarence Pautzke (NPRB)
Ian Perry (Science Board Chairman)
Peter Rand (U.S.A.)

MONITOR Endnote 2

MONITOR Task Team Meeting Agenda

1. Welcome and introductions
2. Approval of agenda
3. Reports on ongoing international and national monitoring efforts and new developments in monitoring activities
4. North Pacific Ecosystem Status Report
5. Discussion of Technical Committee status for MONITOR, and comments on draft terms of reference
6. Scientific and methodological issues, and inter-comparisons of methodologies (sampling and data processing)
7. Discussion of MONITOR role in GOOS and consideration of recommendations on PICES role in GOOS coordination
8. Nomination of workshops and meetings to be held under the auspices of PICES

MONITOR Endnote 3

List of presentations at the MONITOR Task Team meeting

North Pacific Anadromous Fish Commission (Dr. Loh-Lee Low)
EcoTrust Wild Salmon Center State of the Salmon Project (Dr. Peter Rand)
Pacific Continuous Plankton Recorder Program (Dr. Sonia Batten)
Moore Foundation/Sloan Foundation /Census of Marine Life Pacific Ocean Shelf Tracking Project (Dr. Batten for Dr. David Welch)
North East Asian Regional Global Ocean Observing System (NEAR-GOOS) and GOOS Regional Alliances Networking

Development (GRAND) Program (Dr. Vyacheslav Lobanov)
International Argo Project (Dr. John Gould)
Neptune Fiber Optic Project and other efforts in Canada (Mr. Robin Brown for Dr. David Mackas)
Long-term fisheries and oceanography database CD-ROM Press of HUFO-DAT (Dr. Sei-ichi Saitoh)
Ocean Monitoring by Japanese Governmental Organizations (Dr. Saitoh for Dr. Kiyotaka Hidaka)

Monitoring developments in Russia (Dr. Vyacheslav Lobanov)
Integrated and Sustained Ocean Observing System (IOOS) (Dr. Thomas Malone)
Pacific Coast Ocean Observing System, (PaCOOS) (Dr. William Fox)
Alaska Ocean Observing System (Ms. Molly McCammon)
Regional observing systems on the west coast of the contiguous U.S.: Pacific Northwest

(NANOOS), Central and Northern California (CenCOOS), Southern California, (SoCOOS) (Dr. Jack Barth)
Continuous Plankton Recorder (CPR) and Other Ship of Opportunity Programs (Dr. Phillip Mundy)
North Pacific Research Board (NPRB) Programs (Dr. Clarence Pautzke)
NMFS/AFSC/PMEL efforts (Dr. Jeffrey Napp)

MONITOR Endnote 4

Terms of Reference of the MONITOR Technical Committee

1. Identify principal monitoring needs of PICES region;
2. Develop approaches to meet these needs, including training and capacity building;
3. Serve as a forum for coordination and development of the PICES components of the Global Ocean Observing System (GOOS);
4. Serve as the senior editorial board of the North Pacific Ecosystem Status Report (NPESR). In this regard, the committee would establish rules, procedures, and schedule for production of the report in consultation with the Secretariat and other appropriate PICES entities;
5. Recommend interim meetings to address monitoring needs, PICES-GOOS activities, and development of NPESR;
6. Provide annual reports to Science Board and the PICES Secretariat on monitoring activities in relation to PICES;
7. Interact with the Technical Committee on Data Exchange (TCODE) and the MODEL Task Team of the PICES Climate Change and Carrying Capacity (CCCC) Program on matters of mutual concern.

MONITOR Endnote 4

Proposal for a MONITOR Workshop on “North Pacific Ecosystem Status”

In 2004, PICES published the first status report on the marine ecosystems of the North Pacific (PICES. 2004. Marine ecosystems of the North Pacific. PICES Special Publication 1, 280 p). It reviewed climatic, oceanographic, and fisheries conditions for all major regions in the North Pacific, with a focus on 1999-2003, and identified some of the critical factors causing changes in these ecosystems. Much was learned about the process of assessing the status of marine ecosystems, but much was also left out of the report. For example, benthic organisms, near-shore regions and contaminants were only sparsely discussed, and there were few attempts to provide synthetic or summary indices of the ecosystem state that might be comparable among regions. In 2004, PICES also produced a report on Fisheries and Ecosystem Responses to Recent Regime Shifts, which included updated

information that was not in the Ecosystem Status Report. The new MONITOR Technical Committee has accepted the responsibility of updating this Ecosystem Status Report and the production of the next version. The purpose of this workshop is to examine the process used to develop and review the first status report (what worked, what did not), to consider other models of ecosystem status reports (*e.g.*, ICES, Global International Waters Assessment, and the recently released Millennium Ecosystem Assessment), and to identify themes and data sources that were poorly, or not at all, included in the first version. Presentations on these topics, on existing monitoring programs that could contribute to the next Ecosystem Status Report, and on new sampling, observation and data processing technologies which might contribute directly to the next report, are invited.