## **2010 Governing Council decisions**

#### 2010/A/1: Auditor

Council accepted the audited accounts for FY 2009.

# 2010/A/2: Annual contributions

- i. Council instructed the Executive Secretary to send a letter commending Contracting Parties for their performance in submitting annual contributions for *FY* 2010, and describing the difficulties that late and/or partial payment causes the Organization.
- ii. Council re-iterated that for planning of their funding requests for annual contributions, Contracting Parties should continue to use the guideline generally accepted at PICES-1999 (Decision 1999/A/2(ii)), which states that the annual contributions will increase at the rate of inflation in Canada.

#### 2010/A/3: Budget and fund-raising

- i. Council accepted the estimated accounts for *FY* 2010.
- ii. Council approved the *FY* 2011 budget of \$814,000. The amount of \$116,800 will be transferred from the Working Capital Fund to balance the budget, setting the total annual contribution at \$697,200, and the 2011 annual fee at \$116,200 per Contracting Party.
- iii. Council approved a transfer from the Working Capital Fund to the Trust Fund to recover the 2010 expenses, and to restore the Trust Fund to the level of \$110,000 by the end of the fiscal year.
- iv. Council approved a transfer from the Working Capital Fund to restore the Relocation and Home Leave Fund to the level of \$100,000 by the end of the fiscal year.
- v. Council approved that funds (\$21,996) under "high priority PICES projects" be earmarked for the development of the PICES integrative science program on "Forecasting and Understanding Trends, Uncertainty and Responses of North Pacific Ecosystems" (FUTURE).
- vi. Council instructed the Executive Secretary to send a letter to the Contracting Parties providing information on planned activities for FUTURE and requesting contributions to these activities.
- vii. Council approved that the surplus funds remaining from the 2010 PICES/ICES/FAO symposium on "Climate change effects on fish and fisheries" be allocated for the 2012 PICES/ICES Conference for Early Career Scientists.
- viii. Council directed the Executive Secretary to write letters soliciting new members and additional contributions for the consortium to support the North Pacific Continuous Plankton Recorder program.
- ix. Council approved an additional lump sum employer contribution of \$20,000 to the International Fisheries Commission Pension Plan to pay down unfunded liabilities.

#### 2010/A/4: PICES Rules of Procedure

Council approved the proposed amendments to the Rules of Procedure ( $Rule\ 13(iii)(d)$  and Rule 17) to more clearly describe the review period and co-chairmanship duration for Sections.

## 2010/A/5: Future PICES Annual Meetings and 2011 inter-sessional Science Board meeting

- i. Council accepted the proposal from the Russian Federation to host PICES-2011 from October 7–16 or October 14–23, 2011, in Khabarovsk, and agreed to provide \$40,000 to the host country to partially cover meeting costs. The theme of the meeting, "Mechanisms of marine ecosystem reorganization in the North Pacific Ocean", was approved in principle at PICES-2009, and the theme description was finalized at ISB-2010.
- ii. Council accepted the offer of Japan to host PICES-2012 from October 12–21, 2012, in Hiroshima. Council approved in principle the proposed theme of the meeting, "Scientific challenge to the North Pacific

- ecosystem: Understanding and mitigation of the effects of natural and anthropogenic stress", and instructed Science Board to finalize the theme description at ISB-2011.
- iii. Following the established 6-year rotation cycle, Council requested Canada to explore the possibility of hosting PICES-2013, and inform the Secretariat on this matter by March 31, 2011.
- iv. Council agreed to keep the same registration fee structure for PICES-2011 as for PICES-2010:

Type of registration fee	CDN \$
Regular	275
Early	200
Student	50
Spousal/guest	50

v. Council approved a 1½- or 2-day inter-sessional Science Board meeting to be hosted by the United States of America and be held in the spring of 2011, immediately after a 3-day inter-sessional FUTURE workshop on "Indicators of status and change within North Pacific marine ecosystems", and supported extending an invitation to ICES to participate in this workshop and use this opportunity for the PICES/ICES Study Group on Developing a Framework for Scientific Cooperation in Northern Hemisphere Marine Science (SG-SP) to meet immediately prior to ISB-2011.

# 2010/A/6: Intern Program

- i. Considering the current level of the stipend (\$2,000) and funding available for the Intern Program, Council agreed that the 2011/2012 intern, Ms. Jeongim Mok (Marine Policy Division, Ministry of Land, Transport and Maritime Affairs, Republic of Korea), be offered a 6-month term, with possible extension (up to 12 months) if additional funding become available.
- ii. Council instructed the Executive Secretary to invite Contracting Parties to provide voluntary contributions to the Trust Fund to support the Intern Program in 2011 and beyond.
- iii. Council approved changes in the description of the Intern Program clarifying that the focus of the Program is on the professional development of early career marine scientists and managers from PICES member countries.

# 2010/A/7: Improvement of participation in PICES activities

- i. Council re-iterated the necessity for Contracting Parties to (1) regularly review their national membership and make changes as appropriate, and to provide the updated national membership list to the Secretariat by the first day of the calendar year (January 1), and (2) follow up on *Rule 1(ii)* of the PICES Rules of Procedure stating that "each Contracting Party is requested to notify the Executive Secretary, three weeks in advance, of the names of delegates, alternate delegates, advisors and members, attending each meeting of the Organization". The national membership lists are required to maintain a historical record of PICES membership, and to assist in improving participation in the activities of the Organization. The national delegation lists are required to assist in better coordinating activities of the Standing Committees and their subsidiary bodies, and in better preparing the Annual Meeting.
- ii. In order to better assess problems existing in Contracting Parties with the participation of their scientists in the activities of the Standing Committees and their subsidiary bodies, and in the Annual Meetings of the Organization, Council instructed the Executive Secretary to continue regularly preparing and circulating to Contracting Parties information on participation of their scientists in the Annual Meetings for the previous six years.

#### 2010/A/8: Election of Chairman and Vice Chairman

- i. Council unanimously elected Dr. Lev Bocharov (Russia) as the Chairman of PICES for a 2-year term (2010–2012). Accordingly Dr. Tokio Wada (Japan) will serve as the Past-Chairman.
- ii. Council unanimously elected Dr. Laura Richards (Canada) as the Vice-Chairman of PICES for a 2-year term (2010–2012).

# 2010/A/9: Appointment of F&A Committee Chairman

Council re-appointed Ms. Patricia Livingston (U.S.A.) as the Chairman of the Finance and Administration Committee for a 2-year term (2010–2012).

# 2010/S/1: PICES Advisory Report to the Cohen Commission

Council authorized the release of the PICES Advisory Report to the Cohen Commission (*Commission of Inquiry into the Decline of Fraser River Sockeye Salmon*) on the decline of Fraser River sockeye salmon in relation to marine ecology. Council endorsed the invitation to provide scientific advice on this issue in June 2010, noting that this request is a clear recognition of PICES' expertise and scientific leadership on issues of climate variability and marine ecology.

## 2010/S/2: 2011 PICES Annual Meeting

The following scientific sessions are to be convened at PICES-2011:

- 3/4-day Science Board Symposium on "Mechanisms of marine ecosystem reorganization in the North Pacific Ocean";
- 1-day BIO Contributed Paper Session;
- 1-day BIO/POC Topic Session on "Mechanisms of physical-biological coupling forcing biological 'hotspots'";
- 1-day FIS Contributed Paper Session;
- ½-day FIS Topic Session on "Population dynamics, trophic interactions and management of cephalopods in the North Pacific ecosystems";
- 1-day FIS/POC Topic Session on "Recent changes of North Pacific climate and marine ecosystems: Implications for dynamics of the dominant species";
- ½-day MEQ Topic Session on "Harmful algal blooms in a changing world";
- ½-day MEQ/FIS Topic Session on "Identification and characterization of environmental interactions of marine aquaculture in the North Pacific";
- 1-day MEQ/FUTURE Topic Session on "Land-sea interactions and anthropogenic impacts on biological productivity of North Pacific Ocean coastal ecosystems";
- 1-day POC Contributed Paper Session;
- ½-day POC/FIS Topic Session on "Linking migratory fish behavior to end-to-end models";
- 1-day MONITOR/POC/FUTURE Topic Session on "How well do our models really work and what data do we need to check and improve them?";
- TCODE E-Poster Session on "Data and data systems for validation of numerical models" (linked with the MONITOR/POC/FUTURE Topic Session).

#### The following workshops are to be convened at PICES-2011:

- 1½-day BIO Workshop on "MEMIP-IV: Quantitative comparison of ecosystem models applied to North Pacific shelf ecosystems—humble pie or glee?";
- 1-day MEQ Workshop on "Remote sensing techniques for HAB detection and monitoring" (jointly with NOWPAP);
- 1-day MEQ Workshop on "Pollutants in a changing ocean: Refining indicator approaches in support of coastal management";
- 3/4-day POC/MONITOR/TCODE Workshop on "Recent advances in monitoring and understanding of Asian marginal seas: 5 years of CREAMS/PICES EAST-I Program".

#### The following business meetings are to be held at PICES-2011:

- ¼-day Science Board (SB) meeting (first Sunday) and 1½-day SB meeting (second Friday and Saturday);
- 1½-hour overture meetings and ½-day meetings of Scientific (BIO, FIS, MEQ and POC) and Technical (MONITOR and TCODE) Committees to be run concurrently;
- 1-day meeting of the POC/BIO Section on *Carbon and Climate* (CC-S);
- 1-day meeting of the MEQ Section on *Ecology of Harmful Algal Blooms in the North Pacific* (HAB-S);

- 1½-day meeting of the MEQ Working Group on *Non-indigenous Aquatic Species* (WG 21), immediately after a 4-day PICES Rapid Assessment Survey (RAS-2011);
- ½-day meeting the BIO Working Group on Comparative Ecology of Krill in Coastal and Oceanic Waters around the Pacific Rim (WG 23);
- 1-day meeting of the MEQ/FIS Working Group on *Environmental Interactions of Marine Aquaculture* (WG 24);
- 1-day meeting of the PICES-ICES Working Group on *Forecasting Climate Change Impacts on Fish and Shellfish* (WG-FCCIFS);
- 1-day meeting the BIO Working Group on *Jellyfish Blooms around the North Pacific Rim* (WG 26);
- 1-day meeting the POC Working Group on *North Pacific Climate Variability and Change* (WG 27), if this Working Group is approved prior to PICES-2011;
- ½-day meeting the MEQ/BIO Working Group on *Ecosystem Responses to Multiple Stressors* (WG 28), if this Working Group is approved prior to PICES-2011;
- ½-day meeting the SB Study Group on Human Dimensions for Environmental Change (SG-HD)
- ½-day meeting of the BIO Advisory Panel on *Marine Birds and Mammals* (MBM-AP);
- ¼-day meeting of the MONITOR Advisory Panel on the *Continuous Plankton Recorder Survey in the North Pacific* (CPR-AP);
- <sup>1</sup>/<sub>4</sub>-day meeting of the POC/MONITOR Advisory Panel for a CREAMS/PICES Program in East Asian Marginal Seas (CREAMS-AP);
- ½-day meetings concurrent meetings of the FUTURE Advisory Panels on Anthropogenic Influences on Coastal Ecosystems (AICE-AP), Climate, Oceanographic Variability and Ecosystems (COVE-AP) and Status, Outlooks, Forecasts, and Engagement (SOFE-AP);
- ½-day joint meeting of AICE-AP, COVE-AP and SOFE-AP.

# 2010/S/3: Inter-sessional symposia/sessions/workshops/meetings

The following inter-sessional events are to be convened/co-sponsored in 2011 and beyond:

# Symposia

- 5<sup>th</sup> International Zooplankton Production Symposium on "*Population connections, community dynamics and climate variability*" (primary international sponsors: PICES and ICES), March 14–18, 2011, Pucón, Chile (approved in 2008);
- Second ESSAS (Ecosystem Studies of Sub-Arctic Seas) Open Science Meeting on "Comparative studies of climate effects on polar and sub-polar ocean ecosystems: Progress in observation and prediction" (organizational support and travel support for early career scientists by PICES), May 22–26, 2011, Seattle, U.S.A. (approved in 2009);
- 7<sup>th</sup> International Conference on Marine Bioinvasions (co-sponsored by PICES), August 23–25, 2011, Barcelona, Spain;
- 2<sup>nd</sup> International Symposium on "*Effects of climate change on the world's oceans*" (primary international sponsors: PICES, ICES and IOC) as one of the official events related to Ocean Expo-2012, May 14–18, 2012, Yeosu, Korea (approved in 2009).

## Joint Theme Sessions at the 2011 ICES Annual Science Conference (September 19–23, 2011, Gdansk, Poland)

- Atmospheric forcing of Northern hemisphere ocean gyres and their subsequent impact on the adjacent marine climate and ecosystems, with Drs. Emanuele Di Lorenzo (U.S.A.) and Ichiro Yasuda (Japan) serving as PICES co-convenors;
- Atlantic redfish and Pacific rockfish: comparing biology, ecology, assessment and management strategies for Sebastes spp., with Dr. Paul Spenser (U.S.A.) serving as a PICES co-convenor;
- Recruitment processes: Early life history dynamics from eggs to juveniles, with Dr. Richard Brodeur (U.S.A.) serving as a PICES co-convenor;
- Surplus production models: Quantitative tools to manage exploited fisheries and compare the productivity of marine ecosystems, with Drs. Jennifer Boldt and R. Ian Perry (Canada) serving as PICES co-convenors.

#### Workshops and meetings

- FUTURE Workshop on "Indicators of status and change within North Pacific marine ecosystems", April 26–28, 2011, Honolulu, U.S.A.;
- Inter-sessional Science Board meeting (ISB-2011), April 29–30, 2011, Honolulu, U.S.A.;
- Meeting of the PICES/ICES Study Group on *Developing a Framework for Scientific Cooperation in Northern Hemisphere Marine Science*, April 2011, Honolulu, U.S.A., in conjunction with ISB-2011;
- Meting of the Study Group on *Updating the PICES Strategic Plan* (SG-USP), May 1, 2011, Honolulu, U.S.A., in conjunction with ISB-2011;
- ICES/PICES workshop on "Reaction of northern hemisphere ecosystems to climate events: A comparison", May 2–6, 2011, Hamburg, Germany, with Drs. Sukgeun Jung (Korea) and Yoshiro Watanabe (Japan) serving as PICES co-convenors;
- ICES/PICES workshop on "Biological consequences of a decrease in sea ice in Arctic and sub-Arctic Seas", May 22, 2011, Seattle, U.S.A., in conjunction with the 2<sup>nd</sup> ESSAS Open Science Meeting, with Dr. Anne Hollowed (U.S.A.) serving as a PICES co-convenor;
- Workshop on "*Comparative analyses of marine bird and mammal responses to climate change*", May 22, 2011, Seattle, U.S.A., in conjunction with the 2<sup>nd</sup> ESSAS Open Science Meeting;
- Meetings of the PICES-ICES Working Group on *Forecasting Climate Change Impacts on Fish and Shellfish* (WGFCCIFS), in conjunction with the 2<sup>nd</sup> ESSAS Open Science Meeting and the 2011 ICES Annual Science Conference;
- Meeting of the Advisory Panel for a *CREAMS/PICES Program in East Asian Marginal Seas*, *spring* 2011, Hangzhou, China;
- 45<sup>th</sup> CMOS (Canadian Meteorological and Oceanographic Society) Congress on "*Ocean, atmosphere and the changing Pacific*", June 6–9, 2011, Victoria, Canada (co-sponsored by PICES);
- International workshop on "*Development and application of Regional Climate Models*", October 11–12, 2011, Incheon, Korea, immediately prior to PICES-2011;
- International NPAFC-led workshop on "Explanations for the high abundance of pink and chum salmon and future trends" (co-sponsored by PICES), October 30–31, 2011, Nanaimo, Canada.

#### Capacity development events

- 3<sup>rd</sup> PICES/MAFF Harmful Algal Bloom training course for the South Pacific Island community, spring 2011, Fiji;
- PICES/MAFF Rapid Assessment Survey Demonstration Workshop for Southeastern Asian countries, late spring or early summer 2011, Bangkok, Thailand;
- 5<sup>th</sup> SOLAS Summer School (co-sponsored by PICES), August 29–September 10, 2011, Cargèse, Corsica, France;
- NOWPAP/PICES/WESTPAC training course on "*Remote sensing data analysis*", October 8–12, 2011, Vladivostok, Russia, immediately prior to PICES-2011;
- 2<sup>nd</sup> ICES/PICES "Oceans of Change" Conference for Early Career Scientist, April 2012, Majorca, Spain.

## 2010/S/4: Travel support

PICES will provide/arrange travel support for:

# 2011 PICES Annual Meeting

- Invited speakers for Science Board Symposium and Topic Sessions, with the normal allocation of approximately \$5,000 per Committee/Program; additional requests are subject to fund availability;
- Two invited speakers for each of the following workshops: BIO Workshop on "MEMIP-IV: Quantitative comparison of ecosystem models applied to North Pacific shelf ecosystems--humble pie or glee?" and POC/MONITOR/TCODE Workshop on "Recent advances in monitoring and understanding of Asian marginal seas: 5 years of CREAMS/PICES EAST-I Program";
- One invited speaker for each of the following workshops: MEQ Workshop on "Remote sensing techniques for HAB detection and monitoring" and MEQ Workshop on "Pollutants in a changing ocean: Refining indicator approaches in support of coastal management".

## Inter-sessional events

- TCODE representative to attend the 21<sup>st</sup> Session of the IOC Committee on International Oceanographic Data and Information Exchange (IODE-XXI; March 23–26, 2011, Liege, Belgium);
- Three invited speakers for the FUTURE Workshop on "*Indicators of status and change within North Pacific marine ecosystems*" (April 26–28, 2011, Honolulu, U.S.A.);
- Two PICES convenors for the ICES/PICES workshop on "Reaction of Northern Hemisphere ecosystems to climate events: A comparison" (May 2–6, 2011, Hamburg, Germany);
- Two scientists to attend the ICES/PICES workshop on "Biological consequences of a decrease in sea ice in Arctic and sub-Arctic Seas" (May 22, 2011, Seattle, U.S.A.);
- Two Asian early career scientists to participate in the 2<sup>nd</sup> ESSAS Open Science Meeting (May 22–26, 2011, Seattle, U.S.A.);
- PICES plenary speaker for the 45<sup>th</sup> Canadian Meteorological and Oceanographic Society Congress on "Ocean, atmosphere and the changing Pacific" (June 6–9, 2011, Victoria, Canada);
- PICES representative to attend the 2011 IOC General Assembly (June 22–30, 2011, Paris, France);
- PICES SSC member and early career scientists to attend the 7<sup>th</sup> International Conference on Marine Bioinvasions (August 23–25, 2011, Barcelona, Spain);
- Three early career scientists to attend the 5<sup>th</sup> SOLAS Summer School (August 29–September 10, 2011, Cargèse, Corsica, France);
- PICES representative to attend the 2011 SCOR Executive Committee Meeting (September 12–15, 2011, Helsinki, Finland);
- PICES representative and convenors for the joint sessions on "Atmospheric forcing of Northern hemisphere ocean gyres and their subsequent impact on the adjacent marine climate and ecosystems", "Atlantic redfish and Pacific rockfish: comparing biology, ecology, assessment and management strategies for Sebastes spp." and "Recruitment processes: Early life history dynamics from eggs to juveniles" to participate in the 2011 ICES Annual Science Conference (September 19–23, 2011, Gdansk, Poland);
- Two invited speakers for the international workshop on "Development and application of Regional Climate Models" (October 11–12, 2011, Incheon, Korea);
- Three trainees from the Northwest Pacific region and 1 lecturer for the NOWPAP/PICES/WESTPAC training course on "*Remote sensing data analysis*" (October 8–12, 2011, Vladivostok, Russia);
- PICES representative to attend the 2011 NPAFC Annual Meeting (October 24-28, 2011, Nanaimo, Canada);
- PICES SSC member for the NPAFC-led workshop on "*Production trends of pink and chum salmon: Why they can retain high abundance?*" (October 30–31, 2011, Nanaimo, Canada);
- MONITOR representative to attend the 2011 meeting of the ICES Working Group on Operational
  Oceanographic Products for Fisheries and Environment (dates and venue are unknown) subject to fund
  availability;
- MONITOR representative to attend the 2011 meeting of the ICES Working Group on *Oceanic Hydrography* (dates and venue are unknown) subject to fund availability;
- MONITOR representative to attend the 2011 meeting of the ICES Working Group on *The Northwest Atlantic Regional Sea* (dates and venue are unknown) subject to fund availability;
- MEQ representative to attend the 2011 meeting of ICES/IOC Working Group on *Harmful Algal Bloom Dynamics* (dates and venue are unknown) subject to fund availability.

#### 2010/S/5: Publications

The following publications are to be produced in 2011–2012:

#### Primary journals

- Special section in a regular issue of *Journal of Oceanography* based on selected papers from the PICES-2009 Topic Session on "Anthropogenic perturbations of the carbon cycle and their impacts in the North Pacific" (Guest Editors: T. Ono, K. Lee, C. Sabine and T. Saino) to be published in June 2011 (approved in 2009);
- Special issue of ICES Journal of Marine Science based on selected papers from the 2010 PICES/ICES/FAO Symposium on "Forecasting climate change impacts on fish and shellfish: Forecasting impacts,"

assessing ecosystem responses, and evaluating management strategies" (Guest Editors: A. Hollowed, S.-I Ito, S. Kim, H. Loeng and M. Peck) to be published in June 2011, with sufficient time to be considered by review panels responsible for the next assessment report (AR5) of the Intergovernmental Panel on Climate Change (approved in 2009);

- Special issue of *Fisheries Research* based on selected papers from the PICES-2009 Topic Session on "*Ecosystem-based approaches for the assessment of fisheries under data-limited situations*" (Guest Editors: P. Livingston, G. Kruse and L. Richards) to be published in September 2011 (approved in 2009);
- Review paper on "The decline of Fraser River sockeye salmon in relation to marine ecology" in Reviews in Fish Biology and Fisheries to be published in late 2011 or early 2012 (Lead Author: S. McKinnell);
- Special issue of *ICES Journal of Marine Science* based on selected papers from the 2011 PICES/ICES Zooplankton Production Symposium on "*Population connections, community dynamics and climate variability*" (Guest Editors: J. Keister, C. Johnson and D. Bonnet) to be published in late spring or early summer of 2012:
- Special issue of a peer-reviewed journal (*Aquaculture Economics and Management, Aquaculture, Reviews in Aquaculture, or Fishery Research*) based on selected papers from the PICES-2010 Topic Session on "*Economic relation between marine aquaculture and wild capture fisheries*" to be published in 2012.

## PICES Scientific Report series

- Final report of the POC Working Group (WG 20) on *Evaluations of Climate Change Projections* (Editors: M. Foreman and Y. Yamanaka);
- Final report of the BIO Working Group (WG 22) on *Iron Supply and its Impact on Biogeochemistry and Ecosystems in the North Pacific Ocean* (Editors: F. Chai and S. Takeda);
- Final report for the Climate Change and Carrying Capacity Program (Editor: H. Batchelder and M. Kishi);
- Interim report of the POC/FIS Working Group (PICES/ICES WGFCCIFS) on *Forecasting Climate Change Impacts on Fish and Shellfish* (Editors: A. Hollowed, M. Barange, S. Kim and H. Loeng).

## PICES Press – newsletter

• Two regular issues to be published in winter (Vol. 19, No. 1) and summer (Vol. 19, No. 2) of 2011.

## Other publications

- PICES Advisory Report to the Cohen Commission on "The decline of Fraser River sockeye salmon in relation to marine ecology" as Cohen Commission Technical Report (Editor: S. McKinnell);
- Review paper from the PICES-2009 workshop on "Exploring the predictability and mechanisms of Pacific low frequency variability beyond inter-annual time scales" (Lead Authors: S. Minobe and E. Di Lorenzo):
- Synthesis paper from the 2010 PICES/ICES/FAO Symposium on "Forecasting climate change impacts on fish and fisheries: Forecasting impacts, assessing ecosystem responses, and evaluating management strategies" (Coordinators: A. Hollowed, M. Barange, S. Kim and H. Loeng);
- Brochure and slide show based on the final report of the MEQ Working Group (WG 19) on *Ecosystem-based Management Science and its Application to the North Pacific* (PICES Scientific Report, September 2010, No. 37, 166 pp.) summary for policy makers, managers, commercial stakeholders and other interested members of society;
- Brochure and slide show based on the Second North Pacific Ecosystem Status Report (PICES Special Publication, September 2010, No. 4, 393 pp.) summary for policy makers, managers, commercial stakeholders and other interested members of society;

## 2010/S/6: Future of current PICES expert groups

- i. The following two expert groups completed their terms of reference and should be disbanded:
  - POC Working Group on *Evaluations of Climate Change Projections* (WG 20; 2006–2010);
  - BIO Working Group on *Iron Supply and its Impact on Biogeochemistry and Ecosystems in the North Pacific Ocean* (WG 22; 2007–2010).

Final reports of these expert groups will be published in the PICES Scientific Report series in 2011.

- ii. Following a 5-year review by the parent committees, the lifespan of the POC/BIO Section on *Carbon and Climate* (CC-S) was extended for a 3-year term (until October 2013).
- iii. The lifespan of the MEQ Section on *Ecology of Harmful Algal Blooms in the North Pacific* (HAB-S) was extended for 1 year (until October 2011), with the required review of past activities and future directions by the parent committee at PICES-2011 for a possible continuation.
- iv. The lifespan of the BIO Advisory Panel on *Marine Birds and Mammals* (MBM-AP) was extended for 1 year (until October 2011), with the required review of past activities and future directions by the parent committee at PICES-2011 for a possible continuation.
- v. The life span of the Science Board Study Group on *Human Dimensions for Environmental Change* (SG-HD) was extended for 1 year (until October 2011). The SG-HD draft report has to be presented at the 2011 intersessional Science Board meeting and the final report has to be completed by PICES-2011.
- vi. The life span of the Study Group on *Updating the PICES Strategic Plan* (SG-USP) was extended for 6 months (until April 2011). The final report of this group has to be presented at the 2011 SG-USP meeting to be held in conjunction with ISB-2011.

## 2010/S/7: New PICES expert groups

A Working Group on *Jellyfish Blooms around the North Pacific Rim: Causes and Consequence* (WG 26) was established, under direction of the Biological Oceanography Committee (BIO), with the following terms of reference:

- 1. Review past and ongoing studies on the reproductive biology of jellyfish species that cause problematic blooms.
- 2. Compile existing data on temporal variations in jellyfish abundance in the North Pacific and its marginal seas, and analyze them in relation to regional environmental and climate changes in order to identify causes of increasingly recurrent jellyfish blooms.
- 3. Elucidate the role of jellyfish in coastal and oceanic marine food webs and assess the impacts of jellyfish blooms on marine ecosystems and socio-economies such as fisheries and aquaculture.
- 4. Evaluate methodologies for predicting blooms and for diminishing their impact on marine and human systems, including bloom forecast modeling and the modification of fishing gears.
- 5. Promote international collaboration among PICES member countries for exchanging available information on jellyfish, and encourage joint research surveys on jellyfish among PICES member countries.
- 6. Provide jellyfish metrics as indicator of ecosystem change and resiliency in cooperation with FUTURE AICE-AP and SOFE-AP and FUTURE related expert groups.
- 7. Publish a final report summarizing the results, including recommendations to policy makers for reducing impacts of jellyfish blooms in the North Pacific.

# 2010/S/8: Chairmen and Vice-Chairmen for standing committees and ad hoc expert groups

The following reflects changes in Chairmanship/Vice-Chairmanship and new appointments for Scientific and Technical Committees and *ad hoc* expert groups:

- Dr. Sinjae Yoo (Korea) became Science Board Chairman to replace Dr. John Stein (U.S.A.);
- Dr. Thomas Therriault (Canada) was elected Science Board Vice-Chairman;
- Dr. Atsushi Tsuda (Japan) was elected BIO Chairman to replace Dr. Michael Dagg (U.S.A.);
- Dr. Michael Dagg (U.S.A.) was elected BIO Vice-Chairman;
- Dr. Kyung-Il Chang (Korea) was elected POC Chairman to replace Dr. Michael Foreman (Canada);
- Dr. Michael Foreman (Canada) was elected POC Vice Chairman to replace Dr. Ichiro Yasuda (Japan);
- Dr. Hiroaya Sugisaki (Japan) was elected MONITOR Chairman for a second 3-year term;
- Dr. Phillip Mundy (U.S.A.) was elected MONITOR Vice-Chairman for a second 3-year term;
- Dr. Toru Suzuki (Japan) was elected TCODE Chairman to replace late Dr. Bernard Megrey (U.S.A.);
- Dr. Hernan Garcia (U.S.A.) was elected TCODE Vice-Chairman to replace Dr. Kyu-Kui Jung (Korea);
- Dr. Changkyu Lee (Korea) was appointed Co-Chairman of the MEQ Section on *Ecology of Harmful Algal Blooms in the North Pacific* to replace Dr. Hak-Gyoon Kim (Korea);

- Drs. James Christian (Canada) and Toshiro Saino (Japan) were re-appointed as Co-Chairmen of the POC/BIO Section on *Carbon and Climate*:
- Dr. Brett Dumbauld (U.S.A.) was appointed as Co-Chairman of the FIS/MEQ Working Group on *Environmental Interactions of Marine Aquaculture* (WG 24) to replace Dr. Kevin Amos (U.S.A.);
- Drs. Rolf Ream (U.S.A.) and Yutaka Watanuki (Japan) were appointed as Co-Chairmen of the BIO Advisory Panel on *Marine Birds and Mammals* to replace Drs. Hidehiro Kato (Japan) and William Sydeman (U.S.A.);

## 2010/S/9: Relations with other organizations and programs

Council approved the revised *Standing List of International and Regional Organizations and Programs* developed by Science Board at ISB-2010 and agreed with the identified priorities for interaction in 2010–2011.