

REPORT OF THE 2010 INTER-SESSIONAL SCIENCE BOARD MEETING

The Science Board met on the first day from 9:00–6:00 pm on April 23, 2010 in Sendai, Japan, then again on April 24, 2010 from 9:00–5:30 pm to discuss any items not covered at the first meeting. Science Board Chairman, Dr. John Stein, welcomed new Advisory Panel members, Drs. Tom Therriault, Hiroaki Saito, and Mr. Robin Brown, Science Board members, and guests to the meeting (*see ISB Endnote 1*), and special recognition was given to Japanese colleagues present who organized the symposium and meeting. The agenda was discussed and it was agreed to add to Agenda Item 15 a Request for Advice from the Cohen Commission of Inquiry (Canada) into the Decline of Sockeye Salmon in the Fraser River which was received from the PICES Chairman shortly before the inter-sessional meeting. No changes were made to the agenda for Day 2. The agenda was then adopted as presented in *ISB Endnote 2*.

April 23, 2010

AGENDA ITEM 2

Status of planning for PICES-2010

Executive Secretary, Dr. Alexander Bychkov, apprised Science Board of the status of planning for the Annual Meeting in Portland, U.S.A. October 22–31, 2010. He complimented the convenors for having all invited speakers determined. The majority of speakers are from Japan and the U.S. and two are from outside of the PICES member countries. Other organizations (SOLAS, COML, IMBER, NPFMC and ICES) have agreed to co-sponsor topic sessions. Presenters will have an opportunity to have papers published in time for citation in the Intergovernmental Panel on Climate Change Assessment Report No. 5, scheduled for 2013. Deputy Executive Secretary, Dr. Skip McKinnell, will act as the corresponding editor who will contact the editor of Deep-Sea Research II to clarify the scope for submissions. POC Committee Chairman, Dr. Michael Foreman, will act as assistant editor. Any papers whose topics are beyond the interests of DSR II, such as those related to coastal themes, can consider submitting their work to other journals, such as Fishery Research or Continental Shelf Research.

Dr. Bychkov announced that the North Pacific Fishery Management Council has provided PICES with \$5,000 to use at its discretion for PICES-2010. He recommended that part of the money be used to provide full support for an invited speaker at the Science Board Symposium, with any remaining funds to be used for early career scientists to attend the Annual Meeting.

Action

- Secretariat to use NPFMC funds to support invited speaker/and early career scientists to attend PICES-2010.
- Dr. McKinnell to contact Deep-Sea Research editor to clarify scope of topics for publication.

AGENDA ITEM 3

Mid-year reports from Scientific and Technical Committees

Committee Chairmen presented their Committee reports on activities taking place since the 2009 Annual Meeting in Jeju, Korea (see the full Committee reports in this Annual Report). BIO will review the Advisory Panel on *Marine Birds and Mammals* whose second 5-year term is due to expire, and will make recommendations to Science Board at PICES-2010 whether or not to extend its lifetime. The term of Working Group on *Iron Supply and its Impact on Biogeochemistry and Ecosystems in the North Pacific Ocean* (WG 22) will end at PICES-2010. It was noted that SOLAS has co-sponsored a number of iron workshops at PICES Annual Meetings and that it and GESAMP are both interested in collaborating with PICES on the topic of iron supply. BIO recommended not extending the Working Group for another term, although Science Board noted

that some component of the group might be able to be re-constituted. There was a proposal for a new working group on jellyfish, whose formation was discussed at the Workshop on “*Standardizing methods for estimating jellyfish concentration and development of an international monitoring network*” at PICES-2009 in Jeju, Korea. The title of the proposed working group and terms of reference will be circulated to Science Board prior to PICES-2010. In the meantime, the Secretariat will look for co-chairmen from China, Korea and Japan. The Chinese representative on Science Board, Dr. Fangli Qiao, will discuss the China component with colleagues and make recommendations to BIO.

Since PICES-2009, Prof. Yasuzumi Fujimori (Japan) has replaced Prof. Masahide Kaeriyama as FIS member, and Dr. Jacquelynne King (Canada) has replaced Dr. Richard Beamish.

Science Board unanimously approved the appointment of Dr. Brett Dumbauld, supported by FIS and MEQ, to replace Dr. Kevin Amos who is stepping down as Co-Chairman of the Working Group on *Environmental Interactions of Marine Aquaculture* (WG 24). Several MEQ members have expressed interest about the possible formation of a new PICES study group that will focus on anthropogenic contaminants in the North Pacific marine environment. MEQ will discuss the proposal and the issue of marine contaminants in further detail at PICES-2010 before making a recommendation. The Section on *Harmful Algal Blooms* was established in 2003 and it was recommended by Science Board that HAB-S undergo a review by MEQ to see if another term is warranted. The normal review period for a Section is every 5 years. The Coastal and Estuarine Research Federation (CERF) is currently engaged in strategic planning that includes the development of formal and informal relationships with international organizations that share scientific interests in shorelines and coastal zones. Due to the similar interests between MEQ and CERF, MEQ requested that PICES explore a working relationship with the Federation. Dr. Masaya Katoh, member of the Working Group on *Non-indigenous Aquatic Species* (WG 21) gave notice that he is stepping down due to other commitments, and will be replaced by Dr. Takeo Kurihara. He is willing to continue, unofficially, to offer his expertise to WG 21. When preparing a work plan for year 4 of the MNIS sub-project (funded by the Ministry of Agriculture, Forestry, and Fisheries (MAFF), Japan) that includes rapid assessment surveys in PICES member countries, Dr. Thomas Therriault, plans to incorporate Dr. Kurihara’s services.

Working Group on *Evaluations of Climate Change Projections* (WG 20) is in its final year, and will not be renewed for another term. The Section on *Carbon and Climate* completes its first 5-year term at PICES-2010. Anticipating a request from its Co-Chairmen with possible changes to its terms of reference, POC and BIO will probably recommend renewal of CC-S for another term.

MONITOR reported that the Advisory Panel on the *Continuous Plankton Recorder Survey in the North Pacific* currently had funds to continue sampling in the short term, but further funding opportunities were limited.

TCODE has funding to purchase a multi-core computational computer to run models to be used in the Marine Ecosystem Model Inter-comparison Project (proposed at PICES-2007). The core modellers are seven PICES members from Canada, China, Japan and the U.S. who will run the same version of ROMS and the embedded lower trophic-level model on three test beds: the Newport Line and Seward Line off the U.S. coast and the A Line off Japan.

The second terms of BIO Committee Chairman, Dr. Michael Dagg, and POC Committee Chairman, Dr. Michael Foreman, expire after PICES-2010. Both have discussed the need for elections with their Committees at PICES-2010. Dr. Dagg stated that a Vice-Chairman position will be officially created, but until it is in place, he will unofficially act as one after his term. TCODE Chairman, Dr. Bernard Megrey, announced he would not stand for election for a second term. Election of a new chairman will be conducted before PICES-2010. MONITOR Chairman, Dr. Hiroya Sugisaki, informed Science Board that he was discussing elections with his Vice-Chairman, Dr. Phillip Mundy.

Science Board discussed two proposals made to it by U.S. delegate, Dr. George Boehlert. One was to examine a new membership category (Corresponding Member) for people who cannot attend PICES meetings, but can

contribute by correspondence. Science Board viewed the category as unnecessary and did not support the proposal. The second proposal called for Committee Chairmen to evaluate the contributions and performance of its members, annually. The majority of Science Board felt this would alienate members, and would not give a clear picture of why members did not attend or contribute. The Board felt this would put Chairmen in an awkward managerial role, rather than one of providing guidance to their members in science issues; Science Board did not support this proposal.

Decisions/Recommendations

- Complete reviews of expert groups, MBM-AP, HAB-S, and CC-S by PICES-2010.
- Appoint Dr. Brett Dumbald as Co-Chairman of WG 24.
- No support for proposals made by U.S. delegate.
- Add CERF to the standing list of international and regional organizations and programs with which PICES has relations.

Action

- Drs. Dagg (BIO), Rumrill (MEQ), and Foreman (POC) to review MBM-AP, HAB-S, and CC-S and have recommendations ready by PICES-2010.
- Dr. Fangli Qiao (China) to provide a name for co-chairmanship of proposed working group on jellyfish.
- Dr. Therriault (WG 21, AICE) to contact ex-WG 21 member, Dr. Takeo Kurihara for the next MNIS rapid assessment survey.
- Secretariat to invite CERF to attend PICES-2010 as an observer.

AGENDA ITEM 4

Report on Study Group on *Human Dimensions*

The Chairman of the Study Group on *Human Dimensions* (SG-HD), Dr. Mitsutaku Makino, was not able to attend the meeting but did provide a written update. China appointed its second member in April; one of Russia's appointed members has resigned, so an alternate will be appointed prior to SG-HD's first inter-session meeting from June 24–25, 2010. Science Board had no comments on revisions to the terms of reference that were proposed by Dr. Makino.

AGENDA ITEM 5

Status of proposed publications

Dr. Bychkov provided an update on the status of various PICES publications. A Korean translation of Special Publication 3 (Guide to Best Practices for Ocean CO₂ Measurements, 2007) is slated for publication in 2010, but there is no update on the Chinese version. The merits of paper or electronic copy for the Book of Abstracts for future PICES Annual Meetings were debated. There was no overwhelming preference for either form; the Secretariat will add a mandatory check box for electronic/hard copy preference on its website registration page for PICES-2010.

Action

- Mr. Gongke Tan to contact Dr. Liqi Chen on status of translation.
- Secretariat to include a check box field for Annual Meeting registrants to choose Book of Abstracts as electronic or hard copy.

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AGENDA ITEM 6

Status of proposed inter-sessional workshops/symposia

It was agreed to postpone the date for the Rapid Assessment Survey workshop of the Working Group on *Non-indigenous Aquatic Species* until Science Board had time to discuss the activities of the FUTURE Advisory Panels on Day 2 (April 24) of Science Board's meeting.

Science Board reviewed the list of invited speakers for potential travel support from PICES provided by IMBER for the second IMBER IMBIZO on "*Integrating biogeochemistry and ecosystems in a changing ocean: Regional comparisons*" from October 10–14, 2010, in Crete. Science Board agreed to support Drs. Jing Zhang (China), Shin-ichi Ito (Japan), and Chris Sabine (U.S.A.).

Science Board recommended Drs. James Christian and Keith Criddle to be SSC members for the second PICES/ICES/IOC Symposium on "*Effects of climate change on the world's oceans*" scheduled for May 14–18, 2012 in Yeosu, Korea.

The Secretariat agreed to provide organizational support for the second ESSAS Open Science Meeting on "*Comparative studies of climate effects on polar and sub-polar ocean ecosystems: Progress in observation and prediction*" scheduled from May 22–26, 2011 in Seattle, U.S.A.

Science Board supported the idea of co-sponsoring a GIS Europole Mer Workshop on "*Addressing the Model–Experiment Gap*" in 2011, as this would allow PICES to benefit from mesocosm experiments of MEECE and MESOAQUA. PICES is prepared to contribute a NEMURO/mesocosm expert(s), but requires more information from the proposal.

Decisions/Recommendations

- Drs. James Christian and Keith Criddle to be appointed members of SSC for the second PICES/ICES/IOC Symposium "*Effects of climate change on the world's oceans*"

Action

- Secretariat to contact Drs. James Christian and Keith Criddle to confirm willingness to act as SSC members.
- Secretariat to provide organizational support for the second ESSAS Open Science Meeting in Seattle.
- Dr. Megrey to contact GIS Europole Mer Workshop organizers to determine the level of participation they anticipate from PICES.

AGENDA ITEM 7

North Pacific Ecosystem Status report: Production and the future

Dr. Skip McKinnell, PICES Deputy Executive Secretary, and Co-Editor of the second North Pacific Ecosystem Status Report (NPESR), apprised Science Board on the progress of the chapters. Target date for going to press is June 2010, and the Secretariat anticipates printing 1,000 copies, but will print more if there is a need. Science Board congratulated the Co-Editors (Drs. McKinnell and Dagg) for their efforts and dedication, and asked if they would consider preparing a set of guidelines for editors/authors for future NPESRs.

Action

- Committee Chairmen to check with their Committees/subsidiary bodies to determine if there is a demand for additional NPESR copies.

AGENDA ITEM 8

Capacity building

A proposal from NOWPAP CEARAC (Northwest Pacific Action Plan of the Special Monitoring and Coastal Environmental Assessment Regional Activity Centre) for PICES to co-sponsor a summer school on remote sensing was discussed by Science Board. The event is planned for Vladivostok, Russia, in association with PICES-2011. It will differ from the Third PICES Summer School on *Satellite Oceanography*, held in Korea in 2009, in that it will focus on practical applications, such as red tide detection, oil spill monitoring, and eutrophication. It will aim at more international participation and a broader cross-section of participants. PICES supports the summer school concept and believes the cost for funding should be shared equally between PICES, NOWPAP, and WESTPAC.

At the request of IMBER, PICES agreed to co-sponsor their summer school on “*Oceans, marine ecosystems, and society facing climate change*” scheduled for August 23–27, 2010. PICES agreed to support one student from each member country. The Secretariat will approach delegates from Canada, Russia and Japan for contributions, and Science Board Chairman-elect, Dr. Sinjae Yoo, will approach the other member countries. PICES has \$10,000 for local expenses of two participants from each PICES member country. As yet, there are no nominations for students from Canada or Russia, although one Canadian has applied independently.

Decisions/Recommendations:

- to provide support for a PICES/NOWPAP/WESTPAC co-sponsored summer school on remote sensing in 2011

Action

- Secretariat to discuss with IOC and NOWPAP how to use the funds for supporting the summer school.
- Secretariat and Dr. Yoo to request funding for early career scientist support from PICES member countries.
- Mr. Robin Brown to contact University of Victoria Professor, Jay Cullen, about travel support for students.

AGENDA ITEM 9

Interactions with other organizations

Due to shared similar interests, guest observer, Dr. John Calder, representing SAON (Sustaining Arctic Observing Networks), participated at MONITOR’s meeting at PICES-2009 and MONITOR Chairman, Dr. Sugisaki, participated at the SAON meeting in March 2010. Science Board agreed that the relationship between the two groups will be potentially very fruitful, and agreed to a more formal association between MONITOR and SAON by recommending Dr. Calder to be an *ex-officio* member of MONITOR.

In a continuing relationship between SCOR and PICES, BIO Chairman, Dr. Dagg participated at the Third SCOR Project Summit (April 2009, Newark, U.S.A.) to discuss common opportunities and challenges regarding the interactions between large-scale international ocean research projects and the organizations that sponsor such projects. Several recommendations to provide additional opportunities for PICES to increase collaboration with SCOR came from the Summit:

- Consider adding the PICES list of cooperating agencies/organization to the PICES web page with links to each;
- Consider collaborating with SOLAS or IMBER on summer schools;
- Consider requiring that any large research project requesting PICES endorsement to have a Data Management policy in place beforehand;
- Consider requesting TCODE to review the Research Cruise Information System (www.pogo-oceancruises.org/) to assure that cruises in the PICES region are being incorporated into this database.

It was noted that, at the invitation of IMBER, PICES will co-sponsor a summer school on “*Oceans, marine ecosystems, and society facing climate change*” (LimECO2), from August 23–27, 2010 in Brest, France. Science Board agreed that the last two items were important topics to be considered by the TCODE Committee.

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The decision to establish a post-conference working group to consider the outcomes of the OceanObs09 conference was strongly supported by PICES at PICES-2009. At the recommendation of MONITOR, Science Board and Council nominated Dr. David Checkley (Scripps Institution, U.S.A.) to represent PICES on this working group. Since then Dr. Checkley, as member of the *Integrated Framework for Sustained Ocean Observations* Task Team (IFSS-TT), has participated in two teleconferences in which IFSS-TT has been charged with providing inputs on top-level governing conventions that need ocean observations, a draft outline for the framework, and a list of principles for the framework. Questions arising from the framework for Science Board discussion were:

- What do our sponsors (*e.g.*, PICES) expect from the framework?
- Is there an inventory of observing system(s) for the sponsors?

Science Board agreed that PICES should play a co-ordinating role in this framework; MONITOR will prepare an inventory of PICES-related ocean observing systems.

Decisions/Recommendations

- Science Board recommends SAON member, Dr. John Calder, as *ex-officio* member of MONITOR.

Action

- Dr. Megrey to discuss Data Management policy and Research Cruise Information System items with his Committee and report outcome at PICES-2010.
- Dr. Stein/Mr. Brown to consult with Dr. Checkley and to prepare a short synopsis about the expectations of PICES regarding the framework for sustained ocean observations.

AGENDA ITEM 10

P/ICES Study Group on a Framework for Scientific Cooperation

Science Board reviewed the final terms of reference of the joint PICES/ICES Study Group on *Developing a Framework for Scientific Cooperation in Northern Hemisphere Science*, proposed at PICES-2009. Given the timeline options presented in the draft terms of reference, Science Board elected to have the Study Group proceed at a slower pace in view of the workload the PICES SG members were already committed to. The slower schedule would also allow the SG to act on the outcomes of the Study Group on *Updating the PICES Strategic Plan*. Science Board nominated Dr. Thomas Therriault (Chairman, AICE-AP) and Dr. Hiroaki Saito (Chairman, COVE-AP) to be members responsible for Fisheries and Aquaculture, and Climate, respectively.

Decisions/Recommendations

- Science Board nominates Drs. Therriault (AICE-AP) and Saito (COVE-AP) as members of PICES/ICES Study Group on a *Framework for Scientific Cooperation*.

AGENDA ITEM 11

Implementation of Science Board recommendations and Governing Council decisions

Science Board agreed that no changes were necessary to the implementation of Science Board recommendations and Council decisions from PICES-2009.

AGENDA ITEM 12

Wooster and POMA Awards

Science Board met *in camera* to discuss and select a recipient from two nominations for the 2010 Wooster Award and a recipient from four nominations (two rolled over from 2009) for the POMA. The recipient for each award will be announced on October 25 at the Opening Session of PICES-2010 in Portland, U.S.A. The

remaining nominations will be rolled over to the next year for consideration at the next inter-sessional Science Board meeting.

AGENDA ITEM 13

Status of PICES-2011

As requested by Science Board at PICES-2009, Dr. Dagg presented a revised description of the PICES-2011 theme, “*Mechanisms of marine ecosystem reorganization in the North Pacific Ocean*” for consideration. The theme was further edited for clarity at the meeting by Dr. Therriault. Dr. Bychkov informed Science Board that the Khabarovsk government appears to be well prepared to host the Annual Meeting; however, space for parallel sessions will be an issue. He will inspect the venue for space and logistics following the inter-sessional Science Board meeting.

AGENDA ITEM 14

Selection of PICES-2011 topic sessions

The Science Board Chairman reminded members to have suggestions for topic sessions for PICES-2011 ready for discussion for at PICES-2010.

AGENDA ITEM 15

Other business

A request for advice from Canada’s Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River (a judicial inquiry headed by Justice Bruce Cohen; see *IBS Endnote 3*) was tabled for discussion. The North Pacific Ecosystem Status Report, to be published this summer, has information on Pacific salmon and the state of their marine habitats already in place that could aid in the development of a report for the Cohen Commission. There was consensus that this request would provide PICES with an opportunity to offer its expertise and further enhance its profile among stakeholders. It also would play well in the development of FUTURE. Science Board supported the project and identified Dr. McKinnell to develop an outline of the report with the Cohen Commission and to recommend co-authors. He will communicate with Dr. David Levy, the Commission’s Fishery Consultant, to discuss the details of the requirement and the approach to developing the report. (For further discussion and decisions, see Day 2 FUTURE SSC Agenda Item 3.)

Decisions/Recommendations

- Science Board recommends that PICES accept the invitation to provide advice to Canada’s Cohen Commission and recommends that Dr. McKinnell lead the development of the report.

April 24, 2010

The second day of the inter-sessional Science Board meeting was devoted to matters of FUTURE. The agenda was adopted (*ISB Endnote 4*).

FUTURE SSC AGENDA ITEM 1

Overview of FUTURE Implementation Plan

Science Board Chairman, Dr. Stein, reviewed the FUTURE Implementation Plan, its research themes and objectives, and the organizational structure of FUTURE, composed of three Advisory Panels: AICE (FUTURE Advisory Panel on *Anthropogenic Influences on Coastal Ecosystems*), COVE (FUTURE Advisory Panel on

Climate, Oceanographic Variability and Ecosystems) and SOFE (FUTURE Advisory Panel on *Status, Outlooks Forecasts, and Engagement*).

FUTURE SSC AGENDA ITEM 2

Presentation and discussion of work plans for the FUTURE Advisory Panels

Chairmen of the FUTURE Advisory Panels on *Anthropogenic Influences on Coastal Ecosystems* (AICE-AP; Dr. Therriault), *Climate, Oceanographic Variability and Ecosystems* (COVE; Dr. Saito) and *Status, Outlooks Forecasts, and Engagement* (SOFE; Mr. Robin Brown) presented their Panel's work plans to the Scientific Steering Committee for FUTURE (Science Board) for review and comments. It was decided that those expert groups whose terms are coming up for review are required to produce their reports and new work plans at least one month in advance of PICES Annual Meetings to ensure that their parent Committee(s) and the relevant FUTURE Advisory Panel have adequate time to review. The FUTURE SSC recommended that the FUTURE Advisory Panels initiate these reviews using existing mechanisms. Expert group Chairmen will be expected to attend the relevant FUTURE Advisory Panel meetings at the Annual Meeting in order to address any issues regarding their report before final submission at Committee meetings.

Regarding specific items on work plans, it was suggested that:

- AICE item 7 be revised from "Initiate reviews and synthesis of information to address FUTURE goals" to "Review progress on roles and make recommendations to address FUTURE goals";
- COVE item 7 be revised from "Review the progress of FUTURE sciences and update..." to "Review the progress of work plans and update..." ;
- COVE item 8 to be revised from "Support the SOFE activity of representing COVE-related FUTURE products" to "Initiate reviews and synthesis of information to address FUTURE goals."

The FUTURE SSC discussed the urgency of an outreach strategy for such timely publications as NPESR and the Cohen Commission advisory report. It was agreed that a way to ensure the impact of a PICES product, especially in countries where English is not the first language, PICES should publish a brochure and produce high-quality power point presentations targeted to managers and broader community. For NPESR, the FUTURE SSC agreed:

- on the preparation of a standard power point presentation and brochure,
- that each PICES member country (where relevant) would produce a translation (with SOFE to ensure quality control),
- to do outreach and provide feedback to SOFE for metrics on success,
- to purchase 1,000 copies of the report,
- that SOFE will seek translators, but will confirm first with the Secretariat,
- that SOFE will be responsible for extracting information from NSPER for the brochure.

The FUTURE SSC discussed the possibility of producing a 4-page leaflet similar in style to that made for the symposium on "*Climate change effects on fish and fisheries*" (Sendai, Japan from April 26–29, 2010) for PICES-2010.

Decisions/Recommendations

Science Board recommends production of a quality power point presentation and brochure as an outreach product to complement the publication of NPESR.

Action

- HAB-S, CC-S and MBM-AP to submit their reports and work plans to their Committees and relevant FUTURE Advisory Panels one month in advance of the PICES Annual Meeting.
- Secretariat to contact the chairmen of expert groups for their reports one month prior to the PICES Annual Meeting.

- SOFE-AP to identify members in PICES countries who will distribute brochures and make presentations to relevant parties, and determine how many copies of NPESR to order for distribution to relevant countries.
- Dr. McKinnell to provide the synthesis chapter of NPESR for SOFE-AP to extract information for a brochure.
- SOFE-AP members to discuss the merits of producing a leaflet for PICES-2010

FUTURE SSC AGENDA ITEM 3

Complete any business for the morning's agenda

From Day 1, Agenda 13 was revisited and Science Board accepted the revised theme for PICES-2011 (*ISB Endnote 5*). For Agenda 15, Science Board discussed the strategy for addressing the Cohen Commission's request for advice.

Authors of the report will be selected by Science Board, based on the recommendations of Dr. McKinnell. The initial content of the report and the questions it would address will be developed jointly by PICES and the Cohen Commission and submitted to Science Board for approval. The results contained in the draft report will be presented to Science Board at PICES-2010 prior to their release to the Cohen Commission, subject to approval by Governing Council. Science Board delegated the review process and selection of reviewers of the draft to SOFE-AP.

Decisions/Recommendations

- Revised theme for PICES-2011 was endorsed
- Science Board will identify a research and writing team to respond to the request for advice by the Cohen Commission. The list of co-authors and statement of work will be forwarded to Council for approval.

Action:

- Science Board to form a writing team based on recommendations of Dr. McKinnell.
- Dr. McKinnell to respond to the Cohen Commission accepting their invitation, to seek clarification on requirements of the report, and to produce a draft table of contents for the report jointly with the Cohen Commission, before seeking approval to proceed.

FUTURE SSC AGENDA ITEM 4

Process for final approval of Advisory Panel work plans

Science Board reviewed and agreed to the following steps of a proposal for FUTURE Advisory Panel work plans:

- Advisory Panels to complete the final draft of a work plan,
- Advisory Panels to submit the work plan to Science Board (FUTURE SSC) for approval,
- Science Board to review and approve by email,
- Distribute to Committees and post on the PICES website,
- Complete entire process by the mid-July.

FUTURE SSC AGENDA ITEM 5

Process for nominating and approving new expert groups in Committees

Science Board adopted a process to establish new expert groups:

- Proposals to establish new expert groups can be brought to the attention of Science Board from various sources including, but not limited to, the Scientific and Technical Committees and FUTURE Advisory Panels,
- Committees will review all proposals (of interest to their discipline) to establish new expert groups, to ascertain the nature of the relationship of the goals of the expert group with the goals of the FUTURE

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Scientific Program and/or to determine the relation of the goals of the expert group to the Action Plans of the Committee(s), before making a decision to recommend approval to Science Board.

FUTURE SSC AGENDA ITEM 6

Study Group on *Updating the PICES Strategic Plan*

The Chairman of PICES, Dr. Tokio Wada, described points to consider in preparing a work plan for updating the PICES Strategic Plan. They included the need for improved understanding of the effect of climate on ecosystem dynamics of the North Pacific Ocean, with a focus on impacts of anthropogenic origin, and the need to incorporate social science. He also drew attention to the Implementation Plan of FUTURE, increased capacity building to ensure recruitment of young scientists into the field of marine science, and the need to align the PICES Strategic Plan with other international organizations such as ICES.

Dr. Wada reviewed the terms of reference approved at PICES-2009 and requested selected people to take action on various items. In addition, he requested each Science Board member to submit their views of the PICES Strategic Plan to Dr. Stein.

A tentative schedule for completing the tasks is given:

April 24	Assignment of tasks to SG-USP members
May 31	Deadline for comments and recommendations on the tasks from the members
July 15	Distribution of the 1st draft of the revised Strategic Plan to SG-USP members
August 15	Deadline for comments and recommendations of the 1st draft
Sept. 15	Distribution of the 2nd draft of the revised Strategic Plan to SG-USP members
Sept. 30	Deadline for comments and recommendations of the second draft
October 15	Circulation of the final draft of the revised Strategic Plan to SG-USP, Science Board and Council members for their consideration
October 30	Submission of the revised Strategic Plan to Science Board and Council at PICES-2010 for their discussion and approval

Action:

- Dr. Stein to provide comments and recommendations on TOR#1 for the revision of the Strategic Plan, based on discussions at ISB-2010 and incorporate outcomes from discussion PICES/ICES SG on *Developing a Framework for Scientific Cooperation in Northern Hemisphere Marine Science*.
- Dr. Vera Alexander to provide comments and recommendations on TOR#2.
- All SG-USP members to prepare comments and recommendations on TOR#3, in addition to #1 and 2.
- Dr. Wada to prepare first draft of revised Strategic Plan.

FUTURE SSC AGENDA ITEM 7

Other business

Science Board discussed the need for the FUTURE Advisory Panels to meet in Korea before PICES-2010 to discuss their work plans and to coordinate them with FUTURE. There will be a separate, then joint meeting of the Advisory Panels and relevant Working Group chairmen will also be invited to attend. A Korean speaker will be invited for the science component. Meeting times: prior to WG 21's Rapid Assessment Survey workshop, July 19–21, or August 19–21 were viewed as the best windows for the meeting.

Action:

- Secretariat to prepare a preliminary message for FUTURE Advisory Panel Chairmen to send to members, discussing potential meeting times, venue and any travel support for participants.
- FUTURE Advisory Panel Chairmen to provide feedback by mid-May.

Dr. Stein thanked everyone for their participation and gave special thanks to Dr. Yukimasa Ishida, alternate delegate (Japan) for organizing and managing three events in Sendai (inter-sessional Science Board meeting, FUTURE SSC meeting and symposium on “*Climate change effects on fish and fisheries*”).

ISB-2010 Endnote 1

List of ISB-2010 participants

Members

Robin Brown (Chairman, SOFE-AP)
 Michael Dagg (Chairman, BIO)
 Michael Foreman (Chairman, POC)
 Bernard Megrey (Chairman, TCODE)
 Fangli Qiao (representative of China)
 Steven Rumrill (Chairman, MEQ)
 Hiroaki Saito (Chairman, COVE-AP)
 John Stein (Chairman, Science Board)
 Mikhail Stepanenko (Chairman, FIS)
 Hiroya Sugisaki (Chairman, MONITOR)
 Sinjae Yoo (Chairman-elect, Science Board;
 representative of Korea)
 Thomas Therriault (Chairman, AICE-AP)

Invited Guests

Tokio Wada (PICES Chairman)
 Taro Ichii (alternate delegate, Japan)
 Yukimasa Ishida (alternate delegate for Japan)
 Samuel Pooley (delegate for U.S.A.)
 Igor Shevchenko (alternate delegate for Russia)
 Gongke Tan (alternate delegate for China)

PICES Secretariat

Alexander Bychkov (Executive Secretary)
 Skip McKinnell (Deputy Executive Secretary)

ISB-2010 Endnote 2

ISB-2010 meeting agenda

1. Welcome and adoption of agenda
2. Status of planning for PICES-2010, Portland, OR, U.S.A.
3. Mid-year reports from Scientific and Technical Committees
4. Report on SG on Human Dimensions
5. Status of proposed publications
6. Status of proposed inter-sessional workshops/symposia
7. North Pacific Ecosystem Status Report: Production and the future
8. Capacity building
9. Interactions with other organizations
10. P/ICES Study Group on a Framework for Scientific Cooperation
11. Implementation of Science Board recommendations and Governing Council decisions from PICES-2009, Jeju
12. Wooster and POMA Awards
13. Status of PICES-2011, Russia theme and venue
14. Selection of PICES-2011 topic sessions
15. Other business

Request for Advice to PICES

Commission of Inquiry
into the Decline of
Sockeye Salmon in the Fraser River



Commission d'enquête
sur le déclin des populations
de saumon rouge du fleuve Fraser

April 15, 2010

Via email: mckinnell@pices.int and bychkov@pices.int

Dr. Alexander S. Bychkov
Executive Secretary
North Pacific Marine Science Organization (PICES)
P.O. Box 6000
Sidney, BC V8L 4B2

Dear Dr. Bychkov:

Re: Cohen Commission - Research

I understand that the North Pacific Marine Science Organization (PICES) is about to publish a comprehensive report on the status and recent trends of marine ecosystems in the North Pacific, and that the report will include an evaluation of Pacific salmon and state of their marine habitats. For the past three years, Canadian and United States fishing opportunities on the normally large sockeye salmon runs to the Fraser River have been virtually non-existent because of low abundance returning from the sea.

Considering the gravity of the situation, the Prime Minister of Canada established a judicial inquiry headed by Justice Bruce Cohen (formally the *Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River*). In December 2009, a "Think Tank" was convened by Simon Fraser University to consider the issue and it concluded that "*the weight of evidence suggests that the problem of reduced productivity [in 2009] occurred after the juvenile fish began their migration toward the sea.*" This suggests an oceanic cause.

Considering your organization's broad interests and expertise in climate variability, oceanography, and marine ecology, would PICES be interested in preparing a scientific report for the Commission on the status and trends of marine ecosystems where Fraser River sockeye are known to occur and on the potential effects of recent ecosystem

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variability on their survival, distribution, and migration? Special reference should be given to the ocean environment during the recent period of low survival of Fraser River sockeye salmon, especially during the period when the 2009 return was at sea. To the extent that the information is available, the nature and expectations for future ecosystem states will be an important consideration. Please note that no management advice or policy issues are to be considered in the report.

Dr. David Levy, the Commission's Consultant, Fisheries Research, will contact you to discuss the details of the requirement and the approach to developing the report, should your response be positive. The Commission is prepared to enter into a contract with PICES after the scope of the project is decided and necessary approvals are reached. We anticipate requiring the report from PICES by December 2010.

Yours sincerely,

Brian J. Wallace, Q.C.
Senior Commission Counsel

ISB-2010 Endnote 4

FUTURE SSC meeting agenda

1. Brief overview of FUTURE Implementation Plan
2. Presentation and discussion of work plans of the FUTURE Advisory Panels
 1. AICE (Therriault)
 2. COVE (Saito)
 3. SOFE (Brown)
3. Complete any business from the morning's agenda
4. Process for final approval of AP work plans
5. Process for nominating and approving new expert groups in Committees
6. Study Group on Updating the PICES Strategic Plan (SG-USP) – Alignment with FUTURE
7. Other business

ISB-2010 Endnote 5

Theme for PICES-2011 in Khabarovsk, Russia
Mechanisms of marine ecosystem reorganization in the North Pacific Ocean

Marine ecosystem variation often is attributed to natural or anthropogenic stressors, especially climatic or hydrological forcing. These studies typically show correlations among ecosystem characteristics and indices of global warming or climatic oscillations. Also, changes in biological communities often are described in terms of their correlative relationships to these large-scale indices. While these studies have produced interesting results, the underlying mechanisms responsible for ecosystem change have not been totally identified, especially when it comes to understanding how populations, communities, and ecosystems are reorganized, sometimes dramatically, over short time periods. Complexity, arising from varying influences of biotic and abiotic factors on multiple spatial and temporal scales, challenges our understanding of these processes. Because of our insufficient understanding of ecological mechanisms for oceanic regions, it is not unusual to find that what has happened in the past cannot adequately predict what will happen in the future. Thus, the focus of this Science Board symposium will be on describing mechanisms of ecosystem change and reorganization. The influence of factors operating at various temporal and spatial scales will be considered. This symposium will lead to a better understanding of factors that control species composition and ecosystem structure in the North Pacific Ocean, and improve our ability to predict system responses to future stressors, including climate change.