

Report of the FUTURE Scientific Steering Committee

The FUTURE SSC held three separate meetings at PICES-2015 in Qingdao, China, in October 2015. SSC Co-Chairs, Drs. Steven Bograd and Hiroaki Saito led the first two meetings and Dr. Bograd reported at the joint SSC/Science Board meeting.

Sunday, October 18, 2015

FUTURE Mini-Symposium

The Mini-Symposium was a plenary meeting (09:00–12:15) open to the entire PICES community. Drs. Bograd and Saito gave a brief overview of the new organizational structure (the SSC) of FUTURE and summarized recent activities and near-term plans. This was followed by short reports from all PICES Expert Groups (Working Groups, Sections, and Advisory Panels) reviewing recent accomplishments and planned activities in support of the FUTURE science program. The Symposium concluded with an open discussion on the priorities and direction of FUTURE.

Sunday, October 18, 2015

FUTURE SSC Meeting (1)

A 2-h meeting of the FUTURE SSC membership (*FUTURE SSC Endnote 1*) was held to report on and plan FUTURE activities (*FUTURE SSC Endnote 2*). Drs. Bograd and Saito reported on the SSC meeting held inter-sessionally on March 1–3, 2015, in La Jolla, California, USA. The SSC's Terms of Reference and Liaison structure, which were established at the inter-sessional meeting, were reviewed. Drs. Bograd and Saito reported on the Expert Group Activity Reports, which were prepared and submitted by a portion of PICES Expert Groups prior the Annual Meeting. The SSC then discussed potential new Expert Groups, including those that have been proposed and those that are needed by the FUTURE program.

Friday, October 23, 2015:

Joint FUTURE SSC/Science Board Meeting

The FUTURE SSC continued discussion of meeting agenda items (*FUTURE SSC Endnote 2*). The SSC reviewed their 2015 Action Plan, which was developed at the inter-sessional meeting in March 2015, and developed a new 2016 Action Plan. The SSC reviewed activities from this year's Annual Meeting, including members' experiences serving as Expert Group liaisons and feedback from the Mini-Symposium. It was noted that there was high attendance at the Mini-Symposium and generally positive feedback from the PICES community about the Symposium's effectiveness in reviewing FUTURE's progress and priorities. SSC members formulated a request for approval for an inter-sessional meeting to be held in Spring 2016 in California, and discussed the structure of the 25th Annual Meeting to be held in San Diego, California, in November 2016. SSC members developed and approved a FUTURE Topic Session proposal for the PICES-2016 titled "*The response of marine ecosystems to natural and anthropogenic forcing: Past, present, and future*" (*FUTURE SSC Endnote 3*) and discussed potential invited speakers. SSC members endorsed the creation of three new PICES Expert Groups:

- Study Group on "Climate and Ecosystem Predictability";
- Study Group on "Ecosystem Reference Points as a Common Currency across PICES Member Countries";
- Joint PICES/ISC Working Group on "Oceanographic Conditions on the Distribution and Productivity of Highly Migratory Species in the North Pacific".



FUTURE SSC members (back row, left to right): Sukyung Kang, Sinjae Yoo, Emanuele Di Lorenzo, Vyacheslav Lobanov, Jacquelynne King, Mitsutaku Makino, Fangli Qiao, Toyomitsu Horii, Ian Perry, and Guangshui Na; (front row, left to right): Harold (Hal) Batchelder (PICES), Thomas Therriault (PICES), Steven Bograd (FUTURE SSC Co-Chair), Hiroaki Saito (FUTURE SSC Co-Chair), and Oleg Katugin.

FUTURE SSC Endnote 1

FUTURE SSC participation list

Members

Steven J. Bograd (USA, Co-Chair)
Emanuele Di Lorenzo (USA)
Toyomitsu Horii (Japan)
Sukyung Kang (Korea)
Oleg N. Katugin (Russia)
Jacquelynne R. King (Canada)
Vyacheslav B. Lobanov (Russia)
Mitsutaku Makino (Japan)
Guangshui Na (China)
R. Ian Perry (Canada)
Fangli Qiao (China)
Hiroaki Saito (Japan, Co-Chair)
Sinjae Yoo (Korea)

PICES

Laura Richards
Thomas Therriault
Harold (Hal) Batchelder

Observers

Jennifer Boldt (MONITOR, Canada)
Kyung Il Chang (POC, Korea)
Chuanlin Huo (MEQ, China)
Elizabeth Logerwell (FIS, USA)
Sara F. Tjossem (USA)

FUTURE SSC Endnote 2**FUTURE SSC agenda***Sunday, October 18, 2015*

1. Report of ISB meeting (S. Bograd and H. Saito)
2. Communication with ExGs, Committees, members, and the role of “liaisons”
3. New Expert Groups
 - SG-SCISC Final Report Overview + ISC-PICES WG Proposal (King; 8 min)
 - New WG proposal “Climate Prediction and Upwelling Ecosystems” (presented by Di Lorenzo; 8 min)
 - Others ...?

Friday, October 23, 2015

4. ISB FUTURE Symposium/Workshop 2016
5. Structure and Sessions proposed by FUTURE for PICES-2016
6. Action Plan for 2015 and 2016
7. Other issues

FUTURE SSC Endnote 3

**Proposal for a 1-day FUTURE Topic Session on
 “The response of marine ecosystems to natural and anthropogenic forcing:
 Past, present, and future” at PICES-2016**

Forecasting and Understanding Trends, Uncertainty and Responses of North Pacific Marine Ecosystems’ (FUTURE) is an integrative Scientific Program undertaken by the member nations and affiliates of PICES to understand how marine ecosystems in the North Pacific respond to climate change and human activities, to forecast ecosystem status based on a contemporary understanding of how nature functions, and to communicate new insights to its members, governments, stakeholders and the public. One of the principal aims of FUTURE is to improve our understanding of how marine ecosystems respond to natural and anthropogenic forcing, and how marine ecosystems will change in the future. In this session, we will (a) review our state of knowledge on how climate variability and change affect the processes underlying ecosystem structure and function, (b) identify critical gaps in our understanding, and (c) provide an assessment of our capacity to forecast climate-driven marine ecosystem changes. Advances in the understanding of climate impacts on marine ecosystems, and a broad dissemination of this information, is essential for preserving a healthy and sustainable North Pacific for FUTURE generations.