



NORTH PACIFIC MARINE SCIENCE ORGANIZATION (PICES)

OPEN SCIENCE MEETING

Forecasting and Understanding Trends, Uncertainty and Responses of North Pacific Marine Ecosystems
(FUTURE)

April 15–18, 2014

Kohala Coast, Big Island, Hawaii, U.S.A.

Scope

Drastic ecosystem changes have been observed in recent decades in both open and coastal systems. These changes are believed to have occurred in response to climate change and increasing anthropogenic pressures. “*What is the future of the North Pacific given current and expected pressures?*” This is the question addressed by the PICES Integrated Science Program, FUTURE ([Forecasting and Understanding Trends, Uncertainty and Responses of North Pacific Marine Ecosystems](#)). FUTURE will synthesize and disseminate knowledge provided by national and multi-national research programs. Under the overarching question, FUTURE attempts to answer three Key Scientific Questions related to: a) ecosystem resilience and vulnerability; b) ecosystems response to natural and anthropogenic forcing; and c) future ecosystem change. The Program also addresses poorly understood, yet important, issues of interactions between human societies and coastal ecosystems, such as the effects human activities have on the provision of ecosystem services. In addition to the scientific understanding of mechanisms of ecosystem change, FUTURE aims to engage human societies by providing useful products on ecosystem change. Inaugurated in 2009, FUTURE will enter its mid-life in 2014, making it an appropriate time to evaluate what has been achieved and what remains to be addressed. Based on information assessed at this symposium, FUTURE may redirect its course in order to achieve its final goals.

Structure and Scientific Program

The 4-day (April 15–18) symposium will consist of:

- Morning plenary sessions on Days 1–3, each with keynote and contributed speakers to introduce major themes for the concurrent sessions to be convened later the same day;
- Concurrent theme sessions on Days 1–3, following the morning plenary session, to assess progress towards FUTURE objectives;
- Reports from discussions in concurrent sessions on Days 2–4 to appraise advancement on FUTURE key themes;
- A morning plenary session on Day 4 with overarching presentations focusing on the integration of more general topics;
- A plenary discussion on the afternoon of Day 4 to provide an overall evaluation of FUTURE progress, and to identify needed changes or adjustments to fulfil program objectives.

Scientific sessions will include invited and contributed papers. Contributed papers will be selected for oral and poster presentation.

Posters will be on display for the entire duration of the symposium. All coffee breaks and receptions will be held in the poster area to maximize opportunities to view these contributions and to interact with presenters. The poster session/reception will take place on the evening of Day 3, when poster presenters are expected to be available to answer questions.

Selected Themes

A set of theme sessions has been identified by the Scientific Steering Committee:

- How do ecosystems respond to natural and anthropogenic forcing, and how might they change in the future?
 - Ecosystem status/trends of open ocean systems
 - Ecosystem status/trends of coastal ocean systems
 - What are the key stressors in open ocean and coastal ecosystems and how are they changing?
 - How are biological communities responding to stressors?
- What determines an ecosystem's intrinsic resilience and vulnerability to natural and anthropogenic forcing?
- How do human activities affect coastal ecosystems and how are societies affected by changes in these ecosystems?
 - Changes in use of coastal systems via marine spatial planning
 - Changes in ecosystem services provisioning due to human activities
- Quantification and measures of uncertainty in observations and projections
- Communication and engagement in developing and disseminating FUTURE products
- Current and future role of national research programs to ensure program delivery

Additional Themes

The scientific community is invited to propose half-day or full-day workshops related to the objectives of FUTURE, to be held on April 14, 2014 (the Monday immediately prior to the symposium). Proposals should be sent to secretariat@pices.int by April 30, 2013, and include a short description of the topic, convenor(s), format, defined outputs (a research paper, a position paper, or a special issue in a peer-reviewed journal), and potential number of participants. Proposals received will be evaluated by the Scientific Steering Committee, and notification of proposal acceptance will be sent by May 30, 2013.

Outcome

Selected papers (oral and poster) from the symposium will be included in a special issue of a peer-reviewed journal scheduled for publication in 2015.

Registration, Abstract Submission and Financial Support

On-line registration and abstract submission will open on May 30, 2013. Please consult the symposium website for details.

Limited funds are available to assist students and early career scientists to attend the symposium. Application procedures will be posted on the symposium website.

Key Dates

March 15, 2013

- OSM website opens

April 30, 2013

- Workshop proposal deadline

May 30, 2013

- On-line registration and abstract submission opens

December 15, 2013

- Abstract submission deadline
- Financial support application deadline
- Early registration deadline

January 30, 2014

- Abstract acceptance notification
- Financial support grant notification

April 14–18, 2014

- Symposium and associated workshops

May 30, 2014

- Manuscript submission deadline

Scientific Steering Committee

Sinjae Yoo (Korea Institute of Ocean Science and Technology, Korea)

Thomas Therriault (Pacific Biological Station, Department of Fisheries and Oceans, Canada)

Hiroaki Saito (Tohoku National Fisheries Research Institute, Fisheries Research Agency, Japan)

Phillip Mundy (Alaska Fisheries Science Center, NOAA-Fisheries, U.S.A.)

Mitsutaku Makino (Fisheries Research Agency, Japan)

Venue

[Hapuna Beach Prince Hotel](#)

Contact

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