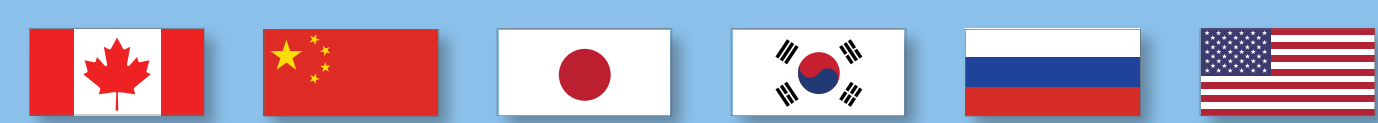




PICES Contracting Parties:
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Japan, Republic of Korea, Russian
Federation, United States of America



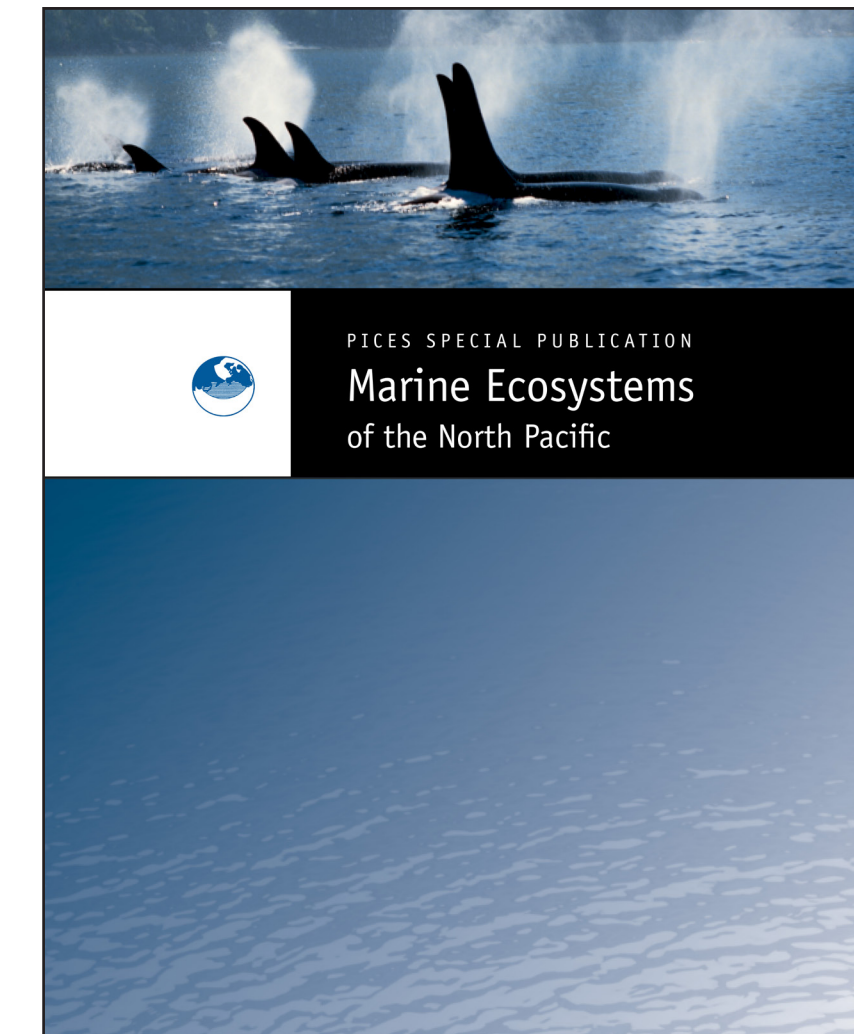
PICES North Pacific Ecosystem Status Report

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NPESR-1 Marine Ecosystems of the North Pacific Perry, R.I. and McKinnell, S.M. [Eds.] 2004, 280 p.

The first North Pacific ecosystem status report was designed to identify, describe, and integrate observations of change in the North Pacific Ocean that occurred up to 2003. Information from 10 regional assessments was summarized, basin-scale ocean and climate changes were summarized, and information on the status of tuna, Pacific halibut and Pacific Salmon was provided by relevant organizations. Most regional chapters have sections on atmospheric forcing, physical, chemical and biological conditions, fishes and invertebrates, and marine birds and mammals. A broad basin-wide synthesis (overview chapter) was accomplished to identify critical factors that cause changes in these ecosystems; and to identify key questions and critical data gaps that inhibit understanding of these marine ecosystems.

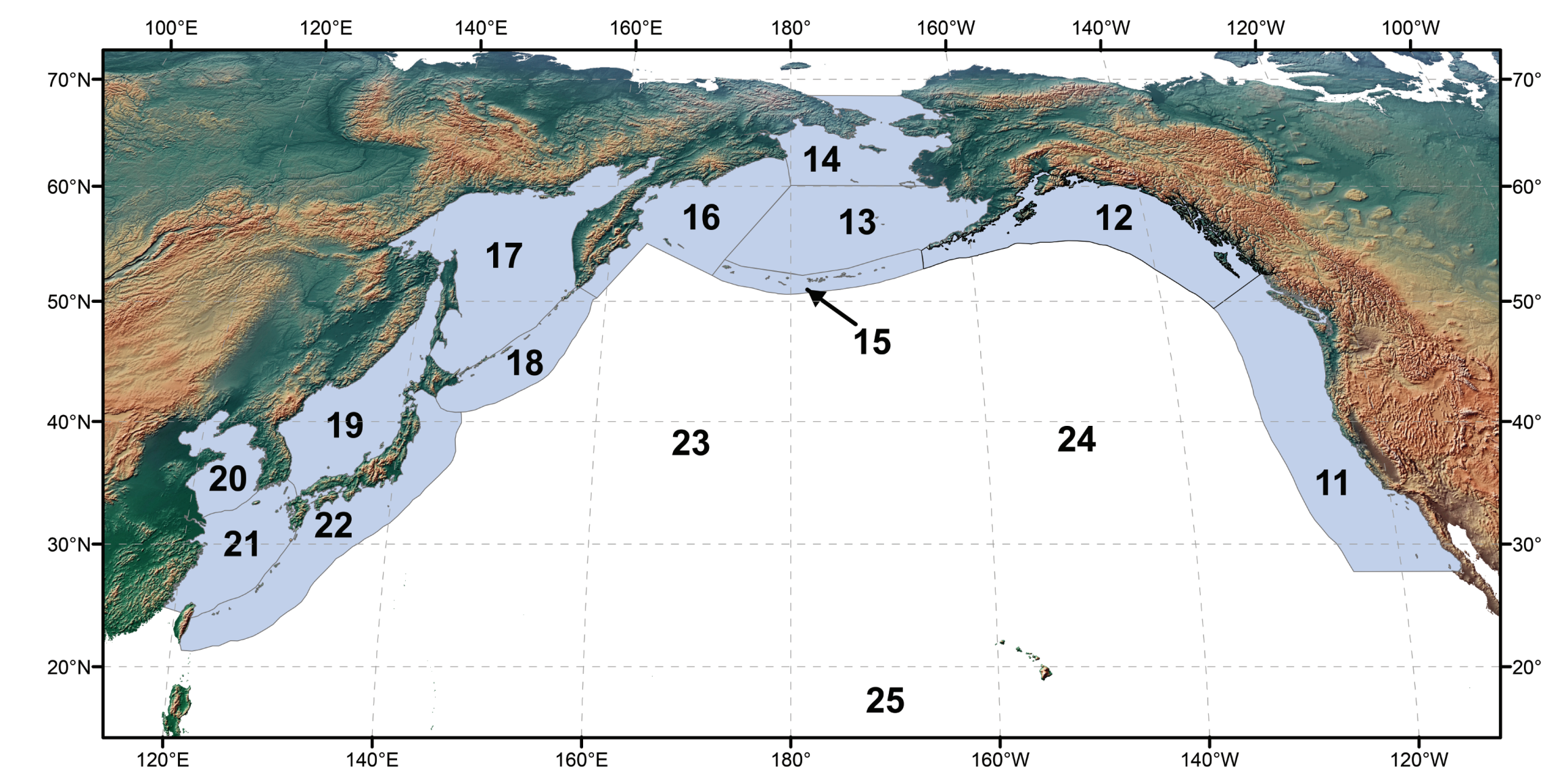
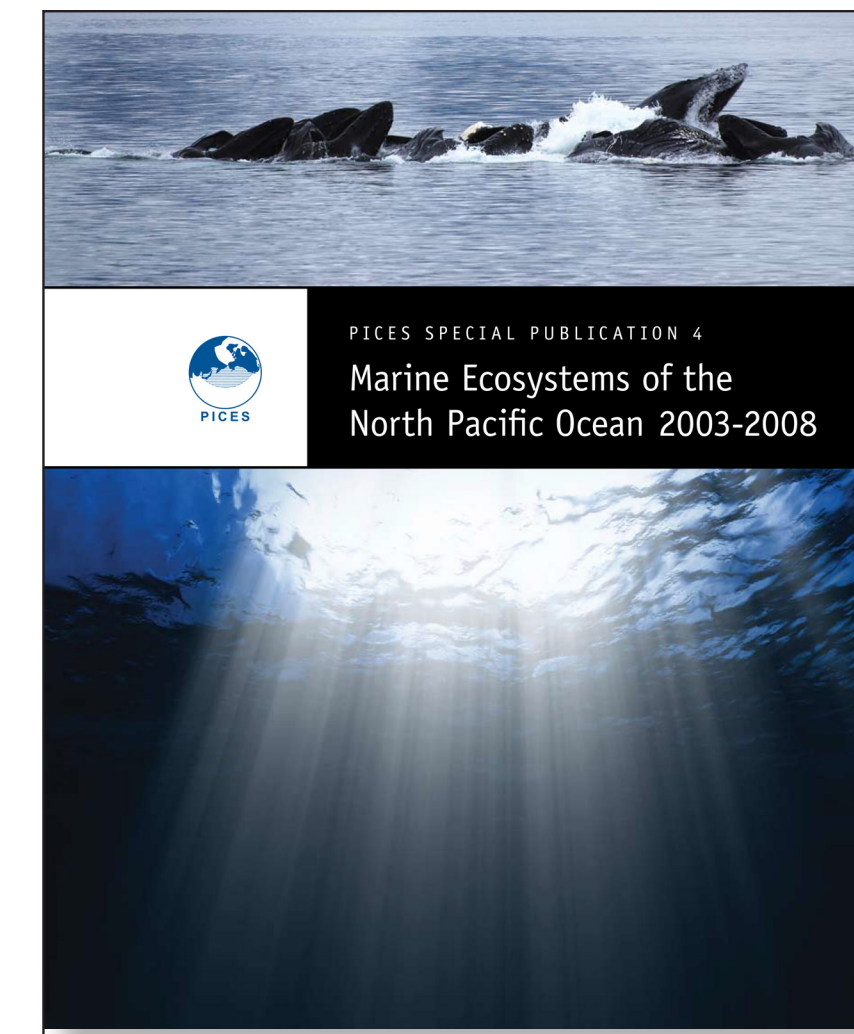
The report is at: <http://meetings.pices.int/publications/special-publications/NPESR/2004/index>



NPESR-2 Marine Ecosystems of the North Pacific Ocean, 2003-2008 McKinnell, S.M. and Dagg, M.J. [Eds.] 2010, 393 p.

The focus period of this assessment is 2003-2008. The information is organized around eight regional chapters. Chapters summarize ecosystem status and trends in four marginal seas, four coastal boundary currents, and the large oceanic region at their center. The overall synthesis chapter was written by an international group of ocean scientists and reviewed by scientists who were not involved in the assessment. The sections in and contents of the chapters are similar to those of NPESR-1.

The report is at: <http://meetings.pices.int/publications/special-publications/NPESR/2010/index>



Because there was no existing regional classification system that met PICES needs a modified biogeographical classification system of 15 regions around the North Pacific has been adopted for NPESR-3. As the biogeographical system represents an amalgamation of several other conventions these regions are identified as PICES regions 11 to 25, with 23-25 being open ocean regions, and the others being coastal current regions or marginal seas. More regions are considered in NPESR-3 than in the previous two reports—mostly due to partitioning of the Bering Sea into multiple regions and having the Aleutian Islands separated (13-16). These changes were recommended due to new ocean and ecology observations from these regions that suggest that they may be different from the generic “Bering Sea” that was used in the earlier reports.

NPESR-3

PICES is producing the third in a series of North Pacific Ecosystem Status Reports (NPESR) to assess the status and trends in North Pacific marine ecosystems, and the vulnerability and resilience of ecosystems to changes in the climate and human activities. The intended audience is primarily scientists involved in the study of climate and marine ecosystems of the North Pacific Ocean, but also includes governments that deal with issues of policy and management of North Pacific marine systems, and the general public. The first two NPESR reports were very expensive to develop and publish, as they required meetings of many experts at multiple regional workshops to develop the text of the various chapters. Due to the immense size of the Pacific Ocean and the variability in the ecosystems one of the first steps in the NPESR process was to identify regions that could be assessed individually. These individual regional assessments can then be synthesized into an Ecosystem Status Report for the entire North Pacific.

The map in the box (above right) shows the regions for NPESR-3. For each regional assessment a lead author works with several contributing authors to evaluate the available data and write the report. A challenge to the authors of regional assessments is how to access the data they need to evaluate the ecosystem. This includes oceanography, fisheries, climate, plankton, birds, mammals, pollutants and human dimensions (the latter two being new components added to NPESRs). For NPESR-3, PICES developed an alternate strategy for providing the data needed to describe the ocean and ecosystem conditions in biogeographical regions. Environmental Time Series Observations (ETSOs) were identified and information about them were input into an online electronic data management system.

The web page for NPESR3 working group is at: <http://meetings.pices.int/members/working-groups/wg35>



Template for Submission of ETSoS

- (1) Title;
- (2) Contributors Names;
- (3) Contact Author/Originator;
- (4) Contact affiliation, mailing and email address;
- (5) Date last updated;
- (6) Body of the Contribution:
 - (6a) description of the ETSo,
 - (6b) status & trends for 2009-end date,
 - (6c) factors influencing observed trends/changes,
 - (6d) what are potential implications or impacts of observed trends on the ecosystems;
- (7) Relevant figures or tables;
- (8) Literature cited; and
- (9) Data or metadata uploads.

NPESR contributions to National, Regional and Global needs:

Information in NPESR1 and NPESR2 was used in the development and writing of the United Nations Regular Process for global reporting and assessment of the state of the marine environment (World Ocean Assessment I [WOA-I]).

PICES NPESR and the WOA-I jointly convened a Human Dimensions workshop in June 2013 to assemble information on social and economic indicators for marine ecosystems of the North Pacific. Objectives were to compile and review socioeconomic data for the North Pacific, identify human dimension data gaps, identify socioeconomic data sources to inform the WOA-I, and engage PICES members in the WOA process.

Chapter 36C on the North Pacific, which was published in the WOA-I was prepared largely on the basis of the first two NPESR reports and other data from the literature. NPESRs provide recent syntheses of the larger scale and regional scale changes that are occurring in the North Pacific, which provides value to PICES member nations when issues arise that demand information on trends in conditions.

NPESR-3 Timeline

Originally, NPESR-3 was to summarize ocean and ecosystem conditions in the North Pacific from 2009-2013. However, due to the delay in this report (it being likely to be published only in late 2019 or early 2020, we may wish to include up through about 2016 [end date] in this report. The proposed activities are shown in the timeline.

