



Media Release

Marine ecosystems get a climate form guide

Reference: 09/213

The first-ever Australian benchmark of climate change impacts on marine ecosystems and options for adaptation is being released in Brisbane today.

27 November 2009

The *Marine Climate Change Impacts and Adaptation Report Card* for Australia, and an accompanying website, will provide a biennial guide for scientists, government and the community on observed and projected impacts of climate change on marine ecosystems.

"The objective of compiling this information is to consider options available to environmental and resource managers in their response to changes in ecosystem balance," says project leader, CSIRO Climate Adaptation Flagship scientist Dr Elvira Poloczanska.

"On both sides of the continent there is clear evidence of ocean warming and this is already bringing sub-tropical species south into temperate waters, and in the case of the giant kelp forests in Tasmania, appears to be having a severe impact in just a few years.

"This research is relevant for anyone with a recreational interest or financial investment in our coasts and oceans," Dr Poloczanska says.

The Report Card highlights observations over the past decade, projects forward to 2030 and 2100 with assessments of likely status and confidence ratings, and offers adaptation responses that can also inform policy makers.

Key concerns include; waters around Australia becoming warmer and more acidic, increases in strengths of major warm-water currents such as the East Australian Current, changes in the productivity of marine ecosystems and shifts in the distribution and abundance of species. The Report Card identifies where change is already occurring, likely trends and confidence levels in those trends depending on the state of knowledge.

The research team comprises scientists from CSIRO, Australian universities, State and territory environmental agencies, the Australian Institute of Marine Science and the Bureau of Meteorology.



The 'Marine Climate Change Impacts and Adaptation Report Card' for Australia. (CSIRO)

“The objective of compiling this information is to consider options available to environmental and resource managers in their response to changes in ecosystem balance.”
Dr Elvira Poloczanska,
CSIRO Climate Adaptation Flagship

Media Resources

- Download the [Marine Climate Change Impacts & Adaptation Report Card](#) [external link]
- Images available at: [Marine ecosystems get a climate form guide](#)

Contact Information

Science Contacts

[Elvira Poloczanska](#)
Marine & Atmospheric Research
Phone: 61 3 6232 5141
Alt Phone: 61 4 2874 1328
Email: Elvira.Poloczanska@csiro.au

[Dr Anthony Richardson](#)
Marine & Atmospheric Research
Phone: 61 7 3826 7183
Fax: 61 7 3826 7222
Email: Anthony.Richardson@csiro.au

[Dr Alistair Hobday \(BSc\(Hons\) PhD\)](#)
Marine Ecologist/Biological Oceanographer-Modeller
Marine & Atmospheric Research
Phone: 61 3 6232 5310
Alt Phone: 61 3 6232 5222
Fax: 61 3 6232 5012
Email: Alistair.Hobday@csiro.au

Media Contacts

[Mr Craig Macaulay](#)
Science Journalist
Marine & Atmospheric Research
Phone: 61 3 6232 5219
Alt Phone: 0419 966 465
Fax: 61 3 6232 5000
Email: Craig.Macaulay@csiro.au

[Ms Jeannette Langan](#)
Media Liaison
National Climate Change Adaptation Research Facility (NCCARF)
Phone: 0466 130 472

The Director of the National Climate Change Adaptation Research Facility (NCCARF), Professor Jean Palutikof, says the Report Card reflects both the increased bank of knowledge about impacts, and the responses of government, industry and the community.

"Australia needs a guide to likely changes in the marine environment and we feel well-positioned now to bring together the science and the latest climate projections to consider options for adaptation," Professor Palutikof says.

Funded by the Australian Climate Change Science Program, NCCARF and CSIRO's Climate Adaptation Flagship, the project is an early outcome of a broader national response to climate change being conducted through the NCCARF.

[National Research Flagships](#)

CSIRO initiated the National Research Flagships to provide science-based solutions in response to Australia's major research challenges and opportunities. The nine Flagships form multidisciplinary teams with industry and the research community to deliver impact and benefits for Australia.

Read more media releases in our [Media](#) section.










 Title: [Marine report card provides a benchmark for climate impacts \(Vodcast 27 Nov 09\)](#)
Media: [Video](#)
Size: [10630 KB](#)

Related Links

- [Climate Adaptation Flagship](#)
- [CSIRO Marine and Atmospheric Research](#)
- [Climate Change](#)
- [Marine Climate Change Impacts & Adaptation Report Card Australia 2009 \[external link\]](#)
- [National Climate Adaptation Research Facility \[external link\]](#)



Share this CSIRO content using:

-  [Digg](#)
-  [Delicious](#)
-  [StumbleUpon](#)
-  [Facebook](#)
-  [Twitter](#)
-  [Reddit](#)
-  [Propeller](#)
-  [Newsvine](#)
-  [Email](#)
- [What are these?](#)

Explore CSIRO

About CSIRO

The Commonwealth Scientific and Industrial Research Organisation is Australia's national science agency and one of the largest and most diverse research agencies in the world.

[Find out more about CSIRO](#)

[View our organisational chart](#)

National Research Flagships

Large-scale, long-term, multidisciplinary science to address Australia's major national challenges and opportunities.

[Climate Adaptation Flagship](#)

[Energy Transformed Flagship](#)

[Food Futures Flagship](#)

[Future Manufacturing Flagship](#)

[Light Metals Flagship](#)

[Minerals Down Under Flagship](#)

[Preventative Health Flagship](#)

Open to the Public

CSIRO has a range of facilities that are opened to the public, with each offering a unique insight into science research activities and history.

[Courses](#)

[Double Helix Club Chapters](#)

[Discovery Centre](#)

[Events & Holiday Programs](#)

[Telescope Visitor Centres](#)

CSIRO's core areas of impact

[Astronomy & Space](#)

[Astronomy & Space Facilities](#)

[Astronomy & Space Technologies](#)

[Astrophysics](#)

[Satellites and Earth Observation](#)

[Climate Change](#)

[Understanding Our Changing Climate](#)

[Reducing Greenhouse Gas Emissions](#)

[Preparing for the Impacts of Climate Change](#)

[Information & Communication Technologies](#)

[Communication Networks](#)

[Risk Management & Decision Support](#)

[Information Security & Privacy](#)

[Information Systems](#)

[Robots, Sensors & Intelligent Environments](#)

[Virtual Environments](#)

[Manufacturing](#)

[Automation & Control](#)

Sustainable Agriculture Flagship
Water for a Healthy Country Flagship
Wealth from Oceans Flagship

Divisions

CSIRO expertise is organised into 15 research areas.

Astronomy and Space Science
Earth Science and Resource Engineering
Energy Technology
Entomology
Food and Nutritional Sciences
ICT Centre
Land and Water
Livestock Industries
Marine and Atmospheric Research
Materials Science and Engineering
Mathematics, Informatics and Statistics
Minerals
Molecular and Health Technologies
Plant Industry
Sustainable Ecosystems

National Facilities

CSIRO manages national facilities and collections that are opened to researchers around Australia and overseas.

The Australian Animal Health Laboratory (AAHL)

National Collections - The Australian National Insect Collection, The Australian National Fish Collection, The Australian National Herbarium, The Australian National Wildlife Collection

The Marine National Facility - The Southern Surveyor

Telescopes - Parkes, Narrabri, Mopra, Tidbinbilla, VLBI, ASKAP

Pyrotron

Energy

Energy Efficiency
Energy & Environment
Energy from Coal
Energy from Oil & Gas
Energy Modelling & Decision Support
Energy Generation & Storage
Renewable Energy

Environment

Biodiversity & Ecology
Bushfires
Environmental Monitoring & Analysis
Forests
Pest Management
Pollution
Salinity & Acidity
Soils
Sustainability
Waste Management
Water

Farming & Food

Animal Products
Aquaculture
Crops
Farm Management
Food
Forestry
Pastures
Soil Management

Health & Wellbeing

Prevention
Health Technologies
Treatment

Fluid Dynamics
Machinery, Process & Systems
Metal Processing
Packaging
Sustainable Manufacturing

Materials

Advanced & Composite Materials
Ceramics
Chemicals
Materials Characterisation & Performance
Metals
Plastics & Polymers
Renewable & Biodegradable Materials
Textiles
Wood

Mining & Minerals

Minerals Exploration
Mining
Minerals Processing & Metal Production
Mining & Minerals Tools & Technologies
Petroleum Exploration & Mining

Oceans & Coasts

Understanding Oceans
Marine Life
Managing Coasts
Blue Resources

Transport & Infrastructure

Building & Construction
Fire Safety & Control
Transport
Urban Planning
Utilities

Contact Enquiries: Phone - 1300 363 400 | Email - Enquiries@csiro.au | [Contact Us](#)