

NCCARF Highlights: Promoting excellence in adaptation



Developing knowledge to adapt: Key achievements of the National Climate Change Adaptation Research Facility

Leading the national research community to generate the information needed by government, business and the community to adapt to the impacts of climate change.

Our climate is changing as a result of increased greenhouse gas emissions from human activities. Further warming is inevitable, regardless of national and international efforts to reduce emissions.

Projected impacts such as sea level rise, more severe heat, storm and drought events will affect almost every aspect of Australia's natural, built, social and economic environment.

Adapting to climate change presents new challenges for policy and decision makers in both the private and public sectors. It will take time to build the skills and knowledge of how best to adapt, and for implementation of decisions to make a difference. Decisions made today that lack suitable climate foresight may create greater costs and risks in future.

The National Climate Change Adaptation Research Facility (NCCARF) is a unique venture established by the Australian Government in 2008 to harness the capabilities of Australia's research institutions to generate the knowledge needed for successful adaptation.

Its key roles are:

- to identify priority knowledge needs in a range of key sectors;
- to commission research projects and deliver the outputs to decision makers; and
- to establish nationwide research networks to build capacity and encourage collaboration between researchers and practitioners.

Our objectives

The aim of NCCARF is:

- to work with decision makers in industry, business and government to identify vulnerabilities to extreme events, climate variability and change, and to identify practical cost effective and achievable responses;
- to work with the research community to generate and deliver the core knowledge needed by

NCCARF's Priority Research Themes

- Human health
- Emergency management
- Indigenous communities
- Water resources and freshwater biodiversity
- Marine biodiversity and resources
- Primary industries
- Settlements and infrastructure
- Social, economic and institutional dimensions.
- Terrestrial biodiversity

- decision makers to address the threats and realise the opportunities presented by climate change;
- to bring together the research and decision making communities to raise awareness and deliver practical solutions to climate change.

Identifying knowledge needs

NCCARF has worked with Australia's leading researchers and decision-makers to develop and implement a suite of National Climate Change Adaptation Research Plans. These Plans identify priorities for research to ensure Australia has the knowledge needed to adapt to climate change. The Plans establish a benchmark for funding agencies seeking to support climate change adaptation research in Australia.



National Climate Change Adaptation Research Plans identify priorities for climate change adaptation research in Australia.

Delivering priority research

NCCARF has commissioned, and manages, a research portfolio of 140 projects with a combined value of almost \$40 million. Project teams comprise researchers from 33 universities, 61 Commonwealth, state and local government entities and 25 private institutions.

Research includes a program of projects that address the priorities in the Research Plans, as well as a program of cross-cutting research designed to synthesise and integrate current and emerging climate change adaptation research.

Together, the NCCARF Research Programs are:

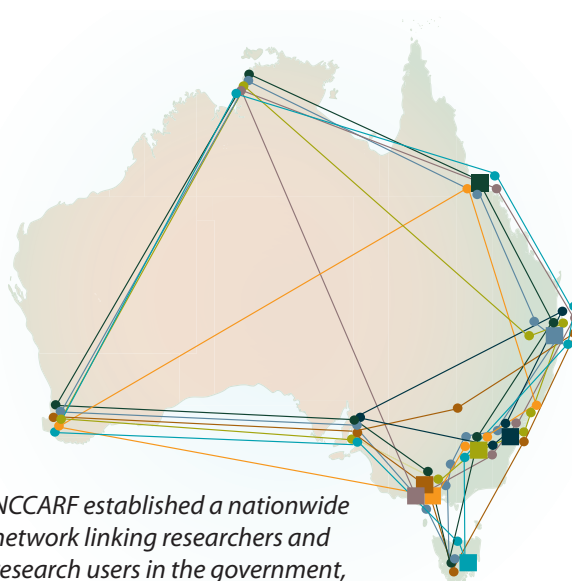
- contributing to governments' understanding of the impacts of extreme events in Australia, how these might change as our climate changes, and what adaptation options are available to address the threat;
- identifying vulnerable ecosystems, regions and communities and working to understand the causes of this vulnerability, the potential to increase resilience and the legislative and regulatory frameworks needed to support adaptation;
- developing and evaluating tools for the planning, management and cost-benefit analysis of adaptation actions; and
- Synthesising existing and emerging national and international research on climate change impacts and adaptation and developing targeted communications products for stakeholders.

Promoting nationwide research collaboration

A key role of NCCARF is the development of eight themed research networks, linking researchers and research users in the government, non-government, university and private sector. The networks now comprise a membership of more than 4000 people, with research hubs in every state and territory.

Each network is convened by a leading Australian researcher. Networks take an active role in facilitating the open exchange of information through events and collaborative research activities; synthesising and communicating existing research relevant to the sector and building the capacity of early career researchers.

The networks are instrumental in the development of the Research Plans, their implementation and ongoing review.



NCCARF established a nationwide network linking researchers and research users in the government, university and private sectors.

Governance and structure

NCCARF is based at Griffith University, Gold Coast, and funded by the Australian and Queensland Governments, with eight university research partners.

It is led by an internationally-renowned climate adaptation researcher, Professor Jean Palutikof.

Operations are guided by an Advisory Board comprising a cross-section of influential decision-makers drawn from local, state and federal governments, business and research. This governance structure ensures NCCARF generates the information decision makers most need, and delivers it in the most effective and accessible manner.

For more information:

To find out more about NCCARF research and activities or get involved in the research networks visit our website at www.nccarf.edu.au

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