## NCCARF Highlights: Promoting excellence in adaptation



### **NCCARF** Research Programs

# Delivering a portfolio of research to support climate change adaptation in Australia

One of NCCARF's primary aims is to deliver a suite of research projects that provide the information needed to adapt to climate change.

NCCARF manages two research programs: the Australian Research Grants Program (ARGP) and the Synthesis and Integrative Research program (SIR), with a combined value of almost \$39 million. Both programs are designed to build the knowledge needed by decision makers in government and in vulnerable sectors and the community to adapt to climate change.

#### The Programs

#### **The Adaptation Research Grants Program**

The focus of ARGP projects is to address priority research questions identified in National Climate Change Adaptation Research Plans (NARPs) by carrying out new research. These NARPs are completed by a writing team of researchers and end users following extensive consultation and review by the wider community, in a process managed by NCCARF.

The ARGP is a \$34 million program focused on delivering research in 9 theme areas (see Table 1), and NARPs have been completed for each of these themes. Australian Government funding of \$27 million has been augmented by \$7 million leveraged through investment by the Fisheries Research and Development Corporation (into the Marine Biodiversity theme), the National Health and Medical Research Council (into the Human Health theme) and the National Water Commission (into the Freshwater Biodiversity theme).

# The Synthesis and Integrative Research Program

The \$4.5 million Synthesis and Integrative Research (SIR) program draws together existing information relevant to key topics in climate change adaptation to address issues or research needs identified by end users. The focus is on bringing together existing knowledge from a variety of sources and disciplines to support decision-making.

NCCARF has commissioned, and now manages, research valued at almost \$39 million. Projects include:



'The role and capacities of private sector development institutions in urban climate change adaptation.'



'Assessing the potential for and limits to, insurance and market based mechanisms for encouraging climate change adaptation.'



'Living with floods - key lessons from Australia and abroad.'

#### Research underway

At March 2012, all of the ARGP funds and most of the SIR program funds have been committed and 140 projects are underway or have been completed. This includes 96 ARGP projects (Table 1) and 44 SIR projects (Table 2).

This represents a substantial body of research and a significant investment in building capacity to address the challenge of climate change.

Projects are conducted by leading Australian researchers and importantly, undertaken in close collaboration with relevant end-users. The research partnerships formed through these programs include personnel from 33 universities, 61 Commonwealth, state and local government entities and 25 private institutions. The programs have also attracted substantial additional cash or in-kind contributions.

NCCARF's research covers the length and breadth of Australia, with study sites located in all states and territories. Where activities are focused on a particular region or locality, the project teams must also demonstrate how the results of their research can be applied nationally.

The research funded through NCCARF is targeted at the needs of end users. Research efforts are shaped and supported by substantial involvement of end users throughout the project life cycle, from inception to information dissemination.

NCCARF works closely with researchers to ensure that their findings, implications and recommendations are provided in ways that are easily accessible to end users. Communication to the research community will include conference publications, seminars and articles in scientific journals.

Although NCCARF strongly supports research results being published in peer reviewed academic literature, we also recognise the substantial time lag from investment to publication. NCCARF invests significantly in its own independent peer review and communication processes to ensure results are available sooner and to a wider audience.

#### **Access our research**

The results of some projects are now starting to become available.

New information is delivered to a range of end users in the form of fact sheets, workshops and information sessions.

Research reports and information products will be made available on the NCCARF website at www.nccarf.edu.au

Table 1. Breakdown of the 96 ARGP Projects funded in each of nine theme areas.

Adaptation Research Grants Program Research by theme	Projects funded
Freshwater Biodiversity	9
Emergency Management	11
Human Health	7
Marine Biodiversity and Resources	17
Settlements and Infrastructure	15
Social, Economic and Institutional Dimensions	17
Terrestrial Biodiversity	9
Primary Industries	3
Adaptation in Indigenous Communities	8

Table 2. Synthesis and integrative research projects are contributing to knowledge in 17 key areas.

#### Synthesis and Integrative Research Program Key Research Areas

**Adaptive Capacity** 

**Historical Case Studies** 

Forest Vulnerability

Coastal Ecosystems Response to Climate Change

Learning from Regional Climate Analogues

Limits to Adaptation

Flooding in Australia

Impacts of Climate Change

Overcoming Barriers To Adaptation

Uncertainty in Climate Change Science – the Implications for Adaptation

**Food Security** 

Communication

Systems Thinking to Support Decision Making

Web-based Tools for Adaptation

Adaptation in Industry and Business

**Economics of Adaptation** 

Adaptation and Mitigation: Avoiding Unintended Consequences