

Climate Change, Communities and Environment:

Building research capability to identify climate change vulnerability and adaptation options for South Australian landscapes

PREMIER'S SCIENCE AND RESEARCH FUND 2009

This project brings a talented group of researchers together to plan for adaptation to climate change in regional South Australia.

We will identify those land use practices and conservation areas that are most at risk from adverse effects of climate change and identify adaptation strategies and policy options to support planning and implementation by regional natural resource management agencies. In so doing we will identify the management investments that get the best improvement in natural resource condition while looking after jobs and services for the regional community.

This is a \$3 million project with contributions from seven organisations.

- University of Adelaide
- CSIRO Climate Adaptation Flagship
- South Australian Research and Development Institute / Primary Industry and Resources
- Department of Water, Land and Biodiversity Conservation
- Department for Environment and Heritage
- SA Murray-Darling Basin Natural Resources Management Board
- Eyre Peninsula Natural Resources Management Board

Our intention is to focus initially on the SA Murray-Darling Basin and Eyre Peninsula NRM regions as a way of directing the outcomes from our research and developing our capability.

The research team aims to assess the impacts of a range of climate adaptation options through:

- Modelling biophysical impacts including water, carbon, nutrients, and biodiversity under changed climate conditions,
- Quantifying the economic and social impacts such as income, jobs, and food and energy security,
- Provide alternative, spatially-explicit policy and management options which increase resilience and reduce climate change vulnerability of our regional social-ecological systems.

We expect to develop the understanding, expertise and tools that result in more evidence based planning and implementation of regional NRM. The net result will be more cost effective conservation and more resilient, viable regional communities.

The Project will employ two Post Doctoral Fellows together with a Project Officer located in each of the two NRM study regions.

The University of Adelaide is the project agent. An Advisory Group of senior representatives from the two NRM regions, independent NRM consultants and a senior ecological researcher will provide advice to the Project Leader and Research Team. The Project Leader, Prof Wayne Meyer will work with a Partner Management Group to deliver the project. Annual reports will be complemented with a vigorous communication and publication effort.