

INTEREST STATEMENT: IAN MACADAM

I have been a member of CSIRO Marine and Atmospheric Research's Climate Change Impacts and Risk Stream since January 2005. Prior to that, I was employed by the UK Met Office.

I first became interested in problems relating to the integration of weather forecasts and society while at the Met Office. Many users of meteorological services appeared to demand deterministic weather forecasts at higher spatial resolution and longer forecast lead times than service providers could generate. At the same time they seemed to find it difficult to make use of the probabilistic forecasts that were being produced.

However my primary interest in WAS*IS stems from my climate impacts work at CSIRO. Often the deliverables for the projects that I am involved in are projections of future climate conditions describing changes in the state of the environment. These projections generally include information about uncertainty. For example common outputs are ranges of likely temperature change in °C, ranges of likely percentage changes in precipitation and ranges of likely values of 1 in 100 year return levels for coastal sea levels in metres. Part of my motivation in my role at CSIRO is the thought that the existence of such information is fundamental to society's ability to adapt to future climate conditions. I am therefore curious as to how the use of uncertain projections describing the future state of the environment to society's decision makers can be maximised. I have been working in the field of climate impacts for less than two years. However, through interactions with researchers and consultants, I have already become aware of two major obstacles to the use of these projections by decision makers:

- 1) The projections describe changes in the state of environment but it is the impact of these changes on human activity that many decision makers are interested in.
- 2) Researchers do not always express uncertainty in projections in a way that can be used by decision makers. Furthermore different types of decision maker activities, such as risk screening and in-depth risk management, appear to require different expressions of uncertainty.

I am hoping that these issues will be discussed at the WAS*IS workshop and that the workshop will increase my understanding of how projections describing the future state of the environment can be incorporated into decision making. I am presently a member of a team that is in the early stages of undertaking an "integrated assessment" of climate change impacts for part of the Western Port region of Victoria and hope that my involvement in this project will compliment knowledge acquired at the WAS*IS workshop.