

# WENTWORTH GROUP

OF CONCERNED SCIENTISTS

Mr Peter Cosier, Dr Richard Davis, Prof Tim Flannery FAA, Dr Ronnie Harding, Prof Lesley Hughes,  
Prof David Karoly, Prof Hugh Possingham FAA, Mr Robert Purves AM,  
Dr Denis Saunders AM, Prof Bruce Thom AM, Dr John Williams.

## **Wentworth Group submission to the Inquiry into recent trends in and preparedness for extreme weather events**

Over the last fifty years trends in extreme weather events in Australia show increases in hot days, heavy rainfall events, hail events, very high fire danger and reductions in cold extremes. It is predicted these trends will continue due to global climate change and that the magnitude of these changes will increase. Small changes in mean climate lead to larger changes in extremes.

These trends point to the potential for very serious negative impacts on the condition of our natural resources (soil, water, biodiversity and coastal zone) over the period to 2070 and beyond. It is extreme events that cause the greatest damage to our natural resources, not gradual change.

These impacts may in turn mean our natural resources are unable to provide the services we rely on. Subsequently the ability of our society to maintain its current form will, at a minimum, be compromised.

Our natural resources, their condition, extent and how they interact have evolved in response to the historical long-term climate and the extreme weather events that were part of it. They have subsequently developed a capacity to deal with the shocks of these extreme weather events and in many cases have incorporated these shocks as a critical part of maintaining a healthy system.

Overdevelopment and exploitation of our natural resources means, however, in many cases our resources and the ecosystems they support no longer have the capacity to recover from the extremes of the current climate.

Our failure to effectively manage natural resources in a way that maintains their capacity to deal with existing extreme weather events raises serious questions about our ability to manage these resources in the future as the climate continues to change rapidly.

If we want our natural resources to be able to provide the services we require in the long term, we must take action now to ensure they are in a suitable condition to deal with the challenges of extreme weather events associated with climate change.

There is already action underway in some sectors but our overall preparedness is inadequate.

Key steps in improving our preparedness include:

- Continued national and international action to reduce greenhouse gas emissions
- Use the best available science to develop and implement legislation, and do planning at the right landscape scale to ensure our natural resources continue to provide the services we require. This process will need to resist the lobbying of those vested interests that seek to over-exploit this continent's natural capital.
- Identify and manage barriers to adaptation
- Develop a set of national environmental accounts to monitor change and guide action
- Start these actions now