

# Bushfire CRC Update

## → Climate change impacts on fire

*Weather history points to changing bushfire seasons*

- ▶ Fire and land management agencies in south eastern Australia will be able to better plan for changes in the severity and timing of bushfire seasons following the release of new research on possible climate change impacts.

Researchers at CSIRO used valuable historical data from Australian Bureau of Meteorology research supported by the Bushfire Cooperative Research Centre to model the potential changes in fire weather over southeast Australia under climate change scenarios.

Bushfire CRC chief executive officer Kevin O'Loughlin said the research was a welcome addition to the debate on the potential impact of climate change and would help refine ongoing related research within the Bushfire CRC.

"The cooperative work on understanding the historical data being undertaken by the Bureau for the Bushfire CRC's fire agency partners is invaluable," Mr O'Loughlin said.

"We have extensive meteorological records but they hadn't been linked with the fire danger index or major fire events. This level of historical information will help improve the climate change modelling of future fire seasons.

"Fire-fighting and land management agencies will now be able to better prepare for the long-term impact



of climate change. If climate change means that bushfires could become an even more regular feature on the landscape then planning must begin on how best to allocate resources to fire prevention, land management and fire fighting."

### KEY FINDINGS

- The study looked at fire weather risk in New South Wales, Victoria, South Australia and Tasmania
- The study looked at weather records from 1974-2003 to generate climate change scenarios for 2020 and 2050.
- Fire danger indices were then calculated for 2020 and 2050.
- The number of very high and extreme fire weather days could increase between 4-25 percent by 2020 and 15-70 percent by 2050 across parts of south eastern Australia.
- The changes would be greatest in the inland and relatively less along the coast and in Tasmania.
- Higher fire weather risk in spring, summer and autumn will shift periods suitable for prescribed burning more towards winter.

### ABOUT THE PROJECT

Key people

- The research was led by Dr Kevin Hennessy at the CSIRO Division of Marine and Atmospheric Research at Aspendale, Victoria.
- Co-authors were Bushfire CRC researchers Dr Chris Lucas and Dr Neville Nicholls from the Australian Bureau of Meteorology.

Further Outcomes

- Dr Kevin Hennessy will speak at the joint AFAC/ Bushfire CRC Annual Conference in Melbourne, 10-13 August 2006.
- The Minister for the Environment and Heritage, Mr Ian Campbell, released the report on 14 February, 2006. His media release can be found at: <http://www.deh.gov.au/minister/env/2006/mr14feb06.html>