Submission No 459

INQUIRY INTO MANAGEMENT OF PUBLIC LAND IN **NEW SOUTH WALES**

Faculty of Agriculture and Environment The University of Sydney Organisation:

Name: Prof Mark Adams

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Professor Mark Adams

Dean, Faculty of Agriculture and Environment

GPSC's

28 September 2012

Ms Madeleine Foley Director, GPSC 5 Legislative Council Parliament House Macquarie Street SYDNEY NSW 2000

Dear Ms Foley

Re: Public Land Management Inquiry

Thank you for the opportunity to make a submission to this important Inquiry. I will restrict my comments to just two areas: fire management and water management.

Fire management

With my colleague Dr Peter Attiwill of the University of Melbourne, I authored a book on this subject (*Burning Issues*) that was published by CSIRO Press in 2011. I hope the committee members have the time to read it as it covers several key issues in land management: water, carbon and fire risks.

I will not go over all the ground covered in my book nor will I attempt a précis. Instead, I am attaching a copy of a few of the chapters.

I do not back away from the hard-hitting comments in the Appendix to Chapter 7 – the dire situation in NSW is a direct result of political interference in the business of fuel reduction burning. It is a matter of public record that NSW lags other states to a very large degree when it comes to the sensible, and easy to understand, use of fuel reduction fires in protecting its citizens (especially rural citizens), and its ecosystems and the services they provide. Much of the problem can be traced to the fact that, in NSW, legislation gives extraordinary power to an interest group – the Nature Conservation Council – in the determination of where and when fuel reduction fires will be set. No other interest group has such power – not rural landowners, not groups such as the Farmers Federation.

I strongly urge the committee to recommend as a matter of urgency, the repeal of the legislated role of the NCC in Bushfire Management Committees.

I would also draw the attention of the committee to the chapter in the book on fire and

Faculty of Agriculture and Environment Biomedical Building C81 The University of Sydney NSW 2006 Australia

T +61 2 8627 1010 E agriculture.dean@sydney.edu.au sydney.edu.au ABN 15 211 513 464 CRICOS 00026A



ecological processes (also attached). In particular the benefits of fuel reduction fires for water and for carbon sequestration.

Water Management

My comments here stem from my long record of research into trees and their response to drought, including redgums and coolabahs. I am happy to provide copies of some of my papers (see publication list) upon request.

Unfortunately, much of the media hype regarding the health of trees in the MDB is just that - hype with no substance. The reality of the recent drought in eastern Australia was that very few trees died. Despite academic papers predicting 'catastrophes', it has not happened. Trees die and regenerate in every drought/flood cycle and most recently the breaking of the drought saw wholesale regeneration. As has happened many times in the past, the regrowth can be so thick in some areas as to defy efforts to walk through it.

My point here is simply to alert the committee to the greatly exaggerated claims of risks to the redgum forests from drought or from many other supposed threats. These forests are extraordinarily resilient. Sensible management is of course a requirement for the forest's sustainability, but that does not mean that management regimes which allocate water to irrigation and other uses are necessarily bad for the forest. Natural cycles of drought and flood will continue and so will the forest.

I again thank you for the opportunity to make this submission.

Yours faithfully,

Mark Adams



Books

 Burning Issues: Sustainability and Management of Australia's Southern Forests. (2011). Adams MA and Attiwill PM 220 pp. CSIRO, Melbourne.

Journal Articles

- Adams MA, Cunningham SC and Taranto M (2012). A critical review of effects of wildfire and management on fuels and ecological attributes of high altitude ecosystems of south-eastern Australia. Forest Ecology and Management (Accepted).
- 3. Adams MA (2012). Mega-fires: tipping points and management of forests and woodlands with special reference to Australia and the USA. *Forest Ecology and Management* (Accepted).
- Attiwill PM and Adams MA (2012). Mega-fires, inquiries and politics in the eucalypt forests of Victoria, south-eastern Australia. Forest Ecology and Management (Accepted).
- 5. Pfautsch S and Adams MA (2012). Water flux of *Eucalyptus regnans*: defying summer drought and a record heatwave in 2009. *Oecologia* (In Press).
- 6. Buckley TN, Turnbull TL, and Adams MA (2012). Simple models for stomatal conductance derived from a process model: cross-validation against sap flux data. *Plant, Cell & Environment* (In Press).
- 7. Buckley TN, Turnbull TL, Pfautsch S, Gharun M and Adams MA (2012). Differences in water use between mature and post-fire regrowth stands of subalpine *Eucalyptus delegatensis* R. Baker. *Forest Ecology and Management* 270, 1 10.
- 8. Buckley TN, Turnbull TL, Pfautsch S and Adams MA (2011). Nocturnal water loss in mature subalpine *Eucalyptus delegatensis* tall open forests and adjacent *E. pauciflora* woodlands *Ecology and Evolution*, 1, 435–450.
- Pfautsch S, Keitel C, Turnbull TL, Braimbridge MJ, Wright TE, Simpson RR, O'Brien JA and Adams MA (2011). Diurnal patterns of water use in *Eucalyptus* victrix indicate pronounced desiccation-rehydration cycles despite unlimited water supply. *Tree Physiology* 31, 1041 – 1051.