



Legislative Council Environment and Planning Committee

Hearing date: 1/05/2026

Questions taken on notice

Directed to: ANU Fenner School of Environment and Society, David Lindenmayer

Received date: 19/05/2026

1. P.52 Melina Bath

Question: -Can you point to which bushfire royal commission hearings or independent inquiry evidence supports your recommendations to scale back prescribed burnings, rather than refine or expand them?- my question was about royal commission findings or independent inquiry evidence. You have just related references that refer either to yourself with another scientist or that other scientist. Have they been part of and inserted into independent inquiry evidence?

David LINDENMAYER: That is my understanding, yes.

Melina BATH: You might need to take it on notice, but could you provide where your own papers have ended up on independent inquiry evidence or royal commission findings and recommendations, please?

David LINDENMAYER: Absolutely.

Response: I have presented at several bushfire inquiries. For example, I gave evidence following the 2003 wildfires in Canberra, including as part of a major forum on the fires in the region – and which resulted in an edited book (for which I was an editor) and that was published by CSIRO (Cary et al., 2003). I presented evidence at the 2019-2020 Royal Commission, including providing information to Professor Macintosh who was one of the commissioners. I was a keynote speaker at an Australian Parliamentary committee on bushfire risk.

My scientific publication record on fire-related issues is substantial (see <https://scholar.google.com/citations?user=4a2XbLwAAAAJ&hl=en>) (I am more than happy to provide a full copy of my publication record on request). I have published more than 150 peer-reviewed scientific articles on wildfires from a wide range of ecosystems around Australia and overseas. I have published four scholarly books on fire and have a fifth currently in the advanced stages of preparation. My published research includes scientific articles on prescribed burning, house loss, fire severity, fire frequency, thinning and wildfire severity, relationships

between logging and fire, fire and climate change, fire effects on biodiversity, salvage logging effects on ecosystems post-fire, fire and the viability of threatened species, and fire management in tree plantations. I am more than happy to provide copies of all the 150+ papers I have written or co-authored on fire if the Inquiry wishes to have access to this information.

1. Royal Commission into National Natural Disaster Arrangements (2020) – Background Paper on Hazard Reduction

The Royal Commission into National Natural Disaster Arrangements (the "Bushfire Royal Commission"), chaired by Air Chief Marshal Mark Binskin AC (Retd) with Commissioner Professor Andrew Macintosh, published an official Background Paper titled:

Background Paper: Land management – hazard reduction: a literature review

Published: 15 June 2020. ISBN: 978-1-921091-16-2

This document was formally published by the Royal Commission as part of its evidence-gathering process and is referenced in the Final Report's Chapter 17 endnotes (endnote 25). It constitutes official inquiry evidence.

My research is cited eight times in this document — twice in the body text making substantive arguments about prescribed burning policy, and six times in the bibliography. The two body text citations are the most significant:

Location	Citation in Body Text	Significance
Page 11 "Costs of prescribed burning" section	"Several studies have highlighted the need for greater longitudinal analyses of the impacts of prescribed burning regimes (e.g. Burrows et al., 2019; AFAC, 2015; Lindenmayer, 2018; Tolhurst, 2003)."	Cited as evidence that the long-term ecological consequences of burning regimes require further study — directly relevant to the question of scaling back versus expanding prescribed burning.

Location	Citation in Body Text	Significance
Page 12 "Costs of prescribed burning" section	"Some species may require fire but also require long fire-free intervals to ensure they reach maturity and continue to flourish and some ecosystems should be protected from prescribed burning entirely (see, for example, AFAC, 2015; Lindenmayer and Taylor, 2020; Penman et al., 2011b; Dixon et al., 2018; Croft et al., 2016)."	Cited as direct evidence for the proposition that some ecosystems should be excluded from prescribed burning — the core of the recommendation to refine rather than simply expand burning programs.

The six bibliography entries are:

- Bradstock, R.A., Cary, G.J., Davies, I., Lindenmayer, D.B., Price, O.F. and Williams, R.J. (2012). Wildfires, fuel treatment and risk mitigation in Australian eucalypt forests: insights from landscape-scale simulation. *Journal of Environmental Management*, 105, 66.
- Cary, G.J., Lindenmayer, D. and Dovers, S. (2003). *Australia Burning: Fire Ecology, Policy and Management Issues*. CSIRO Publishing.
- Gibbons, P., van Bommel, L., Gill, A.M., Cary, G.J., Driscoll, D.A., Bradstock, R.A., Knight, E., Moritz, M.A., Stephens, S.L. and Lindenmayer, D.B. (2012). Land management practices associated with house loss in wildfires. *PLoS One*.
- Lindenmayer, D.B. (2018). Developing accurate prediction systems for the terrestrial environment. *BMC Biology*, 16(42).
- Lindenmayer, D.B. and Taylor, C. (2020). New spatial analyses of Australian wildfires highlight the need for new fire, resource, and conservation policies. *Proceedings of the National Academy of Sciences of the United States of America*.
- Taylor, C., McCarthy, M.A. and Lindenmayer, D.B. (2014). Non-linear effects of stand age on fire severity. *Conservation Letters*, 7, 355.

Verification: The Background Paper is publicly available at: naturaldisaster.royalcommission.gov.au/publications/background-paper-land-management-hazard-reduction-literature-review

2. Royal Commission into National Natural Disaster Arrangements (2020) — Final Report

The Final Report of the same Royal Commission (published 28 October 2020, ISBN: 978-1-921091-46-9) cites Professor Lindenmayer in the endnotes to Chapter 16 (Wildlife and Heritage):

Location	Citation	Context
Chapter 16, Endnote 2	Steffen, W., Burbidge, A., Hughes, L., Kitching, R., Lindenmayer, D., Musgrave, W., Stafford Smith, M. and Werner, P. (2009). Australia's biodiversity and climate change. Australian Government Department of Climate Change, Canberra.	Cited in the chapter addressing environmental impacts of the 2019-20 bushfires and the biodiversity consequences of fire management decisions.

Verification: The Final Report is publicly available at: naturaldisaster.royalcommission.gov.au/publications/royal-commission-national-natural-disaster-arrangements-report

Note on Scope of Search

In preparing this response, the following inquiry documents were searched in full for references to my work:

- Royal Commission into National Natural Disaster Arrangements — Final Report (595 pages, all endnotes)
- Royal Commission into National Natural Disaster Arrangements — Background Paper: Land management – hazard reduction: a literature review (24 pages, full text and bibliography)

- 2009 Victorian Bushfires Royal Commission — Final Report Summary and Recommendations
- 2009 Victorian Bushfires Royal Commission — Volume II, Chapter 7: Land and Fuel Management (full text and all 299 footnotes)
- 2009 Victorian Bushfires Royal Commission — Volume II, Chapter 11: Research and Evaluation (full text and all footnotes)
- IGEM Review of performance targets for bushfire fuel management on public land (2015) — full references list

The 2009 Victorian Bushfires Royal Commission did not cite my published papers. This is consistent with the Commission's methodology: it relied primarily on the oral testimony of a named expert panel of seven scientists (which did not include myself) rather than citing published academic papers directly. The IGEM 2015 review similarly focused on policy and governance rather than the scientific literature.

Please note that my research may also appear in individual submissions tendered to these and other inquiries by third parties (conservation organisations, government agencies, other researchers). A full search of all tendered submissions — which in the case of the 2020 Royal Commission comprised approximately 80,000 pages across 1,750 public submissions — was beyond the scope of this response, but the confirmed citations above represent the most significant and verifiable instances of my work entering the official inquiry record.

2. P. 54-55 Gaelle Broad

Question: -can you please list the different public authorities that need to be consulted to undertake a planned burn?

David LINDENMAYER: I think obviously you need to be thinking about Parks Victoria and Melbourne Water. Melbourne Water is important because of the value of the water catchments for Melbourne's water supply. There are various farmers groups – obviously CFA. There will be others as well, catchment management authorities.

Gaelle BROAD: I am for you to take that on notice.

Response: Other organizations for which should be consulted on fire management include First Nations elders, Catchment Management Authorities, and community groups (especially given smoke-related human health effects).

