ACADEMY OF THE SOCIAL SCIENCES IN AUSTRALIA

National Office: 26 Balmain Cr, Acton, ACT
GPO Box 1956, Canberra, ACT, 2601
(02) 6249 1788
info@socialsciences.org.au
www.socialsciences.org.au

Submission to the Royal Commission into National Natural Disaster Arrangements

28 April, 2020

The Academy of the Social Sciences in Australia welcomes the opportunity to contribute to the Royal Commission into National Natural Disaster Arrangements.

The devastating 2019-20 bushfire season profoundly affected communities and ecosystems across Australia and brought into sharp focus the need to proactively mitigate, manage and prepare for the risks associated with changing global climatic conditions.

As noted during the initial Ceremonial Hearing "*disaster response has been one of the most reviewed issues in the history of Australian governance"* with over 240 previous inquiries and reviews into all of which explored consistent themes. It is critically important that we build on these earlier enquiries for the safety and benefit of all Australians.

The Academy emphasises Australia's response and future planning must be informed by the best information and evidence from research across the breadth of intellectual disciplines. Academy Fellows have expertise across all areas of the social sciences and can assist both individually and collectively.

This submission focuses terms of reference:

- **g** (pertaining to land and fire management practices of Indigenous Australians)
- **b** (pertaining to Australia's arrangement for improving resilience and adapting to climate change)
- **f** (pertaining to greater national coordination and accountability)

Before addressing these points, an overarching conclusion suggested by the Academy is that, as human activity causes further climate change, fires, floods, droughts and other disasters occasioning environmental destruction and loss of life and property in Australia will become increasingly severe. As a result, the Academy suggests that it may be more useful for planning purposes to consider and describe these disasters not as 'natural' but as 'predictable disasters.'

Indigenous Land Management

The Academy holds that Indigenous land and fire management rights and practices should be front and centre of Australia's bushfire management planning and response; not least because almost half of Australia's total landmass exists under land rights or native title laws. Similarly, about half of Australia's conservation estate is currently made up of 75 Indigenous Protected Areas.

Further, the Academy strongly suggests that indigenous fire management practices should not be considered 'traditional', as suggested in the Commission's Letters Patent. Systematic burning of country has been carried out by Aboriginal people for tens of thousands of years, and many components of these traditions remain today. However, modern fire management practices overseen by Indigenous Land Councils and related organisations are anything but traditional, involving sophisticated infrastructure, data analytics and technologies.

As context, around 18.6 million hectares of land are estimated to have burnt in the 2019-20 fires. An estimated 451 people lost their lives as a result of being caught in the fires (34 people) or through

ACADEMY OF THE SOCIAL SCIENCES IN AUSTRALIA

National Office: 26 Balmain Cr, Acton, ACT
GPO Box 1956, Canberra, ACT, 2601
(02) 6249 1788
info@socialsciences.org.au
www.socialsciences.org.au

excess smoke inhalation (417 deaths)[1], almost 6,000 homes and other buildings were destroyed, and an estimated 1 billion animals were killed.

By contrast, around 40 million hectares of Australia's tropical savannah burns each year, most in planned, early-season burning and rarely involving loss of life or property or the mass death of animals.

While both the environment and the settlement characteristics are of course very different in Australia's north, the contrast highlights the enormous value of Indigenous knowledge and practice (modern and customary) in managing and reducing the risk associated with fire in Australia.

➔ **The Academy recommends that Australia's land, fire and disaster management plans and systems should be developed with a core focus on effective contemporary Indigenous practices, and that Aboriginal and Torres Strait Islander people are centrally involved in all aspects of planning and implementation.**

Improving resilience and adapting to climate change

Anthropogenic climate change is associated with increased severity of bushfires, floods and other dangerous weather events. In order to mitigate this risk, Australia needs to play its part in global efforts by reducing net greenhouse gas emissions to zero at least by mid-Century if not earlier. There are many approaches to achieving this objective, and the Academy and its Fellows are actively involved in developing proposals for a new, efficient market-based mechanism that could readily be adopted in Australia. While the Academy acknowledges that this proposal is beyond the scope of the Royal Commission, it would welcome any opportunity to engage with the Commission or other officials to expand on the research and ideas.

Australia also has an opportunity to put in place other strategies to ameliorate and adapt to the impact of climate change. These include:

- **Improved capacity for critical incident health and mental health support**, particularly in regional and rural areas, and using telehealth capabilities
- **Development and re-development of resilient infrastructure**, including energy, water and communications infrastructure and physical infrastructure such as schools and roads.
- **Improved urban planning**, including urban green spaces and green belts that can protect or help to mitigate against bushfires, other adverse weather events and climate change.
- **Improved agricultural planning and regenerative practice**, focusing on ensuring continued capacity to produce plant and animal products in lands impacted or likely to be impacted by fires, floods, drought or associated events.
- **Increased ecosystem protections** to better protect and preserve Australia's unique biodiversity.

The Academy understands the significant community, budgetary and political considerations involved in each these areas, and would be pleased to engage further with the

1 Borchers Arriagada, N., Palmer, A.J., Bowman, D.M., Morgan, G.G., Jalaludin, B.B. and Johnston, F.H. (2020), Unprecedented smoke-related health burden associated with the 2019–20 bushfires in eastern Australia. Med. J. Aust.. doi:10.5694/mja2.50545

ACADEMY OF THE SOCIAL SCIENCES IN AUSTRALIA

National Office: 26 Balmain Cr, Acton, ACT
GPO Box 1956, Canberra, ACT, 2601
(02) 6249 1788
info@socialsciences.org.au
www.socialsciences.org.au

Increased capacity for coordination and accountability through research

Improved monitoring and data collection, along with additional empirical and theoretical research will allow Australia's policy makers and emergency services to better understand, predict, manage and respond to bushfires, floods, cyclones and other dangerous weather events.

Australia's research and technology capabilities related to the prediction, management and short-term response to bushfires and related disasters are reasonably well-developed and coordinated through a range of mechanisms. These include the Bushfire and Natural Hazards Cooperative Research Centre, the Australian Institute for Disaster Resilience and other bushfire related research and knowledge hubs.

In contrast, our research capabilities relating to **recovery** from bushfires while diverse are less well integrated and coordinated. This is particularly the case with respect to the social, health and economic recovery of individuals, businesses and communities as well as the recovery of natural ecosystems.

The Academy suggests consideration be given to the establishment of a significant national coordination mechanism for bushfire and natural disaster recovery research. There are several models that could be considered, including the following two options:

- A research division within the National Bushfire Recovery Agency, with appropriate research governance and coordination mechanisms, and ideally with the ability to convene national meetings and symposia and to provide competitive funding to research projects and collaboration activities
- A virtual research institute or network (potentially hosted by one or more universities and/or the CSIRO) tasked with facilitating coordination of research and dissemination of knowledge
- Establishment of a national disaster management policy centre operated independently of Government. This could operate in a similar way to the proposed National Independent Water and Catchment policy centre; established with support of government and/or philanthropic partners, and tasked with catalysing change in fire and disaster planning and decision making. Such a centre would allow development of sustainable and effective policy to help Australia better mitigate and respond to environmental challenges in the future.

The Academy welcomes any questions or comments regarding the content of this submission, along with further opportunities to support the important work of the Commissioners. For further information please contact the Academy's Policy Manager Ms Andrea Horsburgh on 0466 123 178 or by email: andrea.horsburgh@socialsciences.org.au

About the Academy of the Social Sciences in Australia

The Academy was established in 1971 and comprises almost 700 of Australia's leading social scientist, each elected by their peers on the basis of their outstanding contribution to their disciplines or public policy. It is headquartered in Canberra and works to advance the social science disciplines, provide independent and authoritative advice to governments, to increase public understanding and awareness of the social sciences and to facilitate engagement with international social science research initiatives. The Academy is deeply committed to reconciliation with Aboriginal and Torres Strait Islander people. More information is available at www.socialsciences.org.au