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If you are lodging your submission on behalf of a group or organisation, what is the name of the group or organisation?

Your Submission

In your experience, what areas of the bushfire emergency response worked well?
In your experience, what areas of the bushfire emergency response didn't work well?
In your experience, what needs to change to improve arrangements for preparation, mitigation, response and recovery coordination for national natural disaster arrangements in Australia?
Is there anything else you would like to tell the Royal Commission?
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WeirWilliamsonMarkham_RoyalCommission.pdf
Submission to the Royal Commission into National Natural Disaster Arrangements

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Recommendations

1. Acknowledge that Aboriginal people have been erased, made absent and marginalised in previous post-bushfire enquiries. Undertake the reflective work required to identify and address how this happened and why it continues to happen, so as to help identify embed the need for change.

2. Establish clear policy instructions that Aboriginal people—including their histories, knowledges, perspectives, experiences and unique status—be part of the terms of reference and membership of post-bushfire inquiries in the future, across the full suite of concerns that Aboriginal people raise, experience and are responsible for.

3. Establish, with guidelines and regulations, Aboriginal representation on relevant government committees involved in decision-making for the preparation, planning and implementation of natural hazard risk management, including how public sector research monies are allocated.

4. Examine how the acceleration of the return of land governance to Aboriginal peoples relates to the purpose and models of land management of the Federation of Australia, to ensure that regulation and funding is appropriate to the responsibilities and roles that Aboriginal peoples and their organisations hold.
Aboriginal peoples and the 2019–2020 NSW Bushfires

The Terms of Reference of the Royal Commission are to consider and report on changes that must occur at a national level, but that may very well impact on state, territory and local governments, in response to the increased risk of extreme natural weather events due to climate change. We are happy to make a submission to this Royal Commission in which we address key areas of preparation, planning and response to bushfires specifically. In this submission we foreground Aboriginal peoples’ experiences and priorities.

Our submission is largely based on our research publication *Aboriginal peoples and responses to the 2019-2020 Bushfires* (Williamson, Markham & Weir, 2020), and related research expertise. We attach this paper as an Appendix to this submission.

This submission has been broadly structured to respond to a number of areas set out in the Terms of Reference of the Royal Commission. In particular, we respond to Item G ‘any ways in which the traditional land and fire management practices of Indigenous Australians could improve Australia’s resilience to natural disasters.’ However, we entreat that the Royal Commission must consider larger questions of Indigenous peoples involvement in every component of Planning, Preparation, Response and Recovery. We encourage you to activate Item D ‘any relevant matter reasonably incidental to a matter referred to in paragraphs (a) to (c)’ and consider how Indigenous peoples knowledges and perspectives may contribute to a better prepared and more resilient Australia.

Processes and structures

We raise procedural and structural priorities which we ask the Commissioners to take into consideration. Specifically, for reasons set out in our paper (Williamson et al., 2020), the Royal Commission has an imperative to listen to Aboriginal peoples and their organisations in the course of this Royal Commission. This includes involving Aboriginal peoples’ in the Royal Commission itself, in providing expert evidence to the Royal Commission, and in interpreting other evidence provided to the Royal Commission.

Society, law and policy has shifted to recognise and value the distinct role and experiences of Aboriginal people. For example, the Victorian government has set up an Aboriginal advisory group to work alongside the new bushfire recovery agency, in contrast to the omission of Aboriginal peoples’ and their concerns in the 2009 Victorian Bushfire Royal Commission (Williamson et al. 2020, p. 14). Addressing exclusion requires ameliorating discriminatory structures and processes, and supporting and resourcing Aboriginal peoples decision-making authority.

If it has not already done so, we strongly encourage the Royal Commission to attend to this matter. Should the Royal Commission be unable to do so in a meaningful way given the Terms of Reference, we suggest that the Inquiry make recommendations that addresses these important procedural and structural matters to relevant government agencies.
Distinct residents and peoples

In our research publication (Williamson, Markham & Weir, 2020), we sourced and analysed quantitative census data about Indigenous peoples as residents of the 2019–2020 bushfires within a specific ‘bushfire affected area’ in New South Wales and Victoria. We define the ‘bushfire affected area’ as the zone that falls within 15 km of the burnt area. Our research found:

- **One quarter of all Indigenous peoples in NSW and Victoria were directly affected by the bushfires.** Whilst Indigenous peoples make up only 2.3% of the population in NSW and Victoria, they represent 5.4% of people living in bushfire affected areas. Yet despite the significant population presence of Indigenous peoples in these areas, their minority status means they are at risk of being overlooked in bushfire responses and recovery.

- **One in ten children living in bushfire affected areas are Indigenous.** Indeed, over 36% of the total Indigenous population in fire-affected areas are less than 15 years old. This raises serious questions regarding the diverse effects of bushfires on infants and children. Of particular concern are issues of trauma, health, and access to education, housing and family support.

- **The existence of 22 discrete Aboriginal communities in fire affected areas.** Twenty of these are in NSW, with one in the Jervis Bay Territory and one in Victoria. In total, 10% of the total Indigenous population affected by the fires live in these discrete communities. In urban areas, Indigenous people are more likely to live in some locations than others. For example, Indigenous people comprise 10.6% of residents in fire-affected Nowra–Bomaderry, compared with 1.9% of residents in fire-affected Bowral–Mittagong. This spatial variation is indicative of historic and contemporary experiences and priorities and must be accounted for when providing support to Indigenous peoples.

We also mapped the legal rights and interests held by Aboriginal people, as well as communal land holdings, as formally recognised in government legislation. This mapping demonstrates:

- Aboriginal people have experienced land dispossession, with partial redress by governments; and,

- Aboriginal people have distinct, diverse and spatially extensive legal rights and interests in land as First Peoples, including across much of the fire affected area (Williamson et al., 2020, p. 10).

These are rights and interests in land are complex issues, not least because they require navigating the relationship between the laws of the Federation of Australia, the common law, and Aboriginal peoples’ laws and customs (Weir and Duff 2017). This includes the 2019 High Court decision on the value of compensation for the extinguishment or impairment of native title after 1975 (see Dillon, 2019).

In summary, there is a significant presence of Aboriginal people, with unique population profiles, spatially uneven patterns of residence, distinct communities, and holding status as both Aboriginal peoples and as First Peoples who have ongoing legal rights and interests. This sets Aboriginal peoples in a unique position in Australian society and with specific regulatory arrangements with governments, including government policies to partner with Aboriginal communities as part of ‘Close the Gap’ (Department of the Prime Minister and Cabinet, 2019).
Given these findings, the Royal Commission needs to consider the particular circumstances and standing of Aboriginal peoples. Notably, these experiences and interests are relevant across the Royal Commission’s interests in bushfire and natural disaster preparation, planning and response.

Opportunities to learn from and support Aboriginal peoples

In the following section, we outline how Aboriginal peoples can not only contribute to, but lead across preparation, planning and response. This includes bureaucratic structures and processes, as well as in relation to specific topics, such as land management practices, community recovery, cultural and natural heritage, land use planning, the role of volunteers, research priorities and so on.

The framing of the problem

Aboriginal peoples are uniquely placed to make a substantive contribution to understanding the key questions including: what is at risk, and what might be done about it? These framing matters have broad consequences for regulation and resourcing.

For example, Aboriginal people repeatedly identify that the land needs to be foregrounded in bushfire risk mitigation, and that property and life are to be protected within this. This is a practical and meaningful land ethic known as Country, which sets out priorities for decision making (Williamson et al, 2020, p.16; Cavanagh, 2020; Weir et al., 2020). From this perspective ‘the environment’ should not be the third risk priority after life and property, but first. This does not downgrade the protection of people and property but understands that they are not categorically separate and cannot be protected without looking after the environment first. This viewpoint understands that humans live within the environment, as distinct from viewpoints that understand the environment as biodiversity or a place to visit (Weir and Freeman 2019, p.25; Weir, 2016).

With this framing, government and societal attention on environmental issues finds a sharp and meaningful focus, and bushfires, among other natural disasters, risk mitigation can then be better argued for, resourced and understood in relation to other public priorities. This is similar to, but not the same as, the framing being developed by integrated and sustainable approaches to natural hazard risk and resilience.

Aboriginal people also foreground the importance of culture and its inseparable relation nature. For example, Aboriginal people express healing from trauma as a cultural and spiritual process that is inherently tied to land (Fenney, 2009; The Lowitja Institute, 2020). Yet, in community recovery and disaster resilience, the term ‘community’ is often used to assume a single socio-cultural group where people’s individual needs are broadly homogenous and that is conceptually separate to ‘nature’. Without considering the political and cultural contexts that
define the lives of Aboriginal peoples, responses to the bushfire crisis are likely to be inadequate and inappropriate (Williamson et al., 2020).

However, when Aboriginal people foreground culture, their issues can be characterised as discrete issues to a cultural group, rather than understanding the role of culture in decision making for all people. All people have culture. Culturally literacy is central to understanding social values, social change, and to humanise our futures.1

With this framing, cultural issues are not a grab-all tacked onto a list of management concerns, or dismissed as intangible, but can be identified and analysed to understand how they form and inform management. For example, the natural hazard sector has traditionally focused bushfire risk mitigation on the prescribed burning of public lands, however this is changing with policy approaches centred on resilience and community engagement. The foregrounding and analysis of values, assumptions and more enables a wider range of options to consider in risk mitigation. It also addresses serious gaps in the evidence and expertise needed by risk mitigation practitioners (Weir et al., 2019; Lane, 2013).

Strengths and vulnerabilities

Aboriginal people are often cast as vulnerable passive recipients of assistance. This typecasting glosses over the discrimination that underscores Aboriginal peoples’ vulnerability and instead focuses on Aboriginal peoples as a problem to be fixed (Fogarty et al., 2018). For example, given current child removal rates from Aboriginal people, particularly in NSW and Victoria (Brennan, 2018), it is quite reasonable that some Aboriginal families may be fearful and hesitant to engage with family services, putting them at risk of accessing sub-standard support or indeed, not accessing support at all, leading to further risks and vulnerabilities.

The frequently cited vulnerabilities conceal the strengths Aboriginal peoples possess. These include their laws and customs with respect to kin and Country, their cultural knowledge, their knowledge practices, their social networks, as well as their own organisations and land base. Of particular importance in the context of community recovery is understanding and valuing the resilience of Aboriginal peoples. As communities of peoples that have lived through catastrophic change and continue to exist in a settler-colonial society that perpetuates structural inequality, much can be learnt from the resilience of Aboriginal peoples, individuals and communities who are in possession of durable social, cultural and ancestral ties (Tiwari et al., 2019; Williamson, In Press).

It is important to have nuanced understandings of Aboriginal peoples’ experiences of trauma, vulnerability, and strength because catastrophic bushfires do not just reveal, but can also magnify and deepen vulnerabilities in society, which can then lead to vulnerable people

1 See further the Australian Academy of the Humanities https://www.humanities.org.au/advice/8pointplan/
becoming more vulnerable (Lukasiewicz & Baldwin, 2020). If agencies and non-government organisations responsible for leading the recovery from these fires are not well-prepared, they risk inflicting new trauma on Aboriginal communities. This is not ‘special treatment’, rather policy and practice that is fit-for-purpose.

Though imperfect, the National Disability Insurance Agency offers an example of how to engage with Aboriginal people that sets out to respect Country, culture and community, and working with each community’s values and customs to establish respectful, trusting relationships. This demonstrates that a large national agency responsible for administering a complex and long-term policy can set out to embed different ways of working within its structures and recognise the uniqueness of Indigenous peoples.

Fundamentally, though, Aboriginal peoples’ own organisations and leadership need to be supported. For example, two Aboriginal-led responses have emerged to provide direct support to south coast Aboriginal families in New South Wales. These are the joint Illawarra Aboriginal Medical Service and Dr Marlene Longbottom appeal (Wellington, 2020), and the Indigenous Crisis Response and Recovery appeal (GoFundMe, 2020). Central to both of these fundraising initiatives is the importance of culturally appropriate support (Williamson et al., In Review).

Protecting and maintaining rights and interests.

Aboriginal polities have rights and interests arising out of their laws and customs, as recognised through native title and other laws and policies. This includes places and things of value known as ‘cultural heritage’ – such as scar trees, stone arrangements, rock art, and so on – which are often inseparable to Country and are also have State and Federal statutory regulation. Where there is no formal recognition of land ownership, it remains that all fire-affected lands have Aboriginal ownership held and passed down through songlines, languages and kinship networks.

The distinctive nature of these rights and interests means that the 2019-20 bushfires have different consequences for Aboriginal rights-holders than for non-Indigenous landowners. For example, native title lands are inalienable, and cannot be bought, sold, or held individually. The decision of whether to stay and rebuild or sell and move on, is a transaction not applicable to relationships between Aboriginal polities and their Country. In another example, Ngadju people in southern western Australia have recently attracted greater fire agency support because of the importance of keeping the Nullarbor Highway open (Schultz et al. 2020). But, for Ngadju, their fire management is about looking after a suite of landscape values that are not present, and thus not resourced, in a regulatory set up focused on towns rather than Country (Weir and Freeman, 2019).

Clearly, in the immediate term, supporting these interests requires distinct measures. For example, funds and additional support for recovery for farmers and businesses need to also be allocated for Aboriginal peoples’ interests in land that do not fit within these categories. What
is at risk also requires serious consideration, and a considered engagement with the full meaning of Country.

Without specific measures, it is likely Aboriginal peoples will continue to be marginalised in processes that follow major fire events, and thus the learnings and recommendations that arise out of them. Aboriginal people are placed in an undesirable position as they continue to be largely excluded from key emergency management forums and decision-making roles, even though they have distinct legal responsibilities as different to all others.

Cultural burning

The extraordinary public interest in Aboriginal peoples’ burning practices, and its inclusion in this Royal Commission’s Terms of Reference, present a unique opportunity to embed and extend Aboriginal-led cultural burning in southern Australia. Any additional support to implement cultural burning must be led by Aboriginal peoples. This will require significant investments in the training and capabilities of Aboriginal peoples in fire management, as well as equipment and transport needs. This leadership role, and the allocation of resources, will be unsettling for people who had thought these matters were settled and in the past.

There now exists a significant evidence base from northern Australia demonstrating how Aboriginal-led landscape scale burning has significantly decreased hot, late season bushfires (Russell-Smith et al. 2018). These burns have largely been on Indigenous land holdings, and supported by the carbon economy, as well as public sector funding for conservation employment. Aboriginal groups in southern Australia hold significantly less lands and where they do, it is generally small and sparse parcels. These are often held through Local Aboriginal Land Councils in NSW, the partial return of National Parks through the Traditional Owner Settlement Act in Victoria, or other lands that have had some form of recognition such through a Registered Aboriginal Party (Victoria) or through native title. These smaller land holdings and the Indigenous corporations who manage the legal rights and interests are not tailored nor funded to support land management initiatives (Norman 2018). Cultural burns are also undertaken in collaboration with other land authorities, including parks and conservation lands. Promoting cultural burning will require creating regulation that is fit for this context, including addressing the inequity in land management funding between Indigenous corporations and the public sector.

Furthermore, there must be significant investment in the education and training of non-Indigenous land managers and land holders. The reality is that Aboriginal peoples remain excluded from decision making roles throughout much of mainstream Australia, this is certainly the case in Australia’s land management and emergency response sectors. As such, there must be a strong and sustained commit to a meaningful program of educating and reforming land management and emergency services personnel, including in the education of Aboriginal people’s histories, societies, cultures and worldviews. This is a significant structural
issue that without addressing, severely limits the long-term possibilities that landscape-scale cultural burning offers.

Contemporary land management

Significantly, the accelerating return and co-governance of land across Australia is changing how land management is understood, with the public sector adapting to land rights and native title rights and interests, as well as societal change with respect to the presence and value of Indigenous people as land managers. Fundamentally, Weir and Duff (2017) argue that there needs to be a re-think of the land management responsibilities of land holders in relation to:

- Who the landholders are;
- Their legal status (from companies, individuals and government agencies; to now include (largely non-profit and frequently unfunded, or funded for different purposes) communal landholding groups, sometimes represented by special statutory corporate bodies);
- Their land use activities;
- Their priorities, values and world views, including their motivations for being involved in land management;
- Their available resources – including funding, skills, knowledge, and organizational capacity (noting that these changes are not all necessarily diminutions); and,
- The legal rights and obligations they have in respect of the land.

Concomitantly, the public sector and political leadership needs to think closely about what is meant by ‘the public good’ in their policies and programs – that is, who is the public and what do they consider is good? Whilst remote Australia is an emblematic focus of activity by and for Indigenous Australia, the majority of Australia’s Indigenous people live in urban and regional south-eastern Australia (Markham & Biddle, 2018).

Aboriginal voices and Natural Hazard Resilience

The events of the past summer offer, we argue, a once in a generation opportunity to recalibrate the relationship between the state and Aboriginal peoples with respect to natural hazards and natural hazard resilience. There has been unprecedented public interest in cultural burning, but the opportunities must not stop there. These burning practices are a window into Aboriginal peoples’ concerns and interests that are across preparation, planning, and response. As important as cultural burns are, they should not distract from these matters. Indeed, these matters will inform how cultural burns are interpreted and engaged with.

For example, if cultural burning is considered simply a technical burn practice, without consideration of its context nor meaning in relation to kin and Country, then its larger import is missed. At the same time, this narrow scope presents Aboriginal people with the choice of
having their practices co-opted by the public sector on these terms, or choosing not to engage. This is a real possibility. Because of inequities in resources and decision-making authority, Aboriginal people risk sharing their cultural burning techniques with the public sector and then being excluded from it being practiced in their name. This choice faced by Aboriginal people can be addressed by meeting on different terms. Recalibrating relationships and setting new terms has already begun with the emergence of cultural burning collaborations in southeast Australia, but there is much at stake.

There is substantial academic literature about how the government, research, inquiry processes, and others might respond, engage and co-design disaster response strategies and policies. As Hunt (2013, p. 33) demonstrates, successful Indigenous engagement:

...works best in a framework that respects Indigenous control and decision making and supports development towards Indigenous aspirations. Early engagement to enable deliberation about shared goals is necessary, and support for Indigenous governance development and capacity to engage is important. The development of respectful and trusting relationships is key to success. This takes time, people with the right skills and approaches, good communication and leadership by all parties. Clarity about processes, roles and responsibilities, mutually agreed outcomes and the steps to achieve them and a willingness to share responsibility for progress are essential.

We recommend four steps be taken:

1. Acknowledge that Aboriginal people have been erased, made absent and marginalised in previous post-bushfire Inquiries. Undertake the reflective work required to identify and address how this happened and why it continues to happen, so as to help identify and embed the need for change.

2. Establish clear policy instructions that Aboriginal people—including their histories, knowledges, perspectives, experiences and unique status—be part of the terms of reference and membership of post-bushfire inquiries in the future, across the full suite of concerns that Aboriginal people raise, experience and are responsible for.

3. Establish, with guidelines and regulations, Aboriginal representation on relevant government committees involved in decision-making for the preparation, planning and implementation of natural hazard risk management, including how public sector research monies are allocated.

4. Examine how the acceleration of the return of land governance to Aboriginal peoples relates to the purpose and models of land management of the Federation of Australia, to ensure that regulation and funding is appropriate to the responsibilities and roles that Aboriginal peoples and their organisations hold.
These structural and procedural changes are needed to ensure that Aboriginal peoples own voices are centred in understanding what matters, and what might be done in response, in both policy and practice for Australia’s natural hazard resilience.

Reference List


The Lowitja Institute, 2020, We nurture our culture for our future, and our culture nurtures us. Report, The Close the Gap Campaign Steering Committee for Indigenous Health Equality.


The Centre for Aboriginal Economic Policy Research (CAEPR) undertakes high-quality, independent research to further the social and economic development and empowerment of Indigenous people throughout Australia.

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As with all CAEPR publications, the views expressed in this Working Paper are those of the author(s) and do not reflect any official CAEPR position.

Professor Tony Dreise
Director, CAEPR
Research School of Social Sciences
College of Arts & Social Sciences
The Australian National University, March 2020
Aboriginal peoples and the response to the 2019–2020 bushfires

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Abstract

Aboriginal people were among those most affected by the 2019–2020 bushfires in south-eastern Australia. Yet aside from renewed public interest in cultural burning practices, Aboriginal people have received little attention in the post-bushfire response. In this paper, we describe population geography of Aboriginal peoples affected by the 2019–2020 bushfire season in New South Wales and Victoria, and the geography of Aboriginal legal rights and interests in land across these states. We find that over 84 000 Indigenous people, or one-quarter of the Indigenous population of NSW and Victoria, live in the bushfire-affected area. While Indigenous people comprise nearly 5.4% of the 1.55 million people living in fire-affected areas, they are only 2.3% of the total population of NSW and Victoria. Because Indigenous people in the bushfire-affected area have younger population profiles, more than one-tenth of children in the bushfire-affected area are Indigenous, raising the diverse effects of bushfires on infants and children in particular. Aboriginal people also have a variety of distinct and spatially extensive legal rights and interests in land as First Peoples, including across much of the fire-affected area. Presenting a series of quotations from published accounts, we demonstrate that the Aboriginal experience of the 2019–2020 bushfires have been different from those of non-Indigenous Australians.

We go on to show that despite the presence of Aboriginal people and Aboriginal legal rights across the fire-affected area and the distinctiveness of the Aboriginal experience of bushfire disaster, Aboriginal peoples have been marginalised in recent previous public responses to bushfires. Taking the reports of two post-disaster inquiries as examples, we show that Aboriginal peoples have largely been ignored in these important fact-finding and policymaking forums.

We conclude by arguing that the response to the 2019–2020 bushfires must be different. We call for governments to acknowledge the erasure of Aboriginal people in previous bushfire disaster responses; to establish...
terms of reference for the post-2019–2020 bushfire inquiry to prevent this from being repeated; to ensure adequate Aboriginal representation on relevant government committees involved in decision-making, planning and implementation of disaster risk management; and to centre Aboriginal people’s voices in understandings across the bushfire planning, preparation, recovery, and response spectrum.

This paper constitutes a call for the needs, aspirations and perspectives of Aboriginal peoples to be taken seriously in the response to the 2019–2020 bushfires.

**Keywords:** emergency management, bushfires, Aboriginal peoples, natural hazards.
Acknowledgments

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Acronyms

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<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<td>AGIL</td>
<td>Australian Government Indigenous Programs &amp; Policy Locations</td>
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<td>PPRR</td>
<td>Planning Preparation Response and Recovery</td>
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<td>RSA</td>
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**Fig. 1** Areas in NSW and Victoria burnt and affected by fires of 250 ha or more, July 1, 2019 to January 23, 2020

**Table 1** Estimated Residential Population of the fire-affected area by Indigenous status and broad age group, June 30, 2016

**Fig. 2** Population pyramids for the Indigenous and non-Indigenous populations of the fire-affected area, June 30, 2016

**Table 2** Estimated Residential Population of the 10 largest fire-affected towns and portions of cities by Indigenous status, June 30, 2016

**Table 3** Estimated Residential Population of the fire-affected discrete Indigenous communities by Indigenous status, June 30, 2016

**Table 4** Estimated Residential Population of fire-affected towns and cities with an Indigenous population greater than 15% by Indigenous status, June 30, 2016

**Fig. 3** Areas in NSW and Victoria burnt and affected by fires of 250 ha or more, July 1, 2019 to January 23, 2020, and Aboriginal legal interests in land.
Introduction

The impact of the Australian bushfires over the long, savage 2019–2020 summer has been immense. Traditional Aboriginal burning practices became a prominent feature of the narrative surrounding this fire season with academics (e.g. Bowman & Bradstock, 2020; Cumpston, 2020) and journalists (e.g. Allam, 2020b; Fuller, 2020; Nunn, 2020) adding to and amplifying Aboriginal people’s voices (e.g. King, 2019; Morrison, 2020) about the importance of cultural burning as part of fuel management. However, largely absent from this discussion is the fire season’s impact on Aboriginal people as residents, distinct communities and First Peoples, together with the role of Aboriginal people in disaster recovery and planning more generally (cf. Cavanagh, 2020; Funes, 2020; Williamson et al., 2020). This Working Paper begins to address this absence. As governments and others turn their attention to community recovery, including setting terms of reference and making appointments to oversee inquiry processes that will influence long-term planning, Aboriginal people’s needs and priorities must constitute a core and ongoing thread woven through the fabric of the response. It is difficult to see how these responses will support their recovery otherwise.

In this paper we present some initial information about the Aboriginal population that has been affected by the 2019–2020 fires. Using Geographic Information Systems (GIS) methods and data from the 2016 Census of Population and Housing, we present demographic statistics relating to the ‘bushfire-affected area’, which we have defined as including both the fires’ path and immediate surrounding localities in New South Wales (NSW) and Victoria. We also present maps describing some of the legal rights and interests Aboriginal people hold in relation to the bushfire-affected area. After summarising these findings, we draw on the literature to identify research priorities and the importance of these priorities for the responses to the 2019–2020 bushfires. We argue that Aboriginal peoples have interests, responsibilities and contributions to make across the ‘PPRR’ spectrum: planning, preparation, recovery, and response. Further, that deliberate measures need to be taken to ensure these are addressed and supported.

Please note that in this paper we mostly use the term ‘Aboriginal’ rather than ‘Indigenous’, reflecting the preference of many Aboriginal people we work with in the fire-affected area. However, Torres Strait Islander people also live in the affected area, and the census data we use are inclusive of both Aboriginal and Torres Strait Islander peoples. Thus, we use the term ‘Indigenous’ when referring specifically to the population geography data. We also use the term ‘First Peoples’ to denote the specific relationships that some Aboriginal peoples have as Traditional Owners or Traditional Custodians. First Peoples is used strategically to link their status as Traditional Owners with legal interests (both western and Indigenous) in areas affected by fire.

The 2019–2020 bushfires in NSW and Victoria, Indigenous population geography, and Aboriginal legal interests in land and waters

In this section we describe the Indigenous population geography of the 2019–2020 bushfires and illustrate the Aboriginal legal rights and interests in land in the bushfire-affected area. We first use GIS methods and data from the 2016 Census of Population and Housing to describe the number of people who live in what we have defined as ‘the fire-affected area’, their distribution across towns and cities, and age structure. We then go on to map both the fire-affected area and various forms of Aboriginal legal rights and interest in land to demonstrate the diverse and distinctive nature of the Aboriginal rights in the fires’ proximity.
Data and methods

We draw on 2016 Census data and preliminary fire maps to describe the social and spatial distribution of fire-affected communities. Taking an exploratory approach, we overlay census geographies with spatial data outlining the area burnt (‘burnt area data’) to identify the places and people most affected by the fires.

We limit our analysis to NSW and Victoria due to data availability, as only these states had burnt area data available for the whole fire season at the time of writing. Furthermore, the fire data we use spans the period July 1, 2019 to January 23, 2020 – the day that we undertook the quantitative analysis. More research is needed to cover the whole fire season.¹

We have defined a location as ‘fire affected’ if it was located within 15 km of a fire which burnt an area of 250 ha or more. This conservative decision was made to focus on the most extreme effects of the bushfires on the basis that smaller fires, while dangerous, generally do not have the same collective effect on communities as large fires. Clearly, the impacts of these fires are much more substantive. The geographic area scoped does not reflect the wider impact of road closures and smoke or carbon pollution, nor the effects of a small fire burning valuable infrastructure or heritage.² Moreover, there are far-reaching economic, political, sociocultural and environmental impacts that have affected and continue to affect many more people nationally and globally.

Burnt area spatial polygon data was obtained from the Emergency Management Spatial Information Network Australia (EMSINA). New South Wales data were created by the NSW Parks and Wildlife Service (EMSINA Group, 2020). It was captured via operational fire mapping in Rural Fire Service fire control centres. It is described as representing ‘the visible but unrefined external boundary of the fire extent’. Victorian data were produced by the Country Fire Authority, and identified as ‘any fire perimeter that has been mapped since July 1, 2019’ (EMSINA Group & Geoscience Australia, 2020). Because these polygons show the extent of fire boundaries, it is likely that they incorrectly include internal pockets of unburnt areas. This is unlikely to affect our calculation of fire-affected areas.

Bushfire-affected areas were identified by overlaying the polygons larger than 250 ha with 2016 Australian Bureau of Statistics (ABS) Mesh Blocks. Mesh Blocks are the smallest geographical unit at which the ABS make census data available, and typically either contain no dwellings or around 30–60 dwellings. Any Mesh Block located within 15 km of a burnt area was designated as ‘fire affected’. The list of fire-affected Mesh Blocks was imported into the ABS’ (2020) TableBuilder software as a custom geography for the purpose of tabulating the population of affected areas, as counted in the 2016 Census of Population and Housing.

Census counts of the population within affected areas were tabulated on the basis of ‘place of usual residence’. This means that a person is identified as being resident in a fire-affected area if they lived or intended to live there for six months or more in 2016. Notably, this definition excludes temporary visitors such as tourists and holiday-home owners, who can be a considerable portion of the population of some affected areas during summer. Hugo and Harris (2013, p. 15), for example, estimated that in peak times tourists and second-home owners account for 20%, 32% and 25% of the population of East Gippsland, Eurobodalla and Shoalhaven shires respectively. We do not attempt to estimate the effects of the bushfires on temporary visitors or holiday-home owners here, except to acknowledge that additional people were present in the fire-affected area.

¹ Indeed, one of the authors of this paper was evacuated from their home after January 23, 2020.
² There is a need for further research to investigate an appropriate geographical scope for determining the ‘fire affected’ status of regions. This has both policy implications (in terms of the targeting of government assistance) and research implications (in terms of understanding the extent of fire impacts). Survey research suggests that the impacts of the 2019–2020 fire season have been more diffuse and far reaching that the extreme impacts we have modelled in this paper (Biddle et al., 2020).
It is well-established that a considerable proportion of the Indigenous population is not counted in the census (ABS, 2017b; Taylor & Biddle, 2010). Consequently, unadjusted census tables will underestimate the Indigenous residential population. Thus, we have inflated census counts to adjust for undercount by using age- and sex-specific Indigenous and non-Indigenous undercount rates. These undercount rates were derived by comparing 2016 Census counts with the 2016 Estimated Residential Population (ERP) for NSW. We have not attempted to account for population change since the 2016, year for which Indigenous ERPs were published by the ABS. Therefore, our population estimates should be considered accurate as of 30 June 2016.

Towns and city boundaries are based on the 2016 Urban Centres and Localities geography produced by the ABS (2017a). Discrete Indigenous community names and locations were adopted from the Australian Government Indigenous Programs & Policy Locations (AGIL) database (Department of Human Services, 2019). While this database reflects Australian Government service delivery patterns rather than discrete communities’ locations per se, it provides a useful approximation for discrete communities and is used ‘as is.’

In the second part of this section, we overlay our maps of the burnt area and the fire-affected area with various layers indicating different regimes of Aboriginal legal rights and interest in land. Spatial data relating to different Aboriginal interests in land were retrieved from various state and federal government departments and statutory authorities. This second map of the impact of the fires on land in which Aboriginal peoples hold legal rights is intended to be illustrative rather than comprehensive. It does not include the entire array of rights, interests and agreements including with regard to cultural heritage, conservation joint management, and negotiated agreements such as those provided for by the Indigenous Land Use Agreement mechanism in the Native Title Act 1993.

The population geography of the fire-affected area in NSW and Victoria

The fire data document that over 6 500 000 ha were burnt by fires of greater than 250 ha in Victoria and NSW between July 1, 2019 and January 23, 2020. Fig. 1 shows that burnt areas were mostly concentrated in seven regions: NSW North Coast from Foster to the Queensland border; from the NSW Central Coast to the Blue Mountains; southwest of Sydney to the Southern Highlands; much of the South Coast of NSW to Bega; the Snowy Mountains; East Gippsland; and the alpine region of Victoria south of Mount Buffalo. There were also dozens of other smaller but still significant fires across the two states. Our inclusion of a 15 km buffer zone around this burnt area results in our defined fire-affected area of 26 800 000 ha.

Table 1 shows the ERP of the fire-affected area. Over 84 000 Indigenous people and 1.47 million non-Indigenous people are estimated to live in the fire-affected area in NSW and Victoria. This is a considerable number and indicates the vast scale of necessary disaster response. Furthermore, a very considerable proportion of the Indigenous population has been affected. More than one-quarter of the whole Indigenous population of NSW and Victoria live in the fire-affected area, while only one-tenth of the whole non-Indigenous population of those states live in the fire-affected area. Put differently, Indigenous people comprise nearly 5.4% of the 1.55 million people living in fire-affected areas of NSW and Victoria, but only 2.3% of the total population of NSW and Victoria. They are thus, on a proportionate basis, more highly represented in the residential populations in the fire-affected area.

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3 We use this database rather than the Community Housing and Infrastructure Needs Survey (CHINS) as the geocoded community locations in the CHINS data are not accurate enough for use in this study.
Fig. 1  Areas in NSW and Victoria burnt and affected by fires of 250 ha or more, July 1, 2019 to January 23, 2020

Sources: Data from EMSINA (burnt area data); ABS (2016 Census of Population and Housing); Department of Human Services (AGIL).
Table 1  Estimated Residential Population of the fire-affected area by Indigenous status and broad age group, June 30, 2016

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Indigenous</th>
<th>Non-Indigenous</th>
<th>Indigenous %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>10 279</td>
<td>82 170</td>
<td>11.1</td>
</tr>
<tr>
<td>5–14 years</td>
<td>20 161</td>
<td>176 629</td>
<td>10.2</td>
</tr>
<tr>
<td>15–29 years</td>
<td>21 808</td>
<td>235 755</td>
<td>8.5</td>
</tr>
<tr>
<td>30–64 years</td>
<td>27 657</td>
<td>657 692</td>
<td>4.0</td>
</tr>
<tr>
<td>65 years or more</td>
<td>4 284</td>
<td>317 612</td>
<td>1.3</td>
</tr>
<tr>
<td>Total</td>
<td>84 189</td>
<td>1 469 859</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations from 2016 Census of Population and Housing (ABS 2020) and 2016 ERP (ABS 2017b).

As Table 1 and Fig. 2 show, the age distribution of the Indigenous and non-Indigenous populations in the fire-affected areas are remarkably different. The largest five-year age cohort for the Indigenous population is that aged 5–9 years, while the largest cohort of the non-Indigenous population is that aged 55–59 years. Over 36% of the Indigenous population are less than 15 years old, while only 5% are 65 years old or more. In contrast, only 18% of the non-Indigenous population are younger than 15 years old, and 22% are at least 65 years old.

When considering the composition of the population, the data show that while 5.4% of all people in the fire-affected area identify as Indigenous, more than one in ten children in the fire-affected area are Indigenous. Specifically, 11.1% of infants and pre-school aged children and 10.2% of children aged 5–14 years are Indigenous. In contrast, only a very small proportion of the retirement age population (65 year or more) in the fire-affected area are Indigenous (1.3%).

The Indigenous population is unevenly distributed within the fire-affected area. Table 2, for example, shows the 10 largest towns and portions of cities affected by fires. Indigenous people comprise 10.6% of residents (or 3370 Indigenous people) in fire-affected Nowra–Bomaderry, compared with 1.9% of residents (or 421 Indigenous people) in fire-affected Bowral–Mittagong. Indigenous people are also significantly represented as residents in suburban areas, for example comprising 4.6% of residents (or 21 440 people) in fire-affected parts of Newcastle, the Central Coast and Sydney.

There are also 22 discrete Indigenous communities in the fire-affected area, as listed in Table 3. The needs of communities are likely to be quite different in discrete communities where Indigenous people generally form the majority of the population. Twenty of these communities are in NSW, and many relate to former reserves and missions where the land was transferred to Local Aboriginal Land Council ownership following the passage of the Aboriginal Land Rights Act 1983 (NSW). Lake Tyers is the only discrete Indigenous community within the fire-affected area in Victoria, while Wreck Bay is located in Jervis Bay Territory. In some instances the population statistics for discrete Indigenous communities have not been separated from adjacent towns, and we have identified them together in Table 3. In Table 4 we list six towns in the fire-affected area that are not discrete Indigenous communities according to the AGIL database, but at least 15% of the population identifies as Indigenous. The cumulative Indigenous population of the towns listed in Table 3 and Table 4 is 8600, or around 10% of the Indigenous population of the total fire-affected area. Thus, only a small minority of the Indigenous population of fire-affected areas live in discrete Indigenous communities or towns with a high proportion of Indigenous residents.
Fig. 2  Population pyramids for the Indigenous and non-Indigenous populations of the fire-affected area, June 30, 2016

Source: Authors' calculations from 2016 Census of Population and Housing (ABS 2020) and 2016 ERP (ABS 2017b).
Table 2  Estimated Residential Population of the 10 largest fire-affected towns and portions of cities by Indigenous status, June 30, 2016

<table>
<thead>
<tr>
<th></th>
<th>Indigenous</th>
<th>Non-Indigenous</th>
<th>Indigenous %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newcastle</td>
<td>9360</td>
<td>176 668</td>
<td>5.0</td>
</tr>
<tr>
<td>Central Coast (portions of)</td>
<td>8346</td>
<td>132 002</td>
<td>5.9</td>
</tr>
<tr>
<td>Sydney (portions of)</td>
<td>3734</td>
<td>126 138</td>
<td>2.9</td>
</tr>
<tr>
<td>Maitland</td>
<td>4895</td>
<td>73 624</td>
<td>6.2</td>
</tr>
<tr>
<td>Port Macquarie</td>
<td>2158</td>
<td>44 134</td>
<td>4.7</td>
</tr>
<tr>
<td>Nowra - Bomaderry</td>
<td>3370</td>
<td>28 326</td>
<td>10.6</td>
</tr>
<tr>
<td>Blue Mountains</td>
<td>1034</td>
<td>29 286</td>
<td>3.4</td>
</tr>
<tr>
<td>Cessnock</td>
<td>2188</td>
<td>20 357</td>
<td>9.7</td>
</tr>
<tr>
<td>Bowral–Mittagong</td>
<td>421</td>
<td>21 551</td>
<td>1.9</td>
</tr>
<tr>
<td>Forster–Tuncurry (inc. Cabarita)</td>
<td>1291</td>
<td>19 027</td>
<td>6.4</td>
</tr>
</tbody>
</table>

Note: Only people resident in the fire-affected area of a town or city (i.e. the sections of a town or city within 15 km of a burnt area) are counted in this table. For example, the vast majority of Sydney residents did not live in the fire-affected area, and so are excluded from this tabulation.

Source: Authors’ calculations from 2016 Census of Population and Housing (ABS 2020) and 2016 ERP (ABS 2017b).
### Table 3  Estimated Residential Population of the fire-affected discrete Indigenous communities by Indigenous status, June 30, 2016

<table>
<thead>
<tr>
<th>Community</th>
<th>Indigenous</th>
<th>Non-Indigenous</th>
<th>Indigenous %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kempsey (inc. Greenhill)</td>
<td>2674</td>
<td>8143</td>
<td>24.7</td>
</tr>
<tr>
<td>Forster–Tuncurry (inc. Cabarita)</td>
<td>1291</td>
<td>19027</td>
<td>6.4</td>
</tr>
<tr>
<td>Nambucca Heads (inc. Bellwood)</td>
<td>754</td>
<td>5750</td>
<td>11.6</td>
</tr>
<tr>
<td>Coonabarabran (inc. Gunnedah Hill)</td>
<td>494</td>
<td>2064</td>
<td>19.3</td>
</tr>
<tr>
<td>Yamba (inc. Nyguru Village)</td>
<td>339</td>
<td>5803</td>
<td>5.5</td>
</tr>
<tr>
<td>Culburra Beach–Orient Point</td>
<td>332</td>
<td>3246</td>
<td>9.3</td>
</tr>
<tr>
<td>Bowraville</td>
<td>300</td>
<td>680</td>
<td>30.6</td>
</tr>
<tr>
<td>Maclean (inc. Hillcrest)</td>
<td>268</td>
<td>2403</td>
<td>10.0</td>
</tr>
<tr>
<td>Wreck Bay</td>
<td>189</td>
<td>10</td>
<td>95.0</td>
</tr>
<tr>
<td>Tingha</td>
<td>185</td>
<td>296</td>
<td>38.5</td>
</tr>
<tr>
<td>Coraki (inc. Box Ridge Reserve)</td>
<td>161</td>
<td>929</td>
<td>14.8</td>
</tr>
<tr>
<td>Purfleet</td>
<td>153</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>Corindi Beach</td>
<td>148</td>
<td>1474</td>
<td>9.1</td>
</tr>
<tr>
<td>Jubullum Village</td>
<td>129</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>Wallaga Lake</td>
<td>89</td>
<td>608</td>
<td>12.8</td>
</tr>
<tr>
<td>Cabbage Tree</td>
<td>86</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>Bellbrook Mission</td>
<td>65</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>Crescent Head</td>
<td>63</td>
<td>858</td>
<td>6.8</td>
</tr>
<tr>
<td>Muli Muli</td>
<td>62</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>Baryulgil</td>
<td>38</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>Malabugiilmah</td>
<td>33</td>
<td>13</td>
<td>71.7</td>
</tr>
<tr>
<td>Lake Tyers Community</td>
<td>22</td>
<td>8</td>
<td>73.3</td>
</tr>
</tbody>
</table>

Note: In this table we use the AGIL database to identify discrete Indigenous communities. Where discrete Indigenous communities fall within what the ABS term an Urban Centre or Locality then population statistics for the whole urban centre (i.e. town or city) are presented.

Source: Authors' calculations from 2016 Census of Population and Housing (ABS 2020) and 2016 ERP (ABS 2017b).
Table 4  Estimated Residential Population of fire-affected towns and cities with an Indigenous population greater than 15% by Indigenous status, June 30, 2016

<table>
<thead>
<tr>
<th></th>
<th>Indigenous</th>
<th>Non-Indigenous</th>
<th>Indigenous %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mogo</td>
<td>98</td>
<td>171</td>
<td>36.4</td>
</tr>
<tr>
<td>Jervis Bay</td>
<td>68</td>
<td>131</td>
<td>34.2</td>
</tr>
<tr>
<td>Bodalla</td>
<td>92</td>
<td>221</td>
<td>29.4</td>
</tr>
<tr>
<td>Werris Creek</td>
<td>359</td>
<td>1080</td>
<td>24.9</td>
</tr>
<tr>
<td>Urbenville</td>
<td>36</td>
<td>149</td>
<td>19.5</td>
</tr>
<tr>
<td>Glenreagh</td>
<td>81</td>
<td>420</td>
<td>16.2</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations from 2016 Census of Population and Housing (ABS 2020) and 2016 ERP (ABS 2017b).

Aboriginal legal interests in fire-affected lands and waters

Aboriginal people hold significant legal rights and interests, including cultural heritage, in lands and waters in the fire-affected area. This includes both Aboriginal peoples who have some rights and interests in land recognised by state, Commonwealth or common law, and others who have rights and interests according to Aboriginal law that are not formally recognised by any government. We acknowledge that the entirety of the fire-affected area is Country belonging to Aboriginal peoples according to Indigenous law.

In Fig. 3 we have shown some of the legal interests recognised by the Native Title Act 1993 (Cth), the Aboriginal Land Rights Act 1983 (NSW), the Traditional Owners Settlement Act 2010 (Vic), the Aboriginal Heritage Act 2006 (Vic), Schedule 14 of the National Parks and Wildlife Act 1974 (NSW) and communal land holdings purchased by the Indigenous Land and Sea Corporation (ILSC). Fig. 3 is intended to be illustrative rather than comprehensive. For cartographic clarity, it does not represent some agreements in relation to conservation estates, including Indigenous Protected Areas and other co-management arrangements. Further, Fig. 3 does not depict ownership of Country – the lands and waters that are the homelands of different language and nation groups, as part of regional and national networks of responsibilities between Countries and peoples, and as passed down from ancestors and ancestral beings.

The statutory and policy measures represented in Fig. 3 are responsive to two key matters. First, Aboriginal peoples’ distinct status as First Peoples, and the legal and political rights and interests that arise from this. Also known as Traditional Owners or Traditional Custodians, these Aboriginal polities have rights and interests arising out of their laws and customs, as also recognised through native title and other laws and policies. This includes places and things of value known as ‘cultural heritage’– such as scar trees, stone arrangements, rock art, and so on – which are often inseparable to Country and are also protected by other state and federal legislation. The formal recognition of Aboriginal people’s legal rights and interests in lands, waters and cultural heritage requires governments to meet their own regulatory standards with respect to these. Second, the measures in Fig. 3 are responsive to Aboriginal peoples’ contemporary and historic experiences of land dispossession. To partially address land dispossession, state and federal governments have introduced specific laws and policies to transfer parcels of Crown lands and establish funds for the purchase of land.

These rights and interests are unique and diverse, and Aboriginal people’s ability to enjoy their legal rights have been impacted by the bushfires. As Fig. 3 shows, Aboriginal people hold rights and interests in large areas of land that were directly affected by the bushfires. Furthermore, the distinctive nature of these rights and interests means that the bushfires have different consequences for Aboriginal rights-holders than for non-Indigenous
landowners. For example, native title lands are inalienable, and cannot be bought, sold, or held individually. Thus, while many non-Indigenous land-owning individuals in the fire-affected areas face the difficult decision of whether to stay and rebuild or sell and move on, Traditional Owners are in a different situation. Traditional Owners can leave and live on someone else’s Country. However, their Country and any formally recognised communal land and water rights remain in the fire-affected area.

Fig. 3 Areas in NSW and Victoria burnt and affected by fires of 250 ha or more, July 1, 2019 to January 23, 2020, and Aboriginal legal interests in land.

Note: ‘Registered Aboriginal Party’ areas are lands covered by the Aboriginal Heritage Act 2006 (Vic). ‘Registered NT claim’ refers to an area subject to a native title claim that has passed the Registration Test, conferring claimants certain rights regarding future development on claimed lands. ‘NT determination’ refers to lands where native title has been determined to exist (recognising either exclusive or non-exclusive possession rights and interests). ‘RSA area’ refers to Recognition and Settlement Agreement areas under the Traditional Owner Settlement Act 2010 (Vic) which indicate that formal recognition has been given to the traditional owners of the agreement area. Portions of
RSA areas are subject to agreements regarding customary activities, land use and may contain areas of former Crown land parks and reserves which are subject to Aboriginal title with joint management. ‘ALRA (NSW)’ refers to lands granted to Aboriginal Land Councils through the claims process under the Aboriginal Land Rights Act 1983 (NSW). It also includes so-called ‘Schedule 14 Lands’ under the National Parks and Wildlife Act 1974 (NSW), which cover nine parks or reserves in NSW that have been returned to Aboriginal peoples as freehold title under leaseback arrangements. These titles are mostly held by Aboriginal Land Councils. ‘ALRA (NSW)’ does not include lands that have come into Land Council ownership through other means such as open market purchases, as the authors are unaware of any comprehensive database of such landholdings. ‘ILSC’ refers to lands purchased by the Indigenous Land and Sea Corporation (ILSC) and either divested to Aboriginal interests or still held by the ILSC.

Sources: Data from EMSINA; ILSC; Victorian Department of Environment, Land, Water & Planning; Victorian Department of Premier and Cabinet; NSW Department of Planning, Industry and Environment; National Native Title Tribunal.

Summary of findings

The maps and tables we have presented highlight the importance and complexity of engaging with Aboriginal people across the PPRR spectrum in response to the 2019–2020 bushfires.

Our population statistics have shown that:

- Over 84 000 Indigenous people, or one-quarter of the Indigenous population of NSW and Victoria, live in the bushfire-affected area.
- Indigenous people in NSW and Victoria are more highly represented in the bushfire-affected area than non-Indigenous people, relative to state population averages. While Indigenous people comprise nearly 5.4% of the 1.55 million people living in fire-affected areas, they are only 2.3% of the total population of NSW and Victoria.
- The numerical minority status of Indigenous people means they are at risk of being overlooked in the bushfire response.
- Indigenous people in the bushfire-affected area have younger population profiles.
- More than one-tenth of children in the bushfire-affected area identify as Indigenous, raising the diverse effects of bushfires on infants and children as a particular concern – including, trauma, health, and access to education and housing.
- In some bushfire-affected towns – such as discrete Indigenous communities – Indigenous people form a substantial part of the population, sometimes 100% of the residents. However, only 10% of the Indigenous population in the fire-affected area live in discrete Indigenous communities.

The legal rights and interests held by Aboriginal people in fire-affected lands and waters show that:

- Aboriginal people have experienced land dispossession, with partial redress by governments
- Aboriginal people have distinct, diverse and spatially extensive legal rights and interests in land as First Peoples, including across much of the fire-affected area.

In summary, there is a significant presence of Aboriginal people, with unique population profiles, spatially uneven patterns of residence, and holding a distinct status in Australian society as both Aboriginal people and First Peoples who have ongoing legal rights and interests. These findings are substantive enough that if government policy is to be fit for purpose, then governments need to consider the particular circumstances and standing of Aboriginal peoples. Indeed, this is already state and federal government policy (e.g. Aboriginal Affairs NSW, 2017; Aboriginal Victoria, 2019). These are comprehensive matters that need to be considered across the PPRR spectrum. Of immediate concern is that they inform the processes and structures established in response to the bushfires.
A suite of quantitative and qualitative studies are needed to interpret, analyse and extend our results. This research should be Aboriginal-led if it is to align with best practice research ethics and methods. In the next three sections we draw on scholarly and grey literature to support this research agenda, as well as to further inform the public sector response to the bushfires.

Aboriginal people and the bushfire response

Aboriginal voices from the 2019–2020 bushfires

In this section we present accounts of Aboriginal people’s experiences, drawn from different published media. We present these quotations as they are indicative of the distinctive nature of the Aboriginal experience of the bushfire season. While not a substitute for the systematic research needed to deepen our understandings of these experiences, such publicly published accounts provide a useful interim snapshot of perspectives before such detailed research can be undertaken. We believe they highlight the need for Aboriginal difference to be taken seriously in the bushfire response.

Many Aboriginal people have drawn connections between the fires and the ongoing colonisation of lands and waters. For example, Gamilaroi scholar Amy Thunig stated:

> Seeing people start to ask ‘what is going on in Australia?!’ Ongoing colonisation, that’s what’s going on. This land was nurtured in reciprocal relationships with First Nations peoples for some 120,000 + years. THIS is the result of 200 odd years of extractive invasion (@AmyThunig, 2020, January 5).

These sentiments were shared by Oliver Costello, Chief Executive of the Firesticks Alliance:

> Since colonisation, many Indigenous people have been removed from their land, and their cultural fire management practices have been constrained by authorities, informed by Western views of fire and land management (Costello, cited in Firesticks Alliance, 2020).

Some Aboriginal people were directly affected by the fires, and their experience was much more intimate. Gamilaraay and Yawalaraay journalist Lorena Allam wrote for The Guardian that:

> Like you, I’ve watched in anguish and horror as fire lays waste to precious Yuin land, taking everything with it – lives, homes, animals, trees – but for First Nations people it is also burning up our memories, our sacred places, all the things which make us who we are. It’s a particular grief, to lose forever what connects you to a place in the landscape. Our ancestors felt it, our elders felt it, and now we are feeling it all over again as we watch how the mistreatment and neglect of our land and waters for generations, and the pig-headed foolishness of coal-obsessed climate change denialists turn everything and everyone to ash (Allam, 2020a).

Bundjalung and Wonnarua scholar Vanessa Cavanagh wrote about what it meant for her to lose a Grandmother tree she had grown up with on Darkinjung Country:

> The sight of this old tree with her crown removed brought warm, stinging tears to my eyes. It was a deep hurt of losing someone far older and wiser than me. Losing someone who was respected and adored. Someone with knowledge I cannot fathom or comprehend. When I told my mum that evening she reacted similarly, a personal and family loss. To others she might just be a big tree (Cavanagh, 2020).
Tagalaka man and Indigenous fire practitioner Victor Steffensen spoke about the frustration Aboriginal people have of always being excluded from the conversation of looking after Country:

… just once in this nation’s history can you just listen to Aboriginal people, our knowledge system? You know, there’s an intelligence there and we have all this information for looking after the environment, and we’re not being tapped into, and it’s so frustrating (Steffensen in Australian Broadcasting Corporation, 2020).

Yuin man and cultural fire practitioner Noel Webster expressed similar feelings, coloured by hope for an emerging generation of Indigenous fire practitioners:

It’s hard, you do see a lot of heartbreak in the country, you feel that emotion…what is pushing me along is that I’ve been working with a lot of young people. I’ve been seeing the effort they put in, their commitment, their understanding and it makes my job a lot easier. We’re investing a lot in these young fellas who are stepping up and making everyone proud (cited in Knowles, 2020).

Disturbingly, there have also been accounts of interpersonal racism being experienced by Aboriginal people during the recovery process. One incident reported in Far East Gippsland was of a relief centre worker turning away an Aboriginal elder saying ‘we’ve helped enough of you people today’ (Moore, 2020).

**Absence of Aboriginal voices in 2003 and 2009 bushfire inquiries**

Despite the distinctiveness of the Aboriginal experience of a bushfire disaster, Aboriginal voices have seldom been heard in this context. In this section we report on an analysis of the two inquiries that followed the previously most recent destructive and damaging fire events – the Canberra bushfires of January 2003 and the Victorian Black Saturday bushfire on February 7, 2009.

Following the Canberra bushfires, the ACT Government launched the McLeod Inquiry in March 2003. The Inquiry’s purpose was to investigate the adequacy of the response of ACT Government agencies, with reference to planning, preparation and response, the structure of agencies and their public information strategy, cross-agency coordination, and the adequacy of agencies’ infrastructure (McLeod, 2003, p. 244). The report delivered in August 2003 made 61 recommendations regarding management of fuel loads, access, operations, control and command, equipment, training, interstate support, public education and information and administration of emergency services (McLeod, 2003, pp. 231–238). The ACT Government acted upon these recommendations through the introduction of the *Emergency Services Act 2004* (ACT) to support new policy and operational approaches.

Following Victoria’s Black Saturday, in February 2009 a Royal Commission was established with much broader terms of reference than the McLeod Inquiry. The commissioners were appointed to inquire into: the causes and circumstances of the bushfires; planning and preparation by government, emergency services, communities and households; all aspects of the bushfire response; measures taken to minimise disruption to essential services; and any other matters the commissioners deemed appropriate (Teague et al., 2010a, pp. 38–41). Lay witnesses reported their personal experiences of the fires to the Royal Commission, as well as people representing institutions and organisations. In July 2010 a four-volume report delivered 67 recommendations, including public communication, coordination between emergency response agencies, increases in controlled burning, the appointment of a fire commander and changes to building and planning regulations for fire-prone areas. The Victorian government accepted all the recommendations.
For this working paper we executed simple word searches of the two reports, finding only very limited references to Indigenous or Aboriginal peoples.4

In these reports, Aboriginal peoples are primarily relegated to an historical footnote, rather than featuring as contemporary residents, as First Peoples, as land and rights holders, or as part of contemporary fire management. The report of the McLeod Inquiry mentioned Aboriginal peoples only briefly in ‘a historical perspective’ as the erstwhile instigators of cultural burns (2003, p. 85). Similarly, The Victorian Royal Commission mentions Indigenous people in this contextual paragraph:

Australia is the driest vegetated continent and, along with Southern California and France, one of the most bushfire prone regions in the world. Bushfires have shaped, and continue to shape, all aspects of the environment – landscape, ecosystems, biological diversity and culture. They occur both naturally and as a result of human actions. Indigenous Australians used fire for a variety of reasons, among them hunting and land management and for ceremonial purposes (our emphasis, Teague et al., 2010b, p. 2).

This understanding is repeated again under the heading ‘The Past’ (Teague et al., 2010c, p. 289). While the Royal Commission records the erasure of Aboriginal deaths in 19th Century Victorian fire mortality statistics (Teague et al., 2010b, p. 8, fn. 5), contemporary Aboriginal people remain barely visible in the 2010 report. Indeed, there are more references to ‘indigenous ecosystems’ than Indigenous peoples.

The only two other references to Aboriginal people in volumes I–III of the 2009 Victorian Bushfires Royal Commission Final Report are in relation to protecting Indigenous cultural heritage in bushfire planning activities, specifically in the fire operation plans for prescribed burning and the creation of fuel breaks (Teague et al., 2010c, pp. 303–304). There was no specific mention of Aboriginal cultural heritage in the McLeod Inquiry.

We speculate these two reports are not aberrations. The research report ‘Major post-event inquiries and reviews: Review of recommendations’, commissioned by the Australasian Fire and Emergency Services Council, failed to find that Aboriginal people and their concerns were an important consideration in 55 post-event enquiries and reviews conducted since 2009 (Cole et al., 2017).5 This report organised 1336 recommendations into themes so as to ‘generate a high-level and comprehensive description of the major recurrent categories of recommendations across multiple post-event reviews’ (Cole et al., 2017, p. 3).

Once again, this report does not mention Aboriginal people, whether as First Peoples, a distinct group in the community, or in relation to cultural heritage protection or fire management expertise. Aboriginal people are not identified in the least frequent themes that this report identified as ‘important in of themselves’. These themes included the role of police, role of business and industry, personal responsibility, occupational health and safety, and offences amongst others (Cole et al., 2017, pp. 22–24). The report neither acknowledges nor comments upon the absence of Aboriginal people and their interests in the 1336 recommendations made since 2009.

Further research is needed to investigate why the comprehensive 2003 and 2009 inquiries specifically, but also other inquiries and commissions, ignore the experiences, concerns, rights and interests of Aboriginal peoples. Such research could consider whether the omissions concerning Aboriginal people are because Aboriginal people are not considered relevant or relevant enough; or they are assumed to not be present – either completely absent or only present in the past. Or it may be that Aboriginal people are collapsed into the

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4 We searched using the terms ‘Aborig*’ and ‘Indig*’. We were unable to search Volume IV of the 2009 Victorian Bushfires Royal Commission Final Report (‘The Statements of Lay Witnesses’) as it was unavailable electronically at the time of writing.

5 In the report, ‘events’ include bushfires, floods, storms and technical accidents (Cole et al., 2017).
category of community. The research could also investigate what role Aboriginal people and their institutions play in inquiry processes and structures, if any, and how this informs the inquiry terms of reference and recommendations. At the same time, this research could investigate Aboriginal people’s involvement in the research conducted on bushfire planning, preparation, recovery and response.

Terms of engagement

Our findings show a stark contrast between the large Aboriginal population in the fire-affected area, the diverse and extensive rights and interests Aboriginal peoples hold in those areas, and the omission of Aboriginal peoples from the reports of two major post-bushfire inquiries. We speculate that there are structural features of such inquiries that erase, marginalise and subsume the presence, concerns and roles of Aboriginal people and their institutions. Specific measures need to be put in place to avoid repeating this silencing of Aboriginal people in the inquiry that follows the 2019–2020 bushfires.

In reworking the terms on which Aboriginal people are involved in responses to catastrophic bushfires, it is vital to understand three interrelated matters concerning trauma, vulnerability and strength. First, not only do Aboriginal peoples in the fire-affected area suffer historical trauma stemming from the colonisation of their homelands, but they continue to live in a system that perpetuates ongoing trauma (Atkinson, 2002; Atkinson et al., 2014; O’Shane, 1993; Williamson, 2020). This includes the continued suppression of Aboriginal peoples’ rights and access to their homelands (e.g. Feng, 2019; Williamson, 2020), the ongoing removal of children from families and communities (Cunneen & Libesman, 2000; Williamson, 2020), and the continued marginalisation of Aboriginal people in influential policymaking settings (Referendum Council, 2017).

Second, Aboriginal people are often framed as passive vulnerable recipients of assistance, including in relation to catastrophic disasters, and this can elide the colonial causes of ‘vulnerability’ and instead focus on Aboriginal peoples as a ‘problem’ to be fixed (Fogarty et al., 2018). Aboriginal people in the fire-affected area are likely to have specific socioeconomic vulnerabilities, such as poorer average physical and mental health status, younger families with higher numbers of kids, reliance on social housing, higher rates of unemployment, and access to fewer financial resources. Without pathologising these vulnerabilities (Fogarty et al., 2018; Howitt et al., 2012), it is critical to identify and then materially address the legacies of colonisation and historic and ongoing discrimination that expose Aboriginal people to these vulnerabilities.

Third, Aboriginal people’s strengths are overlooked if they are viewed solely as vulnerable populations, victims, or collapsed into generic notions of community (Howitt et al., 2012; Tran et al., 2014). For example, community recovery research has identified that communities recover more quickly and effectively from disasters if they share common experience, including a shared history and close social bonds (Moreton, 2016). It is exactly these community qualities that exist in Aboriginal communities. In this, the Indigenous healing literature foregrounds the importance of culture and cultural specificity (Feeney, 2009). However, there is a lack of learning from this literature. Instead, the community recovery and disaster resilience literature tends to gloss over culture, neglect it or assume it (for exceptions, see Thomassin et al., 2019). This is evident in ways in which the term ‘community’ is used to assume a single sociocultural group where people’s individual needs are broadly homogenous.

It is important to have nuanced understandings of Aboriginal people’s experiences of trauma, vulnerability, and strength because catastrophic bushfires do not just reveal, but can also magnify and deepen vulnerabilities in society, which can then lead to vulnerable people becoming more vulnerable (Łukasiwicz & Baldwin, 2020). That is, there is a very real risk that Aboriginal people’s trauma may be exacerbated through inappropriate, insensitive and inaccessible recovery strategies from the 2019–2020 bushfires, including the creation of new traumas and risks in both everyday and emergency circumstances (Howitt et al., 2012, p. 51). For example, in
the immediate aftermath of the fires, accessing services to provide basic emergency relief is important. Noting the shameful rates of child removal from Aboriginal people, particularly in NSW and Victoria (Brennan, 2018), it is quite reasonable that some Aboriginal families may be fearful and hesitant to engage with family services, putting them at risk of accessing sub-standard support or indeed, not accessing support at all, leading to further risks and vulnerabilities. We draw attention to this specific example given the high rates of Indigenous children in fire-affected areas.

The reach and importance of these three interrelated matters means that there needs to be specific consideration across PPRR that is coordinated across a range of services, sectors, and organisations, with leadership roles for Aboriginal organisations and people. This involves two tasks: ameliorating structures that exclude and discriminate against Aboriginal peoples; and, supporting Aboriginal peoples' own approaches and priorities in bushfire recovery. Without specific measures, it is likely Aboriginal peoples will continue to be marginalised in the inquiries that follow major fire events – whether in the structures and processes themselves, or in relation to specific topics, such as land management practices, community recovery, cultural and natural heritage, land use planning, the role of volunteers, research priorities and so on. As Thomassin et al. (2019, p. 169) point out, ‘Indigenous peoples often have little to no decision-making power and limited capacity to influence the directions of settler government natural hazard management planning and decision-making.’ For example, it is possible that current societal interest in Aboriginal peoples’ fire management may be limited to specific burning techniques, without appreciating that this is deeper knowledge about how to live with Country that can inform state, territory and national policy and practice more broadly (Weir et al., 2020).

Governments have recognised that they must form ‘genuine, formal partnerships with Aboriginal and Torres Strait Islander peoples as they are the essential agents of change’ (Department of the Prime Minister and Cabinet, 2019, p. 156). This requires governments to be ready and willing to ‘recognise and build on the strength and resilience’ of Australia’s Indigenous people (Department of the Prime Minister and Cabinet, 2019, p. 12). The emergency management sector has taken some steps (e.g. Neale et al., 2019; Weir et al., 2020), but more needs to be done. The importance of such a long-term investment is the mainstay of national policies that focus on sustainability and partnership with all sectors of the community, including the National Disaster Risk Reduction Framework (Department of Home Affairs, 2018b), the National Strategy for Disaster Resilience (Council of Australian Governments, 2011), and the Australian Disaster Preparedness Framework (Department of Home Affairs, 2018a). Indeed, the people with the longest and most durable interests in these places are the Traditional Owners, and their intergenerational approaches are important to learn from and support.

The relationships between First Peoples and Country are not only a matter of legal rights and interests, but also form an important part of social, cultural and political life. Clearly, supporting this requires a change in practice. For example, funds for recovery for farmers and businesses need to also be allocated for Aboriginal peoples’ interests in land that do not fit within these categories. Unfortunately, Traditional Owners are placed in an undesirable position as they continue to be largely excluded from key forums and decision-making roles, even though they have distinct legal responsibilities as different to all others. As the framers of the Uluru Statement from the Heart put it, this is the torment of Indigenous powerlessness (Referendum Council, 2017).

In turning around and setting new terms, we identify four first steps:

- acknowledge that Aboriginal people have been erased, made absent and marginalised in previous bushfire recovery efforts, and undertake the work required to identify and address how and why this continues to happen, as part of identifying where change is needed
- establish, with policy and regulations, clear non-negotiable instructions that Aboriginal people – including their histories, knowledges, perspectives, experiences and unique status – be part of the
terms of reference and membership of post-bushfire inquiries, across the full suite of concerns that Aboriginal people raise, experience and for which they are responsible

- establish, with guidelines and regulations, Aboriginal representation on relevant government committees involved in decision-making, planning and implementation of disaster risk management
- ensure that Aboriginal people's own voices are centred in understanding what matters, and what might be done in response, in both policy and practice.

Though marginalised, there is substantial academic literature about how the government, research, inquiry processes, and others might respond, engage and co-design disaster response strategies and policies. As Hunt (2013, p. 33) demonstrates, successful Indigenous engagement:

…works best in a framework that respects Indigenous control and decision making and supports development towards Indigenous aspirations. Early engagement to enable deliberation about shared goals is necessary, and support for Indigenous governance development and capacity to engage is important. The development of respectful and trusting relationships is key to success. This takes time, people with the right skills and approaches, good communication and leadership by all parties. Clarity about processes, roles and responsibilities, mutually agreed outcomes and the steps to achieve them and a willingness to share responsibility for progress are essential.

Conclusion

As Australia comes to terms with the devastation caused throughout the summer of fire, efforts from governments, charities and civil society is necessary to support communities to recover. Recent public calls to learn from Aboriginal people's fire practices should not be separated from Aboriginal peoples' lived experiences as residents, distinct communities and First Peoples. We think the most urgent forum where Aboriginal people must have a strong presence is in the context of post-disaster inquiries and commissions, including any co-design of new policies and programs created in response to the disasters. However, past inquiries demonstrate a marked neglect of Aboriginal people's priorities, a rhetorical relegation to the past and only the most cursory inclusion.

The neglect of Aboriginal people in bushfire responses impoverishes the capacity of governments, agencies and communities to successfully carry out their work. Indeed, their continued marginalisation diminishes all of us – in terms of our values in living within a just society, as well as the possibilities offered by new and old ideas of how to live with fire-prone landscapes. As diverse peoples accustomed to living with trauma and the disruption of ongoing colonisation, there is much to be learned about the resilience and inherent strengths Aboriginal communities possess (Williamson et al., 2020). It was never acceptable to silence Aboriginal peoples in the responses to major disasters, and it is incumbent upon us all to ensure that these colonial practices of erasure are relegated to the past.
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