

# Indigenous people in the natural hazards management sector: examining employment data

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Examination of the levels of Indigenous employment in southern Australia reveals that most agencies do not adequately record the proportion of staff who are Indigenous. Recent initiatives to improve Indigenous staffing levels need to provide consistent and detailed data on employment.

Natural hazards management agencies in southern Australia have begun to alter their 'monocultural' character by increasing the gender and ethnic diversity within their staff, including through engaging with Aboriginal and Torres Strait Islander peoples (or Indigenous peoples). At the same time, Indigenous peoples are increasingly involved in public sector environmental management due to land rights recognition and the expansion of Indigenous conservation lands. Indigenous peoples' land rights are recognised for over 40 per cent of Australia and Indigenous Protected Areas are more than 44 per cent of the National Reserve System.<sup>1</sup>

Nonetheless, while there is anecdotal suggestion that the involvement of Indigenous peoples in the management of natural hazards in these areas is increasing, there is little data from which to confirm the situation. A review of levels of Indigenous employment using 2013–2018 financial years found that, broadly speaking, most agencies do not represent the proportion of Indigenous residents in their state or territory within their staff. While new initiatives are being put in place to improve staff levels of Indigenous peoples, we argue that agencies must collect consistent and detailed data on employment to support their accountability to Indigenous peoples and their communities.

A changing part of employer practices have been the creation of various reconciliation and inclusion plans designed and implemented in some jurisdictions (e.g. Department of Environment, Land, Water and Planning 2015<sup>2</sup>, Office of Environment and Heritage 2018<sup>3</sup>). These plans often include quota targets to employ a certain number of Indigenous peoples. However, these plans do not typically have similar targets for providing training to Indigenous communities, contracting services through Indigenous companies nor other relevant quantifiable forms of engagement and partnership.

The issue of diversity within the sector, as reflected in the employment data, leads us to ask: Are current levels of Indigenous employment broadly representative of the proportion of Indigenous residents in each state or territory? To examine this, a survey of the employment of Indigenous peoples in the sector over a five-financial-year period was undertaken.<sup>4</sup> While there are clear limitations in this research, it is hoped the findings will:

- aid further inquiry into shaping engagements between the natural hazards management sector, Indigenous peoples and their communities
- encourage productive conversations about how best to support greater representation of Indigenous peoples within the sector.

## Method

In Australia, there are many agencies that have some level of responsibility in relation to natural hazards management. This study focused on agencies that have primary roles in the management of fires and floods. A search was undertaken of publicly available documents where employment statistics are commonly reported (i.e. annual reports). In instances where this data or documents were unavailable, agencies were contacted to source the data from their human resources divisions. Table 1 provides the resulting dataset, which is patchy and has some important interpretive limitations.

1 National Reserve System. At: [www.environment.gov.au/land/nrs](http://www.environment.gov.au/land/nrs).

2 Department of Environment, Land, Water and Planning 2015, *Mungabin-Gadhaba 'Achieve Together': Aboriginal Inclusion Plan 2016–2020*, Department of Environment, Land, Water and Planning, Melbourne, Victoria.

3 Office of Environment and Heritage 2018, *Aboriginal Employment Plan 2018–2023*, Office of Environment and Heritage, Sydney, NSW.

4 The Northern Territory was excluded from this survey as it fell outside the research project scope focus of southern Australian jurisdictions.

## Limitations

Some agencies included in this study do not (currently) collect information on whether their employees identify as Indigenous or not. Some agencies have only begun to collect this information in the past two to three years.

The absolute number of Indigenous people within any particular agency is not known because the data were only collected for people who voluntarily offered this information.

It is not known what proportion of the Indigenous people employed by these agencies work in areas related to their language group (e.g. Bundjalung), nation (e.g. Kulin) or cultural region of origin (e.g. Murri).

It is not known whether the Indigenous people employed within these agencies have responsibilities related directly to the management of bushfires, floods or other natural hazards. Several of the agencies are very large and have wide-ranging responsibilities in environmental management.

The focus on employment data means the survey does not provide information about Indigenous individuals who volunteer within natural hazards management agencies (e.g. Country Fire Authority 2014<sup>5</sup>).

The employment level and geographical location of the Indigenous people who are employed within these agencies is not known. As such, relevant people employed within the sector may be disproportionately represented in particular regions and particular salary bands.

## Results

The aspiration of presenting and analysing this data here is that, even given the study's limitations, it will form an important reference for more inquiry. The dataset provides a basis for preliminary findings regarding the distribution of Indigenous peoples within the natural hazards management sector.

It is acknowledged that there are exceptions. The proportion of Indigenous staff within most agencies has been consistently lower than the proportion of Indigenous residents within the relevant jurisdiction (Figure 1). In years where complete data were available (n=95), the proportion of Indigenous employees in a given agency was lower than the proportion of Indigenous residents in the relevant state or territory 64 per cent of the time. As such, most agencies have not been demographically representative of the communities they operate within.

Agencies with responsibilities for public lands and parks typically have the highest number and highest proportion of Indigenous-identifying staff. Conversely, emergency services agencies typically have the fewest number and lowest proportion of Indigenous staff. In several instances, emergency services agencies have no known Indigenous employees.

Despite the consistent under-representation of employed Indigenous people over the time period investigated, the employment data indicated minor increases are occurring in both the number and proportion of Indigenous staff in many agencies.

<sup>5</sup> Country Fire Authority 2014, *Koori Inclusion Action Plan: 2014–2019*, Country Fire Authority, East Burwood, Victoria.

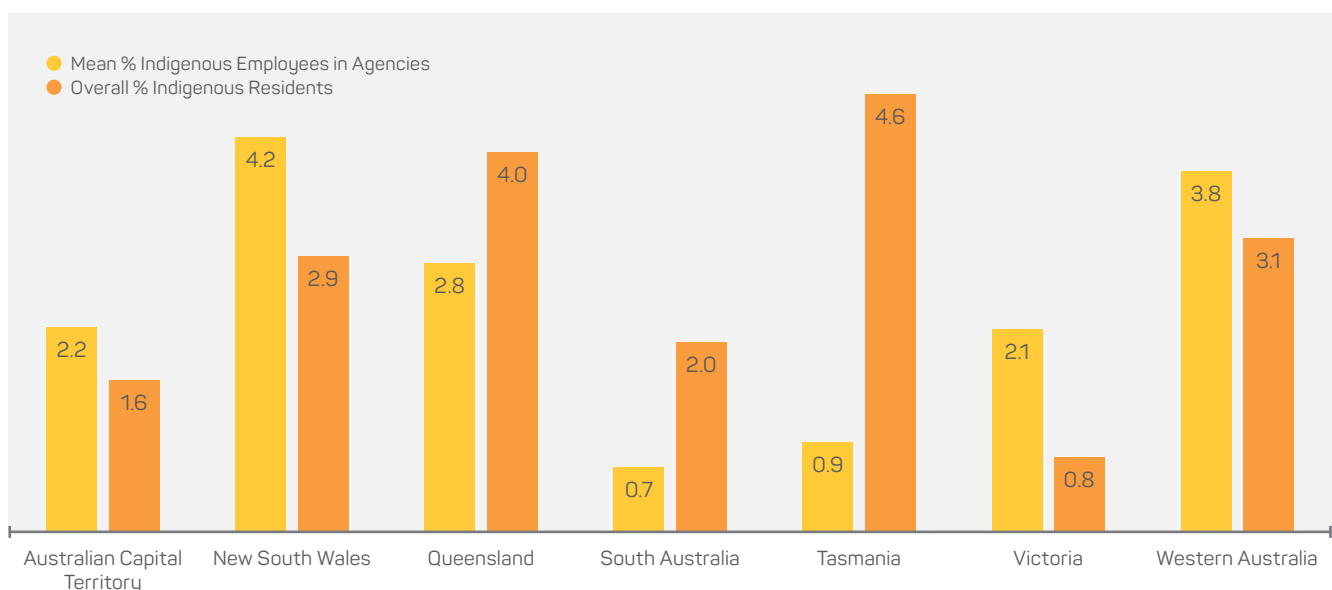


Figure 1: Aboriginal and Torres Strait Islander peoples representation by Australian states and territories, 2013–14 to 2017–18.

Note: Overall % of Indigenous Residents is based on Aboriginal and Torres Strait Islander population data according to the Australian Bureau of Statistics 2016 Census of Population and Housing.

## Analysis and conclusion

This study suggests that Indigenous peoples are statistically under-represented in the natural hazards management sector in southern Australia. At the same time, it raises the question of what a marker of 'good' representation might be. Should agencies be trying to increase overall Indigenous peoples representation in the workforce, or should they aim for higher representation across all organisational levels, or all levels and districts? Current targets for Indigenous employment within specific agencies, where they exist, are typically set at the scale of the total workforce.

This research highlights the potential benefits of consistent and detailed diversity and inclusion data and highlights the limitations of interpreting data without a contextual analysis. In addition to collecting and reporting data on the relative proportion of total employees, agencies would benefit by collecting and reporting data on the geographic distribution of Indigenous employees as well as their employment levels and divisions within the organisation. This information can help agencies achieve clearer accountability in relation to their employment targets and policies as well as inform Indigenous individuals and communities about employment trends. State and territory jurisdictions with large holdings of Indigenous lands, particularly in remote areas such as Western Australia and Queensland, could be expected to exceed target averages for Indigenous employment.<sup>6</sup>

It is worth noting that increasing Indigenous employment is not necessarily a priority for Indigenous peoples themselves, particularly given the priority many place on the funding of their own independent governance institutions as the basis for their greater involvement in

public sector land management. Nonetheless, there are signs of increased Indigenous involvement within the natural hazard sector, particularly through collaborative fire management initiatives (see Maclean, Robinson & Costello 2018<sup>7</sup>, Neale *et al.* 2019<sup>8</sup>, Robinson *et al.* 2016<sup>9</sup>, Smith, Weir & Neale 2018<sup>10</sup>). The natural hazards management sector should prioritise supporting these engagements as part of their commitment to the resilience of Indigenous peoples and their communities.

## Acknowledgment

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6 We note that resident figures in several states and territories are confounded by well-known limitations in data collection (e.g. ACT resident data does not capture the many Indigenous people who work in the ACT but live across the border in New South Wales).

7 Maclean K, Robinson CJ & Costello O 2018, *A national framework to report on the benefits of Indigenous cultural fire management*, CSIRO, Canberra, ACT.

8 Neale T, Carter R, Nelson T & Bourke M 2019, *Walking together: A decolonising experiment in bushfire management on Dja Dja Wurrung country, cultural geographies*, doi:10.1177/1474474018821419.

9 Robinson C, Barber M, Hill R, Gerrard E & James G 2016, *Protocols for Indigenous fire management partnerships: final report*, Brisbane, Queensland.

10 Smith W, Weir JK & Neale T 2018, *Southeast Australia Aboriginal Fire Forum: an independent research report*, East Melbourne, Vic.

Table 1: Organisations included in this study and their employment data.

State/ Territory	Organisation	Agency type	Year	Total employees	% Indigenous employees
Australian Capital Territory (ACT)	ACT Parks and Conservation Service	Parks	2017–2018	635	3.42
			2016–2017	595	3.53
			2015–2016	328	1.52
			2014–2015	314	0.96
			2013–2014	449	1.34
<b>MEAN % ACT</b>					<b>2.15</b>
New South Wales (NSW)	NSW Rural Fire Service	Fire	2017–2018	911	1.87
			2016–2017	878	2.05
			2015–2016	855	1.99
			2014–2015	824	1.09
			2013–2014	858	1.28
	Fire and Rescue NSW	Fire/Emergency Management	2017–2018	7,315	3.60

State/ Territory	Organisation	Agency type	Year	Total employees	% Indigenous employees
			2016–2017	7,315	3.34
			2015–2016	7,313	2.99
			2014–2015	7,239	2.67
			2013–2014	7,246	2.55
	State Emergency Service	Emergency Management	2017–2018	413	1.45
			2016–2017	418	1.44
			2015–2016	408	1.23
			2014–2015	375	1.33
			2013–2014	No data	No data
	Office of Environment and Heritage	Public land/Parks	2017–2018	3,021	9.70
			2016–2017	3,002	9.60
			2015–2016	3,041	9.70
			2014–2015	2,980	10.20
			2013–2014	2,948	10.80
<b>MEAN % NSW</b>					<b>4.15</b>
Queensland	Department of Natural Resources, Mines and Energy	Public land	2017–2018	2,597	No data
			2016–2017	2,385	1.60
			2015–2016	2,406	No data
			2014–2015	2,373	1.22
			2013–2014	2,363	1.18
	Queensland Fire and Emergency Services	Fire/Emergency Management	2017–2018	3,234	5.40
			2016–2017	3,233	1.56
			2015–2016	3,124	1.19
			2014–2015	No data	1.22
			2013–2014	No data	No data
	Department of Environment and Science	Parks	2017–2018	2,982	3.31
	Department of National Parks, Sport and Recreation		2016–2017	1,408	4.80
			2015–2016	1,373	4.30
			2014–2015	1,364	4.00
			2013–2014	1,286	4.20
<b>MEAN % Queensland</b>					<b>2.83</b>
South Australia	Country Fire Service	Fire	2017–2018	162	0
			2016–2017	170	0
			2015–2016	153	0
			2014–2015	150	0
			2013–2014	136	0
	Department for Environment and Water	Public land/Parks	2017–2018	1,669	2.58

State/ Territory	Organisation	Agency type	Year	Total employees	% Indigenous employees
	Department for Environment, Water and Natural Resources		2016–2017	1,714	2.57
			2015–2016	1,764	2.38
			2014–2015	1,716	2.33
			2013–2014	1,643	2.43
	Metropolitan Fire Service	Fire	2017–2018	1,202	0.50
			2016–2017	1,152	0.43
			2015–2016	1,149	0.26
			2014–2015	1,130	0.27
			2013–2014	1,134	0.18
	State Emergency Service	Emergency Management	2017–2018	70	0
			2016–2017	51	0
			2015–2016	44	0
			2014–2015	43	0
			2013–2014	38	0
<b>MEAN % South Australia</b>					<b>0.82</b>
Tasmania	State Emergency Service	Emergency Management	2017–2018	24	0
			2016–2017	25	0
			2015–2016	25	0
			2014–2015	24	0
			2013–2014	24	0
	Department of Primary Industries, Parks, Water and Environment	Parks	2017–2018	1,503	3.10
			2016–2017	1,388	1.80
			2015–2016	1,153	1.60
			2014–2015	1,230	0.98
			2013–2014	1,359	1.97
<b>MEAN % Tasmania</b>					<b>0.95</b>
Victoria	Department of Environment, Lands, Water and Planning	Public land	2017–2018	3,869	1.16
			2016–2017	3,558	1.15
			2015–2016	3,092	No data
	Department of Environment and Primary Industries		2014–2015	2,960	No data
			2013–2014	3,470	No data
	Emergency Management Victoria	Emergency Management	2017–2018	182	0.55
			2016–2017	159	0.63
			2015–2016	141	0
			2014–2015	114	0
			2013–2014	13	No data

State/ Territory	Organisation	Agency type	Year	Total employees	% Indigenous employees
	Parks Victoria	Parks	2017–2018	904	6.64
			2016–2017	968	4.96
			2015–2016	965	4.46
			2014–2015	939	5.32
			2013–2014	906	6.18
	Victoria State Emergency Service	Emergency Management	2017–2018	212	0.94
			2016–2017	211	0.95
			2015–2016	206	0.49
			2014–2015	164	0.61
			2013–2014	188	0
<b>MEAN % Victoria</b>					<b>2.13</b>
Western Australia	Department of Fire and Emergency Services	Fire/Emergency Management	2017–2018	1,478	3.00
			2016–2017	1,530	2.71
			2015–2016	1,460	2.80
			2014–2015	1,456	No data
			2013–2014	1,359	1.50
	Department of Biodiversity, Conservation and Attractions	Public land/Parks	2017–2018	1,346	5.94
	Department of Parks and Wildlife		2016–2017	1,449	4.97
			2015–2016	1,383	4.63
			2014–2015	1,344	4.39
			2013–2014	1,439	4.24
<b>MEAN % Western Australia</b>					<b>3.80</b>