

# Learning from Disasters Down-under?

A comment on the constitution of new subjects and spaces in the management of bushfire and flood in Australia

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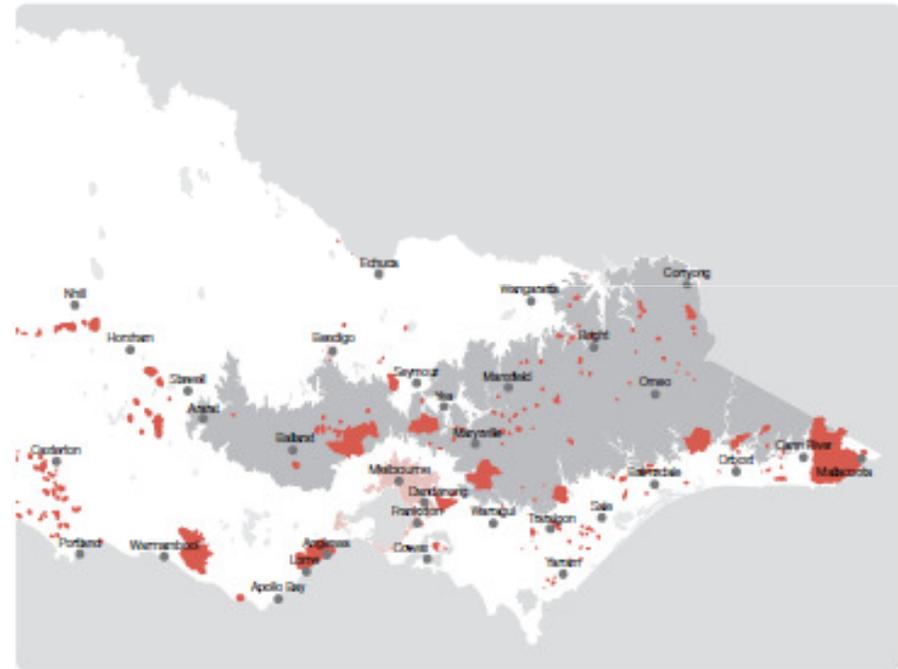
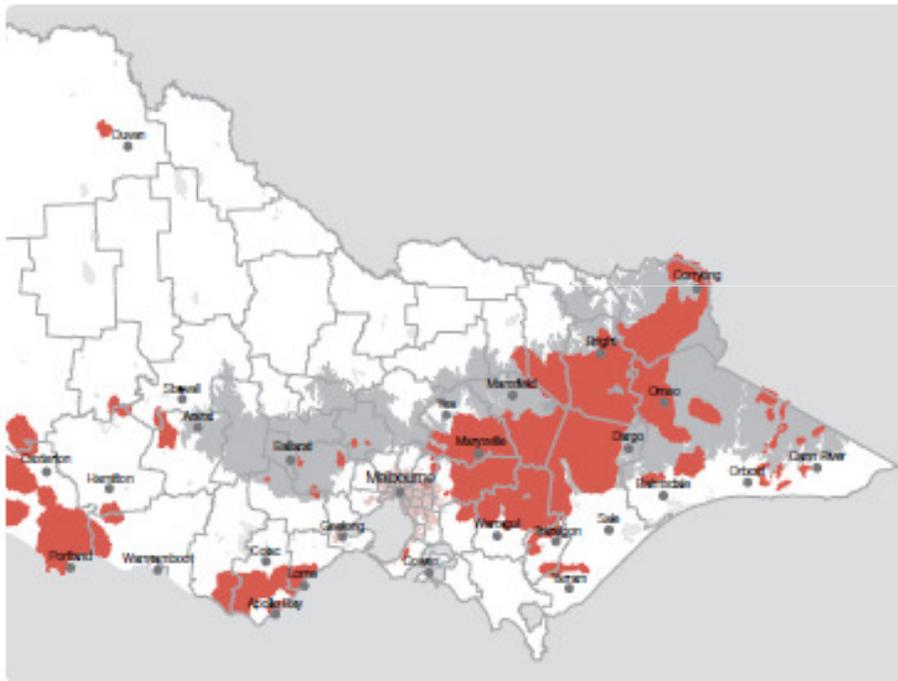








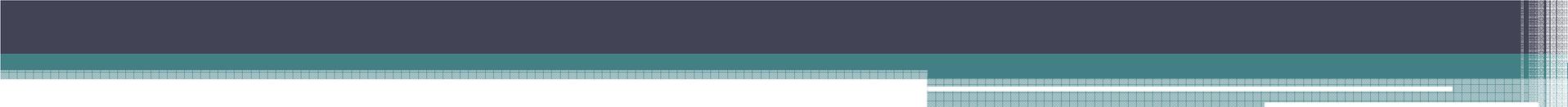
# Victorian bushfires: 1939, 1983



# Victorian bushfires: 2003, 2009







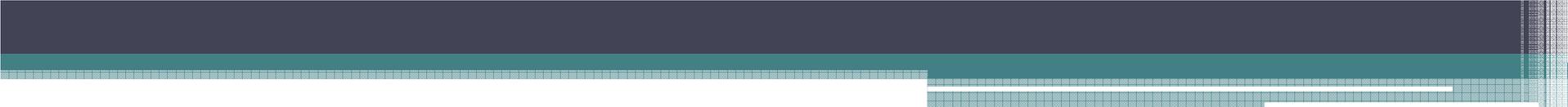
## Key terminology

- A **risk** is the chance of something happening that will have an impact on a current or future set of conditions or states. It usually refers to ‘the likelihood of harmful consequences arising from the interaction of hazards, communities and the environment’ (EMA, 2002: 77).
- An **emergency** is ‘an event, actual or imminent, which endangers or threatens to endanger life, property or the environment, and requires a significant and coordinated response’ but is of a lesser magnitude than a disaster (COAG, 2004: 103).

## Key terminology

## Cont...

- A **natural hazard** is ‘a source of potential harm or a situation with a potential to cause loss’ (COAG, 2004: 103). As an existing or potential event or condition that may cause harm a hazard poses risks to the community or the environment.
- A **natural disaster** is a serious disruption to a community or region caused by the impacts of a naturally occurring event which can cause death, injury or damage to property or the environment and requires a significant and coordinated multi-agency and community response. It can result from any one, or a combination of bushfire; earthquake; flood; storm; cyclone; storm surge; landslide; tsunami; meteorite strike; or tornado (COAG, 2004: 103).

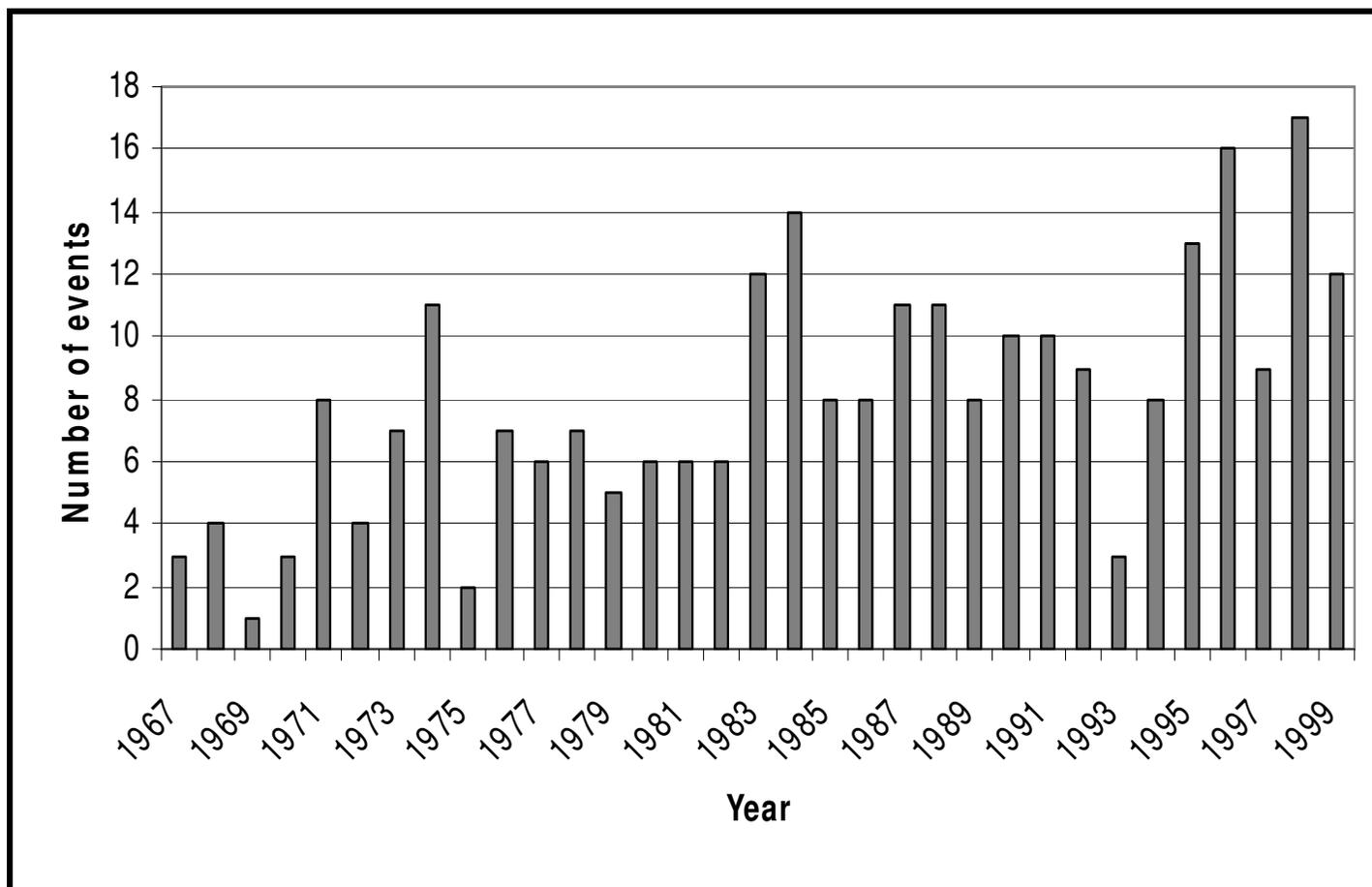


## Key terminology

## Cont...

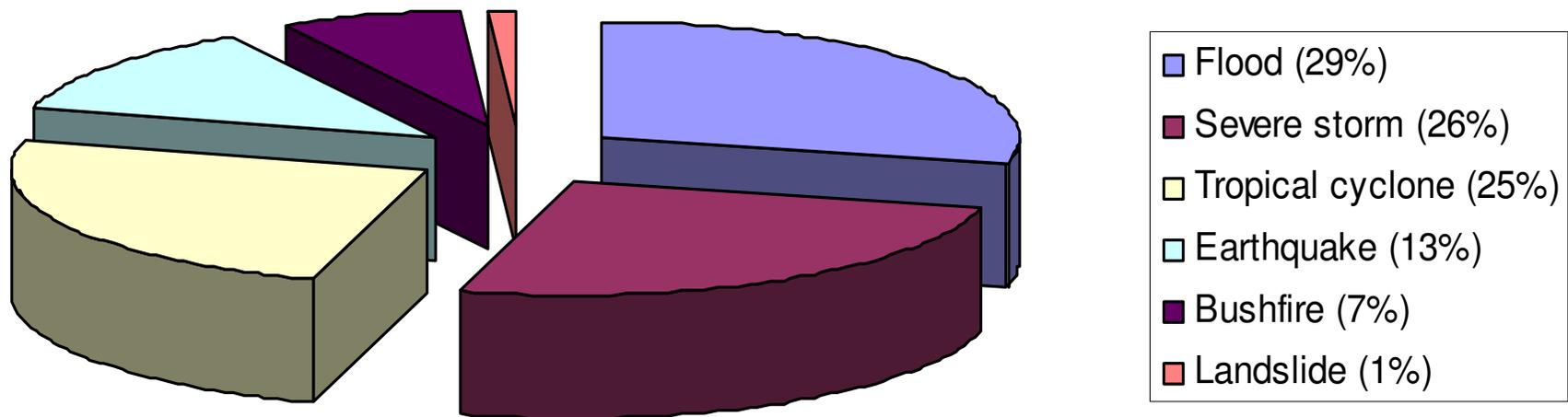
- A **catastrophe** is ‘an extreme natural hazard event which impacts on a community, or communities, resulting in widespread, devastating, economic, social and environmental consequences’ (COAG, 2004: 63). It is of greater magnitude than a disaster, and exceeds the response and recovery capacities of the affected state or territory and the nation combined across all jurisdictions, requiring assistance from other states or territories, and overseas.

Figure 1 Number of natural disasters in Australia 1967-1999 with costs exceeding AUD \$10 m



(Source: BTE, 2001)

Figure 2 Average proportional cost of natural disasters in Australia 1967-1999 by type of event



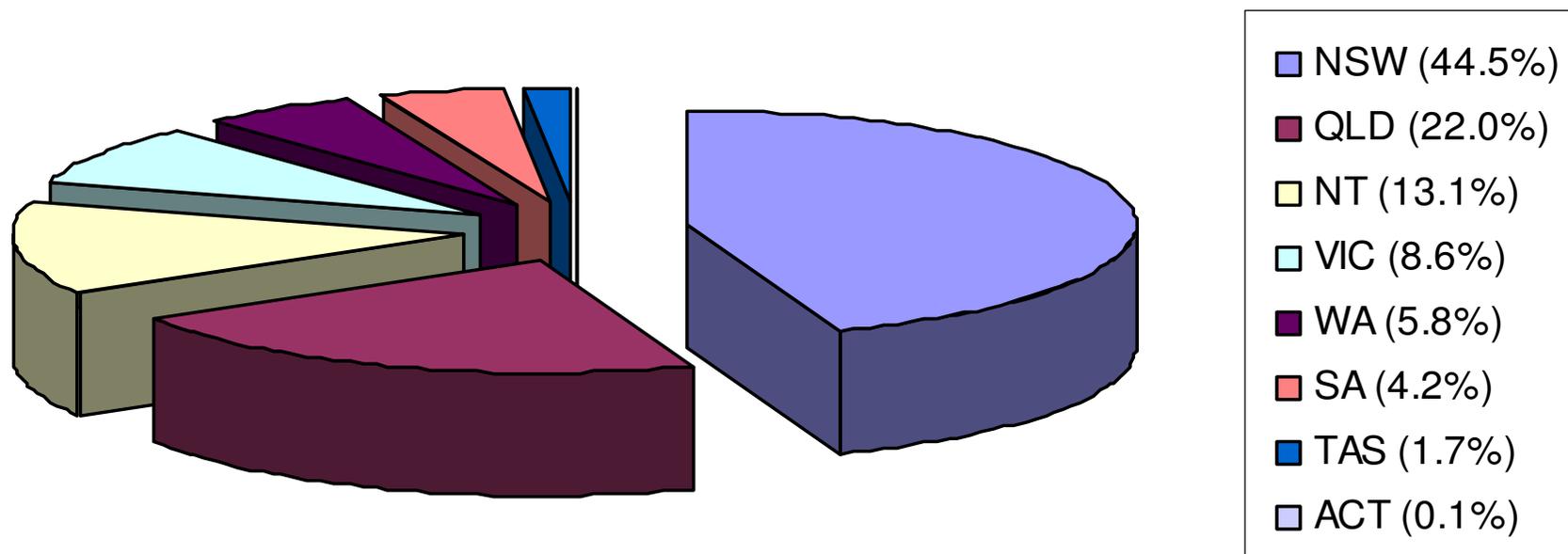
(Source: BTE, 2001)

Figure 3 Average annual cost of natural disasters in Australia 1967-1999 by type of event

<b><i>Natural disaster (type of event)</i></b>	<b><i>Average annual cost (AUD \$ millions)</i></b>
Flood	314
Severe storm	284
Tropical cyclone	266
Earthquake	144.5
Bushfire	77
Landslide <sup>1</sup>	15
Tsunami	n/a

(Source: BTE, 2001 except<sup>1</sup> EMA, 1999 [using 1900-1999 data])

Figure 4 Average proportional cost of natural disasters in Australia 1967-1999 by state/territory

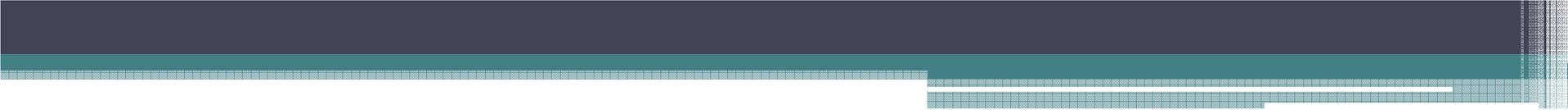


(Source: BTE, 2001)

Figure 5 Most costly types of natural disaster in Australia 1967-1999 by state and territory

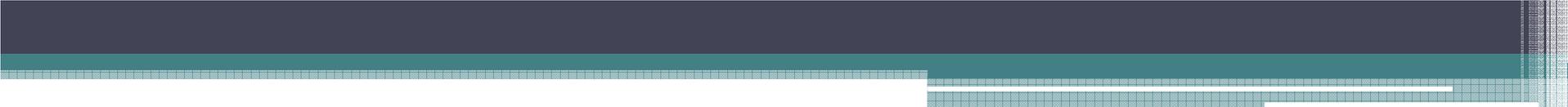
<b><i>State or territory</i></b>	<b><i>Natural disasters</i></b>
New South Wales	Floods, storms
Queensland	Floods, tropical cyclones
Victoria	Floods, bushfires
Western Australia	Tropical cyclones, storms
South Australia	Floods, storms
Tasmania	Bushfires, floods
Northern Territory	Tropical cyclones, floods
Australian Capital Territory	Bushfires, storms

(Source: BTE, 2001)



## Factors influencing natural disaster risks

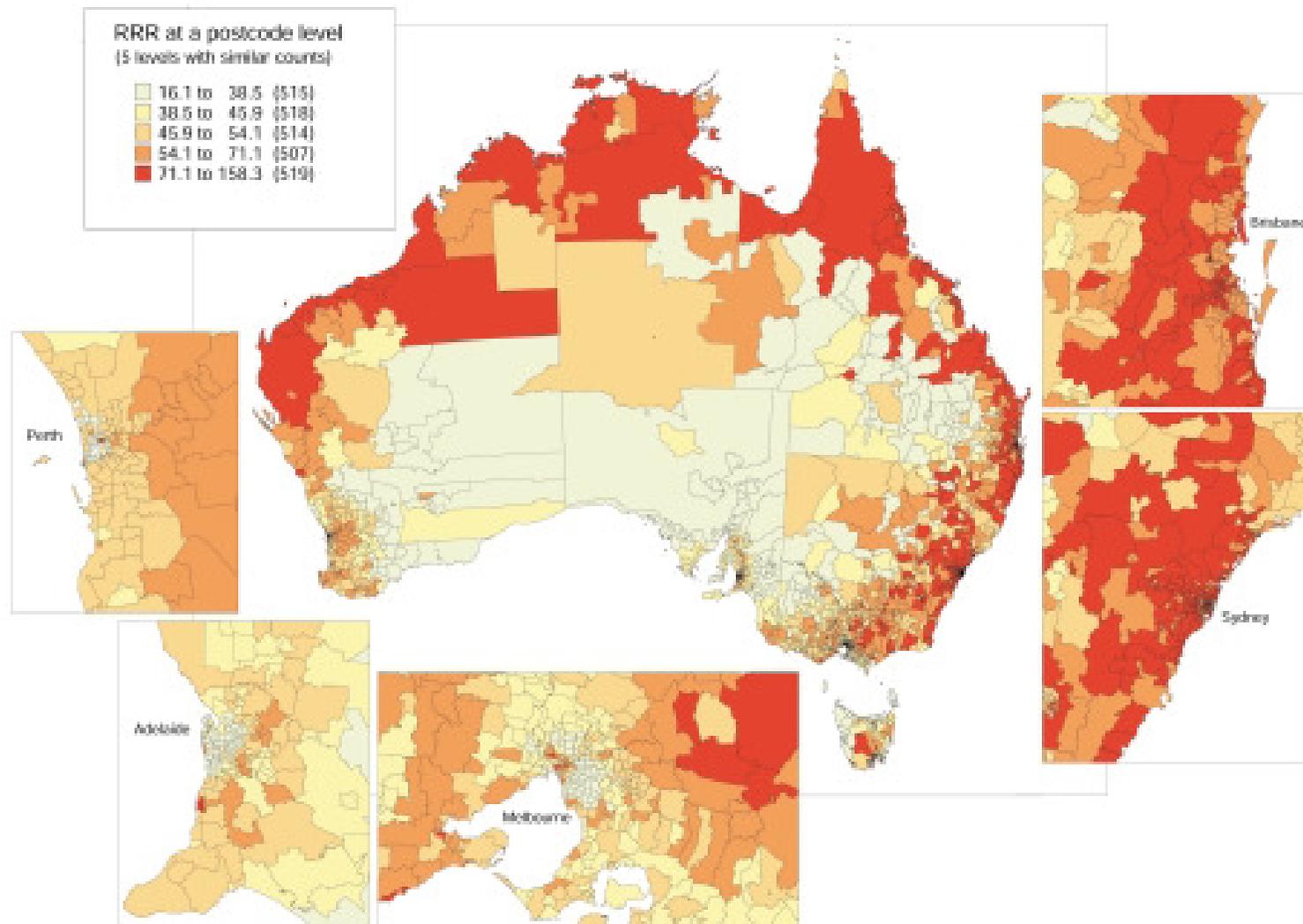
- Population growth
- Demographic structure
- An affluent lifestyle
- Sea- and tree-changers
- Continued urbanisation
- Urban/rural interface
- Coastal fringe development
- Impacts of climate change



## Natural disaster planning and response

- International organisations (IPCC Assessment Reports)
- Australian organisations (GA, BoM, EMA, AusDIN)
- Commonwealth, State/Territory and Local Governments (COMDISPLAN, NEMCC, State DISPLANs, NDRRA)
- Key agencies (Police, Fire, Ambulance, SES)
- State Housing Authorities (SHAs)
- Other stakeholders

# Figure 6 Relative risk ratings by Australian postcode



(Source: Newton *et al.*, 2001)

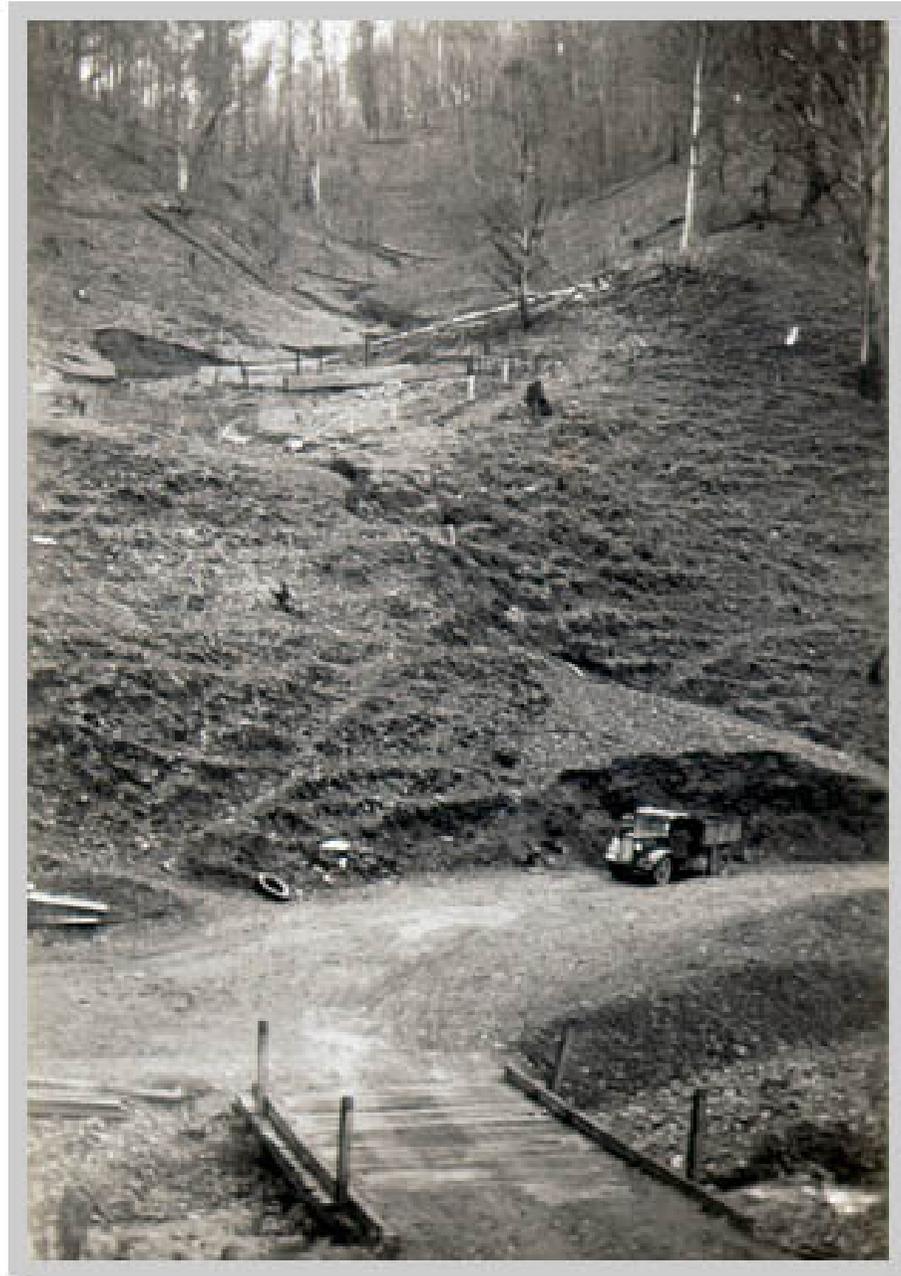
Figure 7 The shift in natural disaster management strategies

<b><i>From ...</i></b>	<b><i>To ...</i></b>
Hazards	Vulnerability
Reactive	Proactive
Single agency	Partnerships
Science driven	Multi-disciplinary approach
Response management	Risk management
Planning for communities	Planning with communities
Communicating to communities	Communicating with communities

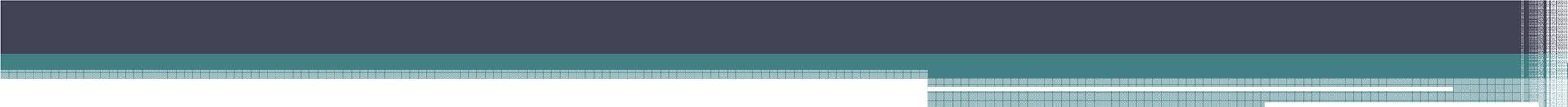
(Source: Pearce, 2003; Handmer and Dovers, 2007)

# Black Friday, Victorian bushfires, 13 January 1939



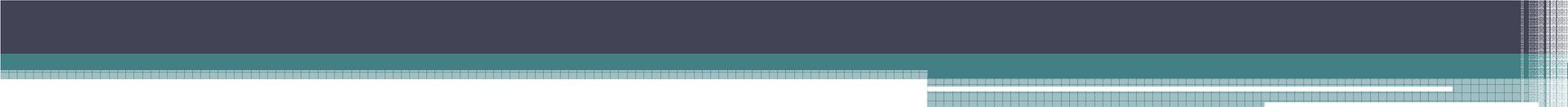






## Stretton, Royal Commission, 1939

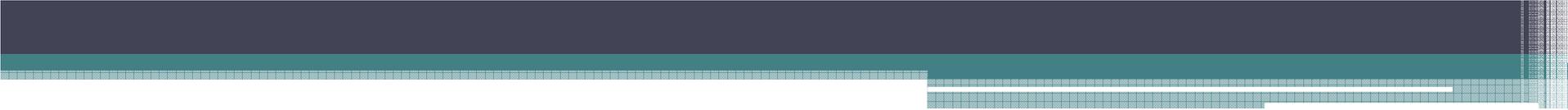
1. The Forests Commission should have complete control of all forests.
2. The Forests Commission must pay greater attention to the reclamation and rehabilitation of forests and cease to be too preoccupied with revenue production.
3. A State Fire Authority should be established.
4. A Land Utilization Control Committee should be established.
5. The Forests Commission must recognise the necessity for protective burning in its areas and should respect local forest lore.
6. Safety precautions at sawmills must be improved.
7. The education of adults and children about fire prevention and protection must be taken seriously.



‘Men who had lived their lives in the bush went their ways in the shadow of dread expectancy. But though they felt the imminence of danger they could not tell that it was to be far greater than they could imagine. They had not lived long enough. The experience of the past could not guide them to an understanding of what might, and did, happen.’

(Judge Leonard Stretton, Report of Royal Commission, 1939)





‘The Victorian bushfires are the worst natural disaster Australia has ever faced.’

(Victoria Premier John Brumby)

‘A tragedy beyond belief, beyond precedent and really beyond words.’

(Australian Dep. Prime Minister, Ms Julia Gillard)



2009 Victorian Bushfires  
Royal Commission

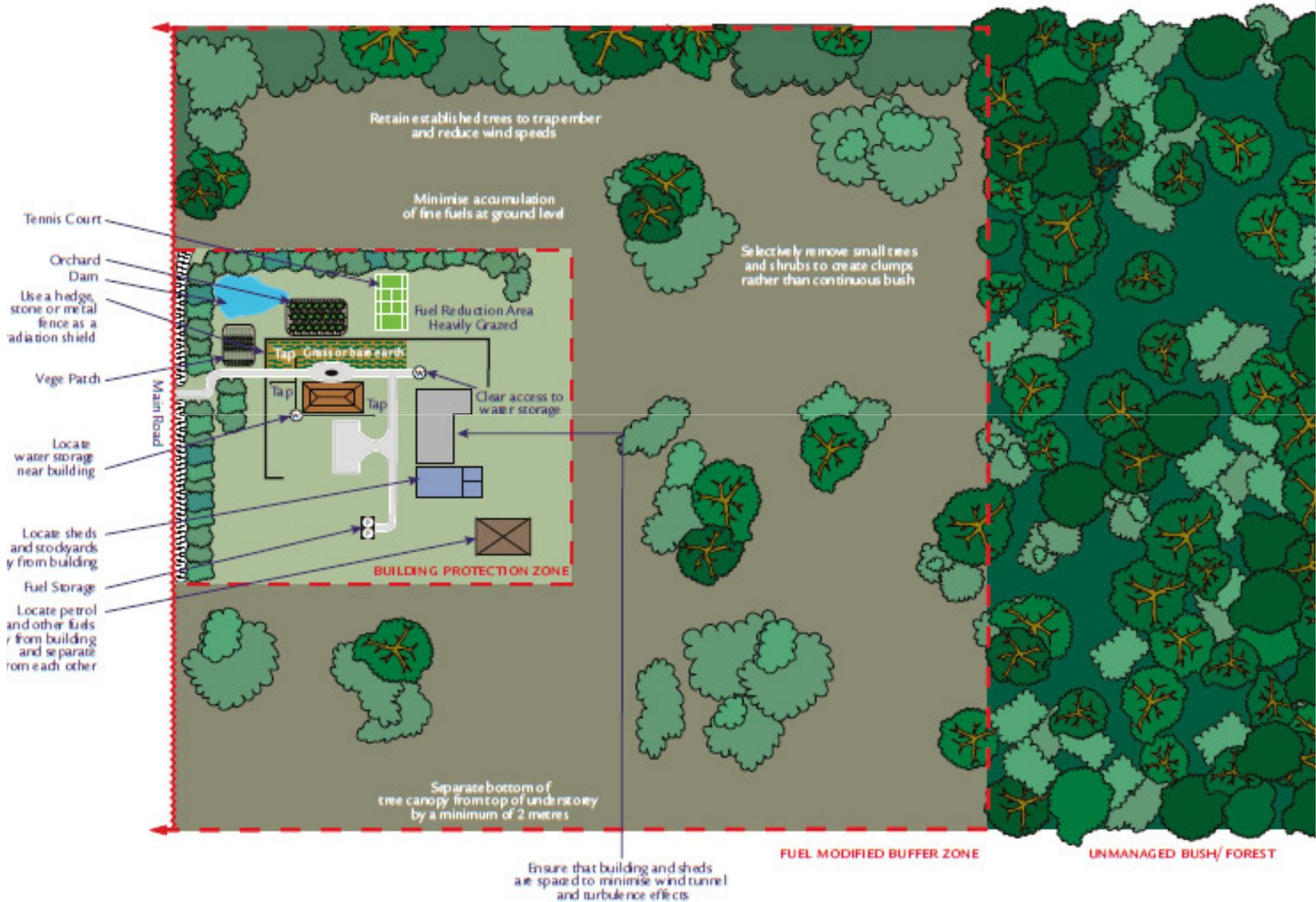


# INTERIM REPORT

## GUIDELINES FOR DEVELOPMENT IN BUSHFIRE PRONE AREAS OF TASMANIA



LIVING WITH FIRE IN TASMANIA





## Cyclone Tracy, Darwin NT, December 1974







## NSW Hunter River floods, 2007









