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Bushfires in NSW: An Update

by

Daniel Montoya

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SUMMARY

This briefing paper summarises the legislative and administrative bushfire management arrangements in NSW and examines the key findings from the 2009 Victorian Bushfires Royal Commission.

An overview of bushfire management in NSW

Between 1994 and 2010 there have been a number of bushfire inquiries, along with a range of legislative and administrative changes. Extreme bushfires in NSW, the ACT and Victoria were the impetus for several of these developments. **[2.0]**

NSW bushfire related legislation

Several significant legislative amendments have been made since 2002 to improve bushfire management in NSW. A new offence was introduced to the *Crimes Act 1900*: causing a bushfire (s 203E). The *Rural Fires Act 1997* has been amended to: improve bushfire management, including via improved integration with the planning system; increase penalties for some offences; increase the powers by which the Rural Fire Commissioner can investigate suspected arson cases; and streamline the administration of rural fire services funding. Improved bushfire management administration has also been achieved through amendment of the *Environmental Planning & Assessment Act 1979*. **[3.0]**

NSW bushfire administration

Several administrative bodies are involved in bushfire management in NSW. Three bodies are responsible for bush fire fighting and mitigation services: the NSW Rural Fire Service; the National Parks and Wildlife Service; and State Forests of NSW. Planning instruments under the *Rural Fires Act 1997* are administered by the Rural Fire Service. Local councils are required to comply with these instruments. **[4.0]**

NSW Rural Fire Service capacity

Funding for the NSW Rural Fire Service has progressively increased since 2004. The area of NSW annually subject to bushfire hazard reduction recently increased from approximately 108,000 hectares to 124,000 hectares in 2007/08. **[5.0]**

The 2009 Victorian Bushfires Royal Commission

Key recommendations from the 2009 Victorian Bushfires Royal Commission into the bushfires of Black Saturday, 7 February 2009, are identified. They concern such issues as: bushfire safety policy; planning and bushfire management; a retreat and resettlement strategy; bushfire hazard reduction; and fire services funding. Key recommendations that attracted considerable debate or are of particular relevance to NSW are discussed. **[6.0]**

1.0 INTRODUCTION

Bushfires are an intrinsic part of the NSW landscape. They are a natural hazard to which both rural and urban communities are exposed, and which are capable of inflicting tremendous costs in terms of environmental damage and lives and property lost. Vulnerability to bushfires is likely to increase in the future due to a number of factors. Population growth has led to progressive expansion of the rural-urban interface. This zone is often populated by people who are unfamiliar with its associated bushfire risks. In addition, the likelihood of bushfires and extreme bushfire weather occurring in NSW is predicted to rise due to climate change.¹ Increased vulnerability, and the guaranteed reoccurrence of the environmental conditions that have caused severe fire events in the past, are challenges faced by all Australian Governments.

The bushfires of 7 February 2009 in Victoria, otherwise known as Black Saturday, were one of Australia's worst natural disasters. 173 people died on Black Saturday. The total cost of the disaster is expected to exceed \$4 billion. The 2009 Victorian Bushfires Royal Commission into Black Saturday established by the Victorian Government was the latest in a long line of bushfire inquiries. Themes common to all of these inquiries include: the importance of community education, especially with regard to the 'stay or go' policy; increased emphasis on risk reduction, including prescribed burning; insufficient integration of bushfire management into planning regimes; and a worrying level of community complacency regarding bushfire risk.

Bushfire management involves regulatory and administrative arrangements which seek to minimise the potential impact of bushfires on the environment, public and private assets, communities and human life. Bushfire management needs to be internally coherent as well as integrated into broader planning and emergency management structures. This paper summarises the current regulatory and administrative arrangements in NSW. Presented next is an examination of some of the most important and relevant recommendations from the 2009 Victorian Bushfires Royal Commission. This examination provides material by which the strengths and weaknesses of bushfire management in NSW may be evaluated.

¹ See for example: McAneney, J., Chen, K., Crompton, R., Pitman, A., 13-17 May 2007. *Australian Bushfire Losses: Past, Present and Future*, Wildfire2007: 4th International Wildland Fire Conference, Seville, Spain; and Bradstock, R. A., Cohn, J. S., Gill, A. M., Bedward, M., Lucas, C., 2009. Prediction of the probability of large fires in the Sydney region of south-eastern Australia using fire weather. *International Journal of Wildland Fire*, 18(8): 932-943.

2.0 BUSHFIRE MANAGEMENT IN NSW: OVERVIEW

Since March 1994, fourteen bushfire management inquiries or reviews have been completed in NSW. COAG and the Victorian, ACT and Commonwealth Governments have also completed inquiries since 1994. Each inquiry followed an extreme bushfire event. Figures 1 to 4 complete a 1994 to 2010 timeline that situates the inquiries and reviews within the context of other significant, and often resultant, bushfire management changes. The most significant administrative change in NSW included in Figure 1 was the introduction of the [Rural Fires Act 1997](#). This legislation was enacted in response to the State Coroner's findings and recommendations in 1996, and replaced the NSW Bush Fire Service with the current [NSW Rural Fire Service](#) (RFS).

Figure 1: Bushfire Management: 1994 to 1998

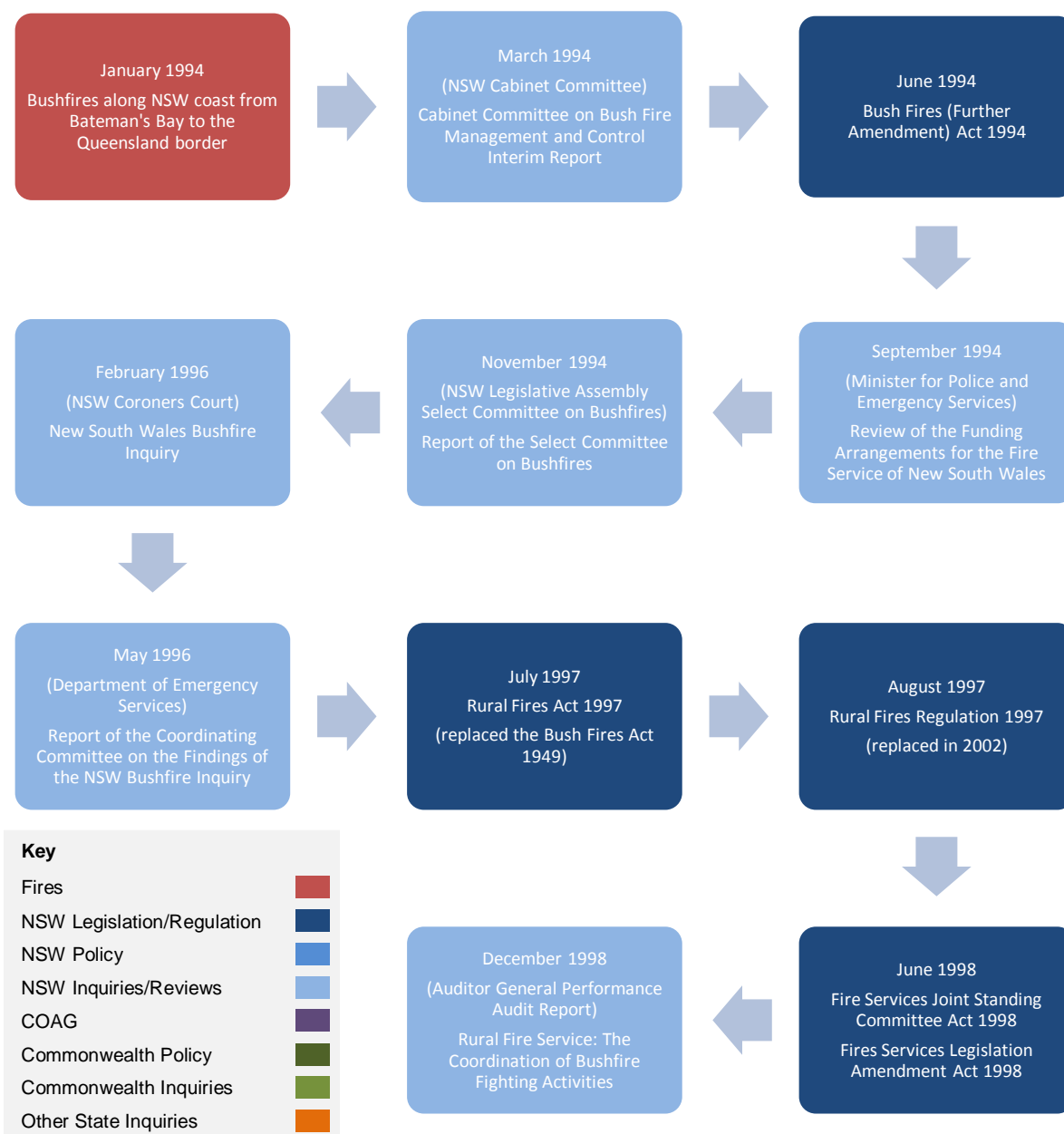
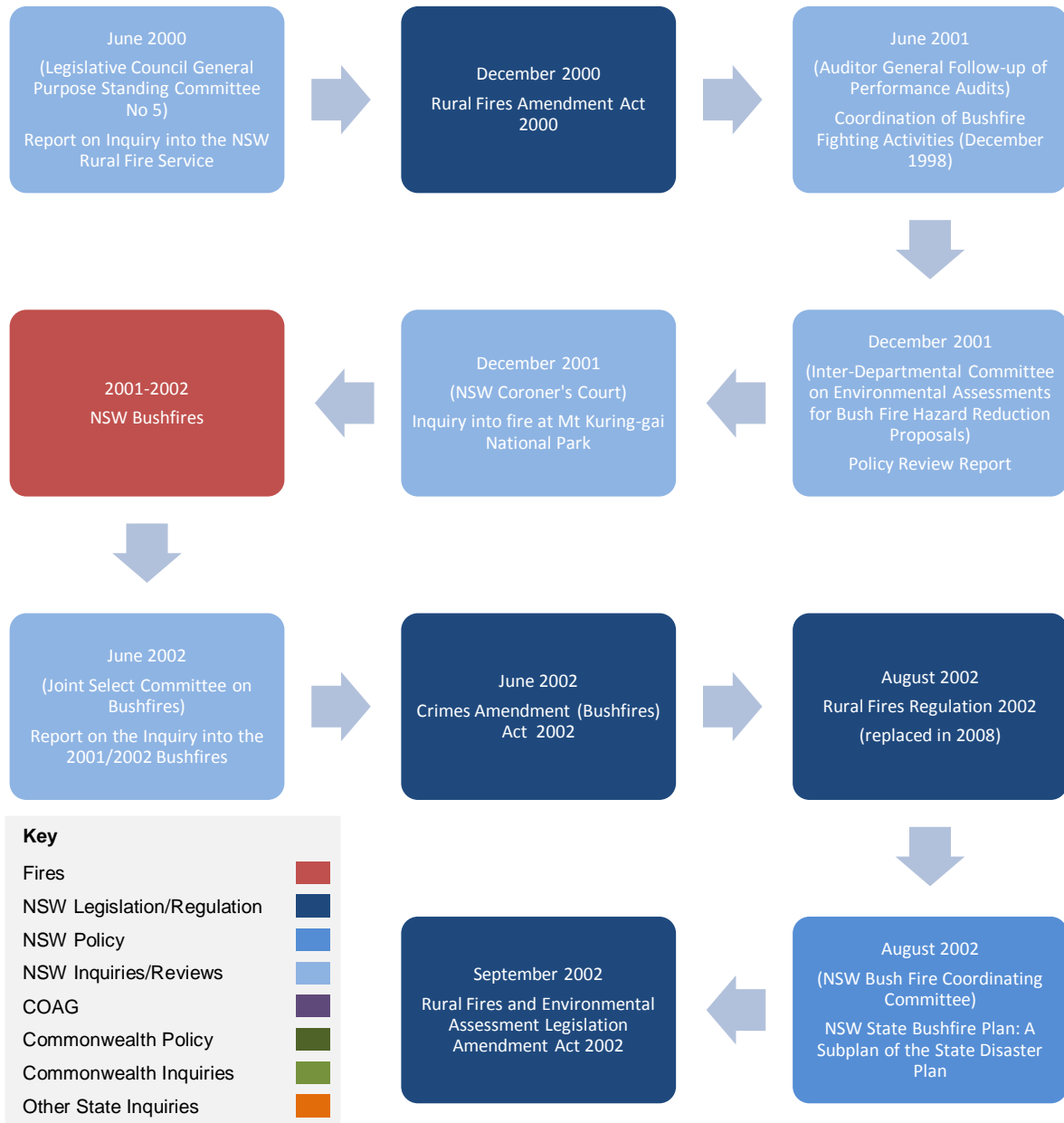


Figure 2: Bushfire Management: 2000 to 2002



The [Rural Fires Amendment Act 2000](#) streamlined fire control staff accountability in response to the Legislative Council inquiry released in June 2000 (see Figure 2). A Joint Select Committee investigation into the 2001-2002 NSW bushfires resulted in further changes to the [Rural Fires Act 1997](#), and concurrent changes to the [Environmental Planning and Assessment Act 1979](#) and the [Crimes Act 1900](#). The planning legislation reforms strengthened the RFS Commissioner's role with regard to the development control process for new developments. Amendments to the [Crimes Act 1900](#) introduced a new offence: causing a bushfire. The 2002 NSW State Bushfire Plan functions as a Sub Plan of the NSW Disaster Plan under the [State Emergency and Rescue Management Act 1989](#). It sets out roles and responsibilities for bushfire management bodies and specifies administrative arrangements for bushfire prevention, preparedness, coordinated firefighting and recovery.

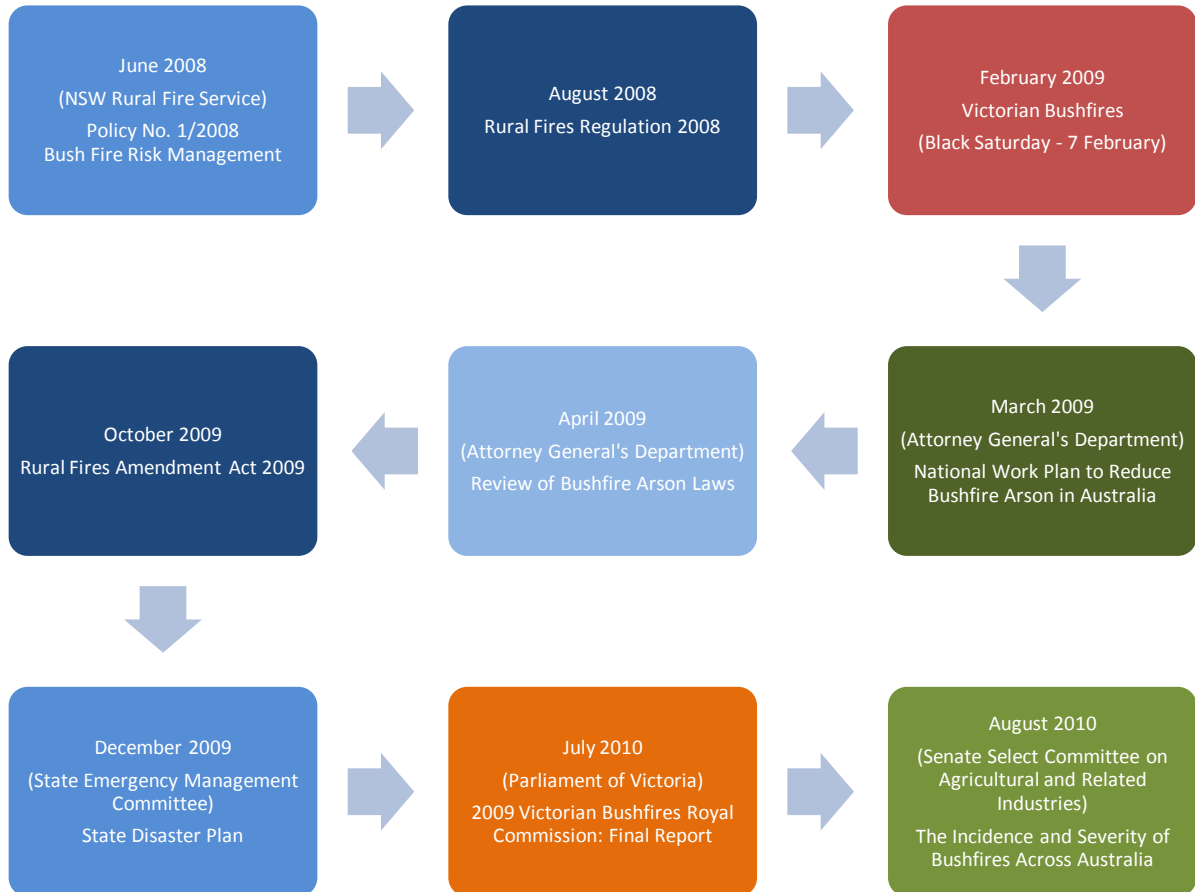
Figure 3: Bushfire Management: 2003 to 2006

Following the ACT bushfires in January 2003, COAG and Commonwealth Government inquiries both made policy recommendations to improve bushfire management (see Figure 3). The House of Representatives inquiry found that "proper land management, proper fire prevention principles and proper fire suppression strategies could have greatly limited the risk of these high intensity wildfires."² In 2005, an administrative review of the NSW [Rural Fires Act 1997](#) concluded that the Act's objectives remained relevant. The review also recommended a future full-scale consultative review. To date, this has not been conducted.

2

[House of Representatives Select Committee into the recent Australian bushfires, October 2003. A Nation Charred: Report on the inquiry into bushfires.](#)

Figure 4: Bushfire Management: 2007 to 2010



On 7 February 2009, the worst bushfires in Australia's history claimed the lives of 173 people in Victoria (see Figure 4). The [Royal Commission](#) investigation estimated the cost of 'Black Saturday' to be in excess of \$4 billion. Figure 4 documents five post-bushfire events of consequence for bushfire management.

Key	
Fires	■
NSW Legislation/Regulation	■
NSW Policy	■
NSW Inquiries/Reviews	■
COAG	■
Commonwealth Policy	■
Commonwealth Inquiries	■
Other State Inquiries	■

First, a National forum in March 2009 produced a [National Work Plan to Reduce Bushfire Arson in Australia](#). Second, as a consequence of the National Work Plan and the NSW Attorney General's [review](#) into bushfire arson laws, the NSW [Rural Fires Act 1997](#) was amended in October 2009 (see section 3.0). Third, the NSW Government started amending the [State Disaster Plan](#) and its subordinate plans in late 2009 (see section 4.0). Fourth, the Victorian Bushfires Royal Commission into the 2009 bushfires released its findings in July 2010 (see section 6.0). Finally, a Senate Select Committee [review](#) concluded that Commonwealth involvement in bushfire management would be most effective in the areas of bushfire mitigation and preparedness, and made recommendations accordingly.

3.0 BUSHFIRE LEGISLATION

Since its introduction the NSW [Rural Fires Act 1997](#) has been amended on several occasions. A comprehensive summary of the Act can be found in Briefing Paper No 5/2002, [Bushfires](#). This section sets out key amendments to the *Rural Fires Act 1997*, and other relevant legislative developments, enacted since the 2002 Research Service publication.

3.1 Crimes Amendment (Bushfires) Act 2002

The [Crimes Amendment \(Bushfires\) Act 2002](#) introduced a new offence into the [Crimes Act 1900](#): causing a bushfire (s 203E). The new bushfire offence is in addition to the pre-existing arson offences in the *Crimes Act 1900*. The offence under s 203E is to intentionally cause a fire, on public land or land belonging to another person, with recklessness as to the spread of that fire. It is also in addition to the offence of strict liability, under s 100 of the *Rural Fires Act 1997*, which is available as a statutory alternative in the event that the s 203E offence is not made out.

Two exceptions are specified in the Second Reading Speech.³ First, exemption from prosecution is provided for persons who are involved in bush fire fighting or hazard reduction operations. Second, the definition of 'causing a fire' in section 203D exempts persons who fail to contain a fire which was lit by another, or lose control of a fire they have lit due to unforeseeable circumstances.

3.2 Rural Fires and Environmental Assessment Legislation Amendment Act 2002

The [Rural Fires and Environmental Assessment Legislation Amendment Act 2002](#) amended the [Rural Fires Act 1997](#) and the [Environmental Planning and Assessment Act 1979](#) (*EP&A Act*). Impetus for the reforms stemmed from the 2001-2002 NSW bushfires and the Joint Select Committee inquiry into them (see Figure 2). The reforms had two overarching objectives: greater integration of fire prevention into the planning regime; and improved bush fire risk management.⁴

Two sections were added to the *Environmental Planning and Assessment Act 1979*. Bush fire risk management plans apply to a large portion of NSW. Where a local council area is covered by such a plan, section 146 requires the council to record and map any land at risk of bush fire as 'bush fire prone land' under advisement of the RFS Commissioner. The map of such land requires certification by the RFS Commissioner as a 'bush fire prone land map'. Under section 79BA, development on any bush fire prone land needs to conform to

³ [NSW Parliamentary Debates](#), 12 April 2002 (Second Reading Speech)

⁴ [NSW Parliamentary Debates](#), 30 May 2002 (Second Reading Speech)

RFS specifications and requirements. The consent authority is also required to consult with the RFS Commissioner concerning measures to protect persons, property and the environment.

Amendments to the *Rural Fires Act 1997* focused on seven issues.

- First, in addition to the requirement of an annual report for each bush fire risk management plan (s 51), provision was made for performance audits of such plans (ss 48 and 62A).
- Second, new procedures for bush fire hazard reduction work were introduced. Bush fire hazard reduction certificates (ss 100D to 100I) authorise bush fire hazard reduction work in accordance with the relevant bush fire risk management plan, the provisions of any applicable bush fire code, and any conditions specified in the certificate. Fire permits and fires lit for the purpose of land clearance or for burning a fire break also require either a bush fire hazard reduction certificate or an authority under the *EP&A Act 1979*. Provision for the development of a bush fire code is made in sections 100J to 100O.
- Third, limitations were placed on the relevance of other legislation for bush fire hazard reduction (s 100C). Environmental planning instruments under the *EP&A Act 1979* cannot prohibit emergency or managed bush fire hazard reduction work. Part 5 of the *EP&A Act 1979* does not apply to emergency hazard reduction; nor does it apply to managed hazard reduction where the work complies with a bush fire risk management plan, bush fire hazard reduction certificate and any relevant bush fire code. Hazard reduction work that complies with these instruments is also exempt from the *Native Vegetation Act 2003*, the *Threatened Species Conservation Act 1995* and the *National Parks and Wildlife Act 1974*.
- Fourth, provision was made for lodgement of a complaint that a bush fire hazard exists on land because of the failure of a public authority or private owner to carry out hazard reduction work. Procedures are specified as to how the relevant local authority or the RFS Commissioner should deal with the complaint (ss 74A to 74H).
- Fifth, in the case that hazard reduction work has not been carried out by a public authority or private owner, the RFS Commissioner may carry out bush fire hazard reduction work on the land.
- Sixth, all local authorities are required to annually report on their bush fire hazard reduction work.
- Finally, section 100B was added to the *Rural Fires Act 1997*, making it consistent with section 79BA of the *EP&A Act 1979*. Under this section, development on bush fire prone land is permitted subject to a bush fire safety authority issued by the RFS Commissioner.

3.3 Environmental Planning and Assessment Amendment (Infrastructure and Other Planning Reform) Act 2005

The purpose of this Act was to insert Part 3A into the *EP&A Act 1979* to provide a new assessment and approval process for major public and private projects.⁵ The 2005 legislation defined the kind of development that may be declared to be a Part 3A project as follows:

- Major infrastructure or other development that is considered by the Minister to be of State or regional environmental planning significance; or
- Major government infrastructure.

Basically, Part 3A provides a streamlined environmental assessment process, with the Minister for Planning as the approval authority. One effect of Part 3A is that it precludes the need to obtain a range of government approvals under different legislation, including under section 100B of the *Rural Fires Act 1997*. By section 100B the Commissioner of the NSW Rural Fire Service is otherwise empowered to issue a bush fire safety authority for development on bush fire prone land.

3.4 Rural Fires Amendment Act 2009

The [Rural Fires Amendment Act 2009](#) served four purposes:

- it empowered the RFS Commissioner and officers to investigate the cause or origin of a fire;
- it enabled RFS officers to remove persons and obstacles from a fire;
- it shifted responsibility for bush fire hazard management in rural fire districts from local authorities to the NSW RFS;
- and it doubled the penalties for failing to comply with a hazard reduction notice.⁶

The Act was introduced in the wake of the Victorian bushfires of February 2009 and in response to the review of bushfire arson laws by the NSW Attorney General's Department (see Figure 4).

According to the Second Reading Speech of the *Rural Fires Amendment Bill 2009*, the Local Government and Shires Association of NSW has supported the progressive transfer of bushfire management to the RFS. Sections 65A and 65-70 now allow the RFS Commissioner to exercise hazard management functions directly.

⁵ These would previously have been subject to the provisions of Part 4 or Part 5 of the EP&A Act.

⁶ [NSW Parliamentary Debates](#), 24 September 2009 (Second Reading Speech)

The NSW Attorney General's Department review of bushfire arson laws concluded that the most important issues were:

- (a) Increasing the penalties for specific minor offences for deterrence purposes; and
- (b) Providing new investigative powers to assist the Rural Fire Service in identifying fires which are the result of arson.⁷

Consequently, Division 3A of the *Rural Fires Act 1997* permits the RFS Commissioner to enter and inspect any land in order to investigate the cause or origin of a bush fire. This power of entry is only exercisable up to 24 hours after the fire has been extinguished. Entry onto the land is allowed with or without the owner or occupier's permission. The Commissioner can apply for a search warrant to investigate the cause or origin of a fire after the 24 hours have expired. The [Rural Fires Regulation 2008](#) has also been amended to double the penalty for failing to comply with hazard reduction notices, lighting a fire during a total fire ban, and leaving fires unattended.

3.5 State Revenue and Other Legislation Amendment (Budget Measures) Act 2008 and the Emergency Services Legislation Amendment (Finance) Act 2009

Funding for rural fires services in NSW is provided by a combination of contributions from insurance companies, the State Government and local councils. While the broad outline of the scheme has not altered, amendments have been made to the administrative arrangements and the like. Notably, the [State Revenue and Other Legislation Amendment \(Budget Measures\) Act 2008](#) amended the three emergency services Acts (*Fire Brigades Act 1989*, the *Rural Fires Act 1997* and the *State Emergency Service Act 1989*) to include the State Emergency Service as part of the contributory system that had previously applied only to the NSW Fire Brigades and NSW Rural Fire Service. The 2008 amending Act also standardised the provisions in the three emergency services Acts to allow for the contributions to be collected centrally by one agency called Emergency Management NSW.

In the words of the Second Reading speech, the [Emergency Services Legislation Amendment \(Finance\) Act 2009](#):

"seeks to clarify the funding arrangements and to address a number of anomalies detected following the implementation of the previous legislation. The anomalies became apparent only following the commencement of the new funding provisions this year."⁸

⁷ [Attorney General's Department, April 2009. Review of Bushfire Arson Laws.](#)

⁸ [NSW Parliamentary Debates](#), 10 November 2009 (Second Reading Speech)

The Act was also said to provide 'for relatively minor changes to the way by which contributions are calculated—ensuring that the correct amounts are collected from contributors and in the simplest manner'. Further amendments of a minor nature to the scheme were also made by the [State Revenue Legislation Amendment Act 2010](#).

4.0 BUSHFIRE ADMINISTRATION IN NSW

Roles and responsibilities for bushfire management in NSW are distributed amongst a number of administrative bodies (see Box 1).⁹ Three bodies are primarily responsible for bush fire fighting and mitigation services: the [NSW Rural Fire Service](#); the [National Parks and Wildlife Service](#); and [State Forests of NSW](#). Most of the bodies listed in Box 1 are represented on the Bush Fire Coordinating Committee. This Committee provides a forum for government and non-government organisations with an interest in prevention, mitigation and suppression of bushfires. It also plays a key role in coordinating the work of Bush Fire Management Committees

Box 1: Administrative bodies involved in bushfire management in NSW

- Australasian Fire and Emergency Service Authorities Council
- Bush Fire Coordinating Committee
- Bush Fire Management Committees
- Department of Environment, Climate Change and Water
- Emergency Management NSW
- Fire Service Joint Standing Committee
- Land and Property Management Authority
- Local councils
- National Parks and Wildlife Service
- NSW Fire Brigades
- Rural Fire Service
- Rural Fire Service Advisory Council
- State Forests of New South Wales

through its policy on Bush Fire Risk Management. Each Bush Fire Management Committee is responsible for developing and implementing a Bush Fire Risk Management Plan for its area under section 52 of the *Rural Fires Act 1997*.

[Emergency NSW](#) updated the [State Disaster Plan](#) in 2009. This Plan is established under the [State Emergency and Rescue Management Act 1989](#) and details emergency preparedness, response and recovery arrangements for NSW. Subsidiary plans include District Plans, Supporting Plans, and Sub plans, one of which is the NSW State Bush Fire Plan (2002). The aim of the NSW State Bush Fire Plan is "to set out the arrangements for preventing, preparing for, responding to and initially recovering from bush fire events by combat, participating and support agencies in NSW."¹⁰ It therefore specifies the roles and responsibilities each administrative body needs to fulfil in the case of a bushfire emergency.

The NSW Rural Fire Service has responsibilities related to land use planning and bushfire hazard reduction. Planning for Bush Fire Protection applies to all development applications on land classified as "bush fire prone land" (s 146 of the *EP&A Act 1979*). Development applications to the consent authority need to include a bush fire assessment report that complies with Planning for Bush Fire Protection. The Bush Fire Environmental Assessment Code (ss 100J to 100N of the *Rural Fires Act 1997*) regulates hazard reduction in NSW. The Code provides a streamlined environmental assessment process for use by issuing and certifying authorities when issuing bush fire hazard reduction certificates.

⁹ For a more detailed summary of the roles and responsibilities of some of the administrative bodies, see: [The Senate Select Committee on Agricultural and Related Industries, August 2010. *The incidence and severity of bushfires across Australia*](#).

¹⁰ [Bush Fire Coordinating Committee, 2002. *New South Wales State Bush Fire Plan*](#).

5.0 NSW RURAL FIRE SERVICE CAPACITY

The NSW Rural Fire Service is divided into four regions: Region North; Region West; Region South; and Region East. Each Region is further broken down into zones/teams, districts and brigades. RFS funding has gradually increased over the past 6 years while the number of RFS volunteers has remained relatively constant (see Table 1).

Table 1: NSW Rural Fire Service information (2004-2009)

Year	Total funding	Volunteers	Salaried staff	Brigades	Hazard reduction (ha)
08/09	\$211M	70,701	752	2,065	123,335
07/08	\$198M	70,159	710	2,058	124,556
06/07	\$168M	71,441	685	2,077	104,238
05/06	\$140M	70,745	680	2,100	107,742
04/05	\$134M	70,964	649	2,069	109,858

RFS funding comes from three sources according to a ratio set by the *Rural Fires Act 1997*: Local Government; a Fire Service Levy collected by the insurance industry; and NSW Treasury. Table 2 summarises the breakdown in funding from each source according to the set ratio between 2007 and 2009.

Table 2: Breakdown of Rural Fire Service funding by source (2007-2009)

	2007 \$(M)		2008 \$(M)		2009 \$(M)	
Local Government	13.3%	22.4	13.3%	13.3%	13.3%	22.4
Insurance Industry	73.7%	123.9	73.7%	73.7%	73.7%	123.9
NSW Treasury	13.0%	21.9	13.0%	13.0%	13.0%	21.9

Hazard reduction takes place across a variety of different land tenures in NSW (see Table 3). The amount of NSW subject to hazard reduction works increased between 2006/07/ to 2007/08 by approximately 20,000 hectares. Most of this hazard reduction involves burning. However, a significant proportion has also been implemented mechanically.

Table 3: Hazard reduction by tenure (2004-2009)¹¹

Tenure	2004/05	2005/06	2006/07	2007/08	2008/09
Catchment Authority	640.1	1,019	20.40	1,705.22	124.48
Commonwealth	0.6	12	n/a	252.20	94.82
Crown Land	943.2	1,286	911.20	2,502.84	2,456.15
Local Government	22,651.8	31,387	25,495.03	10,463.85	12,304.32
National Park	36,377.2	32,026	23,839.80	49,513.78	60,117.07
Other	n/a	n/a	n/a	104.88	7,702.16
Private	12,627.3	3,647	8,891.70	21,655.52	8,897.06
Railcorp	182.5	357	1,364.51	816.56	346.49
RTA	59.5	0	n/a	6,822.12	639.92
State Forests	36,402.5	38,008	43,715.64	30,718.73	30,652.04
Total	109,858	107,742	104,238.28	124,555.70	123,334.51

¹¹ Sources for Tables 1 to 3: [Rural Fire Service Annual Reports 2004-05 to 2008-09](#). Note, both the 2004/05 and 2005/06 Annual Reports included errors in the number of hectares recorded as subject to hazard reduction in 2004/05.

6.0 THE 2009 VICTORIAN BUSHFIRES ROYAL COMMISSION: KEY RECOMMENDATIONS

The bushfires of Black Saturday, 7 February 2009, caused widespread destruction across Victoria and resulted in the death of 173 people. Extreme climatic conditions gave rise to particularly destructive bushfires that were difficult if not impossible to contain or control. Due to the severity of the bushfires and their tragic consequences, a royal commission into the bushfires was announced on 9 February 2009 by the Victorian Premier.

The [Royal Commission](#) was charged with investigating all aspects of the bushfires, including prior preparation and planning, causes, circumstances and the response implemented. 51 interim recommendations were released in August 2009, all of which the Victorian Government agreed to implement. The [final report](#) was released in July 2010 and contained 67 recommendations. Initially, only 59 of the final 67 recommendations were accepted-in-principle by the Victorian Government.¹² Following community consultation with affected communities, the Government committed to implementing all recommendations except for recommendation 46. Recommendations 27, 32, 48, 49 and 53 were only supported in part, and recommendation 64 was supported-in-principle (see Table 4). On 1 August 2010, the NSW Emergency Services Minister committed to reviewing the final Royal Commission recommendations.

This section explores some of the key recommendations contained in the 2009 Victorian Bushfires Royal Commission final report (see Table 4). Recommendations included in Table 4 were selected according to the following criteria: the Victorian Government [response](#) to the Royal Commission findings; recommendations highlighted by the Royal Commission; the Victorian Government Listening to the community [report](#); findings from previous bushfire inquiries; and issues raised in recent NSW parliamentary debates. The recommendations considered in detail either attracted considerable debate or are of particular relevance to NSW.

Table 4: Victorian Bushfires Royal Commission key recommendations

Key recommendations
Bushfire Safety Policy
Recommendation 1: Revise the Victorian bushfire safety policy by adopting the national "Prepare. Act. Survive" framework with modifications
Recommendations 2, 6 and 7: Improve community bushfire safety education, include bushfires in the national school curriculum and develop a national bushfire awareness campaign
Recommendation 3: Establish mechanisms for helping municipal councils to undertake local planning that tailors bushfire safety options to the needs of individual communities
Recommendation 4: Introduce a comprehensive approach to shelter options
Recommendation 5: Introduce a comprehensive approach to evacuation, so that this option is planned, considered and implemented when it is likely to offer a higher level of protection than other contingency options

¹²

[Victorian Parliamentary Debates, 10 August 2010.](#)

Emergency and incident management
Recommendations 9, 17 and 18: Consistent, prescribed and audited training for all staff in incident management teams and level 3 Incident Controllers
Fireground response
Recommendation 20: Better organisation of aerial support for code red days
Recommendation 21: Develop a State-Commonwealth agreement that allows Commonwealth aerial resources that are suitable for firefighting and support activities to be incorporated in preparedness plans and used on days of high fire risk
Recommendation 22: The Country Fire Authority and the Department of Sustainability and Environment standardise operating, information and communication technologies
Recommendation 23: The Country Fire Authority review and improve its communications strategy as a matter of priority
Electricity-caused fire
Recommendation 27: Replace all SWER (single-wire earth return) and 22-kilovolt distribution feeders with aerial bundled cable, underground cabling or other technology
Recommendation 32: The State require distribution businesses to: disable the reclose function on the automatic circuit reclosers on all SWER lines during periods of the greatest risk in every fire season; and adjust the reclose function on the automatic circuit reclosers on all 22-kilovolt feeders on all total fire ban days to permit only one reclose attempt before lockout
Recommendation 34: Amend the regulatory framework for electricity safety to strengthen Energy Safe Victoria's mandate in relation to the prevention and mitigation of electricity-caused bushfires
Deliberately lit fires
Recommendation 35: Pursue a coordinated statewide approach to arson prevention
Planning and building
Recommendations 37-41: Improve bushfire management planning by: improving bushfire risk mapping; implementing a regional settlement policy that takes bushfire risk into account; amending planning provisions to ensure priority is given to the protection of human life; substantially restricting development in bushfire prone areas; and permitting native vegetation removal for fire protection purposes
Recommendation 46: Develop and implement a retreat and resettlement strategy for existing developments in areas of unacceptably high bushfire risk, including a scheme for non-compulsory acquisition by the State of land in these areas
Recommendations 47-49: Amendment of building standards by Standards Australia and the Australian Building Codes Board where appropriate
Recommendation 53: Amend the Sale of Land Act 1962 to require that a vendor's statement include whether that land is in a designated Bushfire-prone Area, a statement about the standard to which the building was made, the bushfire attack level assessment at the time of construction and a current bushfire attack level assessment
Land and fuel management
Recommendation 56: Fund and commit to implementing a long-term program of prescribed burning based on an annual rolling target of 5 per cent minimum of public land
Recommendation 57: Public reporting on prescribed burning
Recommendations 60-62: Ensure appropriate and adequate bushfire hazard reduction takes place along roadsides
Organisational structure
Recommendation 63: Appoint a Fire Commissioner as an independent statutory officer responsible to the relevant Minister and as the senior operational firefighter in Victoria
Recommendation 64: Replace the Fire Services Levy with a property-based levy and introduce concessions for low-income earners
Monitoring implementation
Recommendation 66: Appoint an independent monitor or the Victorian Auditor-General to assess progress with implementing the Commission's recommendations and report to the Parliament and the people of Victoria

6.1 Prepare, Stay and Defend or Leave Early policy (recommendation 1)

One of the most important Australia-wide bushfire management strategies is the 'Prepare, Stay and Defend or Leave Early' policy. Initially known as the 'Stay or Go' policy, it was renamed in order to stress the importance of leaving early if the choice to leave is made. Although the policy emphasises community preparedness and responsibility, it is nonetheless reliant for its effective implementation upon community education, a government responsibility commonly stressed as in need of improvement in bushfire inquiries.¹³ In contrast, some European countries and the USA advocate mandatory evacuation as the safest emergency management approach.¹⁴

The Royal Commission found the central tenets of 'Prepare, Stay and Defend or Leave Early' to be sound. However, the policy was severely tested by the Black Saturday fires, and weaknesses in its application were exposed. The Royal Commission identified eight issues with the policy, many of which had been previously identified in the research literature:

- (1) *Fire severity*: The Royal Commission concluded that "a bushfire policy must be capable of dealing with the fact that every fire is different and must differentiate potential firestorms from most bushfires".¹⁵ Fire agency advice to communities must accord with the seriousness of the fire.
- (2) *Operational focus in extreme conditions*: Where the intensity of the fire limits the capacity of the fire agency to control the fire, their attention should shift to providing information and attending to community safety rather than fire suppression.
- (3) *Community preparedness and assistance from authorities*: The policy makes too many assumptions about community preparedness: it assumes individuals have a well-thought-out plan; it assumes individuals do not require assistance from the authorities in the event of an emergency or produces a situation where community members falsely assume that they will receive advice from authorities during an emergency;¹⁶ and it assumes individuals possess adequate information during the course of an emergency to make the right decision. Translating the policy into practice is complex due to inherent vagueness

¹³ Kanowski, P.J., Whelan, R.J., Ellis, S., 2005. Inquiries following the 2002-2003 Australian bushfires: common themes and future directions for Australian bushfire mitigation and management, *Australian Forestry*, 68(2): 76-86.

¹⁴ Haynes, K., Tibbits, A., Coates, L., Ganewatta, G., Handmer, J., McAneney, J., November 2008. *100 years of Australian civilian bushfire fatalities: exploring the trends in relation to the 'stay or go policy'*, Report for the Bushfire CRC.

¹⁵ [Victorian Bushfires Royal Commission, July 2010. Final Report – Summary, p5.](#)

¹⁶ Tibbits, A., Handmer, J., Haynes, K., Lowe, T., Whittaker, J., 2008. Prepare, stay and defend or leave early: Evidence for the Australian approach, in (eds) Handmer, J., and Haynes, K., *Community Bushfire Safety*. Collingwood: CSIRO publishing, pp59-71.

and ambiguity in the advice given. Many people interpret 'prepare, stay and defend' as 'wait and see'. 'Leave early' lacks clarity, not specifying when to leave or where to go.¹⁷ Community complacency is another serious problem identified by many inquiries.¹⁸ A recent study of three rural areas in NSW vulnerable to bushfires found only 43% of survey respondents had prepared a personalised bushfire action plan, many of which had not been written down nor discussed with other family members.¹⁹ The importance of addressing community preparedness is also supported by a recent study into bushfire fatality trends. Between 1955 and 2008, 25.8% of fatalities occurred because of late evacuation, 24.6% occurred whilst defending property outside, 13.8% occurred while inside defensible property, and 10.8% occurred while travelling unaware through the area.²⁰

- (4) *Content of warnings*: Where warnings were given by the authorities, the information provided was too narrow, being directed at getting people to enact their fire plans rather than giving more specific direction or advice.
- (5) *Lack of alternative responses*: Although the preference is for people to adopt the lowest risk option available by leaving early, a comprehensive bushfire policy needs to provide for all possible outcomes including the reality that people will continue to 'wait and see'. The provision of shelters, refuges and evacuation are therefore critical fallback options (see also sections 6.3 and 6.4).
- (6) *Changing demographics and population growth*: Population growth and demographic change along the urban fringe and in rural towns has increased the number of people exposed to the threat of bushfire, many of whom are already unfamiliar with bushfire.²¹ While fatalities in rural locations have halved in the last 50 years, fatalities along the urban fringe and in rural towns have doubled.²² Continual delivery of frank and

¹⁷ Tibbits, A., Handmer, J., Haynes, K., Lowe, T., Whittaker, J., 2008. Prepare, stay and defend or leave early: Evidence for the Australian approach, in (eds) Handmer, J., and Haynes, K., *Community Bushfire Safety*. Collingwood: CSIRO publishing, pp59-71.

¹⁸ Kanowski, P.J., Whelan, R.J., Ellis, S., 2005. Inquiries following the 2002-2003 Australian bushfires: common themes and future directions for Australian bushfire mitigation and management, *Australian Forestry*, 68(2): 76-86.

¹⁹ Eriksen, C. and Gill, N., 2010. Bushfire and everyday life: Examining the awareness-action 'gap' in changing rural landscapes, *Geoforum*, 41(5): 814-825.

²⁰ [Haynes, K., Handmer, J., McAneney, J., Tibbits, A., Coates, L., 2010. Australian bushfire fatalities 1900-2008: exploring trends in relation to the 'Prepare, stay and defend or leave early' policy. *Environmental Science & Policy*, 13\(3\):185-194.](#)

²¹ Eriksen, C. and Gill, N., 2010. Bushfire and everyday life: Examining the awareness-action 'gap' in changing rural landscapes, *Geoforum*, 41(5): 814-825.

²² [Haynes, K., Handmer, J., McAneney, J., Tibbits, A., Coates, L., 2010. Australian bushfire fatalities 1900-2008: exploring trends in relation to the 'Prepare, stay and defend or leave early' policy. *Environmental Science & Policy*, 13\(3\):185-194.](#)

meaningful advice on the risks and how to adequately prepare for bushfires is therefore required.

- (7) *Housing defendability*: Not all houses are defendable in all circumstances. Important factors include proximity to heavily forested areas and the physical and mental capacity of the people who decide to defend a house. The risks and commitment associated with defending a house therefore need to be stressed, and warnings need to be issued when the bushfire intensity makes defence untenable.
- (8) *Safety of 'vulnerable' people*: The Commission was particularly concerned that nearly half of the deaths were people who were classed as 'vulnerable' because they were aged less than 12 years, or more than 70 years, or because they were suffering from an acute or chronic illness or disability. An analysis of bushfire fatalities between 1900 and 2008 revealed no preferential at-risk age group. However, there has been a significant increase in 40-59 age group fatalities and a very highly significant increase in 60+ age group fatalities in the last 50 years.²³ The vulnerability of women has also increased in recent years. Bushfire safety policy therefore needs to deal more specifically with age and gender differences.²⁴

In light of its findings, the Royal Commission made seven recommendations in respect to bushfire safety policy (see Box 2).²⁵ The Australasian Fire & Emergency Service Authorities Council has recently revised its position on Bushfires and Community Safety in light of the Royal Commission findings and recommendations. Revised RFS [bushfire safety publications](#) were released in October 2009. These publications stress the importance of adequate preparation. Advice is also given regarding several of the issues identified above, including: what to do under extreme or catastrophic fire conditions; how to prepare for different circumstances; and how to interpret and apply the 'Prepare, Stay and Defend or Leave Early' policy.

Box 2: Bushfire safety policy recommendations

- Enhance the role of warnings – including providing for timely and informative advice about the predicted passage of a fire and the actions to be taken by people in areas potentially in its path
- Emphasise that all fires are different in ways that require an awareness of fire conditions, local circumstances and personal capacity
- Recognise that the heightened risk on the worst days demands a different response
- Retain those elements of the existing bushfire policy that have proved effective
- Strengthen the range of options available in the face of fire, including community refuges, bushfire shelters and evacuation
- Ensure that local solutions are tailored and known to communities through local bushfire planning
- Improve advice on the nature of fire and house defendability, taking account of broader landscape risks

²³ [Haynes, K., Handmer, J., McAneney, J., Tibbits, A., Coates, L., 2010. Australian bushfire fatalities 1900-2008: exploring trends in relation to the 'Prepare, stay and defend or leave early' policy. *Environmental Science & Policy*, 13\(3\):185-194.](#)

²⁴ Haynes, K., Tibbits, A., Coates, L., Ganewatta, G., Handmer, J., McAneney, J., November 2008. *100 years of Australian civilian bushfire fatalities: exploring the trends in relation to the 'stay or go policy'*, Report for the Bushfire CRC.

²⁵ [Victorian Bushfires Royal Commission, July 2010. *Final Report – Summary*, p23.](#)

6.2 State support for Local Government emergency planning (recommendation 3)

The Royal Commission made three recommendations with regard to Local Government emergency planning (see Box 3).²⁶ A local planning approach was recommended because it would overcome one of the primary shortcomings identified in relation to the Black Saturday fires: the stay or go policy did not accommodate diverse local circumstances. Advantages of local planning also include the potential benefits of co-ordination with individual planning and the capacity to simulate emergencies in the highest risk areas.

Box 3: Local Government emergency planning recommendations

- Urgently develop local plans that contain contingency options such as evacuation and shelter
- Document in municipal emergency management plans and other relevant plans facilities where vulnerable people are likely to be situated
- Compile and maintain a list of vulnerable residents and distribute this list to the relevant authorities

6.3 Emergency shelters (recommendation 4)

Three shelter options were proposed by the Royal Commission: community refuges; bushfire shelters; and personal shelters (see also Box 4).²⁷ Councils are responsible for providing community refuges according to the Victorian [policy](#) on refuges. The Royal Commission recommended development of a new refuges policy, which would need to take the following challenges into account: identifying communities and areas where refuges might be appropriate; determining suitable locations; standards for design, construction, siting, operation and performance; capacity; assigning responsibility for establishment and maintenance; funding; and legal liability.

Box 4: Emergency shelter recommendations

- Develop standards for community refuges as a matter of priority and develop a new Fire Refuges Policy
- Designate community refuges – particular in areas of very high risk – where other bushfire safety options are limited
- Work with municipal councils to ensure that appropriate criteria are used for bushfire shelters
- Acknowledge personal shelters around their homes as a fallback option for individuals

Bushfire shelters (currently known as neighbourhood safer places (NSP)) provide alternative government-sanctioned shelter options that are less safe than community refuges. Bushfire shelters are less safe because they may not necessarily be designed to withstand a bushfire, for example: car parks; river banks; football ovals; and shopping strips. They are therefore options of last resort, providing relative, rather than guaranteed, safety. In Victoria, the government has published assessment guidelines for NSPs and established a legislative framework to govern their implementation and operation. In NSW, Local Emergency Management Committees identify and recommend NSPs to

²⁶ [Victorian Bushfires Royal Commission, July 2010. *Final Report – Summary*, p24.](#)

²⁷ [Victorian Bushfires Royal Commission, July 2010. *Fire Preparation, Response and Recovery: Final Report Volume II Part One*.](#)

the RFS for designation, after which they are published on the [RFS website](#). There is no statutory obligation on the RFS to designate NSPs.

Personal shelters may include inground swimming pools, nearby paddocks or privately built shelters. A [draft national standard for private bushfire shelter construction](#) was released by the Australian Building Codes Board in January 2010 in accordance with the Royal Commission interim recommendations.

6.4 Emergency evacuation (recommendation 5)

The Royal Commission stressed that late evacuation is always dangerous. However:

"the experiences of those who died and those who survived on 7 February challenge previous research results and suggest there might be greater opportunities for evacuation – particularly when an intense fire approaches – than previously considered. The Commission reiterates its conclusion in the interim report: compulsory evacuation should not be the policy of Victoria's fire agencies and the pecuniary interest exception should remain. The Commission is, however, of the view that the State should reassess its approach to evacuation, so that it is planned for, considered as a viable option for saving lives even after a fire has started, and used where it is likely to offer a higher level of protection than other contingency options in the circumstances."²⁸

A three-tier evacuation policy was recommended: relocation, where individuals and households independently decide to evacuate; assisted evacuation for vulnerable people who require support; and emergency evacuation, where planned agency-initiated evacuation is carried out in the face of an actual threat. 'Vulnerable' people, such as children, young people, people with a disability and frail aged people, require assistance to relocate away from a danger zone well before a fire arrives. The Royal Commission urged the State and local councils to implement systems for planning and executing evacuation plans for the locations of vulnerable people such as schools and aged care facilities.

In contrast to the Royal Commission recommendations, NSW Police have the power to forcibly evacuate people who are threatened by an actual or imminent emergency under section 60L of the *State Emergency and Rescue Management Act 1989*. Following the Victorian bushfires, West Australia introduced laws giving police the same powers in August 2009. These powers already existed in Queensland and South Australia.²⁹

²⁸ [Victorian Bushfires Royal Commission, July 2010. *Fire Preparation, Response and Recovery: Final Report Volume II Part One*, p48.](#)

²⁹ [The Australian, 25 August 2009, *Police get bushfire powers*.](#)

6.5 Planning and bushfire management (recommendations 37-41)

2,133 houses were destroyed in the Black Saturday bushfires. Many people had unsuccessfully defended well-prepared houses. In addition, a large proportion of the 173 people who died in the bushfires had been trying to defend their home. Consequently, "where people live, the standard of the buildings in which they live, how those standards are maintained and, therefore, planning and building controls are crucial factors affecting safety in a bushfire."³⁰ Recommendations 37 to 41 are of particular importance in this regard (see Table 4).

Recommendation 37 advocated improving bushfire risk mapping after finding that, in Victoria, bushfire risk mapping was inconsistent over time and fell under the jurisdiction of more than one agency. In contrast, consistency is achieved in NSW because bush fire prone land is designated centrally by the RFS under the *Environmental Planning and Assessment Act 1979* (see section 3.2).

The Royal Commission found that existing development in rural and peri-urban areas had often not taken bushfire risk into account, with many houses already located in high risk areas. Recommendation 38 proposed the development of a regional settlement policy by which to restrict development in areas known to pose an unacceptably high bushfire risk.³¹

Currently in Victoria, there are no planning zones that relate to bushfire risk. Instead of recommending the creation of a bushfire risk zone, which could result in harsh consequences for the landowners concerned, the Royal Commission recommended the strengthening of existing zones with respect to the use and development of land in areas of bushfire risk (recommendations 39 and 40).³² Regulation of development in bushfire risk areas has already been adopted in NSW, where development on 'bush fire prone land' is only permissible when it meets RFS specifications and requirements (see section 3.2).

Concurrent amendments to planning provisions were also recommended to ensure that the provisions give priority to the protection of human life (recommendation 39). This principle is also given effect through recommendation 41, where native vegetation removal is recommended to be subject to bushfire risk mitigation objectives, as decided by the relevant authority.

³⁰ [Victorian Bushfires Royal Commission, July 2010. *Final Report – Summary*, p13.](#)

³¹ [Victorian Bushfires Royal Commission, July 2010. *Fire Preparation, Response and Recovery: Final Report Volume II Part Two*.](#)

³² [Victorian Bushfires Royal Commission, July 2010. *Fire Preparation, Response and Recovery: Final Report Volume II Part Two*.](#)

6.6 Retreat and resettlement strategy (recommendation 46)

A retreat and resettlement strategy was the only recommendation not supported by the Victorian Government (see Table 4). According to the Royal Commission, the severity of the bushfires highlighted not only the importance of careful planning for future development, but also presented an opportunity to reassess the status of existing development in high risk areas. The Government commitment to rebuild homes and communities 'brick by brick' put "short-term social welfare considerations above the longer term safety of the community".³³ A retreat and resettlement strategy based on non-compulsory acquisition by the State provides one option for existing developments in areas of unacceptably high risk that encourages people to move somewhere safer. Six factors were recommended for consideration in the development of such a strategy (see Box 5).³⁴ The Royal Commission also noted that the proposal is not without precedent:

Box 5: Retreat and resettlement strategy recommendations

- Focus on land that is near to or adjoining public land
- Give priority to acquiring land that is in an area of unacceptably high bushfire risk and on which dwellings were damaged or destroyed by the 2009 bushfires
- Determine criteria for 'unacceptably high risk', with particular reference to the availability of other risk-mitigation measures such as shelters and refuges
- Use non-compulsory land acquisition as a last resort only
- Allow an application for acquisition to be initiated by a landowner or recommended by the State
- Specify the duration of the strategy and the available funds

"... over 30 years successive Victorian governments created a fire buffer zone in the Dandenong Ranges through extensive compulsory acquisition and restructuring of often inappropriately subdivided residential lots, with the objective of separating residential development from areas of high fire risk."³⁵

Four reasons were given by the Victorian Planning Minister for rejecting recommendation 46.³⁶ The first reason given adopts a practical standpoint, arguing that people who were already isolated in small communities may become more isolated. In addition, the types of individuals who may become more isolated could be those who are already at greater risk of bushfire, that is the 'vulnerable'. Second, and consequently, even small levels of depopulation could remove critical mass from rural areas, thereby undermining social

³³ [Victorian Bushfires Royal Commission, July 2010. *Fire Preparation, Response and Recovery: Final Report Volume II Part Two*, p249.](#)

³⁴ [Victorian Bushfires Royal Commission, July 2010. *Fire Preparation, Response and Recovery: Final Report Volume II Part Two*.](#)

³⁵ [Victorian Bushfires Royal Commission, July 2010. *Fire Preparation, Response and Recovery: Final Report Volume II Part Two*, p252.](#)

³⁶ [Victorian Parliamentary Debates, 31 August 2010.](#)

cohesion and economic viability. Third, the most contentious reason given for rejecting recommendation 46 was the potential public cost. According to the Government, the cost of buying the over 2000 homes lost in the fires would be in the order of \$700 million. Extrapolated to the 54,000 homes in the 52 towns in the high-risk category, the cost would be in the order of \$20 billion. The final reason given was the significant concern expressed by community members consulted after the release of the Royal Commission report. Instead of implementing recommendation 46, the Victorian Government is focusing on investing in bushfire risk mitigation and establishing comprehensive, localised fire management strategies.

In response to the position adopted by the Victorian Government, Commissioner Sue Pascoe later clarified that the recommendation was not meant to encompass whole towns but applied only to "micro-zones" of unacceptably high risk.³⁷ Consultation after the release of the Royal Commission's report found mixed community reaction; support, where given, was generally qualified. The question of whether to implement recommendation 46 hinges not only on the issues raised by the Victorian Government, but also on the duty of care governments have for people living in places of extreme bushfire risk.

The NSW Government has not commented publicly on recommendation 46. Recent research provides some support for the Royal Commission recommendation, finding that distance is the most important variable determining bushfire vulnerability.³⁸ The Local Government Areas in the Greater Sydney region to which this recommendation is most pertinent are the Blue Mountains, Shoalhaven, Ku-ring-gai, Wingecarribee, Evans, and Hornsby (see Appendix A).³⁹

6.7 Inclusion of bushfire risk information in the property acquisition process (recommendation 53)

The Royal Commission concluded that ensuring the ongoing upkeep of a house and its surrounds in order to maintain bushfire safety features is beyond the scope of legislation and regulation. Aside from improved community information and education, the point of sale provides a logical time at which information about the bushfire safety of a site and building can be made known to prospective purchasers (see Table 4). The Royal Commission therefore recommended amendment of section 32 of the Victorian *Sale of Land Act 1962* to require provision of bush fire risk information by the vendor for prospective purchasers.

³⁷ [The Age, 1 September 2010, *Brumby plays fast and loose*.](#)

³⁸ McAneney, J., Chen, K., Pitman, A., 2009. 100-years of Australian bushfire property losses: Is the risk significant and is it increasing? *Journal of Environmental Management*, 90(8): 2819-2822.

³⁹ [Chen, K., 2005. *Counting bushfire-prone addresses in the Greater Sydney region*. Risk Frontiers – Natural Hazards Research Centre, Macquarie University.](#)

The Victorian Government provided support in part for this recommendation. It agreed to amend the *Sale of Land Act 1962* to require vendors to provide information about whether the land is in a designated bushfire prone area. Where Bushfire Attack Level assessment information is available, it must also be included on the s32 statement. However, the Victorian Government did not support the requirement upon vendors to undertake a *current* bushfire attack level assessment prior to sale.⁴⁰

6.8 Hazard reduction (recommendation 56)

Bush fire hazard reduction, or 'prescribed burning', can be defined as 'the controlled application of fire under specified environmental conditions to a predetermined area and at the time, intensity and rate of spread required to attain planned resource management objectives.'⁴¹ Fuel levels are the only natural fire risk factor over which governments and communities can exercise control.⁴² However, the Royal Commission found an absence of in-depth understanding of the connections between hazard reduction and the consequences of bushfires. This is despite the existence of substantial scientific research and many inquiry recommendations for increased hazard reduction. The Royal Commission was able to draw six conclusions about the effectiveness of hazard reduction from research into the Victorian bushfires (see Box 6).

Box 6: Factors that shape the effectiveness of hazard reduction

- Fuel age significantly effects fire suppression under moderate and low weather conditions
- A well-conducted prescribed burn, if large enough, might stop a fire in the first one to two years after it is conducted
- Prescribed burning reduces the number of bushfires
- Prescribed burning reduces fuel load and consequently reduces fire intensity
- Reduction in the rate of spread of fire will persist as a consequence of prescribed burning for five to eight years
- Reduced fire intensity due to prescribed burning improves firefighter safety

Hazard reduction is a resource-intensive and costly activity accompanied by reputational, political and operational risks. The Royal Commission found the amount of hazard reduction undertaken in Victoria (1.7% of public land in 2008) to be inadequate. A target of 5 to 8 per cent prescribed burning of public land was recommended as necessary for community safety. This target was considered to pose an acceptable level of risk to the environment.⁴³ The

⁴⁰ [Victorian Government, 27 August 2010. Victorian Government response to recommendations of the Victorian Bushfire Royal Commission Final Report.](#)

⁴¹ [Victorian Bushfires Royal Commission, July 2010. Fire Preparation, Response and Recovery: Final Report Volume II Part Two, p280.](#)

⁴² Ford, G., 2010. Bushfire Fuel Management in Victorian Forests. *Farm Policy Journal*, 7(1):21-29.

⁴³ [Victorian Bushfires Royal Commission, July 2010. Fire Preparation, Response and Recovery: Final Report Volume II Part Two.](#)

Victorian Government committed to a staged increase of planned burning to 5% of treatable public land by 2013-14.⁴⁴

Recently, the NSW Opposition raised concerns regarding the amount of hazard reduction annually conducted and the lack of RFS firefighters in some areas of NSW.⁴⁵ According to the Opposition, of the 33 per cent of land in NSW classified as bush fire prone land, approximately 0.4 per cent (115,000 ha) is burnt annually.⁴⁶ Most recently, a total of 123,334 hectares of land were subject to hazard reduction in 2008-09 (see Table 3). This is equivalent to 0.46 per cent of the total amount (i.e. both public and private land) of bush fire prone land in NSW, far short of the 5 to 8 per cent prescribed burning of *public land* recommended by the Royal Commission.⁴⁷ The Rural Fire Service Association warned that the proposed Victorian model is unworkable in NSW, stressing the importance of targeted hazard reduction given percentage targets could lead to burns which do little to reduce genuine risk.⁴⁸ However, the Royal Commission had already taken this argument into consideration, recommending priority be given to targeting areas identified as high risk by the expert panel they consulted.⁴⁹

6.9 Fire Commissioner (recommendation 63)

Systemic failings in the emergency organisations' collective response to the bushfire were identified by the Royal Commission. It was therefore recommended that improved operational performance be given absolute priority, the first step of which was the immediate appointment of a full-time Fire Commissioner. Commissioner responsibilities would not include governance or management of the three fire agencies. Rather, the Commissioner would direct all three agencies with regard to: developing and building operational capacity for emergency response; the control of level 3 fires; and leading a program of reform. The Victorian Government announced the appointment of a Fire Services Commissioner in August 2010 and plans to introduce legislation prior to the 2010-11 bushfire season. NSW established an equivalent position of Rural Fire Commissioner with the *Rural Fires Act 1997*.

⁴⁴ [Victorian Government, 27 August 2010. *Victorian Government response to recommendations of the Victorian Bushfire Royal Commission Final Report*.](#)

⁴⁵ [NSW Parliamentary debates, 1 September 2009.](#)

⁴⁶ [NSW Parliamentary debates, 31 August 2010.](#)

⁴⁷ The total amount of bush fire prone land in NSW is 26,764,277 hectares, [NSW Parliamentary debates, 20 May 2010.](#)

⁴⁸ [SMH, 16 August 2010. *Fires seek \\$20m more for fuel burn*.](#)

⁴⁹ [Victorian Bushfires Royal Commission, July 2010. *Fire Preparation, Response and Recovery: Final Report Volume II Part Two*.](#)

6.10 Fire Services Funding (recommendation 64)

As is the case in NSW (see Table 2), fire services in Victoria are funded through a mix of contributions from insurance companies, the State and local councils. Insurance companies recoup the cost of their statutory contribution through the imposition of a Fire Services Levy on insurance premiums for building and contents insurance. The argument for sourcing funding from insurance companies is that it is a good way of linking the charge for fire services to the fire risk of individual properties. However, the evidence suggests that the link is tenuous at best.⁵⁰

Two problems with the Fire Services Levy were identified by the Royal Commission. First, the funding model is inequitable: "those who do not insure or who under-insure avoid making a proportionate contribution to the funding of fire services but are afforded the same protection as those with insurance. A disproportionate share of the cost of providing fire services benefitting the entire community falls on insurance policyholders."⁵¹ Second, there is a lack of transparency: "there is no accountability in relation to the amount the insurance companies collect from their customers and nor is there accountability about how the revenue thus gained is dealt with by insurance companies."⁵² Therefore, the Royal Commission recommended replacing the Fire Services Levy with a property-based levy along with concessions for low-income earners.

The Victorian Government accepted this recommendation in-principle, having already released a Green Paper that contained seven options for funding fire services in October 2009. Further, the Victorian Government intends to release a White Paper for public discussion in February 2011. This will outline a revenue neutral, progressive approach to a property-based levy that maintains existing funding levels whilst offering a 50% concession for low income earners.

NSW is currently the only State committed to retaining the Fire Services Levy. An inquiry into fire services funding was conducted in 2004 by the Legislative Assembly Public Accounts Committee (see Figure 3). It found there was a strong theoretical case to be made for replacing the insurance-based system due to inefficient economic outcomes, inherent inequities and a lack of transparency. Nevertheless, the final recommendation made by the Committee was for the retention of the insurance-based system with minor amendments. The arguments made for this decision are as follows: the current arrangements are administratively efficient and relatively inexpensive to the Government; significant limitations in the available data used to model different funding options limited the validity of the finding that most property owners would

⁵⁰ [Victorian Bushfires Royal Commission, July 2010. *Final Report – Summary*.](#)

⁵¹ [Victorian Bushfires Royal Commission, July 2010. *Fire Preparation, Response and Recovery: Final Report Volume II Part Two, p382*.](#)

⁵² [Victorian Bushfires Royal Commission, July 2010. *Fire Preparation, Response and Recovery: Final Report Volume II Part Two, p384*.](#)

contribute less to fire services through a property levy; and more work was needed to ensure the commercial sector would not be unfairly disadvantaged by a change in the funding system.⁵³ The NSW Government accepted the Committee findings in March 2005. Since then, several stakeholders have come out in opposition to the Fire Services Levy, including: IPART; the Henry Tax Review; and the National Insurance Brokers Association.⁵⁴ As noted earlier in this paper, while the scheme remains largely intact, it has been subject to various amendments of detail and administration in the last few years.

⁵³ [Legislative Assembly Public Accounts Committee, September 2004. *Review of fire services funding*.](#)

⁵⁴ Sources: [Independent Pricing and Regulatory Tribunal, October 2008. *Review of State Taxation: Report to the Treasurer, Other Industries – Final Report*](#); [Henry, K., December 2009. *Australia's future tax system: Report to the Treasurer*](#); [National Insurance Brokers Association, May 2009. *What you need to know about taxes on insurance: Insurance taxes discussion paper*](#).

7.0 CONCLUSION

Bushfires are a significant natural hazard faced by many rural and urban communities in NSW. The number of communities at risk from bushfires will increase as the rural-urban interface expands around cities such as Sydney. An increase in bushfire frequency and intensity may also occur due to climate change. These factors, together with the inherency of bushfire in the NSW landscape, point to the increased importance of bushfire management in NSW.

A number of State, Territory and Commonwealth Government bushfire inquiries have been conducted in the last 20 years. Together, these inquiries have recommended a range of regulatory and administrative changes to bushfire management. One of the most recent bushfire inquiries investigated the tragic events of Black Saturday in Victoria, where 173 people lost their lives. The key inquiry recommendations identified and discussed in this paper highlight some of the strengths and weaknesses of bushfire management in NSW. Five of the most important and contentious recommendations are worth reiterating in conclusion.

Community complacency is a finding common to many bushfire inquiries. This complicates the implementation and adoption of one of the most important bushfire management strategies: the "Prepare, Stay and Defend or Leave Early" policy. The Royal Commission found the central tenets of this policy to be sound. However, important qualifications need to be addressed: implementation of the policy in response to a bushfire needs to be sensitive to the severity of the fire; where the fire intensity militates against suppression, focus should shift to ensuring community safety; community knowledge and preparedness is vital for ensuring the right decisions are made when facing a bushfire; targeted planning needs to be undertaken to ensure the safety of 'vulnerable' community members; and alternative bushfire responses such as emergency shelters or emergency evacuation need to be provided.

For the Royal Commission, a retreat and resettlement strategy merits consideration given that circumstances similar to those experienced on Black Saturday, when many houses were impossible to defend, are likely to occur again. Increased hazard reduction is a means by which community risk can be reduced, and was stressed by the Royal Commission. However, it cannot entirely remove the risk to which some properties are exposed.

The appointment of a fire commissioner was deemed to be a vital component of improved bushfire agency operational performance. This recommendation has existed in NSW since 1997. On the other hand, NSW is the only State committed to continuing with a statutory Fire Services Levy on the insurance industry to raise funding for fire services. The Royal Commission recommended replacement of the Fire Services Levy in Victoria with a property-based levy that makes provision for low-income earners in order to remove inequity and increase transparency in fire services funding.

APPENDIX A

All addresses located within 130 metres of bushland are classified as being at "high risk" of bushfire by Chen (2005). Over 30% of properties are at "high risk" of bushfire in six LGAs in the Greater Sydney region: Blue Mountains; Shoalhaven; Ku-ring-gai; Wingecarribee; Evans; and Hornsby. Table 1 contains the analysis of properties within 61 Local Government Areas in the Greater Sydney region.

Table 1: Percentage of addresses located within 130 metres from bushland in the Greater Sydney region⁵⁵

Local Government Area	Percentage of addresses at high risk of bushfire	Number of addresses analysed
Blue Mountains	73.0	45,025
Shoalhaven*	39.7	55,143
Ku-ring-gai	36.0	45,478
Wingecarribee*	36.0	23,740
Evans*	32.4	3,256
Hornsby	31.1	66,813
Wollondilly*	27.6	17,768
Gosford	27.0	102,501
Pittwater	26.4	30,083
Greater Lithgow*	24.9	14,356
Hawkesbury*	23.6	31,086
Baulkham Hills	19.7	66,145
Cessnock	16.3	24,062
Lake Macquarie	15.0	87,178
Wyong	14.6	77,275
Sutherland Shire	14.5	111,146
Port Stephens	14.5	36,705
Dungog*	12.2	5,248
Ryde	10.1	59,021
Oberon*	9.5	3,287
Wollongong	8.8	101,966
Willoughby	8.4	47,682
Warringah	8.1	71,747
Campbelltown	7.3	66,032
Kiama	5.3	10,606
Bankstown	5.0	83,029
Blacktown	4.5	116,445
Singleton*	4.2	12,071
Maitland	3.5	28,764
Penrith	3.2	81,968
Newcastle	3.0	78,476
Lane Cove	2.5	25,166
Hunter's Hill	2.1	6,854
Shellharbour	1.5	30,743

⁵⁵

Table source: [Chen, K., 2005. Counting bushfire-prone addresses in the Greater Sydney region, Risk Frontiers – Natural Hazards Research Centre, Macquarie University.](#)

Hurstville	1.5.	41,607
Liverpool	1.3	68,280
Manly	1.1	27,447
Parramatta	1.1	93,619
Camden	0.7	21,396
North Sydney	0.4	59,773
Fairfield	0.2	86,178
Randwick	0	70,162
Auburn	0	29,294
Woollahra	0	39,585
Bathurst	0	14,756
Waverley	0	43,222
Strathfield	0	15,507
South Sydney	0	93,771
Botany Bay	0	20,325
Burwood	0	16,838
Leichhardt	0	39,764
Canterbury	0	69,949
Ashfield	0	28,512
Concord	0	15,348
Drummoyne	0	24,290
Mosman	0	20,424
Marrickville	0	49,653
Holroyd	0	52,422
Rockdale	0	63,661
Kogarah	0	30,463
Sydney	0	55,662

* For these nine LGAs, the results may be biased because only a partial set of addresses was used in the analysis. The analysis was complete for the other fifty two LGAs.