

# BEGA VALLEY FIRES INDEPENDENT REVIEW

OFFICE OF EMERGENCY  
MANAGEMENT

# FOREWORD

Fires and especially bushfires are here to stay. As pointed out by former High Court Judge Michael Kirby AC CMG in an address to the Australasian Fire and Emergency Service Council in 2010:

*The largest fires in recorded Australian history were in 1851 when a quarter of Victoria (5 million hectares) fell under fire; through to 7.3 million hectares in Queensland in 1974-5; 15.5 million hectares in Western Australia in 2003; 16 million hectares in South Australia in 1974-4 and four occasions in the Northern Territory since the 1960s where bushfires have burnt no fewer than 40 million hectares.*<sup>1</sup>

Despite the ever present risk of bushfire and its extended season we have adopted a federated approach to the problem with each Australian jurisdiction having in place a slightly different arrangement to deal with the threat.

New South Wales is no different.

Following the London tube bombings in July 2005:

*The Coroner raised a concern that despite the emergency services using electronic information capturing systems (such as the computer aided dispatch system used by the police) there was no means by which an agency could see*

*another's information system. She commented that no comparable electronic links existed between the London Fire Brigade and any other emergency service, or between the London Ambulance Service and the British Transport Police or City of London Police.*<sup>2</sup>

Again New South Wales is no different in facing these challenges. This review discovered that each emergency service has varying degrees of capability to manage and share real time operational information.

While there has been much recent commentary suggesting that a single, joined up fire service would address these challenges, it is clear that agency and volunteer culture in New South Wales would not make this a practical proposition at this time. In looking at arrangements for 'call and dispatch' this review has opted for the next best thing. I am proposing a fully integrated call and dispatch centre for all New South Wales fire operations (and other emergencies) using the State's resources to deal with the State's challenges and badged as a State asset. Automatic Vehicle Location devices fitted to the NSW Rural Fire Service fleet will provide better levels of safety for volunteers and accurate resource deployments.

There are some natural disasters and bushfires that are beyond human intervention to control. It is therefore incumbent upon all of us to ensure we use an integrated and contemporary approach to those challenges to make our communities safer and more resilient.

**M.Keelty, AO, APM**

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<sup>1</sup> After the Fires Die Down and the Lawyers Depart  
– AFAC 9 September 2010

<sup>2</sup> Coroner's Inquests into the London bombings  
of 7 July 2005: Review of progress



Photo: Paul Cavalier

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# APPROACH

The independent review into the Bega Valley bushfires that occurred on 18 March 2018 was undertaken at the request of the Minister for Police and Emergency Services, the Hon Troy Grant MP, and was formally commissioned by the NSW Office of Emergency Management.

The Review terms of reference are attached at **Annexure A**.

The Review was conducted with the support of the Office of Emergency Management. The Review had no powers to seek witnesses or documents and was undertaken in a co-operative way.


Agencies and stakeholders were asked to provide information and exchanges occurred where further information or clarification was sought.

In all, a total of 25 people or agencies were interviewed, there were five focus group meetings and site visits and 183 submissions from members of the public and stakeholders. A list of persons interviewed is attached at **Annexure B**.

The 'word clouds' on page 8 of this report were developed from the interviews and submissions made during the Review.







**“Create an agnostic approach to the threat of fires from both a departmental and organisational perspective.”**



# BEGA VALLEY – TIMELINE OF CONDITIONS – 18 MARCH 2018

1228 Hrs: First 000 Call

Incidents: <b>3</b>	Incidents: <b>3</b>	Incidents: <b>6</b>	Incidents: <b>12</b>	Incidents: <b>13</b>	Incidents: <b>18</b>	Incidents: <b>20</b>	Incidents: <b>21</b>	Incidents: <b>21</b>
<b>1200</b> HRS	<b>1230</b> HRS	<b>1300</b> HRS	<b>1330</b> HRS	<b>1400</b> HRS	<b>1430</b> HRS	<b>1500</b> HRS	<b>1530</b> HRS	<b>1900</b> HRS
37.1 degrees celcius	36.9 degrees celcius	37 degrees celcius	37.5 degrees celcius	38.4 degrees celcius	37 degrees celcius	38.4 degrees celcius	36.8 degrees celcius	29 degrees celcius
18% humidity	18% humidity	17% humidity	18% humidity	17% humidity	17% humidity	15% humidity	18% humidity	23% humidity
Wind NW 32km/h	Winds NW 44km/h	Winds NW 44km/h	Winds WNW 32km/h	Winds WNW 24km/h	Winds NW 41km/h	Winds WNW 30km/h	Winds WNW 41km/h	Winds W 17km/h
Gusts 50km/h	Gusts 72km/h	Gusts 72km/h	Gusts 54km/h	Gusts 48km/h	Gusts 65km/h	Gusts 57km/h	Gusts 59km/h	Gusts 32km/h

\*Incident numbers for the Bega Valley fires recorded by RFS, 18 March 2018.

# BEGA VALLEY – TIMELINE OF RESOURCES – 18 MARCH 2018

1228 Hrs: First 000 Call

## CONFIRMED TOTAL RESOURCES

Incidents: <b>3</b>	Incidents: <b>3</b>	Incidents: <b>6</b>	Incidents: <b>12</b>	Incidents: <b>13</b>	Incidents: <b>18</b>	Incidents: <b>20</b>	Incidents: <b>21</b>	Incidents: <b>21</b>
Resources deployed: <b>4</b>	Resources deployed: <b>15</b>	Resources deployed: <b>24</b>	Resources deployed: <b>39</b>	Resources deployed: <b>44</b>	Resources deployed: <b>41</b>	Resources deployed: <b>49</b>	Resources deployed: <b>59</b>	Resources deployed: <b>71</b>

1200HRS

1230HRS

1300HRS

1330HRS

1400HRS

1430HRS

1500HRS

1530HRS

1900HRS



## RFS RESOURCE FIGURES

<b>RFS</b> <ul style="list-style-type: none"> <li>• 2 heavy units</li> <li>• 2 light units</li> </ul>	<b>RFS</b> <ul style="list-style-type: none"> <li>• 6 heavy units</li> <li>• 7 light units</li> <li>• 2 group captains</li> </ul>	<b>RFS</b> <ul style="list-style-type: none"> <li>• 10 heavy units</li> <li>• 9 light units</li> <li>• 4 group captains</li> </ul>	<b>RFS</b> <ul style="list-style-type: none"> <li>• 11 heavy units</li> <li>• 17 light units</li> <li>• 7 group captains</li> <li>• 1 aviation asset</li> </ul>	<b>RFS</b> <ul style="list-style-type: none"> <li>• 13 heavy units</li> <li>• 18 light units</li> <li>• 7 group captains</li> <li>• 1 aviation asset</li> </ul>	<b>RFS</b> <ul style="list-style-type: none"> <li>• 11 heavy units</li> <li>• 17 light units</li> <li>• 7 group captains</li> <li>• 1 aviation asset</li> </ul>	<b>RFS</b> <ul style="list-style-type: none"> <li>• 13 heavy units</li> <li>• 21 light units</li> <li>• 6 group captains</li> <li>• 2 aviation assets</li> </ul>	<b>RFS</b> <ul style="list-style-type: none"> <li>• 14 heavy units</li> <li>• 24 light units</li> <li>• 6 group captains</li> <li>• 2 aviation assets</li> </ul>	<b>RFS</b> <ul style="list-style-type: none"> <li>• 15 heavy units</li> <li>• 19 light units</li> <li>• 8 group captains</li> <li>• 6 aviation assets</li> </ul>
		<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 1 appliance</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 3 appliances</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 3 appliances</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 3 appliances</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 3 appliances</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 3 appliances</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 6 appliances</li> </ul>
						<b>NPWS</b> <ul style="list-style-type: none"> <li>• 2 units</li> </ul>	<b>NPWS</b> <ul style="list-style-type: none"> <li>• 7 light units</li> </ul>	<b>NPWS</b> <ul style="list-style-type: none"> <li>• 3 light units</li> </ul>
								<b>FCNSW</b> <ul style="list-style-type: none"> <li>• 5 light units</li> <li>• 1 heavy unit</li> <li>• 1 heavy plant</li> </ul>

\*Red figures illustrate the discrepancy in the operational understanding of resources deployed.

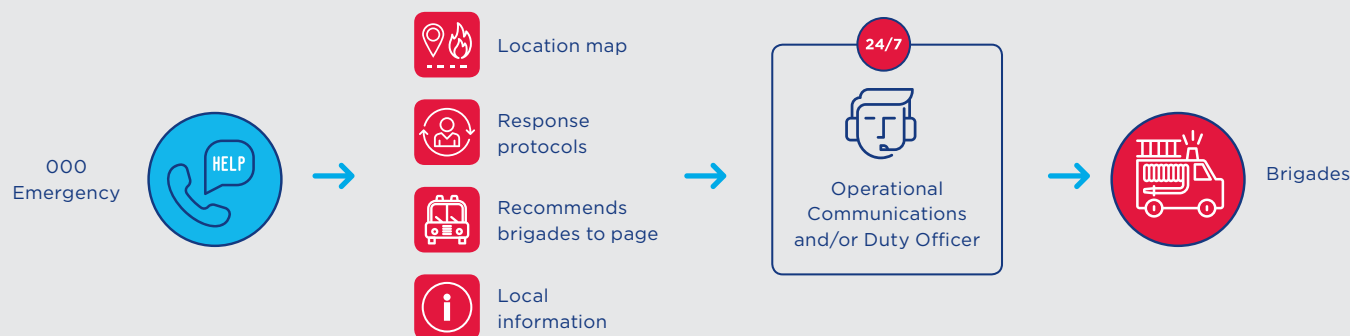
## FRNSW RESOURCE FIGURES

<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 1 appliance</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 3 appliances</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 5 appliances</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 5 appliances</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 5 appliances</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 6 appliances</li> </ul>	<b>FRNSW</b> <ul style="list-style-type: none"> <li>• 13 appliances</li> </ul>
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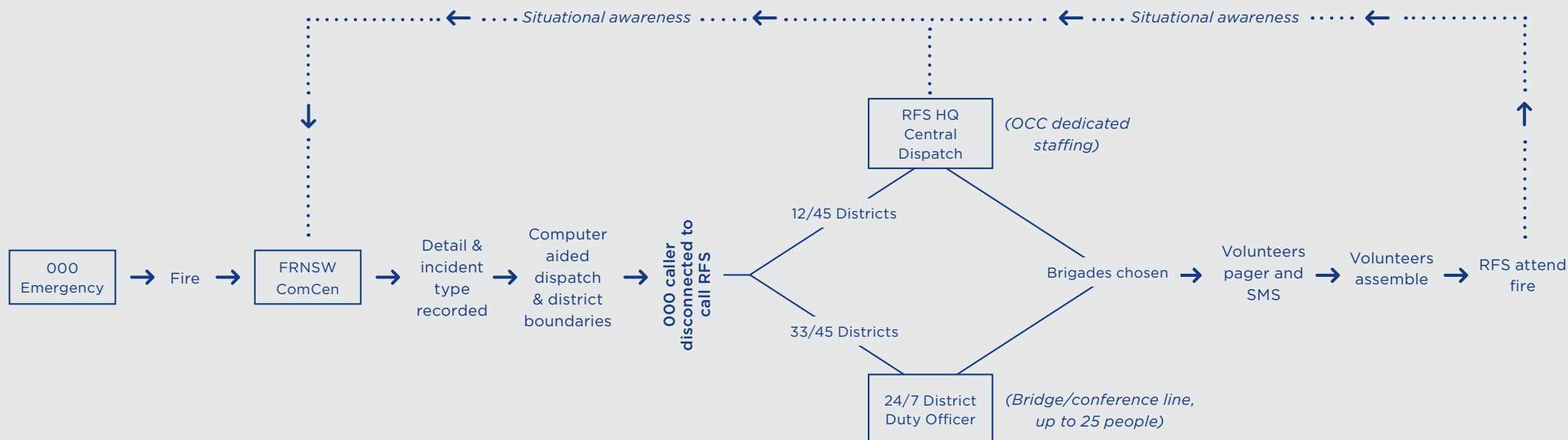




# RFS CALL AND DISPATCH PERCEPTION



# RFS CALL AND DISPATCH REALITY



# INDEPENDENT REVIEW

## of the Operational Response to the Bega Valley fires

### The Review

We are used to pouring accolades upon our firefighters who alongside with other emergency services personnel and many members of the community, place themselves at risk to save lives and protect property in times of fire, natural disasters and emergency situations. Nothing in this Review should change that very positive and realistic perception.

For instance, the Bega Valley fires on 18 March 2018 burnt through more than 1,250 hectares destroying 65 homes and 70 caravans or cabins. Importantly, no one lost their lives and 810 houses were saved through the combined efforts of firefighters, police and residents.

While this Review is critical in some parts, it should not be seen as anything other than a strong supporter of the 85,000 volunteers in organisations such as the NSW Rural Fire Service (RFS), Fire Rescue NSW (FRNSW) and the NSW State Emergency Service (SES). These people give of their time week in and week out to provide a capability to the State

of NSW that no government could afford. They and the community members who help them in a time of crisis are an outstanding example of the pathway to building resilient communities.

What was known as a typical bushfire season lasting a few months over summer has now extended to almost eight months of the year not including hazard reduction activities and strategies. Bushfires burning in south east Sydney in the middle of April 2018 is a good example of the extension of the bushfire season.

This Review had a specific focus:

- The adequacy of the fire services response to what is now termed ‘the Bega Valley fires’ on 18 March 2018, and
- The call taking and dispatch arrangements of both FRNSW and the RFS.

Importantly, the Review was not a formal inquiry and it had no powers to seek information or examine witnesses as is sometimes common in these matters. The Review liaised with the NSW Coroner and the NSW Police Force Arson Squad to ensure that

there was no interference with their respective functions.

The Review received some 183 submissions many of which were from members of the community with the majority submitted by firefighters both volunteers and full time employees.



Photo: Paul Cavalier

## Adequacy of the response to the Bega Valley fires

As noted in this Review in a timeline of events surrounding the Bega Valley fires, all agencies increased their resource deployments to the fires commensurate with the increased risk as the day unfolded. It should be noted that other parts of the State experienced similar weather conditions on that day (18 March 2018) which required decision makers to make judgements about how much resource was in reserve for other fires burning in the State.

The Review has concluded that despite some of the media commentary many more homes might have been destroyed in the Bega Valley fires and even lives lost had the efforts of firefighters and residents not been so successful.

## Problems Identified

From the outset of the Review it became clear that staff within FRNSW had been building a dossier of incidents where it is claimed the RFS had not responded appropriately to some 110 fires across the State. This Review looked at some of those events in a similar fashion to the Bega Valley fires.

This Review did not look at merging the two fire services, but the current arrangements lack a truly collaborative approach and can be improved.

The Review noted the positive steps taken by both fire Commissioners who had recently issued two joint statements reassuring both the community and their organisations of steps taken to work more closely.

The desire to create a dossier to point out purported failures or sub-standard performance by a partner agency belies the excellent and sometimes life-threatening work of both agencies. To bring the animosity forward in the hours following people losing their homes and life possessions is deplorable.

Across Australia emergency services volunteer numbers are in decline as country towns lose populations to the cities and the demographic of the volunteers sourced from farming generations has reduced. It is the responsibility of the leadership of the agencies and their employee representative bodies to create the conditions that encourage the volunteer ethos and tradition rather than allowing it to be denigrated.

The call and dispatch arrangements between a 000 caller, FRNSW and the RFS are flawed and in need of urgent reform. Even the executives of the RFS and the Rural Fire Service Association acknowledge that they are flying blind for a period of time when both the deployment of resources and situational awareness are not available. This in turn creates a knowledge gap for the FRNSW Fire Communications Centre (ComCen) taking multiple 000 calls for assistance.

It was asserted to the Review team that flying blind equates to the 'fog of war'. It is accepted that there will be periods in most fire events where there is a high degree of absent or conflicting information until full situational awareness is achieved. However, this review contends that improved awareness of the location of the RFS and other operational resources clearly needs to be improved.

No better example of flying blind was the RFS and FRNSW providing two completely different pictures to this Review on what resources were available to fight the Bega Valley fires on 18 March 2018. Thankfully, the error was in favour of the community with more FRNSW resources being available than that shown by the RFS Incident Control Online (ICON) system.



The reliability of information provided to the community during a fire (either through the Fires Near Me app, or through the RFS; social media) is largely reliant on the accuracy of operational systems. When these systems do not have up to date information, there is potential for the community to not accept or trust the reliability of the available information. It follows that a single source of truth is not available for the community in a timely manner through the Fires Near Me app or social media.

The adoption of an Automatic Vehicle Location (AVL) device, interoperable with those already in use by FRNSW and the SES will go some way towards addressing some but not all of these problems. Situational awareness will still need to be communicated back to decision makers and the public. This solution or a version of it, is yet to be implemented by the RFS and this should be addressed as a matter of immediate priority.

The Review could not ignore the elephant in the room that members of both fire organisations are often critical of each other with the animosity at times, palpable. It seems that the common enemy of fires is sometimes overlooked through the distraction of finding fault with each other.

This contention is made worse by the fact the FRNSW ComCen manages call taking and relays information to the RFS. Despite the inter

agency agreements and business rules in place, at the time of the Bega Valley fires and other fires complained of by both organisations, it is clear that the power imbalance of one agency managing call taking for both agencies is the nub of the problem. Equally, FRNSW ComCen forward deploying assets without the knowledge of the RFS merely exacerbates the situation.

To their credit, both fire commissioners have taken steps during the conduct of this Review to place a RFS officer into FRNSW ComCen but a significant amount of mistrust about the dispatch process remains in the middle management ranks.

There is a plethora of Memoranda Of Understanding (MOU), policies and legislation as well as mutual aid agreements creating a bureaucratic process to give jurisdiction to one fire agency over another for different geographical areas. The Review noted that there had been delays in reaching agreement on fire boundaries such as those for Bathurst, Cumberland and Blue Mountains, which only highlights the need to cut through this red tape and focus on fighting the fires.

The Review identified that the MOU between FRNSW and the RFS had not been updated since 2011 despite the appointment of a new FRNSW Commissioner in 2017. The Review also noted that the peak fire co-ordination

committee, the Fire Services Joint Standing Committee had failed to provide the Minister with a yearly report in accordance with its own policies.

Based on interviews and material sent to the Review, many Mutual Aid Agreements that are in place at the local level are either ignored or no longer relevant.

These type of issues render the current governance structure ineffective.

Fire is agnostic. Along with natural disasters it gives no credence to the agency used to combat it, the jurisdiction in which it burns or to the people who respond to it. So why do we make the response arrangements so bureaucratic?



Photo: Paul Cavalier

## Potential Solutions

There is a way forward but it will be a challenge for both government and the leadership of the fire organisations.

Reform can begin through firstly acknowledging that, by definition, any volunteer organisation may not have the same response time to an event than full time equivalents and even some retained employees.

The operational responses required for bushfires and structure fires are different, and require a different mobilisation of resources and appliances to combat them. The basic tenet for full time staff fighting structure fires is linked to Key Performance Indicators for call, dispatch and response and of course, they are appropriately remunerated. We are not comparing apples with apples and volunteers will always have their daily employment and livelihoods to look after.

It follows that, at every opportunity, an effort should be made to explain the differences rather than seeking to criticise one agency for not having the same call and dispatch timelines.

The Review examined other call and dispatch centres in NSW and other Australian states and formed the view that the Ambulance Service of NSW has an excellent model. It is a model that is being implemented in other jurisdictions and one that accurately tracks and preemptively positions resources according to demand and availability. The Review recommends benchmarking off the Ambulance Service of NSW for both Computer Aided Dispatch (CAD) and AVL.

The SES is an agency dealing with some 170,000 calls per year and has developed a mobile app to increase efficiency in notifying volunteers and dispatching their resources. The app is linked to personnel records thereby giving details on the currency of qualifications and the skills of people deployed or available for deployment.

In the modern era, if staff are not provided modern technology by their employer they will create workarounds which appears to have happened with the RFS. Some brigades are using a system known as BART (Broadcast, Alert, Respond, Turnout) but it is not used by the whole agency.

The NSW Police Force operates civilianised call and dispatch centres and has done so for many years. Given the breadth of calls from lost children to counter terrorism, a lot can be learned from their capability including their use of situational awareness and resource deployments.

This Review recommends taking an agnostic approach to fires and eliminating the bureaucratic policies that reinforce agency disputes rather than ameliorate them. To better protect the volunteers serving the RFS and provide timely situational awareness about fires, the RFS should move to install AVL to its vehicles immediately.

Further, this Review takes the view that while AVL is being installed on RFS vehicles then the nearest and quickest fire appliance with appropriate capability – whether it be FRNSW or RFS – should attend to the fire. Eventually, details on skills and qualifications of deployed personnel as well as situational awareness should complement the RFS AVL.

## Future State

The Review found that there had been previous reviews of call and dispatch centres and their efficient operation by large and respected private sector consultancies. A comprehensive review that envisages a State Level Operation and Co-ordination capability has also been undertaken by the Office of Emergency Management within the Department of Justice and like the reviews before it, is an excellent body of work.

As each emergency management organisation moves towards improving their current call and dispatch capabilities they should look towards adopting a common operating picture using technology that is interoperable between them. A stovepipe approach appears to characterise the adoption of some new systems to date leading to agencies using different vendors that in turn denies decision makers a common understanding of the event.

Once a common operating picture is achieved, other tools such as the Fires Near Me app and social media can be fashioned to provide a single source of truth to the community.

A strategic and long term solution needs to be found that sees each of the agencies working side by side in a civilianised call and dispatch centre that could also utilise the new SES facility at Wollongong for redundancy. The Review was informed of a future move of the RFS communications centre to new premises. This is an excellent opportunity to rebadge the new centre as a State asset of the Department of Justice, Office of Emergency Management, FRNSW could also be accommodated into the facility.

Some of the problems identified in this review have been overcome by the RFS Commissioner moving to second staff into the FRNSW ComCen. However, this is an interim measure and does not address the question of 'who's in charge?' of an agnostic approach to deploying resources to combat fires. In establishing to a civilianised call and dispatch centre, a role should be designated to a person who is authorised to dispatch units to an emergency that transcends individual agency chain of command arrangements.

The future state should be a position where the nearest and most suitable firefighting capability is sent to combat a fire regardless of agency. The Review acknowledges that the question of 'nearest' is an objective one. A combined fully integrated communications centre will need to decide the 'most suitable' always bearing in mind that it is the fire that needs to be attacked.





**“We are conscious of the differences in our roles, but more so in their commonality; that of saving lives and property.”**



Photo: Highway Patrol Images



# FINDINGS

## Finding 1

The Bega Valley fires on 18 March 2018 were five separate fires that were extremely fierce and quick moving - limiting combat options. Despite this, the number and scaling up of resources allocated to the fire as well as the efforts of residents both before and during the fire means that it is difficult to suggest that any better outcome could have resulted on the day

- There were large numbers of 000 calls that reported the fire across a large geographic area
- An independent assessment by the Commonwealth Scientific and Industry Research Organisation (CSIRO) confirms the fire was fast moving and intense
- Interviews with staff fighting the Bega Valley fires confirm the ferocity and speed of the fire
- Observations of the fire ground made during the Review established that it was fortunate that no residents or firefighters lost their lives on the day
- The fire danger rating for the 18 March 2018 was the fourth highest on record in that area

## Finding 2

Repeated successes in the fighting of fires in NSW is a result of the combined effort of a mixture of volunteers, salaried personnel, retained staff and members of the community delivering a level of co-ordinated responses that is comparable to other parts of Australia and follows a long tradition of integrated and collaborative approaches

- 73,223 RFS volunteer firefighters <sup>1</sup>
- 5,891 Community Fire Unit Volunteers <sup>2</sup>
- 3,517 FRNSW full time firefighting staff <sup>2</sup>
- 3,341 FRNSW retained firefighting staff <sup>2</sup>
- 878 RFS full time equivalent positions <sup>1</sup>

## Finding 3

Fire and other natural disasters are agnostic as to which agency in which district will respond. This is despite the detailed and instructive inter-agency policies in place to deal with them

- Some of these policies were not followed on the day of the Bega Valley fires and while it is impossible to determine the impact, given the extreme conditions it is difficult to

suggest that any better outcome could have resulted on the day

- A Deputy Incident Controller was not appointed at the Bega Valley fires which could have allowed the Incident Controller more time to focus on resource deployments rather than incoming calls which for a period of time were overwhelming
- There were delays in feeding information back to the FRNSW ComCen which was taking a large number of repeat 000 calls from persons either reporting the fire in a different location or who were seeking advice as to whether or not they should stay or leave their homes
- This lack of feedback was partly due to the fast moving nature of the fires and led to delays in updating the Fires Near Me app which remained 'advice only' for the bulk of the time that the fire was raging

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<sup>1</sup> NSW Rural Fire Service, NSW Rural Fire Service 2016-17 Annual Report <https://www.rfs.nsw.gov.au/resources/publications/annual-reports>

<sup>2</sup> Fire & Rescue NSW, Fire & Rescue NSW Annual Report 2016/17 <https://www.fire.nsw.gov.au/page.php?id=453>

- The RFS District Duty Officer was not made available for interview during the 6 weeks of this Review, the RFS advised that the officer was overseas on pre-approved annual leave. The Duty Office was located in Moruya, away from the fire ground. It is likely that assistance from FRNSW was initially declined without full situational awareness of the intensity and speed of the fire
- The Review was provided audio recordings of the decline for assistance by the District Duty Officer which happened on two separate occasions at 12.33pm and again at 12.58pm during the first hour of the Bega Valley fires
- FRNSW ComCen overruled the decision of the RFS District Duty Officer and deployed to the Bega Valley fires without being called out, but as it happened this was very useful for the overall protection of homes
- This action by the FRNSW ComCen appears to be a regular occurrence and it leaves the RFS Incident Controller unaware of the total firefighting resources made available to the Incident Management Team
- The Review team was only able to reconcile the final resourcing of the Bega Valley fires some six weeks after the event and the FRNSW figures were different to the RFS figures confirming that the RFS Incident Controller did not have a full picture of the total resourcing for that fire
- The continued practice by FRNSW to 'self deploy' to fires is a cause of significant angst between both agencies
- The decision to refuse FRNSW offers of assistance had no impact on the outcome of the incident due to the severity of conditions and speed of the fire, and the competing demands for resources to fight other nearby fires. Notwithstanding this, other submissions to the inquiry have suggested that such offers are routinely declined, sometimes in less clear cut circumstances
- ABC radio continued normal broadcasts on the day of the fires rather than broadcasting updates to the community which has been the practice in the past
- An internal review by the ABC is addressing this problem however, the ABC would have suffered from the same lack of updated information and does not have anyone embedded in the RFS headquarters or the RFS Incident Management Team to provide informed broadcasts
- The position of the Public Information functional area co-ordinator could liaise with any ABC manager appointed to assist with messaging
- Broadcast by radio can overcome information flows when mobile and internet services are not available to issue warnings to the community

## Finding 4

Without getting into a debate about climate change, the experiences of recent years has been that the bushfire seasons have been getting longer and opportunities to reduce fuel loads is getting shorter, evidenced by existing NSW Government and various scientific publications. The extended season also means aerial firefighting assets have often returned to the northern hemisphere

Collectively this creates a greater need for more efficient and accountable call and dispatch systems. The following references provide greater detail of the challenges being created by climate change

- The NSW Office of Environment and Heritage paper 'Climate Change Impacts on Bushfire Risk in NSW' <sup>1</sup>
- CSIRO publication on Climate change and extreme weather: understanding the link <sup>2</sup>

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<sup>1</sup> NSW Office of Environment and Heritage, Climate Change Impacts on Bushfire Risk in NSW  
<http://climatechange.environment.nsw.gov.au/-/media/3FA0B16F406F43EDA9536028A88C539F.ashx>

<sup>2</sup> CSIRO, Climate change and extreme weather: understanding the link  
<https://blogs.csiro.au/ecos/climate-change-and-extreme-weather-understanding-the-link/>



## Finding 5

Despite the existence of comprehensive governance arrangements both FRNSW and the RFS are apparently not always complying with key requirements of the policies

- The overarching Memorandum of Understanding between both agencies has not been updated since 2011 and in any event, since the appointment of the new FRNSW Commissioner in 2017
- Two joint messages from the FRNSW and RFS Commissioners issued on 21 March 2018 and 9 April 2018 outlined steps to be taken to improve the working relationship between both agencies for call and dispatch arrangements are commendable but should already have been in place
- A flow diagram provided to the Review by the RFS does not accord with a Memorandum of Understanding specifically written to address the communication arrangements when 000 calls are made to FRNSW ComCen for bushfires (ie: no feedback loop to FRNSW ComCen or 000) which may be an oversight but the lack of a common operating picture has been a major issue during this Review

- Despite being required by its charter of agreement – there has been a failure by the Fire Services Joint Standing Committee to provide a strategic report to the Minister in more than twelve months

## Finding 6

The relationship between FRNSW and the RFS at the executive level is excellent but the review has identified examples of significant animosity at the middle management level rendering any proposal to integrate the two agencies into one organisation with the current organisational cultures implausible

- A dossier presented to The Daily Telegraph appears to have been compiled against the RFS by members of FRNSW who have taken photos and noted details of RFS responses to fire events for the past twelve months
- A comprehensive table prepared by FRNSW and presented to the Review appears to support the dossier presented to the Daily Telegraph

- Many of the public submissions made to the Review highlighted a cooperative and effective operational relationship between the agencies 'on the ground', but the weight of submissions painted a picture of animosity and mistrust between FRNSW and the RFS in many districts and at the middle management level
- Interviews conducted during the Review made it clear that there is a perceived power imbalance in favour of FRNSW who take all calls of all fire events in NSW and then decide whether or not to refer the incident to the RFS depending upon an interpretation as to which fire boundary the fire is believed to be burning within
- Call logs prepared by FRNSW of the Bega Valley fires identified the decline of the offer of resources, but their own AVL logs, which revealed the self-deployment of FRNSW assets, had to be requested multiple times before the complete picture of resourcing was understood
- Disingenuous public comments have been made criticising the RFS despite the success of a number of operations where lives and property have been saved

## Finding 7

This animosity between members of the agencies has been evident during the course of the review and has been the subject of previous inquiries and media reports – however and importantly, the apparent animosity belies the actual success achieved by the agencies in the majority of fire operations

- If middle management is not supportive of their fellow organisations then it follows that the animosity and mistrust is likely to continue despite this and other Reviews unless there is a sustained intervention at the executive level for organisational change to the cultures

## Finding 8

The vision of the 1994 Bushfire Inquiry conducted by the then NSW Government that the two fire services cooperate rather than compete has unfortunately not been fully realised which reflects poorly on all parties given the time since these issues first came to light. This competitiveness unfortunately plays out in the ‘Call and Dispatch’ function where offers of assistance have been refused or jurisdiction of fire boundaries disputed

## Finding 9

There is a plethora of agreements, memoranda of understanding, policy and legislation controlling both FRNSW and the RFS that attempt to create high level co-ordination and help ameliorate the demarcation issues but it has simply focussed the dispatch system on fire boundaries rather than the ‘fires’

At the time of this report Cumberland, Bathurst and Blue Mountains are just some of the areas where disputes remain as to agency jurisdiction. Some of the key policy documents establishing coordination between the agencies include:

- Fire Services Joint Standing Committee Act
- State Bush Fire Plan
- Memorandum of Understanding
- Fire Service Delivery Provisions
- Operational Communications Service Level Agreement
- Bega Valley Mutual Aid Agreement

## Finding 10

Communities across NSW are not experiencing the optimisation of a call dispatch and response model to fire events that are enjoyed by other states because the bureaucratic processes

imposed to achieve co-ordination and overcome demarcation disputes between the firefighting agencies are not working effectively

- NSW communities do not appear to face the same issues when it comes to the SES, Ambulance Service of NSW and NSW Police Force call and dispatch functions
- The review has been advised of a number of instances of FRNSW and the RFS undermining the agreements in place by ‘self deploying’ or refusing assistance

## Finding 11

Elimination of the fire boundary system for the purpose of dispatch will go a long way to improving the efficiency of call and dispatch to fires in NSW while at the same time reducing the competition between agencies

- Existing legislation does not prevent an agnostic response to fires. The Review observed that the vision of responsibility is an overlay put in place by the Fire Services Joint Standing Committee
- The division of responsibility could be easily removed or amended to reflect the thrust of this review

## Finding 12

Unlike the NSW Police Force, Ambulance Service of NSW and FRNSW – the RFS relies solely on radio and telephone communications, and does not have AVL technology or other GPS trackers in its vehicles or on its staff denying the State both situational awareness and efficiency in resource allocation

- The lack of update can indicate a lack of appreciation of the speed and intensity of the event
- The other NSW emergency service agencies see the workplace health and safety issue for staff and have acted accordingly even down to introducing GPS capability for hand held portable radios. It is noted that the SES has recently introduced AVL technology for its fleet of rescue vehicles, and is exploring options to extend the technology to its storm vehicles

## Finding 13

When the RFS ICON system is not updated it can deny situational awareness to firefighters who are deployed in the field, and may lead to the Fires Near Me app not being updated, which in extreme cases could potentially put lives at risk

- In some cases the Incident Management Team is overwhelmed by the volume of information referred to it
- If ICON is not updated the Fires Near Me app is not updated which was a common complaint following the Bega Valley fires
- Many submissions to the Review complained that during the Bega Valley fires the Fires Near Me app provided an 'Advice Only' reading when in fact people should have been evacuating

## Finding 14

The inter relationship between a 000 caller, FRNSW ComCen and the RFS call and dispatch is cumbersome, and leads to a period of time when situational awareness is unavailable. This impacts the volunteers, the community and the RFS executive leading to less than optimal briefings of government and partner agencies

- Submissions to the Review confirm the slowness of RFS call handling and response including submissions from RFS brigades themselves
- The slowness is not necessarily a criticism in all cases – it is a fact of life for volunteer agencies although to their credit, the SES appear to have made some headway through the use of an app to reduce call out time and understand the qualifications of people being deployed through a link to SAP data
- Interviews of the RFS executive conducted during the Review admit that they are 'flying blind' for brief periods depending upon the available resources and the feedback received
- The RFS has centralised dispatch capability, however it is not implemented statewide
- The RFS has worked hard with Telstra to improve their call out and they do have the largest population of volunteers to engage so the problem is not being ignored



## Finding 15

Interviews conducted during the Review reinforced that the emergency agencies appear to be operating in silos when it comes to selection of call and dispatch technologies except for the SES which seems to have taken some excellent whole of government decisions by adopting technologies from FRNSW

- The RFS has 99% of its total of approximately 70,000 staffing resource through volunteers so keeping them engaged through appropriate technologies is important
- Such a move will capitalise on the continued willingness of volunteers to participate in RFS and SES operations

## Finding 16

In the Bega Valley fires the first 000 call did not accurately pinpoint the seat of the fire and the call taker was attempting to establish whether or not the fire was within the FRNSW boundary or the RFS boundary. An incident number was created and the RFS was contacted but this process quickly became irrelevant as a senior member of the RFS corrected the location in a transmission made moments later that included photographs of the fire

- Other cases referred to the Review were found to be just as efficient, driven by good people trying to do the right thing but rumours and hyperbole undermine the great efforts undertaken by all agencies including community members who get involved when the situation demands it

## Finding 17

A number of submissions and interviews highlighted the time taken to establish whether or not a volunteer RFS brigade has been able to contact its members and form a crew for deployment. This puts pressure on the community, the RFS management and volunteers as well as FRNSW ComCen (who are receiving subsequent 000 calls and requests for information)

- Since the commencement of this Review a better integrated call and dispatch approach has been taken by both fire commissioners through the placement of RFS officers in FRNSW ComCen
- This step towards an integrated approach will go some way in overcoming delays in call and dispatch to fires achieving the stated goal of the RFS to “engender better cooperation and collaboration on emergencies reported to it”

## Finding 18

Eliminating fire boundaries coupled with AVL capability for the RFS will offer the opportunity to fight fire with the quickest and most appropriate resource regardless of agency. While the capability is being acquired by RFS, it should not follow that because there is an inherent delay in their deployment that their services will not be called upon for the interim because in many instances, the RFS is the most suitable agency to deploy. A mature common sense approach is needed at FRNSW ComCen if this recommendation is adopted

## Finding 19

At the executive level the NSW Police Force, FRNSW, SES and RFS there is support for a single, civilianised call and dispatch centre for dealing with fires and other natural disasters. This review found however, unless there is total support from all stakeholders including the unions, any move to favour one organisation over another in hosting such an arrangement is likely to draw criticism and continue the existing animosity

## Finding 20

Commentary and criticism of the role and responses by the RFS and FRNSW often does not take into account that the two organisations cannot be compared on an equitable basis given the permanent and part time nature of the respective organisations

- Submissions received by the Review reinforce this point
- Interviews with FRNSW regarding their 'retained fire fighters' also reinforces this point
- Examination of media articles generally discloses a lack of understanding about the complexity of the arrangements and the different operational responses that are required
- The State enjoys the services of volunteers at little cost and could not survive without them whether it be in the RFS, SES and many other roles where volunteerism is sustaining communities

## Finding 21

Each of the NSW Emergency Service agencies in NSW uses a different type of CAD system however, the Review noted that not only does the Ambulance Service of NSW have a comprehensive system – their staff have been providing expert assistance on CAD design for other Australian jurisdictions

## Finding 22

It is important to note that while few submissions made by firefighters or their representative bodies reported a positive relationship between the agencies at the middle management level, almost all submissions stated that they, collectively, still 'got the job done' at the coal face

## Finding 23

The review has examined call and dispatch experiences in other fires, including at Port Macquarie, Taree and Nimbin. It is not proposed to detail the examination of these other incidents in this report, however, it is noted that these other instances reinforce the review's findings in relation to the call and dispatch arrangements arising out of its examination of the Bega Valley fires

## Finding 24

Significant bodies of work have already been undertaken by various government agencies in NSW examining better models for Call and Dispatch; Public Safety Mobile Broadband and Operational Communication Strategies to make them more efficient and cost effective



**“Automatic Vehicle Location capability...  
will offer the opportunity to fight fire with  
the quickest and most appropriate resource  
regardless of agency.”**



# RECOMMENDATIONS

*It is recommended that the NSW Government:*

## Recommendation 1

In recognising the success of the work of both the volunteer based RFS and the full time FRNSW members in joint operations – both agencies should be represented at major briefings or press conferences to reinforce successful integrated collaborative efforts rather than individual agency achievements

Applies to:

- Finding 1
- Finding 2
- Finding 6
- Finding 7
- Finding 8
- Finding 23

## Recommendation 2

Take immediate steps to eliminate fire boundaries for call and dispatch purposes to create an agnostic approach to the threat of fires from both a departmental and organisational perspective

Applies to:

- Finding 3
- Finding 11
- Finding 20

## Recommendation 3

Remove those policies, guidelines, memoranda of understanding and committees that are made redundant as a result of adopting recommendation #2 while updating any remaining policies that are considered to still be relevant

Applies to:

- Finding 3
- Finding 5
- Finding 9
- Finding 11
- Finding 18

## Recommendation 4

The Commissioners of FRNSW and the RFS issue an instruction to FRNSW ComCen that while AVL capability is being made available to the RFS vehicle fleet, no offers of assistance by one agency to the other in combatting a fire is rejected or delayed if what is being offered is appropriate

Applies to:

- Finding 6
- Finding 7
- Finding 8
- Finding 12
- Finding 13
- Finding 21

## Recommendation 5

Use the model and system in place at the Ambulance Service of NSW as a benchmark for call taking, dispatch and the provision of situational awareness when deploying resources. This will overcome the lack of a feedback loop in current bushfire operations

## Recommendation 6

As a matter of priority commence the roll out of AVL capability for the RFS fleet, completing as much work as possible before the 2018/19 bushfire season, capitalising where necessary on current and future work undertaken with the NSW Government Radio Network to ensure both officer safety and situational awareness

Applies to:

- Finding 10
- Finding 12
- Finding 13
- Finding 14
- Finding 17
- Finding 18

## Recommendation 7

Implement a fully integrated civilianised single call and dispatch centre, that includes a redundancy option outside the Sydney CBD, which will adopt an agnostic approach to deploy the quickest most suitable resource to an emergency. Such a centre should be managed by either a non uniformed public servant staffed organisation like the Office for Emergency Management, or the NSW Police Force

Applies to:

- Finding 4
- Finding 10
- Finding 11
- Finding 12
- Finding 14
- Finding 15
- Finding 16
- Finding 17
- Finding 21
- Finding 24

## Recommendation 8

Until a single call centre is developed, continue deployments of a senior RFS officer to FRNSW ComCen on a 24/7 day basis. This arrangement should determine the quickest most suitable resource and who is 'in charge' of an incident

Applies to:

- Finding 10
- Finding 15
- Finding 17

## Recommendation 9

While the proposal to establish an integrated call and dispatch centre is being implemented, FRNSW should take steps to civilianise ComCen and maintain experienced senior officers from both agencies as supervisors similar to how the NSW Police Force and Ambulance Service of NSW operate

Applies to:

- Finding 10
- Finding 19

## Recommendation 10

Explore better options for call and dispatch, telecommunications and information sharing capability across the emergency management portfolio including the adoption of a multi-agency emergency management operations complex

Applies to:

- Finding 13
- Finding 22
- Finding 25

## Recommendation 11

Take steps to ensure that both fire commissioners are seeking opportunities to engender a culture in their respective organisations that seeks to attract and foster the volunteer ethos and experience

## Recommendation 12

Review the effectiveness of emergency public information arrangements, and give consideration to embedding an ABC Manager (not a journalist) into the RFS headquarters during emergencies to broadcast warnings to the community that can be pooled to commercial media outlets

Applies to:

- Finding 3

## ANNEXURE A

Bega Valley fires Independent Review Terms of Reference:

- Review and report on the adequacy of the fire services response to the Reedy Swamp fire near Bega that occurred on 18 March 2018, and subsequently impacted upon the township of Tathra;
- Review the call taking and dispatch arrangements of both Fire and Rescue NSW and NSW Rural Fire Service across the State, and make recommendations to ensure they are best practice, address emerging technology, and provide the best possible service delivery to the community of NSW.

## ANNEXURE B

### Interviews

- Brian McDonough, Vice President, Rural Fire Service Association
- Chris Read, Senior Industrial Officer, Fire Brigades Employees Union
- David Dutton, Executive Director Clinical Operations, Ambulance Service of NSW
- Garry Cooper, Operational Officer, NSW Rural Fire Service
- Greg Buckley, Chief Superintendent, Fire & Rescue NSW
- Greg Mullins, Retired Commissioner, Fire & Rescue NSW
- Greg Newton, Deputy Commissioner, NSW State Emergency Service
- Jamie Vernon, Director Control Division, Ambulance Service of NSW
- Jim Hamilton, Deputy Commissioner, Fire & Rescue NSW
- John Cullen, Superintendent, District Manager, NSW Rural Fire Service
- Katarina Carroll, Commissioner, Queensland Fire and Emergency Services
- Kate Foy, Managing Director, NSW Telco Authority

- Ken Middleton, President, Rural Fire Service Association
- Leighton Drury, State Secretary, Fire Brigades Employees Union
- Leslie Mabbutt, NSW State Coroner
- Mark Smethurst, Commissioner, NSW State Emergency Service
- Mick Fuller, Commissioner, NSW Police Force
- Paul Baxter, Commissioner, Fire & Rescue NSW
- Peter Marks, Manager Telecommunications Emergencies, NSW Telco Authority
- Peter McKechnie, Manager State Operations, NSW Rural Fire Service
- Rob McNeil, Assistant Commissioner, Fire & Rescue NSW
- Rob Rogers, Deputy Commissioner, NSW Rural Fire Service
- Rosemary Milkins, Deputy Commissioner Corporate Services, NSW Police Force
- Sascha Rundle, Manager Diversity Emergency & Strategy, Australian Broadcasting Corporation
- Shane Fitzsimmons, Commissioner, NSW Rural Fire Service

### Visits

- Bega Fire Control Centre, NSW Rural Fire Service
- Fire Communications Centre, Fire & Rescue NSW
- RFS Headquarters, NSW Rural Fire Service
- Sydney Ambulance Centre, Ambulance Service of NSW
- Sydney Police Centre, NSW Police Force

### Submissions

The Review received 183 submissions from members of the public, stakeholder organisations, volunteer and paid firefighters.





