Submission No 29

## ASSETS, PREMISES AND FUNDING OF THE NSW RURAL FIRE SERVICE

Organisation: Independent Bushfire Group

Date Received: 9 May 2024



## Submission to the NSW Parliamentary Inquiry into the Assets, Premises and Funding of the NSW Rural Fire Service

Thank you for inviting comment to this inquiry.

## The Independent Bushfire Group

"The Committee wants to hear from people with first-hand experience, emergency service organisations and their volunteer associations and unions, local councils, bushfire experts, community groups and the public." (Media release, Public Accounts Committee, 20 February 2024)

The **Independent Bushfire Group** (IBG) fits the above categories of "first-hand experience", "bushfire experts" and "community groups".

The IBG is a pro-bono group of non-aligned, professional bushfire practitioners, fire managers, land managers, fire researchers and ecologists with over 450 years of collective experience across a range of landscapes. The IBG advocates for better fire management so we can adapt to our worsening fire climate, with a focus on practical firefighting, science and evidence-based practices.

IBG members are dispersed around the state, with many active in various aspects of bushfire management. IBG engages with government agencies, non-government organisations, firefighters, politicians, researchers and media to pursue its agenda for change. IBG prepares reports and has made submissions to a number of previous inquiries including:

- NSW Bushfire Inquiry (2020)
- Royal Commission into National Natural Disaster Arrangements (2021)
- Senate Finance and Public Administration References Committee: Lessons to be learned in relation to the preparation and planning for, response to and recovery efforts following the 2019-20 Australian bushfire season (2021)
- Select Committee on Coronial Jurisdiction in NSW (2021)
- Inquests and Inquiries into the 2019/2020 Bushfire Season (2024)

## Overview and summary of this submission

The operating environment for bushfire management is changing and growing more complex. Increasing population and exposure to bushfire risk, changing land ownership and use, substantially lower personal/community resilience and more intense weather has created a demonstrable increase in the risk and consequence of NSW bushfires. This was demonstrated in the fires of 2019-2020 and requires a comprehensive response. Fiddling at the margins of the status quo will not suffice.

The terms of this inquiry are limited and perhaps inadequate to deal with the ful range of challenges, but there is scope for substantial change to achieve better outcomes. Areas for reform include the roles of the Rural Fire Service, local government and other agencies, local facilities for bushfire management, aerial assets and aerial firefighting, learning cultures and financial accountability. Overall, arrangements for bushfire management need to be constantly and independently reviewed with a determined focus on outcomes. Relying on past systems and internal agency processes would be suboptimal.

IBG could comment on numerous topics within the brief of this inquiry, but our submission is limited to a few issues that we consider to be important and for which we have knowledge and expertise. Our key points are summarised below, with more details in the body of the submission which follows.

Note that it is difficult to understand all the complexities around RFS and Local Government funding for bushfire management and asset sharing responsibilities. To this extent some of our assumptions may be incorrect.

#### **Role of local government**

#### (Terms of Reference 1d, 2b, 2e, 2f and 3)

 The pendulum has swung a long way towards centralisation of many aspects of bushfire management. This has provided benefits but has also had the unintentional outcome of diminishing community ownership of bushfire preparedness. Local government, with proper support, could be more involved in most aspects of bushfire management, including Bushfire Management Committees. We urge this inquiry committee to ensure the roles of RFS and local government are fully reviewed from scratch to optimise all aspects of bushfire management. These aspects should not be limited to mitigation, suppression and assets, but include prevention, community engagement and resilience.

#### Facilities for rural bushfire sheds

#### (Terms of Reference 1a, 1b, 1d, 2c and 2e)

- A formal audit of RFS shed facilities is required, followed by a statewide program of upgrade.
- The division of costs and accountability for sheds between RFS and local government also needs to be reviewed and rationalised.

#### **Fire control centres**

#### (Terms of Reference 1(all) 2c, 2e and 3)

• Ways to support and use adequate facilities for satellite IMTs in fire-prone areas should be explored. RFS, other agencies and local government will need to work together to achieve this.

#### Volunteer numbers, diversity & recruitment

#### (Terms of Reference 1, 2 and 3)

• An audit of active RFS volunteers and a recruitment strategy are necessary, and will be critical inputs to any consideration of assets and funding.

#### **Aerial assets & operations**

#### (Terms of Reference 1a and 1d)

- The past performance, current mix and future needs of the NSW aerial firefighting fleet, and how it used operationally, should be independently reviewed with the objective of optimising outcomes from investment. A focus of success should be expanded ability to attack fires quickly, especially in areas away from road access. Lessons from other Australian jurisdictions and internationally can provide valuable insights for NSW.
- Operational data collection needs to be comprehensive and rigorous and aerial firefighting research should be greatly expanded.

#### A learning culture & an IGEM for NSW

#### (Terms of Reference 1d and 5)

 NSW needs a stronger focus and commitment on a learning culture for continuous improvement in bushfire operations. An independent Inspector General of Emergency Management should be established to create and oversee the development of a culture of continuous improvement and provide assurance and accountability to both government and the community.

#### **Financial accountability**

#### (Terms of Reference 1(all) and 4)

• Given the large public expenditures and the importance of achieving the best possible results to reduce bushfire impacts, IBG urges much more analysis of large bushfire operations coupled with evaluation of how effective past expenditure has been. Current performance measures should be critically examined to ensure they are fit for purpose and providing the right information to evaluate success.

## Role of local government in bushfire management

Bushfire management is a complex function spread across a vast mix of human communities within a very large and diverse NSW landscape. It needs a whole-of-government and whole-of-community response, to provide local solutions for local communities and fire landscapes. Management and operations have been progressively concentrated within the RFS and hence removed from land management agencies including local government, with a consequent reduction in a more diversified, adaptive and effective response at the local community level.

Before the establishment of the Rural Fire Service (RFS), local government had a major role in bush fire brigades and bushfire management. Cooperative firefighting was the model involving all key government agencies. Concentration of resources and power within RFS has provided benefits in resourcing, standards and consistency. However the involvement of local government and other agencies has been reduced with losses in direct community engagement and accountability. A more effective balance should be restored. IBG submits that building community capacity in prevention, resilience and recovery is just as important as the more tangible functions of bushfire mitigation and suppression, and that community capacity has not received the attention, resourcing or finance it deserves. These community capacities must be developed from the ground up, and local government is the natural vector for this. In comparison the RFS has a statewide perspective with an emphasis on emergency management and hence tends to be a more top-down, command-andcontrol culture. Both bottom-up and top-down approaches have a role to play. Although rural fire brigades, local RFS offices and district bushfire committees are made up of local people, they are a diminishing proportion of communities that are growing larger and more diverse and wanting a say in bushfire management.

RFS is not a land management or community development agency. RFS has not performed strongly in community engagement and building resilience and capacity. Local government and community organisations are the best home for these functions. Local government pays a proportion of overall costs for NSW bushfire management, but has limited control of how this expenditure is focused and prioritised. If local government is to do more, this will have financial implications that need to be addressed across both levels of government.

The pendulum has swung a long way towards centralisation of many aspects of bushfire management. This has provided benefits but has also had the unintentional outcome of diminishing community ownership of bushfire preparedness. Local government, with proper support, could be more involved in most aspects of bushfire management, including Bushfire Management Committees. We urge this inquiry committee to ensure the roles of RFS and local government are fully reviewed from scratch to optimise all aspects of bushfire management. These aspects should not be limited to mitigation, suppression and assets, but include community engagement and resilience.

## Facilities for rural bushfire sheds

There is wide variation in the size and quality of bushfire brigade facilities. Urban and nearurban brigades tend to have much better facilities than in rural areas, where many sheds lack the most basic services such as toilets, washing facilities, change rooms and computers. While this divergence is partly explained by the size of each brigade, it fails to recognise the importance of even small brigades in small rural communities. Fire risk does not depend on the size of local populations.

Poor facilities will not only impact the effectiveness of brigades, but will also inhibit the ability of rural brigades to attract and keep volunteer members, a growing issue for RFS (see below). Local government often owns the land upon which sheds are built, and in some cases owns the sheds and pays for services as well. This again highlights the important role of local government in bushfire management.

# A formal audit of RFS shed facilities is required, followed by a statewide program of upgrade.

The division of costs and accountability for sheds between RFS and local government also needs to be reviewed and rationalised.

## **Fire control centres**

Many fire control centres (FCCs) are actually emergency operations centres (EOCs) serving a number of related functions, where RFS is co-located with State Emergency Services or other organisations. This can be a good arrangement with many benefits, including economies in the provision of the technical equipment needed for modern emergency operations.

With the merging of LGAs in recent years there has been a tendency to manage fires from a central location in each LGA. Some dedicated FCCs have been built and we understand more are planned. The downside we have observed and heard reliable reports about is that IMTs tend to be very large and sometimes remote from the fireground, which can lead to a lack of connectivity between the IMT and resources working on the fireground to control the fires. IBG has reported on this issue (*Reducing the Costs and Impacts of Bushfires*, IBG, pages 85-90), as has the NSW Bushfires Coronial in a submission from the National Parks and Wildlife Service, a fire fighting authority under the *Rural Fires Act 1997* (*Inquests and Inquiries into the 2019/2020 NSW Bushfire Season*, Vol. 2, Appendix 13, Attachment B, pages 312-313).

The solution is to set up smaller IMTs and establish well-resourced forward control or divisional command centres much closer to the actual fires. Ideal facilities for these command posts would be former FCCs in smaller former LGAs, NPWS offices and Forestry Corporation offices. Utilisation of these facilities should be planned and prepared in advance. If this model were to be adopted it may actually save money and reduce travel time for key management and operational personnel.

While centralised EOCs are important, ways to support and use adequate facilities for satellite IMTs in fire-prone areas must also be explored. RFS, other agencies and local government will need to work together to achieve this.

## **RFS volunteer numbers, diversity & recruitment**

The total number of active RFS volunteers is often cited as around 70,000 (e.g. 70,829 in <u>RFS</u> <u>Annual Report 2022/23</u>). The basis of these numbers is unclear which has led to questioning. The Commissioner of the RFS was quoted on this matter in a December 2023 media story:

The RFS Commissioner dismissed any suggestion a proper audit should be conducted to determine how many part and fulltime crews are available in the event of a natural disaster.

"The volunteers can decide their membership and tell us what it is," he said.

(https://www.skynews.com.au/australia-news/nsw-a-ticking-timebomb-for-catastrophicbushfires-as-rfs-falls-significantly-behind-hazard-reduction-targets-ahead-of-summer/newsstory/33e9566f0f8874318772eac74b878f11)

We often hear from firefighters that there are inadequate crews available for call-outs, particularly for night shifts. This was apparent in the demanding 2019-2020 season. RFS often has difficulty raising crews to undertake hazard reduction burns during the week, with consequent loss of weather windows. It is important to understand the number of active volunteers as opposed to those who may appear on membership lists but are not active.

The volunteer force seems to be an aging demographic, and many more younger volunteers are needed particularly in rural and regional areas. We would urge the inquiry to thoroughly analyse the issue of RFS volunteer numbers as we believe the public really does need to understand that the number of capable and available volunteers is very limited in some areas and possibly inadequate to cope with major fire events.

It is noted that a GIPA response from the RFS on 5 February 2019 (not long before the 2019-2020 bushfire season) included data on volunteer numbers and activity. One significant statistic requested was "the number of RFS members who attended a fire in 2018" (and several other years), which would be a more useful number than total membership. While the numerical answers are not readily available to us, they should be available to this inquiry.

Whatever the true situation, it is widely recognised that volunteer numbers need to be maintained and increased, along with ethnic, gender and age diversity. Provision of adequate shed facilities in rural areas (see above) can only help in this regard, as poor facilities will inhibit volunteer recruitment.

An audit of RFS active volunteers and a recruitment strategy are necessary, and will be critical inputs to any consideration of assets and funding.

### Aerial assets & operations

Aerial operations are a major component of bushfire suppression costs. A 2022 research scoping paper (*Investigating the suitability of aviation tracking data for use in bushfire suppression effectiveness research*) from <u>Natural Hazards Research Australia</u> (NHRA) cites the cost of NSW aerial firefighting in 2019-2020 as \$306.3 million. This included six LATs and VLATs (very large air tankers) dropping 24 million litres on 1708 missions (*NSW Rural Fire Service, Royal Commission Into National Natural Disaster Arrangements, Notice & Summons to Give information NTG-HB2-209*, pages 20-21).

But evaluation of the effectiveness of aerial firefighting is lacking. The NHRA paper above lists the multiple inquiries that have called for research into the effectiveness of firefighting aircraft, highlighting a data and research blind spot. Those inquiries included the <u>2020 NSW</u> <u>Bushfire Inquiry</u> which made the following recommendation:

#### Recommendation 50

That, in order to ensure Australia's fire fighting aerial capacity capitalises on existing assets and is made up of the right mix, Government:
b) work with states and territories through the National Aerial Firefighting
Centre to review the current mix of aviation assets and determine whether it is fit-for-purpose, noting the current lack of mid-sized fire fighting aircraft.

The <u>2020 Royal Commission into National Natural Disaster Arrangements</u> also recommended on this subject:

#### Recommendation 8.2

Australian, state and territory governments should support ongoing research and evaluation into aerial firefighting. This research and evaluation should include: 1. assessing the specific capability needs of states and territories, and 2. exploring the most effective aerial firefighting strategies. The NHRA research paper noted that many aircraft used in Black Summer lacked basic data on the objectives for their flights and the volume and type of fire suppressant dropped (water, foam, gel or retardant): *"about 60% of specialised bombing aircraft used (i.e. Helitaks, SEATs and at least two LATs) had no drop data at all"*. In academic understatement, the researchers also wrote that the missing data *"hamper learning and needs to be improved"*. It is not known if data collection has improved since this paper was published.

There is no public evidence of any detailed evaluation of the NSW aerial firefighting fleet or its operations. <u>NSW Bushfire Inquiry Progress Reports</u> list Recommendation 50(b) as "*Completed*" in 2021 because "*The National Aerial Firefighting Centre published the National Aerial Firefighting Strategy 2021-26 in July 2021*".

But the recommendation was to "*review the current mix of mix of aviation assets and determine whether it is fit-for-purpose.*" The <u>National Aerial Firefighting Strategy</u> makes it clear that no such review or evaluation has been done, let alone on the specifics of the NSW aerial fleet and operations. By deferring to a national process (itself inadequate), the NSW Bushfire Progress Reports implicitly confirm that no such NSW review has been done.

The RFS Annual Report for 2022/23 under "*Our focus for the year ahead*" includes a section on Aviation Management (page 25) outlining "significant investments". However the purposes of these investments are couched in generalised statements about what will be done rather than outcomes, with no clear objectives or evaluation. Paragraphs headed "*How will we know we've succeeded?*" are focused on **actions** to be completed, not on **outcomes** to be measured. There is an implicit assumption that more is better, as exemplified by this statement:

"Already possessing the largest aerial fleet of any fire agency in Australia, the RFS is focused on building the capability of our owned and contracted resources even further."

This highlights a lack of strategic focus. Exactly what outcomes are sought and how will they be assessed? How will increased capacity be applied to ensure faster and/or stronger responses to fires so that more are extinguished when small? What aspects of aerial operations are under-resourced? IBG asserts that while increased capacity may be helpful, capacity needs to be applied for maximum effectiveness, and results need to be measured. There should be greater emphasis on improving response systems so they are not just bigger but working more effectively.

The <u>Auditor-General's 2023 report</u> on "Planning and Managing Bushfire Equipment" expressed similar concerns, noting that the RFS could not demonstrate a strategic process for acquisition of aviation fleet and early detection technologies to deliver their target of smaller fires, which is to limit 80% of fires to under 10ha in size.

In some respects a bigger operation with more moving parts can become unwieldy, with reduced responsiveness and agility that is needed in much bushfire suppression. IBG is also concerned at the increasing centralisation of aerial operations at State Operations, with a diminished role for IMTs and local aerial experts at the fireground in formulating strategies and tactics. In recent seasons, there have been instances of LATs and VLATs being sent to firegrounds without being requested by the local operation, with impacts on priorities, safety and effectiveness.

Returning to the NAFC Strategy, importantly it **does** recognise the critical need for the evaluation of aerial firefighting (while not actually doing it), as shown by these extracts (emphasis added):

- Research should underpin long term aerial firefighting fleet strategies and operational tactics, and this is an area that **should be better developed**. (page 5)
- ...there is a need for **greater emphasis on measuring and reporting** of aerial firefighting successes as well as identifying system improvements. (page 27)
- It will remain a challenge to argue for greater investment in future capability if the efficacy, achievements, and costs of the current capability cannot be reported on. Like any business, aerial firefighting needs to be **transparent on the return on investment**. (page 27)
- It is intrinsically difficult to identify and quantify the value of aircraft both from a speed of response and benefit of outcome. Firefighters on the ground appreciate the benefit; communities feel better protected, and individual houses and other infrastructure are saved from aerial firefighting operations. This has not, however, been readily assessed in the past with **scientific or economic evidence**. (page 27)
- There is a clear need for **greater evaluation and monitoring** of successful aerial firefighting strategies, although these need to be initiated by the users in **states and territories**. (page 28).
- Aerial firefighting is currently measured in the relatively crude figures of hours flown and litres of suppressant dropped. While this measures activity, it does not measure effectiveness. (page 28)

These statements demonstrate that aerial effectiveness is currently considered only on the basis of volume of activity and human perceptions, not evaluation or evidence. How decisions are made about aircraft needs at both NSW and national level remains opaque. The NAFC also makes clear the important role of *"states and territories"* in improving this parlous situation. For NSW to defer to a national strategy, which includes no evaluation, is inadequate and misleading.

Most recently, the NSW Bushfires Coronial also examined the question of evaluation. The March 2024 report notes the above recommendations from previous inquiries and includes this statement (Volume 2, page 23):

"It was found that a review of the existing fleet should be undertaken to ensure NSW (and Australia) has fit-for-purpose aerial firefighting assets that support firefighting in a range of conditions. By the 2021/22 bushfire season, the RFS had 28 firefighting contracted aircraft on exclusive use contracts in addition to RFS owned and call when needed aircraft. The RFS fleet includes 31 mixed aerial appliances."

No evaluation is mentioned as preceding the reported fleet composition. Elsewhere the coroner's report (Volume 2, page 8) includes information provided by RFS when consulted on *"Counsel Assisting's summary of findings and recommendations concerning Aerial Resources"*. Whilst RFS reports a number of actions and initiatives, no review or evaluation is mentioned.

The report goes on to confirm the absence of evaluation (Volume 2, page 294):

Although the NSW RFS does not have a framework for assessing the capabilities of its permanent firefighting fleet, including its aerial fleet...the NSW Auditor-General's Audit noted that the NSW RFS is working with other Australian States and Territories to ensure the right mix and type of aerial assets across Australia.

As noted above, the NAFC Strategy is not based on any such assessment or evaluation, nor does it include actions to address this, but highlights the need and importance of such.

IBG analysis has raised many concerns around aerial firefighting, including safety, the best mix of aircraft for rapid attack and later suppression, deployment of the right aircraft for particular missions and optimising expenditure of limited resources. Aircraft continue to be acquired for NSW and deployed without the benefit of a strategic plan, research or evaluation.

United States aerial firefighting expert Bill Gabbert, wrote in the online magazine <u>Fire</u> <u>Aviation on April 16 2021</u>:

"When a [US] federal agency spends more than half a billion dollars in a year on one activity such as fire aviation with very little meaningful oversight, it needs to have a robust knowledge base for making decisions about how to spend those taxpayer dollars."

"In conditions like we have seen in recent decades, fire agencies...should be extremely confident their aerial fleets are comprised of the most capable aircraft in adequate numbers so that all wildland fires that are being suppressed can be attacked from the air within the first 20 minutes, supporting firefighters on the ground. This is just basic Homeland Security."

The past performance, current mix and future needs of the NSW aerial firefighting fleet, and how it is used operationally, should be independently reviewed with the objective of optimising outcomes from investment. A focus of success should be expanded ability to extinguish fires quickly, especially in areas away from road access. Lessons from other Australian jurisdictions and internationally can provide valuable insights for NSW.

Operational data collection needs to be comprehensive and rigorous and aerial firefighting research should be greatly expanded.

## A learning culture & an IGEM for NSW

Learning from the successes and shortcomings of bushfire operations is routine good management in any industry and essential for continuous improvement. IBG is concerned about the effectiveness of learning culture in NSW emergency services generally, and specifically in bushfire suppression. A range of policies and procedures exist at the national level (Australian Institute for Disaster Resilience) and in NSW fire agencies (RFS, NPWS, Fire and Rescue NSW) for lessons management, After Action Reviews (AARs) and similar, but tangible outcomes have been lacking.

Neither the 2020 NSW Bushfires Inquiry nor the 2024 NSW Bushfires Coronial filled this gap because they did not comprehensively examine bushfire operations. IBG has compiled our analysis and detailed concerns about bushfire learning systems in a paper delivered to a

bushfire conference in 2023 (*Learning from Past Fire Operations for Future Success*). The recent coronial has only confirmed these concerns, not assuaged them. Three examples (one from in the IBG paper) are included here to demonstrate that learning systems are inadequate:

The NHRC paper cited above paper (*Investigating the suitability of aviation tracking data for use in bushfire suppression effectiveness research*) reports a number of problems with data collection and evaluation of NSW aerial operations. In referring to the "development of guidelines of the most appropriate tasks for each aircraft type (e.g., the LATs...)" the paper highlights a lack of both analysis and usable outcomes. The paper also suggests "there should be a routine interview or survey process for AAS after the bushfires". This idea was supported by all ten AAS (Air Attack Supervisor) interviewees. Progress in NSW on these initiatives appears to have been minimal since the paper was published in 2021.

Recent NSW Budget Estimates hearings into emergency services included this response to a Supplementary Question:

"The NSW Rural Fire Service (RFS) is aware of escaped backburns in the Busbys Flat...fire"

(NSW Budget Estimates, Emergency Services, Answers to Questions on Notice, 28 February 2024).

However this was another answer provided in response to Question on Notice 19:

"There is no mention of concerns regarding backburns or property damage in the Incident Controller's Report or from the multi-agency After Action Review."

(NSW Budget Estimates, Emergency Services, Answers to Supplementary Questions, 28 February 2024).

The non-reporting of a significant negative event (the escaped backburn) is one example suggesting that routine processes are not working effectively for continuous improvement.

Research on bushfire suppression to assist the best decision-making is minimal. In 2020 eminent bushfire researcher Professor Ross Bradstock said that suppression research was in its infancy, and that suppression is largely experience-based (*Sydney Morning Herald*, "Race to understand fire lessons as another 'significant' season looms"). This followed a 2019 research paper that concluded:

"The suppression of large wildfires accounts for the vast majority of suppression costs. Despite these cost increases, we have a limited understanding of suppression efforts and their effectiveness on large wildfires. "In large fire management, objective measures of effectiveness are limited, or non-existent. Without such measures and without effective research-based firemanagement tools, it is unsurprising that incident management team preferences can be as important as fire and environmental factors..."

(Simpson H, Bradstock R and Price O (2019) A Temporal Framework of Large Wildfire Suppression in Practice, a Qualitative Descriptive Study, *Forests* 2019, 10, 884, p1-2)

In a 2021 peer-reviewed synthesis of the Black Summer fires, a team of 21 Australian fire scientists reported that they could not quantify the effectiveness of suppression operations:

*"Record-breaking fire suppression efforts were undertaken during the Black Summer fires, including a record 24 million litres of aerial fire retardant used and* 

a record expenditure on fire and emergency management...The effectiveness of these efforts is difficult to quantify, as records of the location and nature of the suppression operations and their effect on fire behaviour are incomplete. However, both positive and negative impacts of fire suppression were reported during the fires".

"The effects of suppression efforts on the area burnt, fire severity, and biodiversity and cultural heritage, are much more difficult to ascertain, with some high-profile exceptions."

(Nolan, RH et. al. (2021) What do the Australian Black Summer fires signify for the global fire crisis? *Fire* 2021, *4*, 97, p5)

It remains the case that research on bushfire suppression to assist the best decision-making is minimal, as very few projects or papers have emerged in recent years. The NHRA paper on aerial effectiveness cited above is the **only** publicly available paper on suppression to emerge from the Black Summer fires in NSW. It was a scoping paper hampered by the paucity of data. Both the lack of data collected during fires and the lack of suppression research commissioned by NSW bushfire agencies suggests low interest in this essential component of a learning culture.

Operational analysis is critical for its own sake to optimise outcomes, but also for financial efficiency and fleet planning. It is difficult to make decisions about the best make-up of the terrestrial and aerial firefighting fleet if you don't know much about what suppression strategies are most effective in different conditions. On the other hand, the availability of particular resources will influence the selection of strategies, and perhaps not always for the best. IBG analysis (*Reducing the Costs and Impacts of Bushfires*) suggests one reason for an over-reliance on road-based strategies with tankers is because of a more limited supply of both resources and knowledge to apply alternative remote area methods.

To improve operational learning, IBG recommends the establishment of an Inspector General of Emergency Management (IGEM) for NSW, similar to the IGEMs that have operated successfully in Victoria and Queensland for over ten years, and as recommended by the 2021 Royal Commission into National Natural Disaster Arrangements.

The IGEM would be permanent, independent and expert. It would provide assurance and accountability to the community and government. The IGEM would have no role in day-to-day operations. The IGEM would oversee lessons management systems and continuous improvement for the emergency sector. It would carry out both routine and critical incident reviews and analysis of emergency operations and issues. It would examine both the good outcomes and where results can be improved.

IBG has detailed its IGEM proposal in a <u>paper</u>. Far from being an additional burden, an effective IGEM would streamline the currently ineffective disaster review 'system'. It would replace the need for ad hoc inquiries after disasters. It would provide expert input to coronial inquiries, just as the Air Transport Safety Bureau and other bodies do now. Some of this work would be done behind the scenes, in a blame-free way and out of the public glare, thus encouraging open reflection rather than public defensiveness.

NSW needs a stronger focus and commitment on a learning culture for continuous improvement in bushfire operations. An independent Inspector General of Emergency Management should be established to create and oversee the development of a culture of

continuous improvement and provide assurance and accountability to both government and the community.

## **Financial accountability**

Whilst the usual government reporting requirements apply to RFS, there is little evaluation of the effectiveness of expenditure in achieving bushfire management outcomes. The measures applied for early suppression of fires, for properties saved and for hazard reduction works are blunt instruments at best, needing close examination to determine if they deliver an accurate picture. Performance measures are notorious for aligning people and cultures with certain behaviours which can perversely degrade the actual outcomes sought.

According to <u>NSW Bushfire Inquiry Progress Reports</u> the RFS is currently operating to a *"state-wide target KPI of keeping fires within 10 hectares or less, to 80% of the time"* and this target is to be reported on annually. No report is included in the most recent RFS Annual Report for 2022/23. This target does not take account of the size or difficulty of fires included in the total, nor in the potential of fires to expand and create a threat. Many fires are small, close to road access and firefighting resources, and start in mild conditions. These can readily add to the sub 10 hectare target.

The RFS reported that in August 2023 alone the agency responded to "more than 600 fires" caused by escaped burnoffs (*Central West Village Voice*, August 28, 2023). It would be hoped that many or most of these were readily suppressed once competent resources were on the scene. A more useful measure of initial attack effectiveness might be the proportion of fires kept small that had the potential to expand into serious fires, i.e. fires requiring substantial resources or causing significant impacts.

For hazard reduction works the RFS reports on the "number of properties covered" and the total value of those properties (*RFS Annual Report 2022/23*, page 99, Bush fire community protection: properties protected report). The tables which follow confirm that the 114,898 properties reported as protected for 2022/23 includes hazard reduction works by all agencies. The methodology for determining the number of properties protected by each work is unclear, but seems to take no account of variation in local conditions and the time dimension of "protection" (i.e. how long it lasts). Although this allows a basic comparison year-to-year, this measure could also bear some close examination and refinement. The figures quoted for properties saved during wildfire events are similarly opaque in methodology.

The most significant 'blind spot' in RFS financial accountability is in bushfire suppression operations. According to data released in the February 2024 NSW Budget Estimates process for emergency services and environment (<u>NSW Budget Estimates, Emergency Services, Answers to</u> <u>Questions on Notice, 28 February 2024</u>, Attachment A. <u>Budget Estimates 2023–24</u>, Climate Change, Energy, the Environment and Heritage Portfolios, Portfolio Committee No. 7 – Planning and Environment, Answers to <u>Supplementary Questions</u>, answer to Question 17, page 19), the cost of section 44 operations in the 2019-2020 bushfire season approached \$500 million, combined for RFS and NPWS.

There has been no formal assessment of the effectiveness of that very large expenditure in limiting the extent and impact of the fires. An essential precursor to effectiveness evaluation is analysis of what actually happened in the fires in terms of actions and outcomes. This has also not been done. This is not only a financial issue; it has significant implications for

communities and firefighters. It is important that the selfless contribution of volunteers is used to best effect.

Based on IBG analysis of the 2019-2020 season (*Reducing the Costs and Impacts of Bushfires*), we have identified ways that costs and impacts could be reduced in future bushfire disasters. However the important issues around effectiveness have not been addressed by either the NSW Bushfire Inquiry or the NSW Bushfires Coronial. To our knowledge the RFS and NPWS have also not addressed effectiveness, either globally or at the scale of specific fires. Much of the costs of section 44 fires are recouped from the Commonwealth via the Disaster Recovery Funding Arrangements, which applies no requirements for effectiveness or review.

Aerial firefighting is a major expenditure in large fires and lends itself to effectiveness analysis, but as described above evaluation has not occurred. This is part of the larger problem of a learning culture, also described above.

Given the large public expenditures and the importance of achieving the best possible results to reduce bushfire impacts, IBG urges much more analysis of large bushfire operations coupled with evaluation of how effective past expenditure has been. Current performance measures should be critically examined to ensure they are fit for purpose and providing the right information to evaluate success.