

STATE CORONER'S COURT OF NEW SOUTH WALES

Inquest:	Inquiry into the fire at Yankees Gap Road, Bemboka
Hearing dates:	7-10 August 2023, 14 September 2023
Date of findings:	8 November 2024
Place of findings:	State Coroners Court of New South Wales at Lidcombe
Findings of:	Magistrate Joan Baptie, Deputy State Coroner
Catchwords:	CORONIAL LAW – general inquiry, cause, origin and circumstances - hazard reduction burn on private property – Bush Fire Hazard Reduction Certificates – whether burn appropriately managed prior to breach of containment
File number:	2019/00001534
Representation:	Ms R Mathur SC, Counsel Assisting, instructed by Ms C Dunn, Department of Communities and Justice, Legal
	Mr N Newton for the NSW Rural Fire Service, instructed by Ms H Allison, Crown Solicitor's Office
	Ms A Avery-Williams for the NSW National Parks and Wildlife Services, instructed by Ms R Roberts, McCabes
Non publication order:	Non-publication orders made on 7 August 2023 pursuant to s 74(2)(d) of the <i>Coroners Act 2009</i> prohibiting the publication of the first names and identifying information of Mr Wolfe and Ms Wolfe.
	A copy of the orders may be obtained on application to the Coroner's Court Registry.

Findings:

The origin of the fire was on or near the border of the eastern side of the Wolfe's property at Yankees Gap Road, Bemboka.

The cause of the fire was the Wolfe's hazard reduction burn, which breached containment at around 9.30am on 15 August 2018.

Recommendations:

To the Commissioner of the NSW RFS

- (1) The RFS review its Operational Protocol for Prescribed Burning, and/or other relevant policies, to include practical guidance for officers conducting pre-burn site inspections or providing advice for private burns.
- (2) The RFS develop a checklist or other tool which can be used for pre-burn inspections or when providing advice, with a focus on risk management and safety. The checklist or tool should require consideration of the following (non-exhaustive) list of factors:
 - a. fuel loads;
 - b. proximity to areas containing high fuel load such a bushland, National Parks or State Forest:
 - c. weather forecasts:
 - d. anticipated Australian Fire Danger Ratings;
 - e. quantity and location of water sources, and access to those sources:
 - f. firefighting equipment available to the landowner, including water pumps;
 - g. access to proposed fireground, including access of RFS firefighting vehicles;
 - h. topography;
 - intended burn area and time;
 - j. width of containment lines and breaks;
 - k. redundancy options;
 - whether the circumstances or complexity of the proposed burn warrant involvement or assistance from the RFS and/or Fire Control Officers, both in managing the burn and/or when inspecting the site prior to the proposed burn being lit.

- (3) The RFS develop education and training for officers conducting pre-burn site inspections or providing advice for private burns. The RFS encourage local brigades to nominate a representative to undertake such training and take the lead on pre-burn site inspections in their local area.
- (4) The RFS review its Standards for low intensity bush fire hazard reduction burning, 'Before you light that fire' pamphlet, and/or other relevant policies available to the public, with a view to enhancing the operational guidance content. Such guidance material is to direct that consideration be given to forecast risks and redundancy options and should provide resourcing guidance.
- (5) The RFS update its procedures and policies, or develop a specific procedure, to provide clear, documented protocols clarifying the command and control arrangements in place when:
 - a. RFS units are actively assisting a private landowner to implement a hazard reduction burn in a situation where no formal (written) request for assistance process has been actioned;
 - RFS units are responding to a triple-0 call relating to a fire situation where a private landowner is in the process of implementing an unassisted private hazard reduction burn, and RFS units undertake fire control actions on the fireground out of necessity, to reduce the risk of fire escaping;
 - c. RFS have assisted a private landowner to implement a hazard reduction burn in a situation where no formal (written) request for assistance process has been actioned, and RFS officers decide the hazard reduction burn is sufficiently safe for RFS units to leave the fireground, and the private landowner is agreeable to this;
 - d. RFS have assisted a private landowner to implement a hazard reduction burn in a

situation where no formal (written) request for assistance process has been actioned, and RFS officers decide the hazard reduction burn is sufficiently safe for RFS units to leave the fireground, and the private landowner is not agreeable to this.

- (6) The RFS review its procedure and policies with a view to include clear directions for firefighters to consider weather forecasts, drought index and Australian Fire Danger Index when planning, responding to, managing or deciding to leave a burn.
- (7) The RFS review its training with a view to include or renew emphasis on the requirement for firefighters to consider weather forecasts, drought index and Australian Fire Danger Index when planning, responding to, managing or deciding to leave a burn.
- (8) The RFS review its Bush Fire Hazard Reduction Certificate assessment form, and/or other relevant procedures, with a view to incorporate a high level qualitative operational risk assessment of the application, facilitating the identification of potentially 'high risk' private hazard reduction burns to alert landholders to increased safety risks, and which may trigger further review by the RFS or approval via an alternative process.
- (9) The RFS consider introducing procedures whereby the notification by a landholder of a planned burn triggers an officer review of upcoming weather forecasts and Australian Fire Danger Ratings, to be conveyed to the landholder and/or local brigade if conditions for safely managing the burn are forecast to deteriorate.
- (10) The RFS consider developing a checklist of questions to be asked when private landholders notify the RFS of planned prescribed burns, including planned size and duration of the burn.

- (11) The RFS consider how the Hazard Reduction Certificate system could be improved so that hazard reduction burns of specified parameters are mandated as requiring a Fire Permit year-round.
- (12) The RFS review its Guidelines for Permit Issuing Officers with a view to updating the condition determination process to a risk-based approach aligned with Australian Standard ISO 31000:2018 or equivalent.
- (13) The RFS develop material to further educate their volunteers and staff in relation to:
 - a. their powers to extinguish or prohibit a notified burn if circumstances require;
 - the tools available at their disposal, or the Fire Control Centre's disposal, to assist with preburn site inspections and management of ongoing burns;
 - assessment of risk and management of burns when responding to incidents involving prescribed burns on private properties; and
 - d. pre-emptive fire management by the RFS on private land when called on for assistance.

The education material be presented in diverse formats, including in-person trainings or meetings, via pamphlets, or pre and post fire incidents.

- (14) The RFS review its distribution of material designed to educate the public in relation to the requirements for conducting a prescribed burn outside of the Fire Danger Period, with a view to consider how awareness of this material can be increased
- (15) The RFS review their educational material with a view to increase awareness and clarity in respect of the authorities required to conduct a prescribed burn outside of the Fire Danger Period.
- (16) The RFS review the Prescribed Burn Forecast Tool to increase clarity regarding the 'poor' category of prescribed burning conditions.

(17) The RFS implement a system where Bush Fire Management Committees are prompted to consider, on an annual basis, whether the Fire Danger Period for that year should be amended to reflect increased or reduced adverse fire conditions.

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INTRODUCTION

- This inquiry concerns an uncontained bush fire which burnt from 15 August until 8 November 2018, in and around Bemboka, which is located in the Bega Valley in southern NSW.
- 2. The fire escaped from private property and burned an estimated 19,664 hectares of the South East Forest and Wadbilliga National Parks. In addition, the fire destroyed or damaged at least three homes, as well as a number of outbuildings, vehicles and machinery.
- 3. The total financial damage caused by the fire has been estimated to exceed \$9.3 million.
- 4. By 7pm on 15 August 2018, a "Section 44" declaration was sought from the Rural Fire Services (RFS) Commissioner by the Bega Bush Fire Management Committee. Such a declaration is sought when a fire has been assessed as having reached, or is likely to reach, such proportions as to be incapable of control or suppression by the local firefighting authorities. The declaration resulted in the RFS Commissioner assuming charge of the bush firefighting operation and implementing such measures that he deemed were necessary to control or suppress the fire. The RFS Commissioner made the declaration which remained in force until 30 September 2018.

The role of the coroner and the nature of the inquiry

- 5. Section 30(2) of the *Coroners Act 2009* (NSW) (the Act) provides that a coroner has jurisdiction to hold a general inquiry concerning a fire or explosion that has destroyed or damaged any property within the State, but only if the State Coroner gives a direction for such an inquiry to be held.
- 6. Section 30(3) of the Act provides that the coroner's jurisdiction extends to the examination of "all of the circumstances concerning the fire or explosion (including, but not limited to, an examination of its cause and origin)."
- 7. Section 32(3) and (4) of the Act provides as follows:
 - (3) **General inquiries** A coroner is required to hold a general inquiry concerning a fire or explosion that has destroyed or damaged property within the State if the State Coroner gives a direction under this section for such a general inquiry to be held.

- (4) The State Coroner must direct that a coroner hold a general inquiry concerning a fire or explosion that has destroyed or damaged property within the State if -
 - (a) an authorised public official has made a request to the State Coroner for a general inquiry to be held, or
 - (b) the State Coroner is of the opinion that a general inquiry should be held.
- 8. On 15 June 2023, the State Coroner directed that a general inquiry should take place pursuant to section 32(3) of the Act.
- 9. A coroner who conducts an inquiry concerning a fire or explosion must, at the conclusion of the inquiry, record their findings in relation to the date, place and circumstances of the fire or explosion. In addition, a coroner may make recommendations, based on the evidence deduced during the inquiry, which may improve public health and safety.
- 10. During these proceedings, evidence has been received in the form of statements and other documentation, which was tendered in court and admitted into evidence. In addition, oral evidence was received from a number of witnesses. Expert evidence was received from Mr Paul de Mar and an institutional response was received from the NSW RFS Deputy Commissioner Peter McKechnie. Mr de Mar and Deputy Commissioner McKechnie prepared written opinions, as well as providing oral evidence.
- 11. All the material placed before the Court has been thoroughly reviewed and considered. I have been greatly assisted by the written submissions prepared by counsel assisting, Ms Mathur SC, and Mr Newton on behalf of the RFS. At times I have embraced their descriptions in these findings.
- 12. A non-publication order pursuant to section 74 (1)(b) of the Act has been made relating to the owners of the property at Yankees Gap Road, Bemboka during these proceedings. The two owners are to be referred to as "Mr Wolfe" and "Ms Wolfe".

Background

13. Ms Wolfe and Mr Wolfe initially rented, and then purchased the property at Yankees Gap Road, Bemboka in 2013. The property is set on 80 acres, with one house, a shed and two water tanks. The house is located on the western side of the property near a creek. On the eastern side of the creek, the property rises steeply and connects with the National Park. The adjoining land within the

- National Park boundary then continues to rise to a ridge with an elevation of approximately 400 metres.
- 14. Mr Wolfe had undertaken three hazard reduction burns in different areas of their property, possibly in 2013, as well as in 2015 and 2017. Mr Wolfe stated that the captain of local Bemboka RFS, Captain John Inskip, had attended their property whilst the Wolfes were conducting the 2017 burn.
- 15. In August 2018, Ms Wolfe and Mr Wolfe intended to undertake a further hazard reduction burn on their property. The area that they were intending to burn was located between the creek and the National Park boundary on the southeastern side of their property. Mr Wolfe estimated that the area that he proposed to burn was around 4-5 hectares (10-12 acres) and was forested with eucalypts, shrubs and contained leaf litter. Mr Wolfe had engaged a contractor to bulldoze a containment line the width of a vehicle around the proposed burn site.
- 16. Ms Wolfe confirmed that the "fuel loads were extreme on our property, having experienced no fire since (the) last major bush fire (in about the mid 80's) according to local knowledge." The captain of the local brigade at Bemboka, Mr John Inskip, described the area as having "a bit of stuff on the ground, and it wasn't overly big but there was a medium coverage of foliage."
- 17. Mr Wolfe confirmed that he had access to his Toyota Hilux 4WD vehicle to patrol the perimeter of the burn. On the rear of his vehicle, he had two 25 litre water containers and a bucket. He was also in possession of a chain saw and fire rake. These items constituted the entirety of his firefighting equipment.
- 18. At 8.10am on 9 August 2018, Mr Wolfe commenced the hazard reduction burn.
- 19. There is no dispute that RFS volunteers attended the Wolfe's property on 9 August, 11 August and 15 August 2018.
- 20. A number of factual disputes arose during this inquiry as to who attended the property from the RFS, the times they attended and what occurred.

Scope of this Inquiry

- 21. As a result of the extensive bushfire, four properties were known by NSW Police to have been significantly impacted in terms of property damage.
- 22. Ms Janet Reynolds resided at 405 Desert Creek Road, Numbugga. Her property was consumed at 1.45pm on 15 August 2018, resulting in the loss of her home, a self-contained flat and two sheds. Ms Reynolds was insured; however, this

- clearly did not provide recompense for years of memories, sentimental items and personal possessions.
- 23. Mr Anthony Mead resided at 100 Desert Creek Road, Numbugga. His home and sheds were completely destroyed at 3pm on 15 August 2018. His home and possessions were not insured.
- 24. On 15 September 2018, the fire again broke containment lines and travelled back to 883 Yankees Gap Road, Bemboka. That property was owned by Mr and Mrs Leichsenring. The fire destroyed four sheds on their property.
- 25. On the same day, Ms Suzanne Baskey's home and her possessions at 762 Yankees Gap Road were consumed by the fire. In addition, her fruit orchard and substantial garlic plantings were lost. Although insured, it was unlikely that the insurance payout would cover her replacement costs.
- 26. Ms Reynolds commented as follows:

I find it baffling that the RFS were unable to intervene in order to contain the fire before it destroyed homes, sheds, animals, fences, 20,000 hectares of bush and who knows how many native life forms. ... In 26 years of living on my property I have never experienced winds of such force carrying burning branches for kilometres ... This was not an act of nature, it was an act of man and the catastrophe it became should have been circumvented.

- 27. I would like to acknowledge each of the owners of the properties referred to above and their very significant financial, psychological and emotional loss. I would also like to acknowledge the local community and the impact that this fire had on individuals and the community generally, including the devastating loss of flora and fauna.
- 28. A number of issues were raised by the affected property owners, as well as other submissions received from the public. Some of the issues raised related to the RFS' management of the fire once the section 44 declaration had come into effect, including the use by the RFS of aerial incendiaries and backburning efforts to manage the fire at various times, as well as the lack of warnings and communications to affected property owners and local communities.
- 29. It is noted that the State Coroner of NSW has separately undertaken an extensive inquiry and inquest into the bush fires and deaths which occurred in 2019 and 2020. During that inquiry, evidence was received relating to the appropriateness and efficacy of aerial incendiary and backburning operations undertaken by the RFS, as well as issues relating to limited or non-existent communications. The State Coroner's findings were published in March 2024.

30. Given the similarity of some of the concerns raised in the abovementioned inquiry, the decision was made that this inquiry should focus on the separate, but related issue, of the risks associated with hazard reduction burns conducted on private land. As such, the focus of this inquiry related to the events leading up to, and including, the ignition of the hazard reduction burn at the Wolfe's property on 9 August 2018, until the fire ran out of control into the National Park on 15 August 2018.

List of issues considered during the Inquiry

- 31. The following list of issues was prepared before the proceedings commenced and were considered and provided focus during the inquiry:
 - Whether the hazard reduction burn conducted on 9 August 2018 at Yankees Gap Road, Bemboka, was compliant with the policies of the NSW Rural Fire Service at that time.
 - 2) Whether there is appropriate, thorough and easily understood regulatory framework guiding the assessment and approval of hazard reduction burns on private lands.
 - 3) Whether the hazard reduction burn at Yankees Gap Road, Bemboka, was appropriate and the burn was able to be safely managed in light of:
 - a) the resources available to manage and respond to the burn;
 - b) the topography of the region; and
 - c) other environmental factors relevant to the area.
 - 4) Whether it is appropriate for decisions as to when to ignite hazard reduction burns to be left to the discretion of private landowners.
 - 5) Whether the response and fire management by the relevant agencies to the fire at Yankees Gap Road, Bemboka, particularly from 9-16 August 2018, was appropriate.
 - 6) Whether there was anything unusual in the circumstances in which the hazard reduction burn breached containment on 15 August 2018.
 - 7) What (if any) role does a Fire Behaviour Analyst play in the approval system for hazard reduction burning on private land.

8) Whether it is otherwise necessary or desirable for the Coroner to make recommendations pursuant to section 82 of the *Coroners Act 2009* (NSW) in relation to any matter connected to this inquiry.

FACTUAL ISSUES

The hazard reduction plan and assessment prior to 9 August 2018

- 32. The Wolfes were aware that the bush fire danger period for the Bega Valley Shire Local Government Area commenced on 1 September each year. Accordingly, they were not required to obtain a Fire Permit pursuant to section 87 of the *Rural Fires Act 1997* (RF Act), as their proposed hazard reduction burn was scheduled to commence prior to 1 September 2018.
- 33. Outside the bush fire danger period, a landowner can seek a 'Bush Fire Hazard Reduction Certificate' under the RF Act, which provides a defence to offences under the RF Act, as well as other environmental legislation, if the landowner is burning vegetation for hazard reduction purposes or land clearance on private property.
- 34. Mr Wolfe gave evidence that he had only heard about Hazard Reduction Certificates about four days prior to giving oral evidence at the Inquiry. He further confirmed that he had not prepared a written 'burn plan' which is a requirement if applying for a Hazard Reduction Certificate.
- 35. Mr John Inskip, the Captain of the Bemboka RFS, indicated that he had been contacted by Ms Wolfe in early August 2018, in relation to the Wolfes commencing a hazard reduction burn on their property. According to Captain Inskip, he agreed to attend the property to undertake an inspection and told Ms Wolfe that she would need to contact the Bega Fire Control Centre so that the proposed burn could be added to the "burn list". He could not recall the date that he attended the property, although recalled that it was a weekend.
- 36. Captain John Inskip indicated that he would have called the Fire Control Centre after his attendance at the Wolfe's property and advised the Fire Control Centre of the Wolfe's intention to undertake a burn.
- 37. In his statement, Captain John Inskip recalled that Mr Wolfe drove him around the "track" and his view was that: "It all appeared fine to me." Captain Inskip recalled that there was a containment line, which he described as "tight, only about Landcruiser sized track and wound up and down the hill side around the area they intended to burn." Captain Inskip stated that he was "a little bit worried about the National Park as the property joined onto the National Park and there

was a high fuel load in the National Park however there was still some dampness and on a fine day the fire would be contained within his containment lines. I was at his property for about three parts of an hour."

- 38. In his oral evidence, Captain John Inskip recalled travelling around the containment lines on the Wolfe's property in his RFS vehicle. Captain Inskip confirmed that Mr Wolfe had indicated that he was going to "light it up, weather permitting."
- 39. Captain John Inskip confirmed that he did not speak with the Wolfes about the firefighting equipment that they had available. When asked if he thought that such information may inform his assessment and advice about the proposed burn, he stated: "Well, the fire they'd lit in 2017, they done a good job. So, I just presumed they would do another good job."
- 40. Captain Inskip was asked about his understanding about the legislative process surrounding hazard reduction burns. He indicated that he had not received any training relating to the legislative scheme. He was also unaware of the various RFS pamphlets or leaflets that provided information on hazard reduction burns. He confirmed that he had never provided a copy of this literature to any member of the public.
- 41. Mr Wolfe gave evidence that he did not speak with Captain John Inskip prior to lighting the fire on 9 August 2018. He further stated that Captain Inskip did not attend his premises either on or before 9 August 2018. Mr Wolfe agreed that Captain John Inskip had attended his premises in 2017, prior to the commencement of his hazard reduction burn in 2017.
- 42. Ms Wolfe provided two statements and gave oral evidence. Ms Wolfe confirmed that she had had a telephone conversation with Captain John Inskip "about one day prior" to the 2018 burn commencing.
- 43. Ms Wolfe confirmed that she had contacted the "Command Centre" at Bega prior to commencing with the burn and was told that no permit was required, however, the Command Centre reminded her of her obligations to notify neighbours of the burn. Ms Wolfe also indicated that the Command Centre encouraged her to remain within mobile phone contact for the duration of the burn.

The attendance by RFS volunteers at the Wolfe's property from 9-14 August 2018

- 44. Mr Wolfe stated that two Bemboka RFS officers arrived at his property at around 10.30am on 9 August 2018. He identified the two officers as "Ray and Colin". He stated that his sister, Ms Wolfe spoke with them as Mr Wolfe was on the fire ground. He stated that the two RFS officers were unable to gain access to the fire ground as their vehicle was too large to navigate the containment line. He indicated that he received a text message from his sister, enquiring if everything was alright and he replied that it was all okay.
- 45. The RFS volunteer firefighter, Mr Colin Dorl provided a statement indicating that he had attended the Wolfe's property about three times prior to the fire jumping the containment line on 15 August 2018. He did not recall attending the property on 9 August 2018. He was shown the RFS Situation Report for 9 August 2018, which indicated that he had attended the Wolfe's property at 11.16am, together with volunteers Mr Graham Damm and Kevin Orms.
- 46. Captain John Inskip indicated that his records confirmed that the RFS had received a triple-0 call at about 11.40am on 15 August 2018 in relation to the burn on the Wolfe's property. He did not attend; however he had been advised that the RFS truck that attended was unable to access the fireground due to its size.
- 47. On 10 August 2018, Mr Wolfe stated that he was woken by the sound of the wind and attended the fireground at around 4.30am. On arrival, he noticed that there were some smouldering logs and debris. He attempted to deal with these hotspots, but by 8.30am, he decided to call the Bemboka RFS to request their assessment of the fire. He indicated that at 10am, Captain John Inskip attended his property. Captain Inskip took his own vehicle onto the fireground and advised Mr Wolfe that the containment lines were holding.
- 48. Captain Inskip did not refer to his attendance at the Wolfe's property on 10 August 2018.
- 49. Mr Wolfe indicated that at around 12.30am on Saturday, 11 August 2018, two RFS volunteers, Deputy Captain Ray Inskip and Mr Colin Dorl arrived at his property in response to a triple-0 call made by a member of the public. Mr Wolfe recalled that he took them up to the fireground and "Ray saw a log which was on fire about 20 metres from the containment line and said that he had some concerns. The fire started to snake away across the bottom track resulting in Ray Inskip calling John Inskip for assistance."

- 50. Mr Wolfe stated that a number of additional RFS volunteers arrived in a number of fire vehicles. Mr Wolfe recalled Ray Inskip telling him that the "fire had broken the containment line and had spotted on the other side." Mr Colin Dorl recalled that he was with Deputy Captain Ray Inskip and they saw a small fire burning on the other side of the fire break. He could not recall whether the fire he was referring to was on the downward or upward slope of the fireground.
- 51. In his oral evidence, Mr Wolfe confirmed his belief that Deputy Captain Ray Inskip had deliberately "lit a leaf pile which had been raked off the track and piled on the side." He further contended that when he was told by Deputy Captain Ray Inskip that the fire had spotted over the track, he knew that this was untrue; "Because I went and had a look at it and there was nothing but the leaf pile burnt. It's obvious someone was standing there and just lit it up and let it burn out."
- 52. Captain John Inskip confirmed that when he arrived, there were about 8-9 crew members on site and;

I could see that the fire wasn't doing a real lot. I thought the fire was doing a reasonable job for what he wanted it to do. It was still within the containment lines at that stage. It was slowly burning back through the growth and leaf litter. There was a couple of stumps and trees which were smouldering however it appeared to me to be under control.

53. Mr Wolfe indicated that he continued to monitor the hazard reduction burn from 12-14 August 2018, without incident.

Competing factual versions relating to the RFS attendance on 15 August 2018

Mr Wolfe's version of those events

- 54. Mr Wolfe stated that he had woken up early on 15 August 2018 and noticed that the "wind was strong and that the conditions were not good". He loaded his truck and travelled to the fireground at around 5am. He noted that the "wind was blowing so hard that the dust and ash was making [it] very difficult for me to see anything." He noticed that a number of trees had fallen across the track. After some time attempting to clear the track, Mr Wolfe realised that he needed the assistance of the RFS and contacted triple-0.
- 55. Mr Wolfe recalled the Bemboka crews arriving, comprising of Captain John Inskip, Deputy Captain Ray Inskip, Deputy Captain Andrew Inskip, Mr Colin Dorl and Captain Simon Bateman. Mr Wolfe "had words" with Deputy Captain Ray Inskip in relation to his concerns that a pile of leaves had been deliberately lit by

- him on Saturday (11 August 2018) and Deputy Captain Ray Inskip left the property.
- 56. Mr Wolfe stated that the crews waited until sunrise and then proceeded to the fireground in the respective fire trucks. He denied that he had had a conversation with Captain Simon Bateman about a tree that had sparks coming from it prior to the crews entering the fireground.
- 57. In his statement to police, he recalled the crews remaining in that area for about one hour. In his evidence, he thought the crews had been there for around three hours. He recalled having a conversation with Captain Simon Bateman prior to the crews leaving his property about the issue with Deputy Captain Ray Inskip.
- 58. Mr Wolfe also maintained that they discussed one tree of concern which the crew had extinguished close to the top containment line and marked it with emergency tape. Mr Wolfe stated that he was not told about the trees within the fireground which were alight and sparking at that time.
- 59. Mr Wolfe stated that when the RFS fire crews left his property at around 9am, he went onto the fireground and described the area as being "completely benign" and further that there was "nothing, absolutely nothing. No trees alight, no smoke. There was no dust or ash blowing" and that the conditions were calm again.
- 60. Mr Wolfe recalled seeing a wisp of smoke in the fireground from his house about 20 minutes after the crews had left and he took his vehicle back up onto the fireground. He could not see any fire activity and returned home. After about five minutes, he saw "more smoke, so I went over and that's when I noticed the stump on fire and it was heading up the mountain probably 10 metres up the mountain snaking up the ridge, and it had burnt away from the stump about 5 metres either side" which was located on the National Park side of the containment line. He stated that the stump was not within the area of his containment line where he had been conducting his hazard burn.
- 61. Mr Wolfe asked his sister, who was with him in his vehicle, to call triple-0. He recalled the RFS fire crew arriving at the same time his sister was still talking to the triple-0 operator. The RFS vehicle contained Deputy Captain Andrew Inskip and Mr Colin Dorl and was behind Mr Wolfe's vehicle. He ran over to them and yelled, "Where the fuck did this come from?" and started blaming Deputy Captain Ray Inskip and stating that he wanted the police called. Mr Wolfe maintained that the RFS volunteers made no attempt to pull out their hoses until Mr Wolfe began leaving the area. Mr Wolfe then continued along the track and returned home.

- 62. Ms Wolfe provided a similar account to that of her brother.
- 63. Mr Wolfe confirmed that when Captain Simon Bateman left the fireground at around 9am, there were no trees on fire or emitting sparks. He accepted that if there had been trees sparking within the fireground that it would have been possible that the stump he saw outside of the containment line could have been ignited. He denied that there was any sparking activity in the bottom or middle areas inside the containment line after Captain Bateman left the area.
- 64. Mr Wolfe further described the stump and surrounding area as being located 5-10 metres from the top of the containment line. He said that the burnt area around the stump had a perimeter of about 10 metres and that the stump was "fully ignited". Mr Wolfe denied that during his second trip around the fireground after the RFS left his property earlier that morning that he had observed fire damage within the 10 metre radius from the stump. He was adamant that he would have seen the smoke.

Bega Fire Control Centre and RFS records

- 65. At 5.35am, a radio transmission was recorded by the Bega Fire Control Centre, indicating, "A, Simon, Skippy has spoken to the landholder, um fire is still contained at this stage but it's flared up. There are some trees across the access track. Copy that?"
- 66. At 5.36am, a radio transmission is recorded as, "Yeah, good news, Thanks for that. Just like all crews to be aware of the wind strength and make safety a priority. Fire com clear."
- 67. At 6.08am, a call is recorded as follows: "Yeah, Simon, just wondering how you're going up there?" The response is recorded as:

Yeah, just managed to go around the whole fire, it hasn't ...it's still contained. Just got a tree that's preventing simple access so I've had to go back and come around the other way to it, just going to use the axe and get rid of a couple of branches outta the way. [Indistinct], we just got a tree that is blowing. A short broken off tree that actually is blowing a few sparks into unburnt occasionally so we can reach it with a nine and we're just going to try and to wet it down to take any danger away from that. Copy so far. ...So just heard Candelo 1 they're almost on scene, so we can only use a nine where we got to get to anyway so no further resources required. And I think we will just be able to wet this this broken off tree down and that might be enough.

68. At 7.01am, a call is recorded as follow:

We just had one candle put out, which is pretty much done, everything else burning is well down in the burnt area, there's nothing we can do about it anyway, a few standing trees. Um, the edge, it looks still all contained, nothing escaped anywhere so just about to talk to the owners now and make sure they....Pretty sure they will keep an eye on it, but I'll just reinforce that with them. Wind is picking up out here, I might just do a bit of weather when I get out of here cos it gives you a false weather reading in here cos it's a bit protected but it's much windier outside.

69. At 7.13am, a message is recorded as:

Spoken to the property owner, they're on scene all day today and they are going to do regular patrols of the area. It's pretty good, just a few tall standing burning trees that are way down in the middle of the burnt area which weren't sparking, weren't candling at the time so I was fairly happy with that and they're happy to continue patrolling.

70. The Situation Report prepared contemporaneously by the RFS on 15 August 2018, recorded the origin details as "Burning off – legal."

Deputy Captain Ray Inskip's version of the events

- 71. Deputy Captain Ray Inskip provided a statement to police dated 26 August 2021. He did not give evidence during the Inquiry.
- 72. Deputy Captain Ray Inskip recalled attending the Wolfe's property the day "before the fire escaped, although I cannot now remember why." He recalled that they;
 - ... patrolled the perimeter of the fire and, on the way back spotted a small spot fire that had just started. It was just outside the fire break and less than a metre square. We put the fire out with water. We did the patrol and had a look around and then spoke with him.
- 73. Deputy Captain Ray Inskip recalled receiving a pager message on 15 August 2018, between 5-5.30am. He then drove to the Wolfe's property and parked near the house.
- 74. Deputy Captain Ray Inskip stated that Mr Wolfe indicated that he wanted to speak with him and then said, "you caused the fire that jumped the line yesterday and caused the problem". Deputy Captain Inskip responded, "I did not, we put it

out." After further exchanges between the two men, Deputy Captain Ray Inskip left the property in the company of his son, David.

75. Deputy Captain Ray Inskip indicated in his statement that:

"There was a call later that day and my son Andrew responded. Where I live, I look straight over where the fire was. When the fire first went it just looked like a volcano had gone up – just horrendous smoke. I could see that it was gone – out of control. The way the wind was blowing the fire just went.

Captain Simon Bateman's version of events

- 76. Captain Simon Bateman had been the Captain of the Numbugga Rural Fire Station for eight years by August 2018.
- 77. In Captain Bateman's statement to police dated 3 April 2019, he recalled receiving an early morning call on 15 August 2018 from the Duty Officer requesting that he attend a private property at Yankees Gap Road, Bemboka. He arrived in his RFS Landcruiser at around 6am.
- 78. In his sworn evidence, he recalled that he had been told by the Duty Officer that he was being requested to attend a "private burn that the landholder was concerned with certain trees and stumps that were on fire close to the edge of the burn area of his land." When asked about the additional information that he was able to recall about the initial communication from the Duty Officer in the witness box, Captain Bateman stated that:

If the triple-0 call, or the notification to them, came in and specified that, that's what I would have gone – that's what I would be told. All the information that they would have been given is what I would be – would be passed on.

79. In his statement to police, Captain Bateman stated that when he arrived at the Wolfe's property, he had a conversation with Mr Wolfe who told him that:

... he had previously been doing a hazard reduction burn and was concerned about a particular tree that he had noticed that morning on his patrols. [Mr Wolfe] described to me where this tree was, and I then went out with the Candelo crew to locate this tree. [Mr Wolfe] told me that this particular tree had sparks coming out of the tree and the sparks were being blown towards the national park.

Captain Bateman subsequently conceded that he may have been mistaken about his recollection of the description he received as indicating that the sparks were being blown into the National Park.

80. Captain Bateman confirmed that he had travelled into the fireground with the Candelo crew to locate the tree. He stated in his sworn evidence that:

We broke it open with an axe, and then extinguished that stump. It was like a broken tree, so it wasn't a tree with branches and everything sticking out, it was like it had broken off in the wind many years before, and it was a tall stump.

He stated that this stump was within the containment line area. This account appears to be consistent with radio transmissions to the Bega Fire Control Centre at 6.30am on 15 August 2018.

- 81. Captain Bateman further recalled that: "There were taller trees I noticed about 20 to 30 metres inside the boundary of [Mr] Wolfe that had fire on the outside of these trees and the wind was causing some sparks to blow off these trees." He stated that these trees were "down from the stump we were working on. So I saw them at the same time, and during the and during the rest of the inspection."
- 82. Captain Bateman gave evidence that these trees were 10 -12 metres tall and "I really don't recall, but I mean, four or five there could have been." He indicated that his crew did not extinguish the fire on these trees because "there was no access down to those trees to take the vehicle to them, and the height of where the embers were coming from would not be able to send water with the small capacity pump that's on a Cat 9 up that high." Captain Bateman indicated that the larger Cat 7 vehicle could possibly have driven around the containment line to access these trees, but that wasn't ideal given the width of the track and the steepness of the terrain.
- 83. Captain Bateman confirmed that prior to leaving the Wolfe's property, he spoke with Mr Wolfe and told him that there were some larger trees on his property that they had not been able to extinguish due to the size of the trees and that he needed to continue monitoring them. He stated that he left the property at around 7.30am.
- 84. Captain Bateman stated that he received a call from "Firecom at Bega" and returned to the Wolfe's property at 10.45am. Captain Bateman recalled seeing that the "earlier fire" had "broken the containment line and had spread into the National Park". He stated that the fire had spread into an area which was not accessible by their vehicles and appeared to be out of control.

85. Captain Bateman was asked:

So do you say, as a captain of a brigade, that if you attend a fire, a fire lit by a property owner, that you feel comfortable leaving that fire, even in circumstances where you're leaving tall trees which are alight, bordering on a National Park, and with no knowledge as to what capability the owner had to deal with those trees alight?

Captain Bateman answered:

Well that's the decision that I took, because again, it was his fire, and we, we went up and did the – what we were requested to go and do, and made some observations, and there's been – and that's – I don't really know how to answer that. That's just, yes, I made, that's the decision that I took, I guess, yes.

Mr Colin Dorl's version of events

- 86. Mr Dorl provided a statement to police dated 26 August 2021, in which he stated that the third time that he had attended the Wolfe's property was a "night-time call out". He conceded that this may well have been early in the morning of 15 August 2018. His statement indicated that:
 - ... we had to cut down 2 trees with chimney burns that were right on the edge of the fire line. We either dragged the tree back inside the fire line, or if we could not do that, we split the tree open where it was and put the fire out. There were also a couple of little spots that we were worried about right on the edge of the containment line which we extinguished.
- 87. Mr Dorl indicated that when they returned the second time that day, he was with Deputy Captain Andrew Inskip and he couldn't recall speaking with the Wolfes and believes they travelled directly to the fireground. He recalled that "most of the easy burning fuel within the fireground had been burnt out. There was concern due to the fire being in dead trees, or the hollows in trees, which were high off the ground and in the wind." He also noted that:

We got about halfway around the top side of the fire when we saw that the fire had jumped the fire break and was heading into the bush. The fire was about 10 to 15 metres up the hill and about 5 metres in width. By the time we go the hose out and started chasing it up the hill we couldn't catch up with the fire. The hill ran up to the range and the fuel load in that area was heavy. The fire travelled faster than I could run up hill dragging a hose.

88. Mr Dorl was adamant that there was no stump on the uphill side of the containment line and that the "fire had jumped across the containment line and gone into grass and leaf matter."

89. Mr Dorl denied that he had deliberately started a fire on the other side of the containment line, whilst in the company of Deputy Captain Andrew Inskip.

Deputy Captain Andrew Inskip's version of events

- 90. Deputy Captain Andrew Inskip had been a volunteer firefighter with the Bemboka brigade from 2001 until 2004, and again from 2015 onwards. He is the son of Deputy Captain Ray Inskip and the nephew of Captain John Inskip.
- 91. Deputy Captain Andrew Inskip provided a statement to police dated 4 September 2021. He also gave sworn evidence on 9 August 2023 in these proceedings.
- 92. In his statement, Deputy Captain Andrew Inskip recalled receiving a pager message at about 5.30am on 15 August 2018 and arrived at the property in the Bemboka "Cat 7" and met the landholder. Deputy Captain Andrew Inskip did not hear the conversation between his father, Deputy Captain Ray Inskip and Mr Wolfe, however recalled that his father left shortly afterwards, saying, "I don't need this crap. I'm going home." Deputy Captain Andrew Inskip recalled remaining in his vehicle with his brother David and another volunteer, as the vehicle was too large to traverse the containment line.
- 93. Deputy Captain Andrew Inskip recalled later being told by Captain Simon Bateman that it "looks pretty good, there's nothing too concerning" and standing the crews down from duty.
- 94. In his statement and in his evidence, Deputy Captain Andrew Inskip recalled receiving a pager message that the "fire had taken a run". He attended the Wolfe's property in a "Cat 7" in the company of Mr Colin Dorl. He stated that he spoke with Mr Wolfe near the house and that Mr Wolfe drove his vehicle into the containment line and that he followed in his vehicle. Deputy Captain Andrew Inskip denied that he had met Mr Wolfe on the containment line near where the fire had escaped. Deputy Captain Andrew Inskip stated that he had not previously entered the containment line, although he accepted that Mr Dorl may have entered the area previously.
- 95. Deputy Captain Andrew Inskip confirmed that after Mr Wolfe left the area, he and Mr Dorl attempted to:

put some of the fire out, we had reached our max length with the hose. I told Collin to pack it up, we were going to pull out, and I made the radio call to Bega FCC [Fire Control Centre] that it was too dangerous and windy into the bush, that the fire had taken a run up the hill into the national parks, and I was

retreating back to the house as a refuge area and waiting for the group captain, Simon Bateman, to turn up.

Observations on factual controversies

- 96. It is clear that the accounts of a number of the RFS witnesses were inconsistent with each other, and at times, with their own previous statements. The evidence of the Wolfes were also inconsistent at times with other evidence and required clarification.
- 97. The inconsistencies were incapable of meaningful resolution. It should be noted however, that such a resolution is not vital in these proceedings as the issues central to this Inquiry are focused on other matters which are not reliant on a determination of the factual issues or events on 15 August 2018, or the days immediately preceding.

Weather Observations

- 98. The evidence indicated that the Fire Control Centre at Bega could provide observations relating to adverse weather forecasts to RFS volunteers attending a report of a fire. Similarly, RFS volunteers attending a fire could provide the Fire Control Centre with observations relating to weather and fire behaviour.
- 99. Mr Wolfe gave oral evidence that he had been monitoring a weather 'app' called 'Willy Weather' for the weather forecasts prior to commencing the burn at least daily, if not twice daily. He stated, "I check the wind and the rainfall and it gives me about a six day forecast and it's about as best I can do."
- 100. Captain John Inskip confirmed that in 2018, if he asked for a weather report from the Bega Fire Control Centre, it would be provided. In 2018, he indicated that it was not his practice to access a weather report from the Bureau of Meteorology or any other weather site, such as Willy Weather.
- 101. Captain John Inskip was asked: "Where do you normally go to look when you look for weather predictions?" He replied: "On the TV at night time." When asked if that was the only source, he responded: "No, no. Just making a joke, sorry. No-one was smiling. No."
- 102. At the conclusion of his evidence, it was clear that he made no enquiries with any source in relation to the forecasted weather when attending the Wolfe's property at any time during August 2018.

- 103. As brigade chief and despite the above evidence, he confirmed that he was aware that the weather could change and affect fire behaviour, particularly when they were "doing a bigger burn".
- 104. Captain John Inskip was asked: "Is there anything else you can assist us in understanding why it is that weather, weather patterns, and wind patterns in a hazard reduction burn that borders a National Park wouldn't be at the forefront of your mind?" He responded, "I don't know why. I don't."
- 105. Mr Wolfe recalled in his statement early in the morning of 15 August 2018, "the wind was strong and the conditions were not good." He also noted that: "The wind was blowing so hard that the dust and ash was making [it] very difficult for me to see anything."
- 106. Mr Colin Dorl recalled in his statement that:

the breeze was starting to come up a little bit and John Inskip and the Deputy Captain both thought it would be a good idea to get out there and have a look. The fire at that time was a little on the iffy side – the wind was coming up, and the fire was in an area where the wind would be blowing in one direction, but because of topography, it could reverse.

On his second attendance that day, Mr Dorl recalled that "we were getting more worried because of the wind, which was picking up and swirling around, and the fire behaviour was a bit more intense."

- 107. Captain Simon Bateman recalled in his statement that upon arrival at the Wolfe's property on the morning of 15 August 2018, it was windy with the wind "blowing about 20km from the southwest." In his evidence he stated that "my experience of living in the similar area, the type of wind that we would experience all the time [was] somewhere around in the vicinity of 20 kilometres an hour."
- 108. Captain Bateman stated that on his second attendance the same day, "the wind was stronger from the southwest and the direction of the fire was blowing east to northeast in a direction to a ridge in the national park."
- 109. In his oral evidence, Captain Bateman confirmed that he had not checked the weather forecast prior to making his decision to leave the property on the first occasion on 15 August 2018. When asked why he hadn't made that enquiry, he stated that "other than it was a workday, and, and we'd completed our task, handed back to the landowner and left to go back home." He stated that their "task" had been to locate "a small tree burning in the north-eastern side of the burn. We went out, broke it open, extinguished that tree, went back to the landowner, and then left."

- 110. Deputy Captain Andrew Inskip noted in his statement that: "In the period before this fire started there had been a lot of wind and we were in a drought." He further recalled that on 15 August 2018; "The forecast weather for the next few days was gale force winds."
- 111. In his oral evidence, Deputy Captain Andrew Inskip confirmed that "August/September over the history have been windy months" in the Bega Valley. He further stated that it is "well known, especially for Bemboka, being right at the foot of the mountains. It can generally be one of the windiest months at that time of year" and that "90% of our volunteers out at Bemboka have been there most of their life, and they are aware of the weather conditions around that month."
- 112. In Exhibit 1, a copy of the Bureau of Meteorology Bega forecast report issued at 5am on Wednesday 15 August 2018 stated (emphasis added):

Forecast for the rest of Wednesday 15 August. Mostly sunny, **Winds west to northwesterly 30 to 45 km/h** tending northwest to northeasterly 15 to 20 km/h in the evening then becoming light in the late evening. Precis: Becoming windy. Mostly sunny. Max 23. Chance of rain: 5%. **Fire danger: Very high**

The Wolfe's firefighting equipment

- 113. For the entirety of the hazard reduction burn, Mr Wolfe had possession of a Toyota Hilux 4WD vehicle, with two 25 litre water containers and a bucket. He also had a chain saw and a fire rake. It would appear that he had been similarly equipped during previous hazard reduction burns on the property.
- 114. Captain John Inskip gave oral evidence that when he attended the property prior to ignition he did not ask Mr Wolfe about the type of firefighting equipment he had in his possession. Captain Inskip indicated that Mr Wolfe had undertaken a hazard reduction burn in 2017 and had "done a good job. So I presumed they would do another good job."
- 115. Captain John Inskip indicated that property owners would usually volunteer information to him about the firefighting equipment in their possession. He stated that adequate firefighting equipment would consist of "at least a trailer with a some sort of water tank and pump on the back" holding approximately "four or five hundred litres of water."

- 116. The other RFS volunteers involved in assessing and assisting with the Wolfe's hazard reduction burn did not speak to the Wolfes at any time to seek clarification of their firefighting preparedness in terms of available equipment.
- 117. Captain Bateman confirmed that when he was leaving the Wolfe's property early on 15 August 2018, there were a number of trees that had sparks and embers coming from them. He stated that he told the Wolfes to monitor that fire situation, but he did not at any time enquire of the Wolfes whether they possessed firefighting equipment or the nature of that equipment.
- 118. This was in a context where Captain Bateman had stated that the RFS volunteers had not been able to extinguish these trees:

Because of there was no access down to those trees to take the vehicle to them, and the height of where the embers were coming from would not be able to send water with the small capacity pump that's on a Cat 9 up that high.

119. Captain Bateman was asked to provide his reasoning for failing to make an enquiry of the Wolfe's firefighting capacity and he stated that it was based on his perception that "it was his [Mr Wolfe's] fire, which he lit and it's the landholder's responsibility to maintain their fire on their property." He further stated:

Because it takes me back to if you are the landholder and you introduce a fire, I think you should have, I think you should be — if you're going to take responsibility on what sort of equipment you might have to maintain that fire on your property.

120. Captain Bateman was asked:

And so, in those circumstances, knowing that through your own experience people are sometimes irresponsible with their fire lighting, doesn't that bring to mind at least some question which assesses whether or not this particular individual has been responsible or irresponsible, or is capable [of] managing the fire that they have lit? Because, ultimately, you may well be called upon to deal with the consequences of a person who can't manage their fire, aren't you?

He responded, "Yeah that's entirely possible, yes." He was further asked: "So I'm just coming back to the lack of questioning by you and engagement on the issue as to what [Mr Wolfe's] capacity was to deal with a fireground that now had a number of trees alight, bordering on a National Park with a high fuel load?" He responded, "I don't know what to tell you. I didn't ask him what his capacity was."

Police and RFS investigations relating to the cause and origin of the fire

121. On 17 August 2018, Detective Senior Constable Pep Emerson attended the Wolfe's property. Detective Emerson noted:

Progressing northwest through the fire zone, the burn and angle of char patterns, foliage freeze, and a consistent scorch height through the trees indicated a significant run of windswept fire advancing up the slope towards the northeast. These indicators supported the account supplied by Mr Wolfe. Whilst conducting my examination I considered the topographic factors relative to this area being the steep terrain and gully systems which can channel and strengthen winds, causing erratic fire behaviour.

- 122. Detective Emerson then attended the fire damaged property at Lot 100 Desert Creek Road, Numbugga and conducted an examination of the property. Detective Emerson was "of the opinion that this contained area of damage was caused by embers cast from the main fire event."
- 123. Detective Emerson also attended the fire damaged property at Lot 405 Desert Creek Road, Numbugga and conducted an examination of the property. Detective Emerson was of the opinion that:

The bushland along the western incline of the ridge had been severely affected by fire. The burn and angle of char patterns, foliage freeze, and scorch height through the trees indicated a significant run of windswept fire up the ridge slope from the southwest to the northeast.

- 124. On 24 August 2018, RFS Fire Investigator Angus Barnes conducted an investigation into the origin and cause of the fire. Inspector Barnes' methodology of the determination of origin and cause of the fire included assessing the "fire path from the area of most damage to the area of least damage to bring us back to an area for which the fire originated." He recorded that: "Bushfires increase in intensity and damage the further they spread from the point of origin leaving burn patterns in the remains of vegetation and no combustible material."
- 125. Inspector Barnes accompanied investigating police to view the fire affected area by helicopter. He noted that the:

first area observed was the burnt area referred to by fire fighters as the "Burn Scar" running from Bemboka towards Brogo. From the air, it was possible to identify areas in which the intensity of the fire was greater. These were the paths in which the intense fire travelled under the influence of wind, fuel and topography. Fire Fighters describe these paths as "runs of fire."...From the air, it was possible to locate a U shaped pattern extending uphill from a rural residential property in the Bemboka area. These patterns are made by a fire

increasing intensity as it travels up a slope with the burn scar widening the further from the area of origin the fire travels.

- 126. Inspector Barnes also attended the Wolfe's property later the same day. He noted as he travelled along the containment line "several areas in which the fire had travelled uphill away from the private property and outside the containment line. It was not possible to determine if these escapes were prior to, simultaneous or post the escape which resulted in the rapid spread of fire." Inspector Barnes then commenced a "methodical examination of the area identifying and flagging indicators of advancing fire on both sides of the containment line."
- 127. Inspector Barnes was able to eliminate a number of possible causes of the ignition of the fire, including any suspicious cause.
- 128. Inspector Barnes concluded that "after eliminating other causes of bush fires considered, I believe that the cause of the fire was as a result of fire escaping from a private hazard reduction burn under the influence of strong wind."
- 129. There is limited evidence available in respect of the second fire outbreak on 15 September 2018, as no additional investigations were conducted by either the NSW Police or the RFS.

SECTION 81(2) FINDINGS

- 130. As noted above, there are inconsistent accounts of how the fire breached the containment line around the Wolfe's hazard reduction burn. There is sufficient evidence to support a conclusion that:
 - a. The Bemboka fire originated on or near the border of the eastern side of the property owned by the Wolfes in Bemboka, and
 - b. Its cause was a hazard reduction burn conducted on that property which breached containment at around 9.30am on 15 August 2018.

ISSUES FOR CONSIDERATION

The regulations, policies and procedures which apply to hazard reduction burns

- 131. There is a complex system of procedures that apply to the planning and management of hazard reduction burns that are undertaken on private property.
- 132. Section 63(2) of the RF Act states that:

It is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from, that land.

- 133. Section 81 of the RF Act, states that the "bush fire danger period" in respect of land in NSW is the period commencing on 1 October and ending on 31 March in the following year, unless the RFS Commissioner modifies that period of time. As previously noted, the "bush fire danger period" in respect of the Bega Valley Shire Local Government Area was modified by the Commissioner in 2006 and commences on 1 September and ends on 31 March the following year.
- 134. Section 100(1)(b) of the RF Act states:

A person who, without lawful authority – being the owner or occupier of any land, permits a fire to escape from that land under such circumstances as to cause or be likely to cause injury or damage to the person, land or property of another person or the land or property of the Crown or a public authority, is guilty of an offence.

- 135. Landowners who wish to conduct a hazard reduction burn, pile burn or an environmental burn within the "bush fire danger period" must apply for a Fire Permit. Failure to obtain the mandatory fire permit is a punishable offence (section 87 *RF Act*). A fire permit is required at all times of the year if the proposed burn is likely to be dangerous to a building.
- 136. Fire permits are issued by Permit Issuing Officers under a delegation of authority from the RFS Commissioner. The RFS issued a document entitled *Guidelines* for Permit Issuing Officers which provides guidance to those officers to issue permits, advise permit holders of their responsibilities and consider environmental requirements.
- 137. A Fire Permit applicant must provide evidence with their application that a Bush Fire Hazard Reduction Certificate or other environmental approval has been obtained for the proposed burn.

- 138. Landowners who wish to conduct a hazard reduction burn for the purpose of land clearance or for burning a fire break outside the "bush fire danger period" need to apply for a Bush Fire Hazard Reduction Certificate to avoid committing an offence pursuant to section 86(1A) of the RF Act. An approved Hazard Reduction Certificate provides a defence against criminal sanctions pursuant to section 86 of the RF Act and other environmental legislation.
- 139. A Hazard Reduction Certificate may be applied for in a written application to the RFS District Office. An appropriately trained officer will then process the application and inspect the property to determine whether to approve the certificate in accordance with the *Bushfire Environmental Assessment Code*.
- 140. The Wolfes confirmed that they were not aware of the Hazard Reduction Certificate process nor that they needed to apply for other environmental approvals in lieu of that certificate. As such, they did not apply for a Hazard Reduction Certificate.
- 141. Had they applied, it would have been guided by the *Bega Valley Bush Fire Management Committee Bush Fire Risk Management Plan*. Their property was within a Strategic Fire Advantage Zone and needed to comply with the *Bush Fire Environmental Assessment Code 2006*.

142. The Code required:

- a. only low intensity prescribed burning could be approved without the involvement of fire authorities, being burning conducted in accordance with the RFS Standards for low intensity bush fire hazard reduction burning, and
- b. the prescribed burn be contained within planned control lines.
- 143. The RFS Standards for low intensity bush fire hazard reduction burning is a publication available to the public which provides details relating to a number of matters to be considered ahead of burns, including:
 - a. the bush fire fuel load and structure:
 - b. the effects on the environment and community;
 - c. if there are adequate control lines and fire breaks;
 - d. creating a burn plan;
 - e. determining the season and weather conditions, including considering temperature, relative humidity, wind speed and direction, atmospheric stability and the Forest Fire Danger Index limits for low intensity burning;
 - f. topography and fire behaviour;
 - g. what lighting patterns to use;
 - h. what safety measures may be needed; and

- i. patrol and mopping up.
- 144. The focus of a Hazard Reduction Certificate process is on the assessment and mitigation of environmental impacts of the proposed burn, rather than an assessment of the safety risks associated with the burn. According to Mr de Mar:

... there is no assessment at the [Hazard Reduction Certificate] application processing stage to check whether the applicant has planned appropriate operational risk controls for managing the operational risks for managing the burn – this is not a function of the [Hazard Reduction Certificate] process. The [Hazard Reduction Certificate] process is not designed for, or well directed to, assessing operational and public safety risks of undertaking a hazard reduction burn.

Expert report prepared by Mr Paul De Mar

- 145. Mr Paul de Mar is a bush fire expert with prior experience as the State Fire Manager for Forests NSW from 1996-2007. He is currently the Technical and Project Director, National Resources and Bushfire with GHD. He holds a Bachelor of Arts, a Master of Environmental Planning and is accredited in Incident Management, Bushfire Risk Management Planning, and Prescribed Burn Operations.
- 146. Mr de Mar prepared a report in these proceedings dated 31 July 2023.
- 147. Mr de Mar was of the opinion that the Wolfe's hazard reduction burn did not conform with the *Standards for low intensity bushfire hazard reduction burning* (HRB Standards) in a number of ways. Mr de Mar noted that the Wolfes had not applied for a Hazard Reduction Certificate as required. Further, they did not prepare a Burn Plan, which would contain details of the proposed burn area, containment lines and other features. In addition, the burn was ignited in late winter during a year which had been very dry which elevated the risk of burn reignition and escape. He further noted that the Wolfe's containment lines were not adequate for the task, they did not have appropriate equipment to extinguish the fire and the efforts to mop-up the burn were inadequate, with the burn remaining active and "ultimately breaching its control lines on the first windy day." He also noted that neither the neighbours nor the NSW RFS Fire Control Centre in Bega had been notified by the Wolfes of their intention to light the fire, although the Wolfes clearly refute that suggestion.

148. Mr de Mar further noted that the:

HRB Standards contain a checklist, intended to assist those undertaking burns to ensure they have undertaken prudent preparations and actions for undertaking a hazard reduction burn. In my opinion, the burn preparation and implementation practice applied by Mr Wolfe was highly deficient using the HRB Standards checklist as a baseline for such assessment.

149. The hazard reduction burn at the Wolfe's property was known as a "private" burn. The Wolfes did not request the assistance of the RFS to undertake the burn, but rather sought advice about their plans to commence the burn. Mr de Mar noted that:

The burn itself was not a burning operation led or officially supported operationally by RFS. Thus the question of whether RFS complied with [hazard reduction burn] policies and procedures does not apply to how the burn was carried out because RFS was not carrying out the burn. RFS had not planned the burn, they had not approved the burn and they did not light the burn. They did however respond to the burn as a result of 000 calls reporting the burn as a fire, and one additional time at the request of Mr Wolfe.

- 150. Mr de Mar noted that Captain John Inskip inspected the property in August 2018, prior to the burn commencing (although this is disputed by Mr Wolfe and no other independent or contemporaneous record exists confirming his attendance and inspection). He opined that Captain Inskip concluded that the containment line was adequate based on the assumption that the burn would not be exposed to windy weather while it was still active and did not fully appreciate the effect that the 2018 winter and year-to-date rainfall deficits would have on the fuel sources on the ground.
- 151. In addition, Mr de Mar noted that Captain Inskip did not enquire and did not appear to appreciate the unrealistic firefighting equipment available to the Wolfes and the need for "higher quality trafficable breaks [containment lines] which facilitate aggressive mop-up" of areas with a fuel load on the property which had the propensity to burn for "many days or weeks beyond a known favourable weather forecast window."
- 152. Mr de Mar noted that rather than giving tacit approval for the burn, Captain Inskip should have advised the Wolfes to obtain a Hazard Reduction Certificate when he says he inspected their property in August 2018.
- 153. Mr de Mar stated that if the RFS had hypothetically been undertaking such a hazard reduction exercise, the RFS would have resourced at least one heavy duty Category 1 tanker and two Category 9 tankers, enabling "access around the containment track to light, control, mop-up and patrol the burn." He

commented that given the Wolfes' lack of firefighting resources, the burn "should never have been given formal or tacit approval to proceed without the RFS assistance for the duration of the burn."

154. Mr de Mar stated:

If Captain Inskip, or any other RFS officer had used a checklist such as the one in *RFS's Standards for Low Intensity Hazard Reduction Burning*, then Mr Wolfe's planning and preparations for the burn would have failed a reasonable, objective assessment against the checklist items. The check undertaken appears to me to have been so informal that basic questions such as whether a [Hazard Reduction Certificate] had been obtained (or in the alternative what, if any, environmental approvals had been obtained) were not asked.

- 155. Mr de Mar proposed the following key matters which should be incorporated into a checklist/assessment template relating to hazard reduction burns on private property:
 - a. confirmation of whether or not the owner has obtained a Hazard Reduction Certificate (or other appropriate environmental approval) for the burn;
 - b. identifying the property address, specific burn location within the property and size class of the burn and slope classes within the burn;
 - c. categorisation of the dominant fuels within the burn area (type and hazard level);
 - d. slope and fuel type/hazard level outside control lines at locations of highest escape-concern;
 - e. difficulty level of fire containment if the burn escapes at highest escape-concern locations;
 - f. local drought index at time of inspection;
 - g. likely presence of dead or butt-damaged trees or fallen logs/old stumps or man-made vegetation heaps or windrows within the burn area, and associated escape-risk level based on proximity to control lines;
 - h. identification of what type of control lines have been prepared (for example, formed trafficable road, trafficable mineral earth break, non-trafficable mineral earth break, water body, green break (grass), moist vegetation (moisture differential), other);
 - largest type of RFS fire appliance which can access full length of containment lines;
 - j. whether the owner has prepared a documented burn plan for the burn;
 - k. type and suitability of on-site private firefighting apparatus for burn control, taking into account the mop-up difficulty likely to be faced;
 - I. firefighting qualifications, if any, of the burn proponent;
 - m. mobile phone coverage at the burn site'

- n. water availability at the burn site;
- o. probable timeframe (in hours or days) until blacked-out mop-up may realistically be achieved;
- p. likelihood that the owner, with available on-site firefighting equipment, would be able to control a burn escape across control lines in High fire danger conditions;
- q. specific appraisal of whether RFS assistance at the burn would be necessary, or advisable.

156. Mr de Mar opined that:

... the RFS needs to have in place a formal, consistent and objective approach when responding to private landowner requests to provide RFS advice on their planning and preparedness for conducting a private burn. This would support the local volunteer RFS brigade members who find themselves in such positions, by providing them with a structured, systemic process for considering their advice. Alternatively, such assessments could be undertaken by appropriate salaried RFS Operations section officers, or other appropriate RFS staff.

157. Mr de Mar noted that the "RFS do not have any policies, protocols or standards governing how advisory inspections of private HRB sites" should be conducted. He noted that the RFS has an:

Operational Protocol Prescribed Burning covering prescribed burning operations RFS participates in operationally. The Protocol contains procedural standards relating to the handling of requests for RFS assistance and consents for RFS to participate in prescribed burns on private properties, but it does not contain guidance or protocols covering advisory inspections of private burns.

158. Mr de Mar indicated that:

... given the significant hazards and constraints that can be present during [hazard reduction burn], and the potential consequences which can arise from [hazard reduction burn's] escape of their intended area, RFS should provide clear protocols for RFS personnel to follow in undertaking advisory site inspections of the nature of that undertaken by Captain Inskip.

159. Mr de Mar noted that when the RFS attended the Wolfe's property on 9 August 2018, there was no Hazard Reduction Certificate in place and therefore there was "no formal mechanism for RFS HRB Standards or Hazard Reduction Certificate conditions to be applied to the burn, despite RFS attendance, there was effectively no formal RFS governance over the burn, other than [Bega Fire Control Centre] were now formally aware that the 'private' burn was underway."

- 160. In addition, he noted that the RFS does not appear to "have a formal protocol which triggers a decision to undertake a pre-burn inspection of a proposed private burn-site (for registered private burns, or unregistered private burns brought to their attention) to inspect and assess burn risks, pre-burn planning, and the state of preparations made for the burn."
- 161. Mr de Mar noted that the RFS did not have many practical options on 9 August 2018, noting that the burn was already alight. He suggested that they could have extinguished the fire or allowed it to keep burning with Mr Wolfe monitoring the burn. If required the RFS could have assisted in extinguishing the fire once it had burnt to the containment lines and assisted with the mop-up operation, given that the Wolfes had inadequate resources. Mr de Mar opined that in making the decision about the management of the site, weather forecast would be a critical piece of information.
- 162. He noted that the weather forecast available on 9 August 2018, forecast light winds and that the outlook until 15 August 2018 was for light winds in the mornings, with winds increasing to 15-20km/h during the day before becoming light again in the evening. Mr de Mar opined that this was a favourable forecast "given the burn had already been lit, it was not unreasonable to depart the property and leave Mr Wolfe to monitor his burn at this stage. But the visit should have put the RFS on notice that there was a high chance their assistance would be required again, and that they should monitor the fire." He believed that it would have been "prudent for the RFS to initiate a periodic patrol of the fire (in addition to Mr Wolfe's monitoring). As it turned out, the RFS ended up responding to the fire on each of the next 2 days (10 and 11 August) in any case."
- 163. Noting that the weather forecast for the following four days was for mild conditions, a "strategy of letting the burn continue to burn itself out to control lines whilst monitoring it would be a reasonable strategy" in Mr de Mar's opinion. He noted however, that:
 - ... due to the dry conditions, difficult terrain, sub-standard control lines and access and the difficulties of fire control if fire breached control lines and spread into the neighbouring National Park, this strategy relies heavily on weather conditions remaining mild. The risk profile of the burn would escalate substantially if windy conditions were to develop.
- 164. Mr de Mar noted that the request process under the RFS *Operational Protocol* for *Prescribed Burning* is not designed for a burn that is already underway and is only designed for implementation before a burn is commenced.

165. Mr de Mar posed the following questions:

If the attending RFS Brigade is not 'assisting' the land owner to undertake the [hazard reduction burn] because the request for assistance protocols have not been actioned, then the question arises as to in what capacity the RFS Brigade is attending? If RFS is responding to the burn on the basis that it is a Fire Incident, then on private property in Rural Fire Districts, it is normally the case that the RFS is the Incident Controller for the Fire Incident and is in charge of the response operation. When the response operation is to a [hazard reduction burn] being undertaken by a private landowner, what is the command-andcontrol arrangement - is the RFS in control or is the private land owner in control? When the RFS attends the scene of a private [hazard reduction burn], and undertakes various operations like controlling active fire, cutting down trees, potentially applying fire either to extend the burn or control a section of it, and at some point after completion of such activity decides to leave the property for the land owner to monitor and mop-up the burn, what are the command and control arrangements then? If the burn is being attended on the basis that it is a Fire Incident, does the RFS remain in charge as Incident Controller after leaving the property, or does it revert to being a burn undertaken by the private landowner? If the RFS is not attending the HRB on the basis that it is a Fire Incident, and they are not operating under the Operational Protocol for Prescribed Burning on the basis that there has been no request for assistance prices action, then what are the operating protocols applying?

166. Mr de Mar comments that these "are important command and control issues with important responsibility and accountability implications. In my opinion RFS policies, operating protocols and service standards are not clear on these important questions ... which makes it difficult for responding RFS Brigades to understand their responsibilities and obligations."

167. Mr de Mr noted that:

In my opinion the attending RFS Brigades portrayed an expectation that the private landowner was responsible and accountable for the burn, if not at all times, then certainly in between their response or assistance attendances. In my opinion, the RFS should be clear in its operational protocols about what protocols apply when RFS Brigades are attending and taking control actions and deciding to depart the fireground and provide procedural guidance about how such assistance should be provided.

168. Mr de Mar considered that:

Mr Wolfe only had the capability to keep the burn contained and controlled if the weather and fire behaviour remained benign until such time as a significant rainfall event extinguished smouldering potential spot-over sources. In the event of the onset of any weather conditions which could significantly escalate fire behaviour, the chance of fire spotting over control lines was high and dry forest fuels outside the containment lines could support vigorous fire behaviour and spread, as they in fact did. Such an outcome was a foreseeable possibility because the fuels were so dry that fire persisting overnight in forest fuels for several days and beyond weather forecast periods was almost certain.

- 169. He further noted that the "RFS should also have been aware that Mr Wolfe had negligible success prospects of suppressing any spotovers occurring in windy weather." Mr de Mar commented that as at 10 August 2018, the forecast for 11 August 2018 had been issued and indicated that there would be winds from the west at 20-30km/h tending west to north-westerly at 25-35km/h in the afternoon before becoming light in the evening. Essentially this was deterioration in the weather forecast from the previous day and "should have been of concern to RFS, and in my opinion would warrant scheduling a visit during the morning of 11 August to check the state of the burn."
- 170. He commented that by Tuesday afternoon (14 August) the forecast had deteriorated even further, noting that the forecast fire danger index would be in the Very High range (as it then was). Mr de Mar noted that "under standard conditions in Fire Permits, a permit is automatically suspended at such a rating."
- 171. Mr de Mar opined that by the morning of 15 August 2018:

Given the highly adverse weather forecast, and significant fire activity and actively burning trees already occurring at 6:00 am, and with the weather and fire behaviour virtually certain to get worse, in my opinion it was a serious error of judgement for RFS to leave the Wolfe property. At that time, the RFS needed to increase resourcing at the property, not leave it. With highly adverse weather forecast and already beginning to manifest, and an active fireground with known burning trees, I do not understand why Captain Bateman decided the fire was safe to leave to Mr Wolfe to monitor, given the potential for the fire to spread into inaccessible areas and develop into uncontrollable proportions with the potential to become a serious life and property threat in the adverse conditions forecast.

172. Mr de Mar continued, stating

... the lack of RFS action from 12 to 14 August, despite the weather forecast developments, reflected a generally passive approach to a minimally planned and resourced private burn, with significant operational risks which the RFS had awareness about. The only times RFS attended the burn once lit, was either in response to 000 calls, or at the request of the landowner. In my opinion there was a culture of passiveness about attending a 'private burn' and a misplaced level of confidence in the ability of Mr Wolfe to handle the burn without any proper firefighting equipment. When RFS did attend the burn, they duly attended to significant escape threats they found, but their assessments

that the burn was well under control or that everything was fine were based on assumptions that weather conditions remained relatively benign. In my opinion, they did not turn their minds to whether the burn would be 'fine' if weather conditions deteriorated, even when that was forecast. In my opinion this was a significant shortcoming in how RFS responded to the burn incident. The decision to leave the Wolfe property with trees burning and an adverse weather forecast beginning to manifest I find inexplicable.

ISSUE 1: Whether the hazard reduction burn conducted on 9 August 2018 at Yankees Gap Road, Bemboka, was compliant with the policies of the NSW Rural Fire Service at that time?

- 173. It is an offence to light a fire on private property for the purpose of a hazard reduction burn unless notice has been given at least 24 hours prior to the Fire Control Officer of the Rural Fire District. Similarly, the landowner is also required to give notice to their neighbours of an intended burn.
- 174. Captain John Inskip stated that he advised the Wolfes to make contact with the Bega Fire Control Centre after his inspection of their property in August 2018. Captain Inskip also gave evidence that he verbally informed the Bega Fire Control Centre about the planned burn at the Wolfe's property.
- 175. The Wolfes clearly notified one of their neighbours and gave sworn evidence that they contacted the Bega Fire Control Centre.
- 176. The RFS did not have any record of the Wolfes contacting the Bega Fire Control Centre to notify of the proposed burn. The process at the time at Bega was when a notification of a proposed burn was received, details of the burn would be manually recorded at the Fire Control Centre. The Wolfe's burn was not entered into the NSW RFS Bush Fire Risk Information Management System (BRIMS) which would have occurred if a Hazard Reduction Certificate had been applied for and should have occurred if the Wolfes had contacted the Fire Control Centre. Additionally, no record exists indicating that Captain John Inskip notified the Fire Control Centre of the proposed burn as he contended. This would appear to be a system failure where information is required to be manually recorded into the BRIMS.
- 177. Once the RFS respond to a fire, it is managed within the Incident Control Online (ICON) system.
- 178. Without needing to resolve whether Captain Inskip attended the Wolfe's property in August 2018, his attendance at their property to offer advice on the proposed burn and inspect the site does not appear to fall within RFS policies

- or procedures. His assistance, and that of the RFS, was not in response to a formal request, nor were any RFS resources, such as checklists, utilised during the inspection.
- 179. As indicated previously, Mr de Mar was of the view that the RFS does not have any policies, protocols or standards governing how advisory inspections of burn sites should be conducted.
- 180. Landowners may request the assistance of the RFS to conduct a hazard reduction burn, including the ignition and management of the fire, on private property. In such circumstances, the fire would be considered to be entirely managed by the RFS, pursuant to the RFS *Operational Protocol* (1.2.14) *Prescribed Burning*. Fire Control Centres and officers with specialised prescribed burn qualifications manage the prescribed burn, including providing the approval for the burn.
- 181. If the RFS is conducting a hazard reduction burn on private property, they must complete a Basic Burn Checklist or a Prescribed Burn Plan. The Basic Burn Checklist directs that consideration is given to weather forecasts, control and fall-back lines, water resources and communications, amongst other factors.
- 182. The RFS Operational Protocol (1.2.14) Prescribed Burning has no application to a situation where the RFS attends at the request of a landowner to provide advice or guidance to the landowner on an informal basis. Captain Inskip gave evidence that he would attend private properties to give advice or guidance with hazard reduction burns sometimes up to 10 to 12 times per year in a busy year.
- 183. The RFS officers that provided evidence in this Inquiry indicated that in their view there was a clear distinction between hazard reduction burns on private property, compared with burns managed by the RFS on private property. The critical distinction between the two depended solely on who lit the fire. The RFS officers emphasised that if a landowner ignited the fire, they were of the view that the landowner bore the responsibility to manage the fire.
- 184. Captain John Inskip indicated that he did not consider that the RFS had the authority to 'take control' of the hazard reduction burn on the Wolfe's property, and that the only authority they had was to extinguish a fire they deemed problematical. Ms Wolfe indicated that she was of the view that Captain Inskip had the authority to manage all aspects of the fire on their property.
- 185. The perceived distinction between the burns managed by the RFS and those managed by private landowners raised issues relating to operational controls and safety mitigation measures. Mr de Mar raised this practical dilemma at

- paragraph 165 above, in addition to the uncertainty surrounding what RFS protocols apply and the RFS' capacity to manage the fire.
- 186. Deputy Commissioner McKechnie agreed that there could be greater clarity provided in situations where the RFS attend and then decide to leave an incident where a private landowner is conducting a hazard reduction burn.
- 187. There also appears to be some uncertainty surrounding the authority of the RFS to prohibit a burn from taking place outside of the bush fire danger period.
- 188. Pursuant to the RF Act, there is no enforceable mechanism for the RFS to refuse the ignition of a burn on private land outside the bush fire danger period. Whilst it is a requirement that a private landowner notify the relevant Fire Control Centre, there is no mechanism for the RFS to stop or direct that a burn not proceed.
- 189. An RFS officer is empowered to take all necessary steps to extinguish a fire for the purpose of saving lives and property pursuant to section 38 (2) (d) of the RF Act. Deputy Commissioner McKechnie confirmed that RFS officers have the power to take control of a situation where the Fire Control Centre considers that there is a risk to life and property and are encouraged to take such action where appropriate. The power does not appear to apply to the pre-emptive management of fires in order to prevent such a threat eventuating.
- 190. On the available evidence, the inspection that Captain Inskip says he conducted did not occur pursuant to any RFS policies or procedures. The tacit approval that Captain Inskip says he provided to the Wolfes should not have been relied upon by the Wolfes as it was contrary to the prescribed regulations. There appears to have been a failure by both the Wolfes and the RFS volunteers to comprehend the legislation and the regulations relevant to the hazard reduction burn at the Wolfe's property.

ISSUE 2: Whether there is an appropriate, thorough and easily understood regulatory framework guiding the assessment and approval of hazard reduction burns on private lands?

- 191. Section 100D of the RF Act defines a Bush Fire Hazard Reduction Certificate as "a certificate that authorises the carrying out of bush fire hazard reduction work on land in accordance with
 - a) a bush fire risk management plan that applies to the land, and
 - b) the provisions of any bush fire code applying to the land specified in the certificate, and
 - c) any conditions specified in the certificate."

- 192. The available evidence confirms that there appears to be confusion in the community as to whether there is a mandatory scheme in place which requires landowners to obtain approval for a hazard reduction burn on their private land by obtaining a Hazard Reduction Certificate at all times of the year, including outside a bush fire danger period. In this case, it became clear that both the landowners and RFS volunteers were unclear how, and whether, they complied with relevant legislation and policies.
- 193. Mr Wolfe confirmed that he was not aware of the legislative protection that a Hazard Reduction Certificate would afford him. He also stated that at no time, including at the time of his previous hazard reduction burns, had any RFS officer indicated to him that he should consider obtaining a certificate. He further stated that he had not seen any public announcements or any pamphlets or other literature outlining the process for obtaining the Hazard Reduction Certificate.
- 194. Applications for a Hazard Reduction Certificate are assessed by qualified RFS officers who have received specialised training in relation to those certificates.
- 195. Captain John Inskip confirmed that at no time, including during earlier hazard reduction burns undertaken by the Wolfes, had he indicated to them that they should consider applying for a Hazard Reduction Certificate. He further confirmed that he had never referred a landowner to the Hazard Reduction Certificate documents or forms.
- 196. Captain John Inskip and Captain Bateman told the Court that they would refer any landowners seeking to apply for a Hazard Reduction Certificate to the Bega Fire Control Centre. Deputy Captain Andrew Inskip indicated that his practice was to provide the Hazard Reduction Certificate application form to the landowner.
- 197. The RFS volunteers gave evidence that their basic firefighter training undertaken as a volunteer did not include training on private hazard reduction burns, nor the legislation applicable to those burns.
- 198. The RFS have at least two publications which have been designed to assist private landowners in comprehending their obligations in terms of planning, approval for and the management of, planned burns. They are:
 - a 'Before you light that fire' pamphlet, and
 - b. Standards for low intensity bush fire hazard reduction burning.
- 199. The RFS 'Before you light that fire' pamphlet provides advice for landowners that are planning to commence a burn on their property. The pamphlet identifies

the approval process and provides a number of links to other publications, including the RFS Standards for low intensity bush fire hazard reduction burning.

200. On page 2 of the pamphlet the following appears (emphasis added):

You will need to make sure that you have:

- gained environmental approval (if required)
- been issued a Fire Permit (if required)
- notified all adjoining landowners/occupiers and your local fire authority
- checked to make sure it's not a Total Fire Ban Day.
- 201. The pamphlet's contents are unclear and lacking in guidance as to the process associated with undertaking a hazard reduction burn on private property.
- 202. Holders of Hazard Reduction Certificates are required to comply with the RFS Standards for low intensity bush fire hazard reduction burning, which contains a list of issues that a landowner should consider when undertaking a burn.
- 203. Mr de Mar commented that there are some deficiencies in the *Standards for low intensity bush fire hazard reduction burning*. He particularly noted that the Standards:
 - are silent on the sorts of firefighting equipment suitable for undertaking mop-up work if trees, logs or stumps catch on fire;
 - do not contain a qualitative system for considering the relative risk profile of a burn;
 - do not provide guidance on what burn types or complexities should not be contemplated without RFS assistance or should trigger the seeking of RFS assistance.
- 204. Mr Wolfe gave evidence that he had never seen the *Standards for low intensity* bush fire hazard reduction burning. He further confirmed that he had never been provided with a copy of the document and no member of the RFS had brought it to his attention.
- 205. Captain John Inskip also confirmed that he had never seen the *Standards for low intensity bush fire hazard reduction burning* document. Similarly, he stated that he had never received any training regarding the document, despite its centrality to the hazard reduction burning scheme.
- 206. Many members of the public are reliant on the advice of the RFS and its volunteers. Some members of the public are aware of community hall meetings held in some communities in late winter and early spring, whilst some are dependent on the easy availability of educational resources through their local

- RFS volunteers. Online resources currently available are both generic and confusing.
- 207. Captain John Inskip gave evidence that when he attended a private landowners' property for the purpose of giving advice or guidance on a proposed burn, he would resort to a mental checklist, rather than a written checklist, to consider matters such as the area to be burnt and the availability of water resources.
- 208. Captain Bateman gave similar evidence and indicated that he would also give consideration to the proposed time that the burn was likely to take. Deputy Captain Andrew Inskip stated that he would also give consideration to containment lines, property assets, weather conditions and would use the Hazard Reduction Certificate application form as a guide or checklist.
- 209. Both Captain John Inskip and Deputy Captain Andrew Inskip confirmed that when they attended private landowners' property in relation to a proposed burn, they perceived their role was to provide guidance to the property owner rather than complete a formal inspection.
- 210. As referred to above in paragraph 155, Mr de Mar provided a suggested checklist or assessment template which RFS officers may consider when attending a private property prior to a proposed burn.
- 211. Deputy Commissioner McKechnie noted that each burn should be assessed on its merits. He acknowledged that more guidance could be provided to RFS officers who were undertaking informal inspections on private property.
- 212. It is plain that RFS officers are volunteers and should be provided with easily accessible resources for their own assistance, as well as to be able to provide assistance to members of the public. In addition, clear guidelines and preparatory checklists are a means of ensuring the safety of RFS volunteers, as well as members of the public and property. In that regard, there is a need for the RFS to take further steps to ensure that its resources are known by, and are easily available to RFS volunteers, in order for those RFS volunteers to be able to provide them to the public.

ISSUE 3: Whether the hazard reduction burn at Yankees Gap Road, Bemboka, was appropriate and the burn was able to be safely managed in light of:

- a. the resources available to manage and respond to the burn:
- b. the topography of the region: and
- c. other environmental factors relevant to the area.

- 213. A number of matters were identified which impacted on the Wolfe's and the RFS' ability to manage and respond to the hazard reduction burn on the Wolfe's property. These deficiencies included:
 - the inability of large and medium sized RFS fire trucks to access the containment lines and fireground;
 - the very basic and limited firefighting equipment available to Mr Wolfe, including two 25 litre water containers, a chain saw and a fire rake;
 - the close proximity of the burn site to the adjacent National Park which contained extensive areas of dry bushfire-prone forest;
 - the steep incline from the fireground to the National Park;
 - the unseasonably dry conditions and the high fuel loads, which would combine to produce vigorous and persistent fire behaviour over a number of days, without significant rainfall;
 - the heightened likelihood that in the event of adverse weather, the fire could spot over containment lines.
- 214. The evidence confirmed that there was no discussion between Mr Wolfe and Captain John Inskip regarding the fire equipment Mr Wolfe had at his disposal to manage the fire. The lack of inquiry by Captain Inskip is of greater concern given that he stated in his evidence that he believed that Mr Wolfe would have needed a pump attached to a water tank containing 400-500 litres of water to successfully manage the burn.
- 215. Similarly, the other RFS officers who attended the Wolfe's property on 9 August and 11 August 2018, do not recall speaking with Mr Wolfe about his firefighting equipment. The officers gave evidence that they believed it was the landowner's responsibility to be adequately equipped if the owner had ignited the hazard reduction burn. It can be inferred that the RFS officers in attendance did not perceive it as their responsibility to enquire with a private landowner how the owner was resourced with firefighting equipment.
- 216. Such a conclusion by RFS officers seems somewhat shortsighted in terms of the likelihood that a poorly resourced landowner may well struggle to manage the burn and will ultimately require the assistance of RFS volunteers, presenting greater safer concerns for the RFS volunteers themselves; as well as the need for greater resources to contain a problematic burn.
- 217. Deputy Commissioner McKechnie confirmed that he would expect RFS officers attending an incident and then leaving the incident with the owner, to give consideration to the landowner's ability to deal with the fire. This would include giving consideration to any firefighting equipment available to the owner and the availability of a water resource, such as dams or tanks, pumps and heavy equipment.

- 218. From the available evidence, it is clear that a private landowner must be adequately resourced with firefighting equipment appropriate to the type of burn they are undertaking and prior to commencing the burn. Similarly, the RFS volunteers need to give serious consideration to the available equipment held by the landowner, both at the time of any pre-burn inspection or assessment, as well as at the time of handing the management of the fire back to an owner and prior to leaving a property.
- 219. A significant amount of evidence was given by the RFS volunteers during this Inquiry relating to the issue of weather forecasts pertinent to the Wolfe's property. It was both confusing and confounding that many of the RFS witnesses appeared to suggest that they had made no enquiry as to weather forecasts between 9 15 August 2018. Many of their responses were implausible given the known impacts of weather on fire volatility and their own need for safety when responding to fire, particularly in a year affected by drought conditions. Mr de Mar stated that the most important factor to consider when determining the risk of a fire breaching containment lines was the weather forecast.
- 220. It is perplexing that none of the RFS volunteers turned their minds to the weather forecast, either generally or specifically, on any of the occasions that they attended the Wolfe's property. It is particularly improbable that no-one turned their minds to the weather forecast on the first occasion the RFS attended the Wolfe's property on 15 August 2018. At that time, the radio transmissions from the Fire Control Centre simply stated "be aware of the wind strength."
- 221. General weather forecasts are available to the public through the Bureau of Meteorology providing information on wind and rainfall for six days in advance, as well as other applications and web sites.
- 222. Deputy Commissioner McKechnie confirmed that normal warnings and adverse weather conditions are broadcast from the Fire Control Centre to any volunteer on air and listening. At other times, information would be passed on by the Fire Control Centre to a brigade in relation to a specific incident or at the request of a brigade. RFS procedures dictate that the weather needs to be communicated during 'special safety warnings' and at other times it is communicated in an ad hoc manner.
- 223. Deputy Commissioner McKechnie indicated that many RFS volunteers have an understanding of the local weather conditions, in addition to broadcasts from the Fire Control Centres. He further noted that it is incumbent on RFS officers to consider weather conditions in their decision-making, and to make enquiries if they are not aware of the predicted forecast.

- 224. The evidence confirms that the Very High Fire Danger Rating pertaining to the conditions on 15 August 2018 was not communicated to the responding RFS brigades. Captain Bateman gave evidence that he was not aware of the Very High Fire Danger Rating on 15 August 2018 and had he been aware of such a rating he would have likely had a discussion with his duty officer or taken directions from the Fire Control Centre.
- 225. The Court was informed that there are a number of tools available to RFS officers, in addition to local knowledge, observations at the fireground and broadcasts from the relevant Fire Control Centre to consider weather forecasts. These tools include RFS officers having 'registered user' access to the Bureau of Meteorology, which provides the user with forecasts every ten minutes and fire-specific weather information.
- 226. RFS officers also have access to a Kestrel device which is "a handheld device that tells you what the wind speed is and what the temperature and humidity are at your location." Mr de Mar indicated that the Kestrel system assesses the wind speed at a level of 1.5 metres, as compared with the Bureau of Meteorology's forecast which is assessed at 10 metres. Mr de Mar noted that:

In an open forest the wind speed down at 1.5 metres is typically about onethird of what it is above the canopy and the difference can be even greater if you were talking about up on a ridge. So the Kestrel is only telling you what the wind speed is in the forest at 1.5 metres above the ground. In terms of ... the potential for fire behaviour you really need to be considering what the forecast weather is, not what it is now at 1.5 metres above the ground.

- 227. In addition, the RFS confirmed that it is equipping RFS fire trucks with mobile tablets to enable firefighters to access weather forecasts whilst in the field.
- 228. The importance of the impact of weather on the planning and execution of hazard reduction burns is paramount. The training of RFS volunteers and the public about the impact of weather on a fireground should be regarded as a high priority.

ISSUE 4: Whether it is appropriate for decisions as to when to ignite hazard reduction burns to be left to the discretion of private landowners?

229. The expert evidence available to this Inquiry confirms that the burn undertaken by the Wolfes had a risk profile which necessitated the assistance of the RFS to undertake the burn. As such, it was not appropriate that the decision to ignite the fire was left to Mr Wolfe.

- 230. It is clear that hazard reduction burns conducted without RFS assistance are undertaken by private landowners who are often untrained, inexperienced and minimally resourced. By way of contrast, prescribed burns undertaken by the RFS are managed by specially trained personnel, who have completed three days of directed study, as well as on the job training.
- 231. The current Hazard Reduction Certificate process provides minimal assessment of the operational risks of the proposed burn. The certificate provides the landowner with significant latitude to determine when to light the fire. A Hazard Reduction Certificate can be issued for period up to 5 years, and such certificates include alternative means of hazard reduction, including slashing and removing vegetation. It is noted that a Fire Permit remains in force for the period specified in the permit, but not exceeding 21 days.
- 232. It would be an unworkable system to require the RFS to manage and direct every hazard reduction burn on private property. The need for clarity around preparation and execution of burn by both landowners and the RFS cannot be understated.
- 233. None of the approved pathways, nor the guidance found in RFS materials, provide sufficient guidelines to equip landowners to adequately undertake risk assessments and safety measures for burns on private properties.

ISSUE 5: Whether the response and fire management by the relevant agencies to the fire at Yankees Gap Road, Bemboka, particularly from 9-16 August 2018, was appropriate?

- 234. As referenced above, the RFS attended at the Wolfe's property on 9 August, 11 August and 15 August 2018.
- 235. Mr de Mar noted that the pre-burn inspection which Captain Inskip says he conducted in early August 2018, failed to fully appreciate the extent of the coarse woody fuels within the burn area, and the likelihood in the very dry conditions that dead trees, stumps and tree hollows were likely to burn for many days or weeks in the absence of rainfall. The RFS officers further failed to comprehend the limitations of the firefighting equipment available to Mr Wolfe and the limitations of the containment line to allow larger vehicles to access the fireground to assist with aggressive mop-up activities if required and the effect of the adverse weather forecast on 15 August 2018.
- 236. Mr de Mar was of the view that the decision made by the RFS volunteers on 9 August 2018 to allow the fire to continue to burn to the containment lines was appropriate in the circumstances, given the relatively benign conditions.

- 237. On 11 August 2018, the fire was continuing to spread within containment lines and at one stage spotted over the containment line and was extinguished by the RFS. Mr de Mar was of the view that at this time the RFS volunteers should have appreciated that the fire would continue to burn without impediment until it rained.
- 238. He commented that the RFS should have considered the likelihood that the containment lines would be breached if the fireground was exposed to moderate or strong winds. In addition, the RFS should have been aware that Mr Wolfe did not possess the resources to successfully suppress spot overs in windy weather.
- 239. Mr de Mar opined that a thorough mop-up and black-out operation around the entirety of the containment line to a distance of at least ten metres was required, and should have been implemented, prior to the onset of windy weather, particularly winds from the north-west, west or south-west which would have had the potential to blow embers from the fireground into the National Park.
- 240. Deputy Commissioner McKechnie agreed that a thorough mop-up and blackout operation around the entirety of the containment line would be needed prior to the onset of windy weather, however, he noted that a mop-up operation is focused on dealing with issues that have been identified.
- 241. On 13 and 14 August 2018, the RFS did not attend the Wolfe's property. The weather predications commenced deteriorating on 13 August and continued to deteriorate on 14 August 2018. By the afternoon of 14 August 2018, the forecast weather conditions for 15 August 2018, predicted winds to increase to between 30-40 kilometres per hour, providing a Fire Danger Index forecast in the Very High range.
- 242. On 15 August 2018, Mr Wolfe realised that he was unable to manage the conditions and contacted the RFS. The RFS attended and extinguished a number of trees and other fire sources. Captain Bateman confirmed that he noticed about "20 to 30 metres inside the boundary of [Mr] Wolfe that had fire on the outside of the trees and the wind was causing some sparks to blow off these trees." He advised Mr Wolfe to monitor these trees that were on fire and explained to Mr Wolfe that the trees could not be extinguished due to their size and the limits of the RFS pump and hose. Mr Wolfe did not recall this conversation and it is improbable that if Mr Wolfe felt that he was unable to cope with the fireground conditions when he called the RFS at 5am, that he would have been able to control the fire in deteriorating weather conditions later the same morning.

- 243. The RFS officers gave evidence that they would not have left the fireground if they perceived that the fire was not contained or if there was a real risk that the fire might breach the containment lines. This seems to be at odds with the evidence of Captain Bateman that there were trees on fire, with sparks flying from them, which could not be extinguished due to the limitations of the RFS tankers that they were able to bring onto the fireground. Mr de Mar concluded that the decision by the RFS to leave the fireground at this time was "inexplicable".
- 244. The RFS returned to the Wolfe's property at 9.50am, by which time the fire had breached the containment line and was advancing rapidly into the National Park.
- 245. Mr de Mar stated that the highly adverse weather forecast, the fire activity and the actively burning trees at 6am on 15 August, with a likelihood that the weather and fire behaviour was likely to deteriorate, required the RFS to remain at the fireground. He indicated that the decision to leave was a serious error of judgment.
- 246. Deputy Commissioner McKechnie suggested that according to reports there was no significant fire activity on the property on the morning of 15 August 2018. He noted that RFS brigades assess each burn on its merits and expected that their local knowledge, including the landowner's capacity to manage the burn, would form part of their overall considerations.
- 247. The role of RFS officers is to respond to incidents requiring an emergency response. They do so under the direction of the Fire Control Centres which are staffed by paid officers with access to greater resources, such as fire behaviour and weather forecasts.
- 248. Captain Bateman indicated in his evidence that he was contacted and provided with the relevant 'task', which was to deal with a tree which had "sparks coming from it and those sparks were being blown into the National Park". The call logs do not indicate that such a 'task' was communicated from the Bega Fire Control Centre. Captain Inskip stated that he did not receive any communication from the Bega Fire Control Centre from 9 15 August 2018, as to how his officers were to manage the burn.
- 249. The Fire Control Centres are often involved in large scale operational decisions. In addition, the decisions made by the Fire Control Centres are reliant on information provided by officers at the fire scenes. Similarly, firefighters are reliant on information being made available from the Fire Control Centres which may assist, inform and protect those firefighters on the scene.

- 250. Deputy Commissioner McKechnie indicated that whilst it would be impracticable to expect every detail to be relayed from the firefighters to the Fire Control Centre, he would expect that key considerations would be conveyed.
- 251. Overall, the management and guidance offered by the Fire Control Centre in this matter prior to the breach of the containment line, appears to have been minimal.
- 252. Evidence became available during the Inquiry confirming that an "After Action Review" had been conducted into the fire. The various agencies involved in the operation provided feedback and discussion to improve future outcomes. The review only focused on the events after the breach of the containment line and not the preceding events from 9 15 August 2018.

ISSUE 6: Whether there was anything unusual in the circumstances in which the hazard reduction burn breached containment on 15 August 2018.

- 253. Mr and Ms Wolfe raised their concerns that the stump on their property had been deliberately lit by either Deputy Captain Andrew Inskip and/or Mr Dorl, which led to the fire escaping into the National Park on 15 August 2018.
- 254. The Wolfes gave evidence that the area inside the containment line and near the stump had been burned a number of days previously and the area was no longer actively burning and had been mopped up by the morning of 15 August 2018. The stump was located outside the containment line and there was no burnt land across the containment line towards the stump.
- 255. The Wolfes believed that the stump had been deliberately lit after the earlier angry exchange between Mr Wolfe and Deputy Captain Ray Inskip (Andrew's father) on 11 August 2018.
- 256. The Wolfes raised further suspicions in relation to how quickly Mr Dorl and Deputy Captain Andrew Inskip arrived on the scene on 15 August 2018, after Ms Wolfe contacted triple-0 at 9.58am. Records indicated that three triple-0 calls were registered by neighbours from 9.21am to 9.45am on 15 August 2018.
- 257. Both Mr Dorl and Deputy Captain Andrew Inskip denied deliberately lighting the stump.
- 258. Evidence suggested that it is possible for logs, stumps, tree hollows and dead root systems to remain active with fire or embers, particularly where the soil and fuel were very dry. When exposed to winds, the material could emit sparks and cause a spot fire.

- 259. Mr de Mar did not consider that there was anything unusual in the manner the burn breached the containment line on 15 August 2018.
- 260. There is insufficient evidence to conclude that the fire was deliberately lit on the morning of 15 August 2018.

ISSUE 7: What (if any) role does a Fire Behaviour Analyst play in the approval system for hazard reduction burning on private land?

- 261. Mr Laurence McCoy and Mr David Philp are engaged as RFS Fire Behaviour Analysts. Both provided statements to this Inquiry, with Mr McCoy also giving sworn evidence during these proceedings.
- 262. Fire Behaviour Analysts assist with decision-making and provide support to the RFS officers when undertaking prescribed burns. Their role is to develop tools, policies, procedures and training for RFS officers. They have no formal role in the approval of Hazard Reduction Certificates on private land. Mr McCoy expressed the view that the involvement of Fire Behaviour Analysts in private hazard reduction burns would create additional regulation, delay and cost.
- 263. Fire Behaviour Analysts provide education and support to RFS officers in relation to the recently updated Australian Fire Danger Rating System. The Australian Fire Danger Rating System assesses a number of factors which impact fire behaviours, including dryness of fuels, relative humidity, temperature and wind speed. Previously, the Forest Fire Danger Index and the Fire Danger Index were relied upon. A number of fire behaviour calculators are available online.
- 264. A Drought Index describes the amount of rain an area has received and does not reflect daily fluctuations in temperature, relative humidity or wind speed. The Drought Factor assesses the dryness of fuels, particularly heavier fuels, such as logs and tree hollows.
- 265. Mr de Mar was of the view that the Drought Index should be considered when assessing the risk of hazard reductions burns on private land. The Keetch-Byram Drought Index is available to the public on the Bureau of Meteorology site.
- 266. Mr de Mar was of the opinion that planned burns should involve a consideration of both the Drought Index and the Fire Danger Ratings.

- 267. The evidence indicates that the RFS should consider recommending and including this information in RFS resources for landholders considering a hazard reduction burn on private land.
- 268. The RFS has developed an interactive Prescribed Burn Forecast Tool which is available to fire agencies to assist in identifying windows of opportunity for low to moderate intensity burning. This tool provides hourly forecasts of prescribed burning conditions, with conditions identified as 'possible', 'marginal', 'poor' or 'too wet'. It assesses a six kilometre radius and is used alongside site specific risk assessments. Mr McCoy accepted that the 'poor' category designated by the Prescribed Burn Forecast Tool could be fine-tuned for greater clarity.
- 269. The Prescribed Burn Forecast Tool is not available to the public. There is no other equivalent tool which allows landowners to make an assessment as to whether they should commence a burn based on the subjective conditions pertaining to their property. Mr McCoy indicated that the reason this tool is not available to the public is that it may provide members of the public with a false understanding that they have permission to commence with a burn.
- 270. The expert evidence confirmed that the Australian Fire Danger Rating System provides an appropriate tool for determining the fire danger in the landscape and the consideration of risks when planning a prescribed burn.
- 271. The prescribed Bush Fire Danger Periods are codified pursuant to the RF Act and can be modified from the statutory norm in different regions of NSW to enhance risk mitigation for planned burns where there is an increased likelihood of adverse fire conditions.
- 272. The evidence suggested that environmental impacts and the effect of Climate Change may require constant review of the Bush Fire Danger Periods and consideration should be given by local Bush Fire Management Committees to reviewing local circumstances to determine whether the Bush Fire Danger Period should be extended or reduced in certain local areas each year.

RECOMMENDATIONS

ISSUE 8: Whether it is otherwise necessary or desirable for the Coroner to make recommendations pursuant to section 82 of the *Coroners Act 2009* (NSW) in relation to any matter connected to this Inquiry.

273. The evidence available in this Inquiry has indicated that whilst various other aspects of the RF Act and associated policies and procedures are clear, there is some confusion and lack of clarity associated with hazard reduction burns on

- private land. The effect of this lack of clarity may well result in significant damage to property and danger to the community, as well as jeopardising the safety of RFS volunteers.
- 274. There is a clear need for an improvement in the understanding of the duties and responsibilities by both RFS volunteers and landowners undertaking hazard reduction burns on private property.
- 275. Senior Counsel assisting has proposed a number of recommendations to the Commissioner of the NSW RFS. Some of those recommendations have been embraced by the NSW RFS.

Recommendations 1 - 7

Support for Proposed Recommendations 1 - 7

- 276. Recommendations numbered 1 7, seek to improve and enhance public safety in relation to hazard reduction burns undertaken on private property.
- 277. The evidence in this Inquiry has made it plain that there is an urgent need for both the community and RFS officers to be provided with a clear understanding of their duties and obligations relevant to hazard reduction burns.
- 278. In particular, the RFS needs to embrace clear protocols which apply when RFS volunteers attend a landowner's private property to provide advice prior to the commencement of a burn by the landowner. Similarly, the RFS needs clear operating protocols when their volunteers attend a burn which has already commenced on private property, with policies and protocols clarifying their role for attendance, the assumption of control over the burn, handing control of the burn back to the landowner and extinguishing a burn with or without the owner's permission.
- 279. By clarifying the duties and obligations of both the RFS volunteers and the landowner, it is hoped that RFS volunteers will receive clear advice and training to assist with their fire response.
- 280. It is acknowledged that many RFS volunteers do not wish to undertake additional training in hazard reduction burns on private property and wish to provide their voluntary assistance in directly fighting fires. As such, it is recommended that the RFS offer increased training to RFS volunteers who wish to undertake the task of advising on and managing proposed burns on private property.

281. On behalf of the RFS, it is noted that the RFS agrees with Recommendations 1, 3, 6 and 7. In relation to Recommendation 2, 4 and 5, the RFS has indicated that: "The RFS agrees with this recommendation, save that the final content of any checklist should be determined through the review process." In relation to Recommendation 4, it is noted that the RFS advise that: "This review has already commenced."

Proposed Recommendations to the Commissioner of the NSW RFS

- (1) The RFS review its *Operational Protocol for Prescribed Burning*, and/or other relevant policies, to include practical guidance for officers conducting pre-burn site inspections or providing advice for private burns.
- (2) The RFS develop a checklist or other tool which can be used for pre-burn inspections or when providing advice, with a focus on risk management and safety. The checklist or tool should require consideration of the following (non-exhaustive) list of factors:
 - a. fuel loads:
 - b. proximity to areas containing high fuel load such a bushland,
 National Parks or State Forest;
 - c. weather forecasts;
 - d. anticipated Australian Fire Danger Ratings;
 - e. quantity and location of water sources, and access to those sources;
 - f. firefighting equipment available to the landowner, including water pumps:
 - g. access to proposed fireground, including access of RFS firefighting vehicles;
 - h. topography;
 - i. intended burn area and time;
 - j. width of containment lines and breaks;
 - k. redundancy options;
 - whether the circumstances or complexity of the proposed burn warrant involvement or assistance from the RFS and/or Fire Control Officers, both in managing the burn and/or when inspecting the site prior to the proposed burn being lit.
- (3) The RFS develop education and training for officers conducting pre-burn site inspections or providing advice for private burns. The RFS encourage local brigades to nominate a representative to undertake such training and take the lead on pre-burn site inspections in their local area.

- (4) The RFS review its Standards for low intensity bush fire hazard reduction burning, 'Before you light that fire' pamphlet, and/or other relevant policies available to the public, with a view to enhancing the operational guidance content. Such guidance material is to direct that consideration be given to forecast risks and redundancy options and should provide resourcing guidance.
- (5) The RFS update its procedures and policies, or develop a specific procedure, to provide clear, documented protocols clarifying the command and control arrangements in place when:
 - a. RFS units are actively assisting a private landowner to implement a hazard reduction burn in a situation where no formal (written) request for assistance process has been actioned;
 - b. RFS units are responding to a triple-0 call relating to a fire situation where a private landowner is in the process of implementing an unassisted private hazard reduction burn, and RFS units undertake fire control actions on the fireground out of necessity, to reduce the risk of fire escaping;
 - c. RFS have assisted a private landowner to implement a hazard reduction burn in a situation where no formal (written) request for assistance process has been actioned, and RFS officers decide the hazard reduction burn is sufficiently safe for RFS units to leave the fireground, and the private landowner is agreeable to this;
 - d. RFS have assisted a private landowner to implement a hazard reduction burn in a situation where no formal (written) request for assistance process has been actioned, and RFS officers decide the hazard reduction burn is sufficiently safe for RFS units to leave the fireground, and the private landowner is not agreeable to this.
- (6) The RFS review its procedure and policies with a view to include clear directions for firefighters to consider weather forecasts, drought index and Australian Fire Danger Index when planning, responding to, managing or deciding to leave a burn.
- (7) The RFS review its training with a view to include or renew emphasis on the requirement for firefighters to consider weather forecasts, drought index and Australian Fire Danger Index when planning, responding to, managing or deciding to leave a burn.

Recommendations 8 - 10

Support for Proposed Recommendations 8 - 10

- 282. The evidence in this Inquiry has indicated that the Hazard Reduction Certificate process is less focused on assessing the containment of fire on private property and the associated public safety risks, and is more focused on environmental factors associated with the burn.
- 283. It has been suggested that the Hazard Reduction Certificate process could incorporate additional risk assessments as part of the application process or when a proposed burn is notified to the RFS and the RFS gives consideration of the risk profile of the burn.
- 284. These additional risk assessments include consideration of formal weather forecasts and drought conditions applicable to the property, with a view to reducing risk and encouraging landowners to consider impacts of fire behaviour during unexpected changes in weather patterns and the impact of drought on the soil and vegetation.
- 285. The recommendations encourage the use of tools and resources currently available to the RFS. In utilising these available resources, such as the Basic Burn Checklist for prescribed burns and the *Guidelines for Permit Issuing Officers*, a more rigorous assessment would be available than the current Hazard Reduction Certificate application process. The advantage of using these tools is that they are readily available and would promote greater safety for the community and RFS officers attending a fire.
- 286. Deputy Commissioner McKechnie advised that the RFS was of the view that the current Hazard Reduction Certificate process should remain. He expressed his view that the development of better operational guidance is sufficient to achieve better safety outcomes. In addition, the current system allows for the RFS officer assessing the burn proposal to specify conditions for the appropriate containment of the fire if they consider that the proposal is inadequate.
- 287. On behalf of the RFS, it has been indicated that the RFS agrees in part with Recommendations 8 and 9 and agrees with Recommendation 10.
- 288. In relation to Recommendation 8, the RFS advise that "it can consider the feasibility of creating an automated referral of high risk burns to the local RFS District within the Guardian system when issuing a Hazard Reduction Certificate during the bush fire danger period. The local RFS District can consider operational safety factors or the burn and discuss with the landholder as appropriate."

289. In addition, the RFS notes:

- a. The additional time burden on RFS District officers of this process must be taken into account as part of this consideration,
- b. The hazard reduction certificate is a legislated pathway for obtaining environmental approval for the activity and should not be used for assessing operational safety beyond the referral mechanism suggested above.
- c. As part of its feasibility assessment, RFS will consider how an automated referral would work when the hazard reduction certificate is issued by an authority other than the RFS Commissioner.
- 290. In relation to Recommendation 9, the RFS indicated that it agrees in part. It stated that the "RFS can consider the feasibility of creating an automated response to the landowner when the landowner is giving notice of burns within the Guardian system, to remind the landowner to check weather conditions when planning the burn."
- 291. In relation to Recommendation 10, the RFS responded, stating the "RFS currently provides information to landowners by email in response to a burn notification. RFS may consider automating this process within Guardian."

Proposed Recommendations to the Commissioner of the NSW RFS

- (8) The RFS review its Hazard Reduction Certificate assessment form, and/or other relevant procedures, with a view to incorporate a high level qualitative operational risk assessment of the application, facilitating the identification of potentially 'high risk' private hazard reduction burns to alert landholders to increased safety risks, and which may trigger further review by the RFS or approval via an alternative process.
- (9) The RFS consider introducing procedures whereby the notification by a landholder of a planned burn triggers an officer review of upcoming weather forecasts and Australian Fire Danger Ratings, to be conveyed to the landholder and/or local brigade if conditions for safely managing the burn are forecast to deteriorate.
- (10) The RFS consider developing a checklist of questions to be asked when private landholders notify the RFS of planned prescribed burns, including planned size and duration of the burn.

Recommendation 11

Support for Proposed Recommendation 11

- 292. Evidence was received regarding the need for greater oversight of private burns conducted outside the Fire Permit period.
- 293. Mr de Mar suggested that it was not necessary for all proposed burns to be the subject of a more stringent approval process. For example, he noted that small burns which could be fully extinguished on the same day as they were ignited, could be excluded.
- 294. Mr de Mar suggested that other, more substantial undertakings, in forest with heavy fuel loads and more complex conditions or risk profile, could be the subject of additional oversight outside the Fire Permit period.
- 295. Such an undertaking would require the RFS to review historical burn escape data and undertake a risk assessment process to determine what parameters may be appropriate for any permit. This process would inevitably necessitate increased resourcing for the RFS to process such permits.
- 296. In addition, members of the public may view this expansion of the Fire Permit system as an unwelcome intrusion into the management of their land.
- 297. The RFS does not agree with this recommendation. The RFS indicated that:

The Hazard Reduction Certificate system provides for environmental approvals, not operational safety mitigation and it is only one method of applying for an environmental approval. Additionally, imposing year-round permit requirements would be strongly resisted by interest groups including the agricultural sector, and would create an unworkable burden on RFS District officers. The RFS considers that its proposed responses to recommendations 8 and 17 would address the purpose of this recommendation 11.

Proposed Recommendation to the Commissioner of the NSW RFS

(11) The RFS consider how the Hazard Reduction Certificate system could be improved so that hazard reduction burns of specified parameters are mandated as requiring a Fire Permit year-round.

Recommendation 12

Support for Proposed Recommendation 12

298. Deputy Commissioner McKechnie noted: "The RFS accepts that there is merit in reviewing the guidance provided to permit issuing officers. An *Interim Fire Permits Guideline* has been developed for the 2023/2024 bush fire danger period and replaces the *Guidelines for Permit Issuing Officers 2021.*" He continued:

Further policy work will be done ahead of the 2024/2025 bush fire danger period, with the intent to move towards moving the permit process to a standardised online system through the Guardian program. The future online permit system utilising Guardian would potentially allow a risk-based assessment to form part of the decision to issue a permit and for that risk assessment to be captured for future reference. It must however be noted that incorporating a risk-based assessment would add to the process and may impact the capacity for RFS to keep up with public expectations for permits to be issued in a timely manner.

299. In addition, counsel for the RFS stated that the "RFS agrees with this recommendation. It is currently undertaking further work to its permit processes to move towards a standardised online system. This may allow a more formalised risk-based assessment to form part of the decision to issue a permit."

Proposed Recommendation to the Commissioner of the NSW RFS

(12) The RFS review its *Permit Issuing Officer Guidelines* with a view to updating the condition determination process to a risk-based approach aligned with Australian Standard ISO 31000:2018 or equivalent.

Recommendations 13 - 15

Support for Proposed Recommendations 13 - 15

- 300. It is apparent that there is a need for increased education and awareness regarding RFS tools and resources, as well as any which arise from these recommendations.
- 301. Deputy Commissioner McKechnie agreed that the key to mitigating risks is to ensure that RFS volunteers are well trained and informed when assessing risks.

302. On behalf of the RFS, it was indicated that it agreed with Recommendation 12 - 14, noting that "the reviews to be conducted pursuant to the above recommendations may impact the material that it is appropriate to develop." Similarly, the RFS agree with Recommendation 15, save that the content of the revised educational material should be determined through the review process.

Proposed Recommendation to the Commissioner of the NSW RFS

- (13) The RFS develop material to further educate their volunteers and staff in relation to:
 - a. their powers to extinguish or prohibit a notified burn if circumstances require;
 - the tools available at their disposal, or the Fire Control Centre's disposal, to assist with pre-burn site inspections and management of ongoing burns;
 - c. assessment of risk and management of burns when responding to incidents involving prescribed burns on private properties; and
 - d. pre-emptive fire management by the RFS on private land when called on for assistance.

The education material be presented in diverse formats, including in-person trainings or meetings, via pamphlets, or pre and post fire incidents.

- (14) The RFS review its distribution of material designed to educate the public in relation to the requirements for conducting a prescribed burn outside of the Fire Danger Period, with a view to consider how awareness of this material can be increased
- (15) The RFS review their education material with a view to increase awareness and clarity in respect of the authorities required to conduct a prescribed burn outside of the Fire Danger Period.

Recommendation 16 - Fire Behaviour Analyst Resources

303. The RFS agreed with this Recommendation.

Proposed Recommendation to the Commissioner of NSW RFS

(16) The RFS review the Prescribed Burn Forecast Tool to increase clarity regarding the 'poor' category of prescribed burning conditions.

Recommendation 17 – Fire Danger Periods

304. The RFS agreed with this Recommendation.

Proposed Recommendation to the Commissioner of NSW RFS

(17) The RFS implement a system where Bush Fire Management Committees are prompted to consider, on an annual basis, whether the Fire Danger Period for that year should be amended to reflect increased or reduced adverse fire conditions.

ITEMS FOR NOTIFICATION TO THE MINISTER

- 305. It should be noted that some of the proposed recommendations referred to above are likely to require legislative amendments to the *Rural Fires Act 1997* and associated Regulations.
- 306. However, it is acknowledged that the Minister for Emergency Services was not a party to the Inquest and has not had the opportunity to provide comments in respect of the proposed recommendations.
- 307. It is suggested that the following may be required to give effect to proposed recommendations:
 - a. expanded powers to be afforded to the RFS in order to prohibit a proposed burn from proceeding if, in the reasonable assessment of the Commissioner of the NSW RFS or their delegate, the proposed burn is a risk of escape or is likely to be unable to be safely managed;
 - b. expanded powers to be afforded to the RFS to take over control and management of a burn conducted on a private property where, in the reasonable assessment of the Commissioner of the NSW RFS or their delegate, the proposed burn is at risk of escape or is likely to be unable to be safely managed; and
 - c. amendments to Part 4 of the Rural Fires Act 1997 to implement any suggested changes as a result of the RFS review of the Hazard Reduction Certificate system pursuant to Proposed Recommendation 11.
- 308. The RFS have indicated that there is no objection to (a) above, noting that "further resourcing would be required to enable this power to be utilised." It is further noted that the:

RFS understands (a) and (b) to mean an expansion of legislative powers to the effect that RFS may attend and take over the conduct of a proposed burn, where required for safety reasons, and may either stop the burn from proceeding or modify the conduct and parameters of the burn as appropriate.

- 309. In relation to (b) above, the RFS stated that the "RFS considers it already has the power to take over and control existing burns in the identified circumstances."
- 310. In relation to (c) above, the "RFS does not agree with this recommendation. No changes should be made to the Hazard Reduction Certificate system under recommendation 11, which is also not agreed by RFS."
- 311. It is proposed that the Minister of Emergency Services is notified of the findings of this Inquiry and the proposed recommendations, drawing the Minister's attention to the potential need for legislative change.

FURTHER CONSIDERATION OF PROPOSED RECOMMENDATIONS

- 312. The fire on the Wolfe's property bears witness to the need to manage risks associated with hazard reduction burns on private land. Although the scale of the burn on their property related to a small area, the consequences of that fire escaping caused a significant impact to the community, homes and personal possessions, national parks and local flora and fauna.
- 313. Although it is clear that the Wolfes did not obtain a Hazard Reduction Certificate or other environmental approval for the fire, it is also clear that the legislative regime, as well as the policies and protocols relevant to undertaking such fires, were either confusing, misunderstood or poorly communicated to both the community and RFS volunteers.
- 314. In light of the available evidence, there is significant scope for improvement in terms of the relevant legislation, education and training, technology and resources.
- 315. There is a need for the legislation to clearly impose a positive duty on a private landowner to seek the approval of a Hazard Reduction Certificate outside of the bush fire danger periods under the RF Act. Many members of the community are well aware of the need to obtain a Fire Permit during the Fire Danger Period, however, are unaware of the need to obtain a Hazard Reduction Certificate throughout the year. In this Inquiry, neither the landowners nor the RFS volunteers appeared to comprehend the requirements pursuant to the RF Act.

- 316. It is imperative that clear and concise information is available to the public to ensure that they understand their obligations, as well as the risks associated with undertaking hazard reduction burns. The current information available online and through RFS publications should be updated and made comprehensively clear for the benefit of members of the public. RFS volunteers are also a very important source of information and guidance for members of the public and would similarly benefit from clear and concise educational material and training. Education for both the community members and the RFS volunteers is of paramount importance.
- 317. It was clear that had the Wolfes applied for a Hazard Reduction Certificate, their proposed burn would have been deemed to be too high risk for their self-management. The resources available to them were unlikely to have been sufficient in the environmental circumstances at the time, including the lack of rainfall for some months, the fuel loads, the inadequacies in the containment line, the firefighting equipment and access to water and the topography, particularly if the fireground was exposed to moderate or severe winds.
- 318. The evidence makes it clear that a real need exists for more stringent risk assessments to be undertaken as part of the Hazard Reduction Certificate process. More comprehensive checklists should be required to be provided by the landowners or the RFS officers assessing a proposed burn for a Hazard Reduction Certificate. In addition, ongoing or proactive input by the RFS, such as providing weather forecast warnings to landowners, would provide additional safeguards.
- 319. It is accepted that some of the recommendations will necessitate additional resources and may diminish the autonomy of some landowners. As bush fire seasons become more onerous and dangerous, the prevailing safety of RFS volunteers, members of the public, property and wildlife requires the urgent consideration of both.

CONCLUSIONS

- 320. The cause and origin of the Bemboka fire are clear.
- 321. It is not the role of this Inquiry to find fault or establish either civil or criminal liability for the fire.
- 322. There have been a number of factual matters raised during this Inquiry which are incapable of being resolved satisfactorily.

- 323. In spite of that, it is clear that such a resolution is not necessary to consider the larger issues at hand, being the review of the relevant legislation and the improvements to the policies and protocols of the RFS. In addition, numerous improvements have been suggested and highlighted in the expert evidence tendered and received orally during these proceedings.
- 324. RFS volunteers dedicate hours of their time and energy to ensuring the safety of the public, property and wildlife. They work in dangerous, dirty and overwhelmingly difficult environments for little or no pay. They are invariably courageous and brave in the face of terrifying scenes. They should be lauded for their dedication and commitment.
- 325. I would again like to acknowledge the overwhelming loss to the landholders severely impacted by this fire, together with the local community, as well as the devastating loss of flora and fauna.

CLOSING OBSERVATIONS

- 326. Before turning to the findings that I am required to make, I would like to acknowledge and thank Ms Ragni Mathur SC, and Ms Claire Dunn, for the preparation, presentation and extensive assistance provided with this most complex matter.
- 327. I would also like to acknowledge and thank Detective Senior Constable Evan Gray for his investigative efforts in this matter.

FINDINGS PURSUANT TO SECTION 81(2) OF THE ACT

The origin of the fire

328. The origin of the fire was on or near the border of the eastern side of the Wolfe's property at Yankees Gap Road, Bemboka.

The cause of the fire

329. The cause of the fire was the Wolfe's hazard reduction burn, which breached containment at around 9.30am on 15 August 2018.

I make the following recommendations pursuant to section 82 of the *Coroners Act 2009* (NSW):

To the Commissioner of the NSW RFS

- (1) The RFS review its *Operational Protocol for Prescribed Burning*, and/or other relevant policies, to include practical guidance for officers conducting preburn site inspections or providing advice for private burns.
- (2) The RFS develop a checklist or other tool which can be used for pre-burn inspections or when providing advice, with a focus on risk management and safety. The checklist or tool should require consideration of the following (non-exhaustive) list of factors:
 - a. fuel loads;
 - b. proximity to areas containing high fuel load such a bushland,
 National Parks or State Forest;
 - c. weather forecasts;
 - d. anticipated Australian Fire Danger Ratings;
 - e. quantity and location of water sources, and access to those sources;
 - f. firefighting equipment available to the landowner, including water pumps;
 - g. access to proposed fireground, including access of RFS firefighting vehicles;
 - h. topography;
 - i. intended burn area and time;
 - j. width of containment lines and breaks;
 - k. redundancy options;
 - whether the circumstances or complexity of the proposed burn warrant involvement or assistance from the RFS and/or Fire Control Officers, both in managing the burn and/or when inspecting the site prior to the proposed burn being lit.
- (3) The RFS develop education and training for officers conducting pre-burn site inspections or providing advice for private burns. The RFS encourage local brigades to nominate a representative to undertake such training and take the lead on pre-burn site inspections in their local area.
- (4) The RFS review its Standards for low intensity bush fire hazard reduction burning, 'Before you light that fire' pamphlet, and/or other relevant policies available to the public, with a view to enhancing the operational guidance content. Such guidance material is to direct that consideration be given to forecast risks and redundancy options and should provide resourcing guidance.

- (5) The RFS update its procedures and policies, or develop a specific procedure, to provide clear, documented protocols clarifying the command and control arrangements in place when:
 - a. RFS units are actively assisting a private landowner to implement a hazard reduction burn in a situation where no formal (written) request for assistance process has been actioned;
 - b. RFS units are responding to a triple-0 call relating to a fire situation where a private landowner is in the process of implementing an unassisted private hazard reduction burn, and RFS units undertake fire control actions on the fireground out of necessity, to reduce the risk of fire escaping;
 - c. RFS have assisted a private landowner to implement a hazard reduction burn in a situation where no formal (written) request for assistance process has been actioned, and RFS officers decide the hazard reduction burn is sufficiently safe for RFS units to leave the fireground, and the private landowner is agreeable to this;
 - d. RFS have assisted a private landowner to implement a hazard reduction burn in a situation where no formal (written) request for assistance process has been actioned, and RFS officers decide the hazard reduction burn is sufficiently safe for RFS units to leave the fireground, and the private landowner is not agreeable to this.
- (6) The RFS review its procedure and policies with a view to include clear directions for firefighters to consider weather forecasts, drought index and Australian Fire Danger Index when planning, responding to, managing or deciding to leave a burn.
- (7) The RFS review its training with a view to include or renew emphasis on the requirement for firefighters to consider weather forecasts, drought index and Australian Fire Danger Index when planning, responding to, managing or deciding to leave a burn.
- (8) The RFS review its Bush Fire Hazard Reduction Certificate assessment form, and/or other relevant procedures, with a view to incorporate a high level qualitative operational risk assessment of the application, facilitating the identification of potentially 'high risk' private hazard reduction burns to alert landholders to increased safety risks, and which may trigger further review by the RFS or approval via an alternative process.

- (9) The RFS consider introducing procedures whereby the notification by a landholder of a planned burn triggers an officer review of upcoming weather forecasts and Australian Fire Danger Ratings, to be conveyed to the landholder and/or local brigade if conditions for safely managing the burn are forecast to deteriorate.
- (10) The RFS consider developing a checklist of questions to be asked when private landholders notify the RFS of planned prescribed burns, including planned size and duration of the burn.
- (11) The RFS consider how the Hazard Reduction Certificate system could be improved so that hazard reduction burns of specified parameters are mandated as requiring a Fire Permit year-round.
- (12) The RFS review its *Guidelines for Permit Issuing Officers* with a view to updating the condition determination process to a risk-based approach aligned with Australian Standard ISO 31000:2018 or equivalent.
- (13) The RFS develop material to further educate their volunteers and staff in relation to:
 - a. their powers to extinguish or prohibit a notified burn if circumstances require;
 - the tools available at their disposal, or the Fire Control Centre's disposal, to assist with pre-burn site inspections and management of ongoing burns;
 - c. assessment of risk and management of burns when responding to incidents involving prescribed burns on private properties; and
 - d. pre-emptive fire management by the RFS on private land when called on for assistance.

The education material be presented in diverse formats, including in-person trainings or meetings, via pamphlets, or pre and post fire incidents.

- (14) The RFS review its distribution of material designed to educate the public in relation to the requirements for conducting a prescribed burn outside of the Fire Danger Period, with a view to consider how awareness of this material can be increased
- (15) The RFS review their educational material with a view to increase awareness and clarity in respect of the authorities required to conduct a prescribed burn outside of the Fire Danger Period.
- (16) The RFS review the Prescribed Burn Forecast Tool to increase clarity regarding the 'poor' category of prescribed burning conditions.

(17) The RFS implement a system where Bush Fire Management Committees are prompted to consider, on an annual basis, whether the Fire Danger Period for that year should be amended to reflect increased or reduced adverse fire conditions.

Notification to NSW Government

That the Minister of Emergency Services give consideration to amending the *Rural Fires Act 1997* and *Rural Fires Regulations 2022* to give effect to the abovementioned Recommendations, including:

- a. Expanded powers to be afforded to the RFS in order to prohibit a proposed burn from proceeding if, in the reasonable assessment of the Commissioner of the NSW RFS or their delegate, the proposed burn is at risk of escape or is likely to be unable to be safely managed;
- b. Expanded powers to be afforded to the RFS to take over control and management of a burn conducted on a private property where, in the reasonable assessment of the Commissioner of the NSW RFS or their delegate, the proposed burn is at risk of escape or is likely to be unable to be safely managed; and
- **c.** Amendments to Part 4 of the *Rural Fires Act 1997* to implement any suggested changes as a result of the RFS review of the Hazard Reduction Certificate system pursuant to Recommendation 11.

330. I now close this Inquiry.

Magistrate Joan Baptie
Deputy State Coroner
8 November 2024
Coroners Court of New South Wales