

# The Canberra **Firestorm**

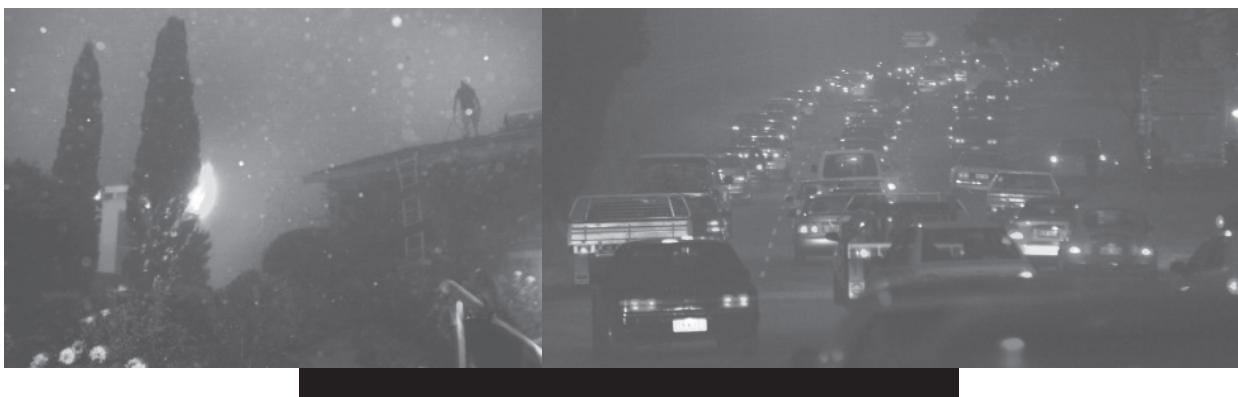


**Inquests and Inquiry into  
Four Deaths and Four Fires  
between 8 and 18 January 2003**

**Volume I**

Maria Doogan, Coroner

# The Canberra Firestorm



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Four Deaths and Four Fires  
between 8 and 18 January 2003**

**Volume I**

Maria Doogan, Coroner

December 2006

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AUSTRALIAN CAPITAL TERRITORY  
**OFFICE OF THE CORONER**

19 December 2006

Mr Simon Corbell MLA  
Attorney-General  
Legislative Assembly of the ACT  
Civic Square  
London Circuit  
CANBERRA ACT 2601

Dear Attorney-General

In accordance with s. 57 of the ACT *Coroners Act 1997*, I report to you on the inquests into the deaths of Mrs Dorothy McGrath, Mrs Alison Tener, Mr Peter Brooke and Mr Douglas Fraser and on my inquiry into the fires in the Australian Capital Territory between 8 and 18 January 2003.

When I began the inquests and the inquiry I intended to report to your predecessor by December 2004. Regrettably, a series of delays prevented me from doing this. The longest delay was occasioned by the litigation initiated by the ACT Government and a small number of ACT government employees, which effectively added a year to the process. Had the litigation been successful, I would have been prevented from completing the inquests and the inquiry and been prevented from reporting my findings to you.

From the accompanying report you will see that I conclude that the failure to aggressively attack the fires in the first few days after they ignited on 8 January 2003 was one factor that led to the firestorm on 18 January 2003, which resulted in four deaths, many injuries (some of them extensive and permanent) and property losses valued at \$600 million to \$1 billion.

Frankly, on the evidence before the inquiry, it is a miracle that no more than four people died. I draw your attention to the evidence of the residents affected by the fires. I also make it clear that, once the four fires had combined to produce the firestorm on 18 January, containment and control were impossible, despite the best efforts of the firefighters.

On the evidence before the inquiry, I conclude that the failure to warn the community—despite senior personnel of the Emergency Services Bureau having knowledge that the fires would burn into the suburbs—was a factor that exacerbated the property losses and resulted in panic and

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confusion throughout the affected suburbs on the day of the firestorm.

I note too that, in accordance with the long-established Westminster convention of responsible government, the responsible Minister at the time of the firestorm was Mr Jon Stanhope in his capacity as Chief Minister and Attorney-General—with responsibility for the Department of Justice and Community Safety, which organisationally incorporated the Emergency Services Bureau—and in his further capacity as acting Minister for Police and Emergency Services between 17 and 19 January 2003. Here, I draw your attention to the expert opinion of Sir Peter Lawler in the report.

I also draw your attention to the conclusion reached by CSIRO fire expert Mr Phil Cheney after the firestorm:

If similar weather and fuel conditions were to occur in the ACT, and historical accounts indicate this is possible, then a fire starting under extreme weather 40 km north-west of Canberra could burn to the suburbs in 2–3 hours. It is therefore fanciful in the extreme to imagine that any emergency service organisation is going to be able to stop fires and provide total protection under these conditions.

Pursuant to s. 52 of the Coroners Act, I make a number of findings about the manner and cause of the four deaths, when and where they occurred, the cause and origin of the fires, and the circumstances in which the fires occurred. I also comment throughout the report on matters connected with the deaths and the fires that bear on public health or safety or the administration of justice.

Further, in accordance with s. 57 of the Act, I make a number of recommendations in connection with the inquests and the inquiry, including on matters relating to public health or safety or the administration of justice. Among these recommendations are the following:

- that the Emergency Services Agency be removed from the Department of Justice and Community Safety and become again a statutory authority, as previously recommended by Mr Ron McLeod AM and previously agreed to and acted on by the ACT Government
- that the ACT Government engage in a formal, detailed memorandum of understanding with the NSW Government in relation to emergency and bushfire-fighting activities, in order to take advantage of the economies of scale, the resources and the expertise that reside within the relevant NSW bodies and in order to eliminate, as far as is possible, the operational constraints that result from the ACT being an island in the sea of NSW
- that there be an ongoing program of back-burning and fuel-load management across the ACT, to ensure that at all times forestry and other access roads are kept clear and are accessible to emergency personnel and vehicles and to ensure that fuel loads are kept at a level that will minimise the risk of a recurrence of the firestorm
- that a taskforce be established to effect the implementation of the recommendations contained in this report, any of Mr McLeod's recommendations that are yet to be implemented, and any unimplemented recommendations that remain current from the previous seven reviews of the Emergency Services Bureau. If they are willing and available

to participate, Mr Phil Cheney, Mr Tony Bartlett, Mr Val Jeffery and Mr John Lowe should be among the members of the taskforce

- that the Coroners Act be amended in several respects
- that—as a means of eliminating difficulties encountered during the inquiry and for reasons to do with accountability and the separation of powers in the administration of justice—self-administration and appropriation of funds by the Legislative Assembly directly to the ACT courts be introduced
- that a system of public warnings using grid references on the maps in the Canberra telephone directory be adopted.

Finally, Mr Attorney, I express the hope that the findings and recommendations in this report will be given serious consideration and that the recommendations will be adopted in an effort to take all reasonable steps to try to avoid a repeat of the January 2003 catastrophe—a catastrophe that affected so many people in the ACT.

I say this in the knowledge that the ACT Government publicly committed itself to implementation of the recommendations made in the McLeod report, yet within a very short time of their implementation the Government recanted on one of the most important of these recommendations—that the Emergency Services Bureau, now the Emergency Services Agency, become a statutory authority.

Yours sincerely



Maria Doogan  
Coroner



# Foreword

On 8 January 2003 lightning strikes in the ACT and surrounding area caused four fires known as the McIntyres Hut fire, the Bendora fire, the Stockyard Spur fire and the Mount Gingera fire. Eventually these fires combined to produce the firestorm that devastated the ACT on 18 January 2003.

I record here my admiration for the effort made by the large number of men and women at the firefront: they gave their all, working unstintingly in the face of fires that by 18 January had grown to a point beyond control.

As a community, we are greatly indebted to the emergency services workers; the rural and urban firefighters, both full time and volunteer; parks and forestry staff; rural residents who fought the fires; police officers; ambulance personnel; hospital staff; people who worked in the recovery centres; ActewAGL employees; people from various charities; the many volunteers who came from near and far to help; and last, but by no means least, the thousands of residents who came together to help one another in a time of need.

Maria Doogan  
Coroner



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**Appendix A    Section 55 statements**

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# Acknowledgments

This report is the product of hard work and dedication on the part of many people.

The morning after the firestorm members of the Australian Federal Police began the task of assembling the brief of evidence that was to form the basis of the inquests and the inquiry. Sergeant Therese Barnicoat and her team of police officers—particularly Constables Judy Goldsmith, Matthew Doyle and Mark Travers—worked long hours for several months, interviewing witnesses, taking statements and collecting evidence, so that the inquests and inquiry could formally begin with a minimum of delay. I thank them for their dedication to this important task.

I am especially indebted to counsel assisting, Mr Lex Lasry QC and Mr Ted Woodward, both of the Melbourne Bar. They brought to the inquests and inquiry independence of mind and extensive experience and worked tirelessly throughout, in what at times proved to be trying circumstances. For this I am most grateful.

Mr Lasry and Mr Woodward were joined by Ms Sara Cronan, from the ACT Office of the Director of Public Prosecutions. As counsel assisting, she ably contributed to the work of the inquiry until she left the Office of the DPP in July 2004. I also thank the ACT Director of Public Prosecutions, Mr Richard Refshauge SC, who engaged Mr Lasry and Mr Woodward as counsel to assist me and made available Ms Cronan and an instructor from his office to work with counsel assisting. Initially that instructor was Ms Helen Drew; she was later replaced by Ms Diana Price. Provision of this assistance was most appreciated, especially at a time when the resources of the Office of the DPP were limited.

An important contribution was also made by Dr David Blumenthal, who closely examined the very large volume of evidence before the inquiry in order to provide assistance to me in the preparation of Chapter 5 of the report.

Potter Farrelly and Associates provided sophisticated technical support without which it would have been almost impossible to deal with the thousands of pages of documents that emerged during the inquiry. Special mention is due to Ms Elizabeth Miller and Mr John Cheevers, who sat through the inquiry and ensured that the system operated effectively. Additionally, my thanks go to Mrs Elizabeth Gulson and Ms Polly Templeton, who also sat through the inquiry, day after day, and ensured that the real-time transcript was efficiently produced for the benefit of all involved.

I am grateful to the former ACT Courts Administrator, Mr Bruce Kelly, for his assistance in the day-to-day running of the inquiry. ACT courts have no control over their financial, human or other resources, all of which are controlled by the Department of Justice and Community Safety. As a senior employee of that department until his resignation, Mr Kelly ensured that the many administrative requirements of the ACT bureaucracy were met in a timely way, so that the inquiry ran as smoothly as was possible in the litigious circumstances surrounding it.

Expert assistance was also rendered by Mr Rick Clarke, a Department of Justice and Community Safety employee located in the ACT Supreme Court library. From the earliest to the final

hearings Mr Clarke was responsible for making the transcript of proceedings, the submissions and other materials available on the internet via the ACT Magistrates Court website. Similarly, he produced the compact disc of the transcript and submissions that forms part of this report, as well as the electronic version of the report on the Magistrates Court website.

I was ably assisted by Ms Chris Pirie, who brought her editing expertise to bear on the final draft of this report and made many useful suggestions about the style and layout of the report. Ms Debbie Phillips and Ms Julie Hamilton also made valuable contributions to the report's production: Ms Phillips designed the layout and Ms Hamilton designed the cover and the colour section.

Last, but by no means least, I offer my thanks to Ms Angela Papanicolaou, Mrs Michell Heidtmann and Mrs Nerida Barges, each of whom played important roles in the conduct of the inquiry. Ms Papanicolaou was the Executive Officer until she resigned to take up a promotion. She was replaced by Mrs Heidtmann. Mrs Barges is my Associate; despite difficult personal circumstances, she remained dedicated to the work of the inquiry.

Ms Papanicolaou, Mrs Heidtmann and Mrs Barges had a wide variety of roles—from performance of court room tasks such as the swearing in of witnesses and identification of exhibits to providing ad hoc assistance to counsel, arranging meetings, typing this report, and myriad clerical functions associated with the conduct of the inquiry and the production of this report.

I thank the *Canberra Times* and News Limited for supplying photographs used in the report and Geoscience Australia for supplying the maps I used.

Finally, I express my sincere gratitude to the large number of people in the community who sent me email and telephone messages and letters and cards of support when the ACT Government and some of its employees commenced litigation against me in the ACT Supreme Court, seeking to prevent me from completing the inquiry. I am equally grateful to the many people who turned out in an unprecedented rally of support. These spontaneous gestures were very reassuring.

Maria Doogan  
Coroner

Part One

# About the inquiry



# 1 Preliminary matters and jurisdiction

Saturday 18 January 2003 will remain in the consciousness of the ACT community as a day of tragedy, a day of bravery, and a day of loss for many people.

The ACT is an island in the sea of New South Wales. Once the McIntyres Hut fire in NSW gathered momentum, crossed the border and joined the fires burning in the ACT, it became inevitable that the resultant firestorm would deliver its fury to both rural and urban areas of the ACT, turning some areas into an inferno that firefighters had no way of controlling.

The firestorm was a tragedy of momentous proportion:

- Four people died.
- Four hundred and thirty-five people were injured, some suffering injuries that necessitated removal interstate for long-term treatment of burns.
- Four hundred and eighty-seven homes were destroyed.
- Twenty-three commercial and government premises were destroyed.
- Two hundred and fifteen homes, commercial premises, government premises and outbuildings were damaged.
- Mount Stromlo Observatory, an institution of international renown, was destroyed.
- An inestimable number of animals were killed or injured.
- Almost 70 per cent of the ACT—157 170 hectares—was burnt.
- The financial losses have been estimated to amount to at least \$610 million.<sup>1</sup> When (unquantified) losses arising from damage done to catchment areas and the flow-on effect in terms of costs to Canberra's water supply are added, it has been suggested that this figure could be closer to \$1 billion.<sup>2</sup>

Could the catastrophe have been prevented? It is, perhaps, impossible to say. It can, however, be said that the firestorm's severity and impact could have been mitigated.

During the inquiry it was submitted that the severity of the firestorm could not have been foreseen. I do not accept this. Australia has a recorded history of extreme fire events dating back to at least 1851.<sup>3</sup> As is discussed in Chapter 7, CSIRO fire expert Mr Phil Cheney predicted several years ago a conflagration of the type experienced in January 2003. He made his prediction on the basis of information in the report of one of the seven inquiries that have been held since 1986 to examine various aspects of the ACT's emergency services.

The point to make here is that experiences in life, be they good or bad, serve no useful purpose if we fail to learn from them. It is to be hoped, therefore, that the many lessons that can be learnt from this catastrophe in the ACT are in fact learnt and result in positive action, not just supportive words and shallow promises.

For the sake of our community today and in the future, I hope my findings and recommendations are not relegated to the archives to gather dust—as has occurred with the reports of several of the previous inquiries.

History is the best predictor of the future.

The evidence before the inquiry revealed that those in authority could, and should, have done many things to reduce the extent of disaster and loss. The evidence also revealed highly commendable efforts—and, indeed, bravery—on the part of volunteer, rural and urban firefighters, parks and forestry staff, the rural landholders, the police, ambulance personnel, the many people who came from interstate to help and, not least, the large number of people in the ACT community who came together to help one another in the face of a terrible event.

## 1.1 The subject matters of the report

The proceedings I conducted were twofold:

- inquests into the deaths of four people—Dorothy McGrath, Alison Mary Tener, Douglas John Fraser and Peter Brabazon Brooke—on 18 January 2003, when fires invaded a forestry settlement and Canberra suburbs
- an inquiry into three ACT fires that joined a fire that began in NSW and then crossed the border into the ACT. All four fires were caused by lightning on 8 January 2003. The ACT fires were called the Bendorra fire, the Stockyard Spur fire and the Mount Gingera fire; the fire that began in NSW was called the McIntyres Hut fire.

The proceedings became known as the ‘Bushfire Inquiry’. Although they involved two distinct components, I generally use the term ‘the inquiry’ in this report for ease of reference to both the inquests and the Bushfire Inquiry.

## 1.2 Structure of the report

The report is divided into four parts and 10 chapters:

- In Part One, this first chapter describes the legislative basis for the inquests into the deaths and the inquiry into the fires, the obligations and restrictions imposed on me by the law, and a number of other preliminary matters. Chapter 2 lists the names of the people who gave evidence before the inquiry and the names of counsel who represented interested persons, organisations and authorities. Chapter 3 details the course of the inquests and the inquiry, from the first directions hearing on 16 June 2003 until 28 July 2006, the last day on which oral submissions were made.

- In Part Two, Chapter 4 provides information about the situation in the ACT before the fires started on 8 January 2003 and Chapter 5 is a chronology of events, tracing the progress of the fires from their ignition until 18 January 2003, when they burned into the suburbs of Canberra.
- In Part Three, Chapter 6 examines the initial response to the fires, from 8 January 2003, and Chapter 7 discusses the question of warnings to the community.
- In Part Four, Chapter 8 deals with the circumstances of the deaths of Dorothy McGrath, Alison Tener, Douglas Fraser and Peter Brooke and Chapter 9 deals with a number of other matters that arose during the inquiry and are associated with the administration of justice. In Chapter 10 I present my findings and recommendations.

The report is based on a very large quantity of exhibits, evidence and submissions by counsel. It is possible that there will be instances where I quote verbatim from submissions and other documents but make no attribution. This should be treated as a combination of me agreeing with the statement at the time I read and reproduced it and the fact that this final report is the result of several iterations and edits. Some attributions might have been overlooked. This was not intentional: it is inevitable with an inquiry that generated documents running to more than 10 000 pages.

Despite this, at the outset I make it plain that I considered *all* the evidence and took it into account when compiling my report. Given the extensive public interest in the inquiry, it is important that the relevant information be made public. I have therefore authorised the publication of the complete transcript of proceedings and the submissions made at the end of the inquiry. This material already appears on the ACT Magistrates Court website; for the sake of completeness, attached to this report is a compact disc that contains an electronic version of this report, the transcript and submissions.

## **1.3 The jurisdiction of a coroner**

At the outset I record my appreciation of the submissions on jurisdiction made by counsel, especially those from counsel assisting, counsel for the ACT, and counsel for the NSW interested persons. These were very useful, especially in the light of the jurisdictional restrictions referred to by the Full Bench of the ACT Supreme Court in the litigation initiated by the ACT Government and some of its employees.<sup>4</sup>

### **1.3.1 The Coroners Act**

The ACT *Coroners Act 1997* makes provision for the holding of inquests into deaths and inquiries into fires and disasters and contains provisions for related purposes. Interpretation of the Act is in accordance with the provisions of the Act itself, the provisions of the ACT *Legislation Act 2001* and relevant case law.

### **1.3.2 General functions of a coroner**

The general functions of a coroner are dealt with in s. 12 of the Coroners Act, which provides that a coroner has the functions and jurisdiction given by the Act or any other ACT law. It also provides that—except as otherwise provided by the Act—a coroner has all the functions and jurisdiction that were vested in a coroner immediately before the commencement of the *Coroners Act 1956*. (Before self-government in the ACT, the legislation was known as the *Coroners Ordinance 1956*.) The legislation in force before the *Coroners Act 1956* came into force was the *Coroners Ordinance 1932*, as amended by the *Seat of Government (Designation) Ordinance 1938*. It became the *Coroners Ordinance 1932–1938*, which provided, among other things, that the NSW *Coroners Act 1912* applied to the ACT. Examination of that legislation reveals there are neither coronial functions nor jurisdiction not otherwise covered by the *Coroners Act 1997*. I therefore make no further reference to coronial legislation previously in force in the ACT.

### **1.3.3 Procedure and discretion**

Section 47 of the *Coroners Act 1997* provides that a coroner is not bound to observe the rules of procedure and evidence applicable to court proceedings. It also makes provision for a coroner to give directions in the course of an inquest or inquiry. The Act—read in conjunction with and interpreted by the *ACT Legislation Act 2001*—gives the coroner very extensive discretion in the conduct of inquests and inquiries. For example:

- discretion to allow representation—s. 42
- discretion to appoint investigators—s. 59
- discretion about undertaking a view—s. 61
- discretion to seek police assistance—s. 63
- as noted, discretion in relation to procedure and evidence—s. 47.

### **1.3.4 Learning, not blaming**

I adopted this subheading from the submissions of counsel for the ACT because it encapsulates the nature of the coronial jurisdiction. In this regard, counsel for the ACT submitted:

It is not the role of the coroner to make findings of contribution, blame or guilt. Indeed, the removal of the power to make findings of contribution, which occurred with the enactment of the 1997 Act, emphasises the limits upon the coronial jurisdiction in this respect. It is for the coroner to make findings, comments and recommendations as permitted by the Act.<sup>5</sup>

Counsel's reference to 'contribution' is a reference to the fact that in the legislation that preceded the *Coroners Act 1997* provision was made for a coroner to find that a person contributed to the cause of a fire or the cause of a death.<sup>6</sup> In the absence of such a provision in the current Act, it is arguable that I am prevented from making a finding that a person or people contributed to the deaths of the four deceased persons who are the subject of this report and that I am also prevented from finding that one or more people contributed to the fires that are the subject of this report. I say more about this in Chapter 9.

Counsel for the ACT referred me to Lord Lane CJ in *Reg v South London Coroner; ex parte Thompson*, in which Lord Lane said:

Once again it should not be forgotten that an inquest is a fact finding exercise and not a method of apportioning guilt. The procedure and rules of evidence which are suitable for one are unsuitable for the other. In an inquest it should never be forgotten that there are no parties, there is no indictment, there is no prosecution, there is no defence, there is no trial, simply an attempt to establish facts.<sup>7</sup>

Counsel for the ACT also submitted that this passage had been relied on by the High Court in Toohey J's judgment in *Annetts v McCann*. This submission is debatable in that *Annetts v McCann* involved a provision of the Western Australian *Coroners Act 1920*, and Toohey J's reference to Lord Lane's statement was in the context of explaining the rationale behind a particular provision in the Western Australian legislation that was based on the English coronial system.<sup>8</sup> Nevertheless, I take the point that the aim of the inquiry is to seek out the truth of what happened in order to learn from the established facts and endeavour to ensure that, where mistakes have been made or things could have been done in a better way, lessons are absorbed and the prospect of similar mistakes occurring in the future is eliminated or, if this is not possible, reduced.

Once the truth is established, however, it is often impossible to learn from mistakes made without finding fault on the part of individuals—as will be clear from a number of the chapters that follow. The Act anticipates this in s. 55, which is a natural justice and procedural fairness provision aimed at ensuring that any adverse comment made by a coroner in his or her findings or report is brought to the notice of the person who is the subject of the adverse comment and that the person concerned has the opportunity to make a submission or give a written statement to the coroner in relation to the comment. The person may ask that the coroner include in his or her report such a statement or submission or a fair summary of it. Once a coroner receives such a statement or submission, the coroner may modify his or her intended comment or remove it altogether. This is an important provision; it is worth setting it out in full:

- 55(1) A coroner shall not include in a finding or report under this Act (including an annual report) a comment adverse to a person identifiable from the finding or report unless he or she has, prior to the making of the finding or report, taken all reasonable steps to give to the person a copy of the proposed comment and a written notice advising the person that, within a specified period (being not more than 28 days and not less than 14 days after the date of the notice), the person may—
  - (a) make a submission to the coroner in relation to the proposed comment; or
  - (b) give to the coroner a written statement in relation to it.
- (2) The coroner may extend, by not more than 28 days, the period of time specified in a notice under subsection (1).
- (3) Where the person so requests, the coroner shall include in the report the statement given under subsection (1)(b) or a fair summary of it.

It was submitted—directly or indirectly—by counsel for the ACT and for Messrs Mike Castle, Peter Lucas-Smith and Rick McRae that the rule in *Browne v Dunn*<sup>9</sup> precludes me from making any adverse comment, finding or inference from the evidence without giving the person who

might be the subject of that comment, finding or inference the opportunity to reply by having the matter put to him or her in examination or cross-examination. The High Court of Australia recently explained the rule in *Browne v Dunn*: ‘The rule is essentially that a party is obliged to give appropriate notice to the other party, and any of that person’s witnesses, of any imputation that the former intends to make against either of the latter about his or her conduct relevant to the case, or a party’s or a witness’s credit’.<sup>10</sup> Their Honours, Gummow, Kirby and Callinan JJ, went on to observe, ‘Reliance on the rule in *Browne v Dunn* can be both misplaced and overstated’.<sup>11</sup>

I reject the submission by these four counsel for three reasons. First, this inquiry is neither civil litigation involving parties nor a criminal prosecution. Second, it would be impossible in a matter such as this inquiry—which has been very long and where the evidence has evolved over time—to anticipate every possible matter that could become the subject of an adverse comment, finding or inference and put that to the person giving evidence. (In this regard it should be remembered that neither a coronial inquest nor an inquiry is an adversarial proceeding, and the rules of evidence do not apply.) Third, to accept the proposition would be to ignore the existence of s. 55 of the Act.

As their Honours observed in *R v Doogan*, it is a matter for me as coroner to determine whether any adverse comments should be made in the light of evidence adduced during the course of the inquiry.

### 1.3.5 Deaths

The *Coroners Act 1997* makes provision, in relation to a range of situations in which a person is killed or dies, for a coroner to hold an inquest into the manner and cause of death of the person (s. 13(1)). The Act also requires a coroner holding an inquest to find, if possible, the identity of the deceased person, when and where the death occurred, and the manner and cause of death (s. 52(1)). Additionally, the Act permits a coroner to comment on any matter connected with the death, including public health or safety or the administration of justice (s. 52(4)). Further, the Act provides discretion to a coroner to make recommendations to the Attorney-General on any matter connected with an inquest, including matters relating to public health or safety or the administration of justice (s. 57(3)). There is also provision in the Act for a coroner to make an interim finding (s. 53).

When considering the scope of these provisions, there is a great deal of case law on which to draw in an effort to determine the boundaries that applied when conducting the four inquests and the inquiry.

The notion of ‘causation’ is of particular importance and has been considered by the High Court of Australia on a number of occasions. In *March v Stramare (E&MH Pty Ltd & Another)*, a case involving negligence and personal injury, Mason CJ had this to say:

Commentators subdivide the issue of causation in a given case into two questions: the question of causation in fact—to be determined by the application of the ‘but for’ test—and the further question whether a defendant is in law responsible for damage which his or her negligence has played some part in producing ... However, this approach to the issue of causation (a) places rather too much weight on the ‘but for’ test to the exclusion of the ‘common sense’ approach which the common law has always favoured; and (b) implies, or seems to imply, that a value judgment has, or should have, no part to play in resolving causation as an issue of fact. As Dixon CJ, Fullagar and Kitto JJ remarked in *Fitzgerald v Penn* (49) ‘it is all ultimately a matter of common sense’ and ‘in truth the

conception in question [that is, causation] is not susceptible of reduction to a satisfactory formula' (50).<sup>12</sup>

This common-sense approach has been followed in various Australian jurisdictions, and legislative provisions similar to those that bind me have been considered. In *Harmsworth v State Coroner* Nathan J considered a similar provision in Victoria relating to the coronial power to comment. He explained, 'The power to comment, arises as a consequence of the obligation to make findings ... It is not free ranging ... It arises as a consequence of an exercise of a coroner's prime function, that is to make "findings"'.<sup>13</sup>

Cause of death was considered by Lee J in *Queensland Fire and Rescue Authority v Hall*. His Honour described cause of death in the following terms: 'The death is the actual event and the cause of it is the process of happening which brought the death about and is the cause of it ...'.<sup>14</sup> This case was later considered in South Australia in *WRB Transport Pty Ltd & Ors v Chivell*, both in the first instance and on appeal, with the Full Bench applying the *March* decision as follows:

The cause of a person's death in respect of the coroner's jurisdiction is a question of fact which, like causation in the common law, must be determined by applying common sense to the facts of each particular case: Mason CJ, *March v E&MH Stramare Pty Ltd* (1991) 171 CLR 506 at 515. The coroner, therefore, has to carry out an inquiry into the facts surrounding the death of the deceased to determine what, as a matter of common sense, has been the cause of that person's death. The inquiry will not be limited to those facts which are immediately approximate in time to the deceased's death ... That is a factual inquiry which only has, as its boundaries, common sense ... The circumstances surrounding the death of the deceased may be important, for the purpose of the coroner adding to his or her findings, recommendations which might prevent or reduce the likelihood of a recurrence of a death.<sup>15</sup>

In the litigation initiated by the ACT Government and a number of its employees during the course of this inquiry, the Full Bench of the Supreme Court of the ACT referred with approval to the earlier quotation from *Harmsworth v State Coroner*.<sup>16</sup> Similarly, they adopted the common-sense approach from *March*, saying:

A coroner conducting an inquest into the death of a person may be obliged to consider whether the death was attributable to accident or homicide ... If that situation does not arise, the coroner will be obliged to make findings as to the nature of the acts and/or omissions that cause the death, even if they reflect adversely on the reputation of one or more people involved in the relevant incident ... The application of the common sense test of causation will normally exclude a quest to apportion blame or a wide-ranging investigation into antecedent policies and practices.<sup>17</sup>

A few months after the Supreme Court of the ACT delivered its judgment in *R v Doogan*, the High Court of Australia delivered its judgment in *Travel Compensation Fund v Tambree (t/as R Tambree and Associates) & Ors*.<sup>18</sup> Statements made in each of the four judgments are instructive. When considering the question of causation under the Fair Trading Act, Gleeson CJ stated, '... the statutory purpose is the primary source of the relevant legal norms'.<sup>19</sup>

Gummow and Hayne JJ observed, 'It is now clear that there are cases in which the answer to a question of causation will differ according to the purpose for which the question is asked ... it is doubtful whether there is any "common sense" notion of causation which can provide a useful, still less universal, legal norm ...'.<sup>20</sup> Kirby J agreed with Callinan J: '... Tribunals of fact cannot

resort to “an invariable scientific formula”. They must draw on common sense, experience, understanding, a multiplicity of community values and their own judgment ...<sup>21</sup> Callinan J expanded on the subject:

It would be a delusion to think that a disputed question of causation can be resolved according to an invariable scientific formula, and without acknowledgement that common sense, that is, the sum of the Tribunal’s experience as a tribunal, its constituents’ knowledge and understanding of human affairs, its knowledge of other cases and its assessment of the ways in which notional fair-minded people might view the relevant facts, is likely to influence the result ... tribunals of fact have to do the best they can. And that which has to be done is better done with candour, and candour demands the acknowledgement by any tribunal or any judge called upon to resolve a matter, of the use of his or her common sense in determining causation ...<sup>22</sup>

Finally, on the subject of inquests and in the context of adverse findings, counsel assisting submitted that if I am satisfied that the actions or inactions of an agency or person were a cause of any of the deaths I am obliged by the Act to so find.<sup>23</sup> Counsel for the ACT conceded that, although there might be some debate over whether s. 52(1) of the Act imposes an obligation to make such findings in an inquest, power to make such findings does exist.<sup>24</sup>

### 1.3.6 Fire

The *Coroners Act 1997* makes provision for a coroner to hold an inquiry into the cause and origin of a fire that has destroyed or damaged property (s. 18(1) and 52(2)(a)). It also requires a coroner, if possible, to find the circumstances in which the fire or disaster occurred (s. 52(2)(b)). As in the case of a death, a coroner may comment on any matter connected with a fire, including public health or safety or the administration of justice (s. 52(4)). Again as in the case of a death, a coroner may make recommendations to the Attorney-General on any matter connected with that inquiry, including matters relating to public health or safety or the administration of justice (s. 57(3)). Further, as with an inquest, a coroner may make an interim finding on any matter connected with the inquiry (s. 53).

The scope of the fire inquiry was dealt with at some length in *R v Doogan*.<sup>25</sup> Higgins CJ, Crispin P and Bennett J referred to s. 18(1) of the Act in the following terms:

... Unlike a death, a fire is not a one-off event but a process that develops over time. The process may have been initiated by a single event such as ignition due to a lightning strike or, as in the present case, by ignition due to lightning strikes at four separate places. However, when the concept of causation is applied to a process that has developed over a period of several days, it must extend beyond such origins to embrace those factors that had a causal effect on the development or continuance of the process. It would be quite unrealistic to regard a fire that had travelled long distances and/or burnt out vast areas of bushland as co-extensive with a fire that had been smouldering on the end of a cigarette when negligently thrown from a car window and then dismiss from any consideration any intervening or contributing events. In any event, the meaning of a statutory provision of uncertain scope is not to be found by relentless adherence to semantics or philosophical argument, but by attempting to deduce the intention of the legislature ... We are satisfied that the term, ‘the fire’, in s18 of the Act should be construed to mean the fire that caused the damage to property rather than merely the initial ignition from which that fire ultimately developed. In the present case, it was open to the coroner to inquire into ‘the cause and origin’ of the fire that swept through parts of Canberra causing the deaths of four people and immense damage

to property on 18 January 2003, and to consider all of the factors that might reasonably be regarded as having been causative of the entire process of that fire. The phrase ‘cause and origin’ is not a hendiadys. A coroner is required to inquire into two separate concepts. The word ‘origin’ means, of course, the source or beginning, and in the context of a fire it clearly refers to the starting point. Hence, the origin or origins of the fire can usually be identified with some confidence. In the present case, the origins of the fire would have been the locations of the lightning strikes that ignited each of the four fires that later converged into the overall conflagration.<sup>26</sup>

Their Honours went on to deal with the concept of causation, which I discuss in Section 1.3.5 in relation to death. After noting that many factors can contribute to the development of a fire or fires over a period, such that a coroner might need to inquire into a range of causal facts and circumstances, their Honours noted the limitations that apply:

... even in relation to statutory provisions such as that contained in s18(1), questions inevitably arise as to whether particular factors are too remote to be regarded as having been causative of the fire, as it developed, in any real sense. To take but one example, it may be thought that the thickness of the vegetation at the site where the fire commenced had some causal relevance and, if [the coroner] came to that view, then she would clearly be entitled to make a finding to that effect ... Section 18(1) does not authorise the coroner to conduct a wide-ranging inquiry akin to that of a Royal Commission ... A line must be drawn at some point beyond which, even if relevant, factors which came to light will be considered too remote from the event to be regarded as causative. The point where such a line is to be drawn must be determined not by the application of some concrete rule, but by what is described as the ‘common sense’ test of causation affirmed by the High Court of Australia in *March v E&MH Stramare Pty Ltd* (1991) 171 CLR 506.<sup>27</sup>

The ACT has a history of coronial inquiries that have been wide-ranging. Their Honours gave consideration to this and made the following observation:

We should, perhaps, mention that it was suggested in argument that other coroners had, from time to time, conducted inquests or inquiries that ranged far beyond issues relating to the manner and cause of a death or the cause and origin of a fire. However, the present applications do not raise any issue as to the legality of the approach adopted in such proceedings and it would be inappropriate for us to make any comment about them other than to observe that, even if the relevant provisions of the Act have previously been overlooked, they nonetheless impose legal constraints on the jurisdiction that may be exercised by coroners in this Territory. The position may be different in other jurisdictions where the comparable provisions confer broader powers.<sup>28</sup>

Chapter 9 discusses this further.

Their Honours then went on to deal with what they described as the duty to make findings. In relation to s. 52(2)(b) of the Act, they said:

... the ‘circumstances’ to which the provision is directed are circumstances that are related to the cause and origin of the fire ... The word ‘circumstances’ has a wide meaning and the concept referred to in s52(2)(b) of the Act is broader than that referred to in s52(2)(a) of the Act [the cause and origin of the fire] ... A coroner is not authorised to make findings in relation to any circumstances arising from the fire, but only in relation to the circumstances in which the fire occurred ... In essence, it is for the [coroner] to determine whether any particular factor should be regarded as a

relevant circumstance and whether the evidence is sufficient to enable her to make any finding about it.<sup>29</sup>

Finally, their Honours dealt with a coroner's right to make comments in accordance with s. 52(4):

Comments may obviously extend beyond the scope of 'findings'. The latter term refers to judicial satisfaction that facts have been proven to the requisite standard or the legal principles have been established. The former refers to observations about the relevant issues, and may extend to recommendations intended to reduce the risk of similar fires, deaths or disasters occurring in the future.<sup>30</sup>

### 1.3.7 The ACT as an island

Because the ACT is a self-governing territory surrounded by the state of NSW, the jurisdiction covered by the *Coroners Act 1997* is necessarily limited by the extent to which the ACT Legislative Assembly is empowered to legislate.

Counsel for the NSW represented persons provided to the inquiry extensive submissions on the limits imposed on me in relation to the largest of the four fires, the McIntyres Hut fire, which began in NSW and ultimately joined the ACT fires to become the firestorm. The essence of the submissions is as follows:

- Section 22 of the *Australian Capital Territory (Self-Government) Act 1988* (Cth) gives power to the ACT Legislative Assembly to make laws for the peace, order and good government of the ACT.
- Section 4 of the *Legislation Act 2001* (ACT) applies to all ACT Acts, and s. 3(2)(c)(iii) of that Act provides rules about the interpretation of ACT legislation.
- Section 120 of the *Legislation Act 2001* (ACT) limits the coronial jurisdiction to matters about which the Legislative Assembly has power to confer that jurisdiction.
- Section 122 of the *Legislation Act 2001* (ACT) provides that a reference to a place, jurisdiction or anything else must be taken to be a reference to a place, jurisdiction or thing in the ACT.
- The effect of s. 122 of the *Legislation Act 2001* (ACT) is that the relevant provisions of the *Coroners Act 1997* (ACT) are deemed to include the words 'in the ACT' such that, for example, s. 18(1) is deemed to read 'A coroner shall hold an inquiry into the cause and origin of a fire in the ACT ...'
- The first point at which jurisdiction to inquire into the McIntyres Hut fire is acquired is when that fire crossed the NSW border into the ACT on 18 January 2003, and this was the first time it became a fire in the ACT.
- The cause and origin of the McIntyres Hut fire are a question solely for the NSW coroner.
- '... the question of the cause of a fire that comes across the border must be confined to a cause that is directly connected with a relevant matter for the good government of the ACT.'

That may extend, for example, to matters of liaison by ACT authorities with firefighting agencies in a State. Or perhaps precautions may have to be taken in the ACT at particular locations on the border because some feature of the terrain or vegetation may increase the risk of a fire crossing the border into the ACT at those points'.<sup>31</sup>

- The ACT Legislative Assembly does not have power to make a law that would authorise an ACT coroner to make any findings, comment or criticism in relation to NSW government agencies.
- In this inquiry there is a lawful power to inquire into the McIntyres Hut fire as long as there is a rational connection with the ACT coronial jurisdiction.

By and large, I accept these submissions that I have no legal power to formally find the cause and origin of a fire or fires occurring in NSW. I am limited to events that occurred in the ACT. In order to make sense, however, of the events that occurred on 18 January 2003 in the ACT once the McIntyres Hut fire had crossed the border and entered the ACT, it was necessary for me to examine as a matter of fact what took place in NSW in the days leading up to 18 January. To do otherwise would be nonsensical and would be to fail to put into any context the fires that ultimately reached Canberra. Indeed, this was recognised by counsel representing the NSW interested persons:

First, your Honour needs to know the story of the fire in order to put other evidence in context. This is similar to the well-known principle in evidence law of the *res gestae* ...

Second, some matters of chronology and narrative clearly have relevance to the cause and origin of the fire within the ACT ... [Third] your Honour's jurisdiction is that of a coroner [and you] must inquire independently into the facts. In the investigation phase that will involve, of necessity, following evidence to see where it might lead. Thus it was appropriate for your Honour to hear from those NSW witnesses who gave evidence, and to have regard to the NSW documents forming part of the coroner's brief in order to see where that evidence led in terms of cause and origin of the ACT fire ...<sup>32</sup>

### 1.3.8 Hindsight versus foresight

Counsel for the ACT made extensive written submissions under the heading 'The benefit of hindsight'. The general thrust of those submissions was that it is easy to be wise in hindsight, and they referred to several cases relating to the risk of judging actions after the event and with the benefit of hindsight. They also said, 'It would be unfair, unrealistic and inappropriate to measure the performance of persons and individuals in the ACT by reference to a benchmark or measuring stick formulated upon the basis of experience of other jurisdictions or by reference to the extraordinary and catastrophic forces that struck Canberra on 18 January 2003'.<sup>33</sup>

Counsel representing Mr Lucas-Smith and Mr Castle also made extensive submissions on the subject of hindsight. They, too, drew my attention to many cases dealing with hindsight and to a number of statements on the subject by coroners in other Australian jurisdictions. For example, they referred to the words of Northern Territory Coroner Cavanagh in his findings on the death of Sarah Rose Higgins: 'It is always necessary to make allowance for the fact that the coronial process is conducted with the benefit of hindsight. It is not appropriate to judge those individuals whose actions are the subject of scrutiny during the course of that process in accordance with the counsel of perfection'.<sup>34</sup>

Similar submissions were made by counsel representing other interested persons. Counsel assisting took the contrary position, however, when making the following oral submission in reply: ‘If the evidence demonstrates, as we submit that it does, that particular people knew particular things at a relevant time and failed to act on their own knowledge then there is no role for complaining about the wisdom of hindsight, but rather the complaint is that there was a failure to have appropriate foresight’.<sup>35</sup>

All the submissions were helpful in my analysis of the evidence and had an effect on the conclusions I reached and the findings and recommendations I make as a result. Ultimately, though, it must be said that wisdom acquired through hindsight is of great assistance when one seeks to avoid making the same mistakes again if a similar situation arises. It also helps ensure that foresight informs future decision making.

## 1.4 Views

It is a long-established coronial practice—in the ACT specifically and throughout Australia generally—to inspect the scene of an event that is the subject of an inquest or inquiry. Such visits are generally known as ‘views’. The undertaking of such views is dealt with in s. 61 of the *Coroners Act 1997* and is discretionary.

The benefit of viewing the scene of a death or a fire is that it helps with understanding the evidence that is later led in the inquest or inquiry. I viewed the devastation of the firestorm on three occasions, all of which were before evidence taking began on 7 October 2003. The three occasions were:

- by car in company with the police in the urban areas on Sunday 19 January 2003
- by helicopter with Mr Peter Lucas-Smith on 28 January 2003
- by four-wheel drive in company with counsel assisting, two officers from the Office of the ACT Director of Public Prosecutions (Ms Sara Cronan and Ms Helen Drew), and Messrs Phil Cheney, Trevor Roche, Sean Cheney and Peter Hutchings.

In the High Court of Australia Dixon CJ and Webb, Kitto and Taylor JJ made plain the rule about views: ‘... the rule is that a view is for the purpose of enabling the tribunal to understand the questions that are being raised, to follow the evidence and to apply it, but not to put the result of the view in place of evidence: *London General Omnibus Co Ltd v Lavell ...*’<sup>36</sup>

## Notes

- <sup>1</sup> See the statement by Constable Goldsmith: AFP.AFP.0102.001.
- <sup>2</sup> Submissions of counsel assisting, p. 488, para. 1327.
- <sup>3</sup> See the report of the Royal Commission to Inquire into the Causes of and Measures Taken to Prevent the Bush Fires of January 1939 and to Protect Life and Property and the Measures to be Taken to Prevent Bush Fires in Victoria and to Protect Life and Property in the Event of Future Bush Fires, Parliament of Victoria, Melbourne, 1939, introduction, part 1, p. 6.
- <sup>4</sup> *R v Doogan* [2005] ACTSC 74.
- <sup>5</sup> Written submission on behalf of the ACT, para. 43.
- <sup>6</sup> *Coroners Act 1956* (ACT), s. 56, paras 1(d) (death) and 2(c) (fire).
- <sup>7</sup> Written submissions on behalf of the ACT, para. 37.
- <sup>8</sup> *Annett v McCann* (1990) 170 CLR 596 at 616.
- <sup>9</sup> *Browne v Dunn* (1893) 6R67.
- <sup>10</sup> *MWJ v R* (2005) ALR 222 at 448, para. 38.
- <sup>11</sup> *ibid.*, para. 40.
- <sup>12</sup> [1990–1991] 171 CLR 506 at 515.
- <sup>13</sup> [1989] VR 989 at 996.
- <sup>14</sup> (1998) 2 QdR 162 at 170.
- <sup>15</sup> (1998) SASC 7002 at paras 20, 21 and 26.
- <sup>16</sup> *R v Doogan* [2005] ACTSC 74 at para. 41.
- <sup>17</sup> *ibid.*, para. 31.
- <sup>18</sup> [2006] 222 ALR 263.
- <sup>19</sup> *ibid.*, para. 28.
- <sup>20</sup> *ibid.*, para. 45.
- <sup>21</sup> *ibid.*, para. 63.
- <sup>22</sup> *ibid.*, para. 80.
- <sup>23</sup> Written submissions of counsel assisting, para. 1095.
- <sup>24</sup> Written submissions of counsel for the ACT, para. 33.
- <sup>25</sup> *R v Doogan* [2005] ACTSC 74.
- <sup>26</sup> *ibid.*, paras 20–22.
- <sup>27</sup> *ibid.*, paras 24, 25, 28 and 29.
- <sup>28</sup> *ibid.*, para. 32.
- <sup>29</sup> *ibid.*, paras 38–40.
- <sup>30</sup> *ibid.*, para. 41.
- <sup>31</sup> Written submissions of counsel for the NSW represented persons, para. 74.
- <sup>32</sup> *ibid.*, paras 131 to 134.
- <sup>33</sup> Written submissions on behalf of the ACT, para. 71.
- <sup>34</sup> Written submissions on behalf of Mr Castle and Mr Lucas-Smith, para. 40.
- <sup>35</sup> T 380 18 July 2006.
- <sup>36</sup> *Scott v Numurkah Corporation* (1954) 91 CLR 300 at 313.



# **2 Appearances, representation and witnesses**

## **2.1 Counsel assisting the coroner**

Mr Lex Lasry QC and Mr Ted Woodward appeared as counsel assisting me in my role as coroner; they were instructed by the Office of the ACT Director of Public Prosecutions. Ms Sara Cronan also appeared as counsel assisting until July 2004.

During the inquiry the Australian Capital Territory and nine territory employees submitted to me that I should cease to act as coroner and, in support of their submissions, were critical of certain actions by Mr Lasry. Thereupon, Messrs Lasry and Woodward stood aside and were replaced by Mr Julian Burnside QC and Ms Penny Neskovicin, who performed the role of contradictors to the submissions made by counsel for the ACT and the nine territory employees.

After careful consideration of those submissions, I rejected them. This resulted in the ACT and the nine territory employees initiating proceedings in the Supreme Court of the ACT.

Mr Burnside and Ms Neskovicin continued to act as contradictors during these proceedings.

This litigation was unsuccessful, and when I resumed the inquiry Mr Lasry and Mr Woodward resumed their role as counsel assisting.

## **2.2 Witnesses and entities represented by counsel**

Section 42 of the ACT *Coroners Act* 1997 provides as follows:

**42. Representation at Hearing**

A Coroner may grant leave to a person—

- (a) who has been summoned to give evidence in relation to an inquest or inquiry; or
- (b) who, in the opinion of the Coroner, has a sufficient interest in the subject matter of the inquest or inquiry;

to appear in person at a hearing or to be represented by a legal practitioner and, at the hearing, to examine and cross-examine witnesses on matters relevant to the inquest or the inquiry to which the hearing relates.

The following entities and individuals were given leave to be represented by a legal practitioner. Not all the named legal practitioners represented the entities or individuals for the duration of the inquiry. Some appeared only for portions of the inquiry or for particular segments, such as the making of final oral submissions in support of previously filed written submissions. Further, Mr Russell Bayliss, from the Office of the ACT Government Solicitor, initially said he would be

representing the ACT, employees of the ACT and administrative sub-units that make up the ACT. This later changed, and individual ACT employees were represented by individual counsel.

### **2.2.1    ActewAGL**

ActewAGL was represented by Mr Robert Stitt QC and Mr Andrew Coleman, who were instructed by Mallesons.

### **2.2.2    The Australian Capital Territory**

The Australian Capital Territory was represented by Mr Richard Tracey QC, Mr Peter Johnson SC, Mr Paul Lakatos SC and Mr Geoff McCarthy, who were instructed by the Office of the ACT Government Solicitor.

### **2.2.3    The Australian Federal Police**

The Australian Federal Police was represented by Mr Ken Archer.

### **2.2.4    Ms Odile Arman**

Ms Odile Arman was represented by Mr James Glissan QC, Mr Selwyn Gibb SC, Mr Geoffrey Petty SC and Mr Gerard Craddock. She gave evidence on 27 April 2004.<sup>1</sup>

At the time of giving her evidence Ms Arman was attached to the ACT Chief Minister's Office, as a liaison officer for Environment ACT. Her substantive position was District Conservation Officer. She had been a ranger at Namadgi National Park from 1984 until 1995 and had attended remote fires as a crew member. Her first role in a command position was in about 1994. Most of Ms Arman's fire experience had been with small urban-interface grassland, woodland and open-forest fires. She was the incident controller at Bruce Ridge during the Christmas 2001 fires and was in command in the initial response to the Bendora fire on the night of 8 January 2003.

### **2.2.5    Mr Bruce Arthur**

Mr Bruce Arthur was represented by Mr Bret Walker SC and Mr Christopher Erskine. Mr Arthur gave evidence on 4 May 2004.<sup>2</sup>

Mr Arthur joined the army as a field engineer in 1965. In 1973 he retrained as an army firefighter, retiring in 2002. He subsequently joined the NSW Rural Fire Service. At the time of the January 2003 fires he was District Fire Control Officer for the Yarrowlumla and Queanbeyan rural fire district. Mr Arthur had previously attended a number of wildfire incidents and had been the incident controller for two or three campaign fires. Mr Arthur was the day shift incident controller for the McIntyres Hut fire from 9 to 18 January 2003.

### **2.2.6    Mr Tony Bartlett**

Mr Tony Bartlett was represented by Mr John Watts. Mr Bartlett gave evidence on 31 May and 1, 3 and 8 June 2004.<sup>3</sup>

At the time of the fires Mr Bartlett was Director of ACT Forests, a position he had held since October 1999. He has a Bachelor of Forest Science degree from Melbourne University and a Masters degree in Science (Forestry) from Oxford. Mr Bartlett has over 25 years' experience in forest management and fire suppression. His relevant experience is set out in his statement and was supplemented by his evidence. In summary, it is as follows:

- two years as Fire Protection Officer in East Gippsland
- two years managing the Forest and Fire Program in north-east Victoria
- the role of Divisional Commander in fires leading up to and including Ash Wednesday in 1983
- several other large fire events after that, including the wildfires in the Byadbo wilderness area in 1988
- compilation of a fire research report published by the Victorian Department of Conservation and Natural Resources
- leader of 120 Victorian firefighters in the Blue Mountains in NSW in 1994
- incident controller at the 1998 Caledonia wildfires in alpine north-east Victoria.

In addition, Mr Bartlett has attended a large number of formal fire training programs. He has various accreditations, including as incident controller for type 3 fires and a Statement of Attainment in Competency 6.02 Major Operations Management under the Australasian Fire Authorities Council National Fire Training Framework. He is nationally accredited for fulfilling the role of incident controller under the AIIMS Incident Control System at major wildfires.

### **2.2.7 Commissioner Ian Bennett**

Commissioner Ian Bennett was represented by Mr James Glissan QC and Mr Edson Pike. Mr Bennett gave evidence on 2, 3 and 4 March 2004.<sup>4</sup>

At the time of the fires Mr Bennett was Commissioner of the ACT Fire Brigade, having been in that position since October 2000 and having been with the ACT Fire Brigade since 1976. He had also been involved in other kinds of emergencies, among them the Thredbo disaster. In 1994 he led a taskforce to the Sydney wildfire and was involved in firefighting along St Ives Road. Apart from that incident, he had no exposure to anything of the magnitude of the January 2003 fires, and most of his earlier experiences of non-urban fires had been in grassland areas. His only experience of wildfire in pine plantations had come from the fires of Christmas 2001 in the ACT.

### **2.2.8 Mr Dannie Camilleri**

Mr Dannie Camilleri was represented by Mr Ray Mildren. Mr Camilleri gave evidence on 12 May 2004.<sup>5</sup>

At the time of the fires Mr Camilleri was the station officer in charge of Ainslie fire station. He had been in the ACT Fire Brigade since 1983.

## **2.2.9 Mr Peter Cartwright**

Mr Peter Cartwright was represented by Mr John Watts. Mr Cartwright gave evidence on 14 May 2004.<sup>6</sup>

At the time of the fires Mr Cartwright was a relieving district officer in the ACT Fire Brigade. On 16 January 2003 he attended a briefing by Mr Lucas-Smith for Fire Brigade officers at the Emergency Services Bureau in Curtin.

## **2.2.10 Mr Mike Castle**

Mr Mike Castle was represented by Mr James Glissan QC, Mr Peter Hastings QC and Mr Steven Whybrow. Mr Castle gave evidence on 23, 24, 25 and 26 February and 1 and 2 March 2004.<sup>7</sup>

At all relevant times Mr Castle was Executive Director of the Emergency Services Bureau. This was not an operational role. Mr Castle's background was in the Australian Army, where he rose to the rank of Lieutenant Colonel. He holds a degree in economics from the Australian National University and a US degree in personnel management. He has lectured in managerial economics at the Royal Military College, Duntroon. During his military service he was involved in providing support to emergency operations, including fire and flood. This was in a non-firefighting role.

In his statement to the inquiry, Mr Castle described his role as ESB Executive Director as one in which he was responsible for ensuring that there existed effective arrangements for preparation for, prevention of, response to and recovery from emergencies. Mr Castle was also a director of the Australasian Fire Authorities Council. In evidence, he said that in his nine years of running the Emergency Services Bureau there had been some 2000-odd bushfire events and, he estimated, about 175 000 different incidents. Mr Castle said he had done some Incident Control System training after he joined the Emergency Services Bureau in 1994, although he did not have any formal accreditation. In his statement he said the Emergency Services Bureau had a budget of approximately \$35 million, about 450 full-time employees, and about 850 volunteers.

## **2.2.11 Mr Michael Collins**

Mr Michael Collins was represented by Mr Geoffrey Petty SC and Mr Ian Bradfield. Mr Collins gave evidence on 17 May 2004.<sup>8</sup>

At the time of the fires Mr Collins was a fire brigade officer in the ACT Fire Brigade, having joined in 1988. After joining the Fire Brigade, he had been an operational firefighter until 1997, when he was assigned to the Fire Safety section of the brigade. Mr Collins attended the briefing by Mr Lucas-Smith on 16 January 2003 and was closely involved in the work of the ACT Fire Brigade incident management team during the following three days.

## **2.2.12 Mr Kevin Cooper**

Mr Kevin Cooper was represented by Mr Bret Walker SC and Mr Christopher Erskine. Mr Cooper gave evidence on 7 May and 2 and 3 June 2004.<sup>9</sup>

At the time of the fires Mr Cooper had been a volunteer member of the NSW Rural Fire Service for nearly 20 years. He has extensive experience as the Coordinator of Emergency Response

with the NSW Department of Agriculture. He was Commander of the NSW Rural Fire Service task force that travelled to the ACT on 16 January 2003. His role was to liaise with ACT authorities and to ensure the wellbeing of members of the task force. He spent time at the Emergency Services Bureau in Curtin and had discussions there with both Mr Graham and Mr McRae.

### **2.2.13 Mr Neil Cooper**

Mr Neil Cooper was represented by Mr John Watts. Mr Cooper gave evidence on 6 May 2004.<sup>10</sup>

At the time of the fires Mr Cooper was employed by ACT Forests; since 2001 he had been manager of debris removal and fire control and responsible for ACT forest fire management. Previously, he had been responsible for plantation management. Mr Cooper has a Bachelor of Science degree from the Australian National University and has had a senior role as a fire controller for some 15 years. He undertook the AIIMS Incident Control System training in 1991 and in 2002 and is an accredited trainer. During the January 2003 fires Mr Cooper was the ACT liaison officer at Yarrawumla for 9 and 10 January and incident controller for the Bendorra fire on some night shifts.

### **2.2.14 Mr Tony Corrigan**

Mr Tony Corrigan was represented by Mr John Watts. Mr Corrigan gave evidence on 5 May 2004.<sup>11</sup>

For two years Mr Corrigan was a wildlife ecologist with the ACT Parks and Conservation Service, and in 2000 he became the manager of that organisation. From December 2002 onwards he ceased to occupy the latter position, being an unattached officer at the time of the fires. In the 1980s and 1990s Mr Corrigan had considerable bushfire experience, usually as a team leader. That included a number of remote area fires. In December 2001 he was the planning officer for the Stromlo fire; this was the first type 3 incident where he had been involved in an incident management team in the field. From 12 to 16 January 2003 he was the ACT liaison officer situated in Queanbeyan.

### **2.2.15 Ms Julie Crawford**

Ms Julie Crawford was represented by Mr Bret Walker SC and Mr Christopher Erskine. She gave evidence on 3 May 2004.<sup>12</sup>

In January 2003 Ms Crawford was the Queanbeyan area manager for the NSW National Parks and Wildlife Service. Her fire experience began in 1979 and included being part of incident management teams. She was the incident controller for the McIntyres Hut fire from the time of its ignition on 8 January 2003 until the following day; thereafter she fulfilled other operational roles in respect of that fire.

### **2.2.16 Mr David Dutton**

Mr David Dutton was represented by Mr John Watts. Mr Dutton gave evidence on 29 April 2004.<sup>13</sup>

At the time of the fires Mr Dutton was operations manager for the ACT Ambulance Service. In that role, he attended meetings at the Emergency Services Bureau, including the briefing by Mr Lucas-Smith on 16 January and subsequent ESB planning meetings. He prepared memoranda of information obtained at those meetings and circulated them to ambulance officers.

#### **2.2.17 Mr Peter Galvin**

Mr Peter Galvin was represented by Mr Ray Mildren. Mr Galvin gave evidence on 27 April 2004.<sup>14</sup>

At the time of the fires Mr Galvin was manager of Tidbinbilla Nature Reserve, within the ACT Parks and Conservation Service. He had held that position for about three years but had worked with the service since 1988, starting as a park ranger. Mr Galvin is an experienced firefighter and at the time of the fires held the position of group officer within the ACT Bushfire Service.

#### **2.2.18 Mr Robert Gore**

Mr Robert Gore was represented by Mr John Watts. Mr Gore gave evidence on 28 April 2004.<sup>15</sup>

At the time of the fires Mr Gore was a senior executive in the Commonwealth Department of Defence. He had joined the Jerrabomberra Volunteer Fire Brigade in 1994. At the time of making his statement he was in his third year as captain of that brigade. On 17 January 2003 he was the overnight duty coordinator at the communications centre in ESB headquarters in Curtin.

#### **2.2.19 Mr Tony Graham**

Mr Tony Graham was represented by Mr James Glissan QC, Mr Selwyn Gibb SC and Mr Edson Pike. Mr Graham gave evidence on 23 and 24 March and 5, 6 and 7 April 2004.<sup>16</sup>

At all relevant times Mr Graham was Operations Manager with the ACT Bushfire and Emergency Services section of the Emergency Services Bureau and was thus involved in some crucial decision making in connection with both firefighting strategies and resources.

Mr Graham had held that position since July 1997 (then with the title Manager) and from that point on had had a role as one of the duty coordinators or duty officers at the Emergency Services Bureau and was the designated Operations Manager in the service management team. Mr Graham's curriculum vitae and written statement showed he had spent 21 years in the Royal Australian Navy. On discharge from the navy in 1993, Mr Graham was a Warrant Officer, having spent most of his naval career in catering. His firefighting experience was limited to two or three incidents and the occasional bush or grass fire near shore facilities. In the last few years of his naval service, Mr Graham joined ACT Emergency Services as a volunteer and received bushfire training. He was involved in training for the AIIMS Incident Control System and is accredited as an instructor. Before the 2003 fires he had some experience as an incident controller between 1998 and 2001. Mr Graham had never actually fought a fire by holding a hose or rake-hoe and has no training in fire behaviour.

## **2.2.20 Ms Felicity Grant**

Ms Felicity Grant was represented by Mr John Watts. She gave evidence on 1 June 2004.<sup>17</sup>

Ms Grant was employed by ACT Forests as a geographical information systems manager. She holds a Bachelor of Science degree in Environmental Science and on 9 January 2003 was assigned to the Planning Section of the Emergency Services Bureau to assist Mr McRae.

## **2.2.21 Mr Dennis Gray**

Mr Dennis Gray was represented by Mr Selwyn Gibb SC, Mr Gerard Craddock and Mr Ian Harvey. Mr Gray gave evidence on 20 and 21 April 2004.<sup>18</sup>

At the time of the fires Mr Gray was employed by the ACT Parks and Conservation Service as a depot foreman. He had been with the service for 25 years and had more than 20 years' experience as a firefighter. He had been trained in the AIIMS Incident Control System and was active in the Parks Brigade. He had experience as an incident controller and as deputy captain of the brigade. On 8 January 2003 Mr Gray was deployed to attend the Stockyard Spur fire.

## **2.2.22 Mr Richard Hayes**

Mr Richard Hayes was represented by Mr James Glissan QC and Mr Steven Whybrow. Mr Hayes gave evidence on 22 April 2004.<sup>19</sup>

Mr Hayes had worked for the ACT Department of Urban Services until about 1980. He became a member of the Temora Brigade and then in 1987 resumed employment with the Department of Urban Services and joined the O'Connor Brigade. He has had experience in a number of fires and in 2001 was a sector leader at the Stromlo fire. He had undergone Incident Control System training in 1998 and was incident controller at the Bendorra fire on 9 January 2003.

## **2.2.23 Mr Robert Hunt**

Mr Robert Hunt was represented by Mr Bret Walker SC and Mr Christopher Erskine. Mr Hunt gave evidence on 4 May 2004.<sup>20</sup>

At the time of the fires Mr Hunt was a ranger with the NSW National Parks and Wildlife Service, being responsible for Brindabella National Park and Bimberi Nature Reserve. His fire involvement began in 1989 as a student at Charles Sturt University. He later joined up as a field officer in Kosciusko National Park, then became a ranger at Narrabri. He was a ranger in the Queanbeyan area for almost 10 years. Mr Hunt was involved in initial assessment of the McIntyres Hut fire on 8 January 2003 and fulfilled other roles in respect of that fire during subsequent days.

## **2.2.24 Mr David Ingram**

Mr David Ingram was represented by Mr Edson Pike. Mr Ingram gave evidence on 19 and 20 April 2004.<sup>21</sup>

At the time of the fires Mr Ingram was logistics coordinator with ACT Bushfire and Emergency Services; he has a Diploma of Education in Adult Education and has attended numerous courses in logistics management. He has assisted with logistics in major operations such as the Canberra Hospital implosion incident, the Thredbo landslide, and the 2001 fires in Canberra. He also assisted with logistics for the Canberra aspect of the 2000 Olympic Games. Having joined the Emergency Services Bureau in 1995 as the operational support officer, Mr Ingram became the logistics coordinator for both the Bushfire Service and Emergency Services in 1997.

#### **2.2.25 Mr David Jamieson**

Mr David Jamieson was represented by Mr John Watts. Mr Jamieson gave evidence on 28 April 2004.<sup>22</sup>

At the time of the fires Mr Jamieson was employed by ACT Forests as Manager of Environment and Recreation. Until mid-2002 he had been the bushfire captain with the Forests Brigade. During the night shift on 11, 12 and 13 January 2003 he worked in the control room at the Emergency Services Bureau; on 15 January he took over responsibility for plant coordination and became the ACT Forests representative, which involved monitoring the location of equipment (such as bulldozers) and compiling crew rosters for tankers and light units. On the afternoon on 18 January he moved into the Operations Officer position when the state of emergency was declared.

#### **2.2.26 Commissioner Phil Koperberg**

Commissioner Phil Koperberg was represented by Mr Bret Walker SC and Mr Christopher Erskine. Mr Koperberg gave evidence on 16 and 17 March 2004.<sup>23</sup>

Mr Koperberg is Commissioner of the NSW Rural Fire Service and his fire experience is extensive, both operationally and administratively. He began his firefighting activities in 1967, later becoming deputy captain and then captain of the brigade he joined. In 1970 he was appointed Fire Control Officer for the Blue Mountains, and in 1972 he became the first chairman of the Fire Control Officers Association. In 1985 he was appointed Executive Officer of the Bushfire Branch of the Office of the Minister for Police and Emergency Services in NSW. He was subsequently appointed to his present position. Mr Koperberg was in telephone contact with Mr Arthur on a number of occasions between 8 and 18 January 2003 and attended meetings at the Queanbeyan incident control centre on 15 January with Mr Lucas-Smith and members of the incident management team responsible for the McIntyres Hut fire.

#### **2.2.27 Ms Natalie Larkins**

Ms Natalie Larkins was represented by Mr Alexander Dawson. She gave evidence on 18 March 2004.<sup>24</sup>

At the time of the fires Ms Larkins was a journalist employed by the ABC and was a Canberra resident, living in the suburb of Rivett. Her home was destroyed by fire on 18 January. Ms Larkins was responsible for the weekend news bulletins on ABC radio on the weekend beginning 17 January.

## **2.2.28 Mr Nick Lhuede**

Mr Nick Lhuede was represented by Mr Ray Milden. Mr Lhuede gave evidence on 10 May 2004.<sup>25</sup>

At the time of the fires Mr Lhuede was a fire management officer with Environment ACT, having been appointed to that position in September 2002. Before that, he had been employed with NSW State Forests as a harvest planning manager and was involved in fire suppression. He had some incident control training and some remote area firefighting training. As a fire manager in the ACT, Mr Lhuede became a member of the Land Managers Fire Working Group. He worked in the Planning Section of the Emergency Services Bureau from 9 to 18 January 2003.

## **2.2.29 Mr Peter Lucas-Smith**

Mr Peter Lucas-Smith was represented by Mr James Glissan QC, Mr Peter Hastings QC and Mr Phillip Walker. Mr Lucas-Smith gave evidence on 16, 17, 18, 19 and 23 February 2004.<sup>26</sup>

Mr Lucas-Smith was appointed Chief Fire Control Officer in the ACT in 1986 and held that position at the time of the fires. He had also held the position of Director of ACT Bushfire and Emergency Services since the organisation's formation in 1995. Mr Lucas-Smith's professional career had been in firefighting. From 1971 until 1986 he was employed by the NSW National Parks and Wildlife Service in fire management roles. During that time he was the incident controller or part of the incident management team for 10 major bushfires and for more than 4000 medium and minor bushfires and other emergency events. Mr Lucas-Smith was awarded the Australian Fire Service Medal for meritorious and distinguished service in bushfire management.

## **2.2.30 Mr Shawn McIntyre**

Mr Shawn McIntyre was represented by Mr Michael Bartlett. Mr McIntyre gave evidence on 13 May 2004.<sup>27</sup>

Mr McIntyre was a station officer with the ACT Fire Brigade, having been appointed to that position in August 2002. He had been a firefighter for 14 years and at the time of the fires was a relieving officer attached to the Chisholm fire station. He had had some experience with fighting rural fires and attended the Sydney fires in 1994, being involved in the Jannali and Como fires. He had also been involved in some small events in rural areas around Canberra.

## **2.2.31 Mr Rick McRae**

Mr Rick McRae was represented by Mr James Glissan QC, Mr Selwyn Gibb SC, Mr Geoffrey Petty SC, Mr Gerard Craddock and Mr Ian Harvey. Mr McRae gave evidence on 7, 14, 15 and 16 April 2004.<sup>28</sup>

At the time of the fires Mr McRae was Acting Manager of the Risk Management Unit at the Emergency Services Bureau. By the time he gave his evidence he had been confirmed in that position. Mr McRae explained during the inquiry that his role was to provide risk-based services to agencies within the Emergency Services Bureau. He is a trained ecologist, and during the early 1980s he worked for the Blue Mountains National Park. In that capacity he had some role in relation to bushfire suppression when acting as a firefighter and crew leader of remote area

firefighting teams. He was involved in about six major fires. In the late 1980s he worked for the Victorian Department of Conservation, Forests and Lands on alpine management, but that did not involve any bushfire fighting. In July 1989 Mr McRae took up employment with the ACT Bushfire Service, initially as the fire management planning officer, which involved weather mapping and fire behaviour prediction. Once the Incident Control System came into use in the ACT, in the early 1990s, he became the planning officer.

### **2.2.32 Mr Brian Murphy**

Mr Brian Murphy was represented by Mr Steven Whybrow. Mr Murphy gave evidence on 23 April 2004.<sup>29</sup>

At the time of the fires Mr Murphy was employed by the Department of Urban Services to manage the maintenance of Canberra's lakes (other than Lake Burley Griffin) and coordinated bushfire management between the Department of Urban Services and Cityscape Services. This involved fuel reduction, including burns. Mr Murphy is an experienced bushfire fighter who has provided training in bushfire fighting. He is a member of the ACT Bushfire Council.

### **2.2.33 Mr Peter Newham**

Mr Peter Newham was represented by Mr James Glissan QC and Mr John Watts. Mr Newham gave evidence on 11 May 2004.<sup>30</sup>

At all relevant times Mr Newham was either Acting Superintendent or Superintendent with the ACT Fire Brigade. He had been a firefighter since 1978 and had held various ranks, including station officer and manager. He has various qualifications relating to command and control. He was commander of an ACT taskforce at the 1994 Sydney fires and also had a command role at the 1997 Thredbo landslide and the 1999 Sydney hailstorm. Mr Newham attended the briefing by Mr Lucas-Smith on 16 January 2003 and was involved in directing preparations by the ACT Fire Brigade between that date and 18 January 2003.

### **2.2.34 Mr David Prince**

Mr David Prince was represented by Mr Christopher Whitelaw. Mr Prince gave evidence on 4 June 2004.<sup>31</sup>

At the time of giving evidence Mr Prince was Acting Fire Commissioner at the ACT Fire Brigade. In January 2003 he was Acting Superintendent and Deputy Director, Communications Upgrade Project, for the Emergency Services Bureau. Mr Prince attended the briefing by Mr Lucas-Smith on 16 January 2003 and was closely involved in the ACT Fire Brigade's preparations in the days leading up to 18 January and in meetings to discuss community warnings and preparedness on 17 and 18 January 2003.

### **2.2.35 Ms Vivian Raffaele**

Ms Vivian Raffaele was represented by Mr James Glissan QC and Mr Steven Whybrow. She gave evidence on 22 April 2004.<sup>32</sup>

Ms Raffaele was a ranger employed by the ACT Parks and Conservation Service. She was the Senior Deputy Captain of the ACT Parks Brigade and a member of the Tidbinbilla Volunteer Bushfire Brigade and had been involved in firefighting for 15 years.

### **2.2.36 Mr Hilton Taylor**

Mr Hilton Taylor was represented by Mr John Watts. Mr Taylor gave evidence on 11 May 2004.<sup>33</sup>

Since 2001 Mr Taylor has been Manager of Strategic Planning and Harvesting with ACT Forests. He holds an Associate Diploma of Applied Science in Forestry and a Bachelor of Science degree. He has international experience in forest harvesting, planning and management and also holds some firefighting qualifications, including Incident Control System training and accreditation as a planning officer level 2. Additionally, he has completed formal study in fire behaviour, fire management and fire weather.

### **2.2.37 Mr Andrew Winter**

Mr Andrew Winter was represented by Mr John Watts. Mr Winter gave evidence on 27 April 2004.<sup>34</sup>

Mr Winter was employed by ACT Forests as a senior harvesting forester. He is a graduate of the Australian National University, having a Bachelor of Science degree in Forestry and a Master of Science degree. He has had experience in firefighting operations in native and pine forests since 1996 and has extensive firefighting qualifications. Mr Winter was Captain of the Forests Brigade at the time of the 2003 fires.

## **2.3 Witnesses not represented by counsel**

In addition to the witnesses and entities who were given leave to be represented by legal practitioners, the following individuals appeared as witnesses without legal representation.

### **2.3.1 Mr Michael Anderson**

Mr Michael Anderson gave evidence on 27 May 2004.<sup>35</sup> At the time of the fires he was a resident of the Uriarra forestry settlement.

### **2.3.2 Commander Peter Bennetts**

Commander Peter Bennetts gave evidence on 27 May 2004.<sup>36</sup> At the time of the fires he was the senior fire commander with Air Services Australia and was located at Canberra airport.

### **2.3.3 Senior Constable Christopher Bird**

Senior Constable Christopher Bird gave evidence on 16 October 2003.<sup>37</sup>

### **2.3.4    Constable Gregory Booth**

Constable Gregory Booth gave evidence on 16 October 2003.<sup>38</sup>

### **2.3.5    Mr Michael Boyle**

Mr Michael Boyle gave evidence on 19 May 2004.<sup>39</sup> At the time of the fires he was a resident of Chapman.

### **2.3.6    Constable Christopher Burgess**

Constable Christopher Burgess gave evidence on 16 October 2003.<sup>40</sup>

### **2.3.7    Sergeant Jason Byrnes**

Sergeant Jason Byrnes gave evidence on 30 April 2004.<sup>41</sup> Before 18 January 2003 he was the acting officer-in-charge of Tuggeranong Police Station. In that capacity he had a telephone conversation with Mr Graham on 15 January 2003. On 18 January he had a police liaison role at the Emergency Services Bureau.

### **2.3.8    Mr Phil Cheney**

Mr Phil Cheney gave evidence on 9, 10, 13, 14 and 15 October 2003, 26 and 27 August 2004 and 15, 16, 20 and 21 September 2004.<sup>42</sup> At the time of giving evidence he was a senior principal research scientist with CSIRO, specialising in bushfire behaviour and management. He has a number of relevant tertiary qualifications, among them a Diploma of Forestry and a Bachelor of Science in Forestry degree. During the first half of the 1970s Mr Cheney lectured at the Australian National University on subjects associated with fires and fire suppression. He has since held various positions with the Forest Research Institute; his work includes developing guidelines for prescribed burning and the application of aerial prescribed burning for fuel reduction in mountains and forests. He has led research projects on the use of large air tankers, the behaviour of high-intensity fires, the effectiveness of retardants, understanding the spread of bushfires in the natural environment, and the development of models to predict fire behaviour. He has also been involved in more than 50 consultancies as a fire behaviour expert—including providing advice to the Emergency Services Bureau and its predecessor—and has written or co-written a substantial number of related publications. Early in his career Mr Cheney had some experience as a firefighter in the field. He was subsequently involved in fire suppression and control on experimental fires, and he initiated and led the Project Vesta experiments on fire spread in Western Australia; these experiments began in 1996. Mr Cheney is one of Australia's pre-eminent experts on fire behaviour, suppression and management.

### **2.3.9    Mr Michael Connell**

Mr Michael Connell gave evidence on 24 May 2004.<sup>43</sup> At the time of the fires he was a resident of Duffy.

### **2.3.10 Mr Clem Davis**

Mr Clem Davis gave evidence on 7 and 8 October 2003.<sup>44</sup> He has worked as a meteorologist in Canberra for 31 years and provided the weather briefing to the planning meeting on the morning of 18 January 2003.

### **2.3.11 Mr Benjamin Dearsley**

Mr Benjamin Dearsley gave evidence on 18 May 2004.<sup>45</sup> As a volunteer bushfire fighter with the Gungahlin Brigade, he was a member of the remote area firefighting crew posted to the Stockyard Spur fire on 9 January 2003.

### **2.3.12 Ms Tracey Devitt**

Ms Tracey Devitt gave evidence on 21 May 2004.<sup>46</sup> At the time of the fires she was a resident of Duffy.

### **2.3.13 Dr Peter Ellis**

Dr Peter Ellis gave evidence on 15 October 2003.<sup>47</sup> He is a research scientist with CSIRO. His scientific work has been in modelling fire-brand and spotting behaviour and assessing radiant heat. In August 2003 Dr Ellis prepared a report, in conjunction with Mr Andrew Sullivan, for the ACT Planning and Land Authority on pathways of fire attack on and within the suburbs of Canberra.

### **2.3.14 Mr Alan Evans**

Mr Alan Evans gave evidence on 21 May 2004.<sup>48</sup> At the time of the fires he was a resident of Duffy.

### **2.3.15 Mr David Ferry**

Mr David Ferry gave evidence on 25 May 2004.<sup>49</sup> At the time of the fires he was a resident of the Stromlo forestry settlement.

### **2.3.16 Ms Jillian Ferry**

Ms Jillian Ferry gave evidence on 23 March 2004.<sup>50</sup> At the time of the fires she was the administrative liaison officer for the Bushfire and Emergency Services branch of the Emergency Services Bureau. She assisted Mr Lucas-Smith and performed various administrative tasks, including note taking and preparing minutes of ESB planning meetings.

### **2.3.17 Mr Graham Franklin-Browne**

Mr Graham Franklin-Browne gave evidence on 25 May 2004.<sup>51</sup> At the time of the fires he was a resident of the Stromlo forestry settlement.

### **2.3.18 Mr Nicholas Gellie**

Mr Nicholas Gellie gave evidence on 11 May 2004.<sup>52</sup> He is a landscape ecologist and holds a Bachelor of Science in Forestry degree. In 1983 he was appointed fire management officer for the NSW National Parks and Wildlife Service in the Blue Mountains National Park. In that position, he developed systems of fire appraisal and fire management. In 1995 he moved to Queanbeyan and became manager of the Natural Heritage Unit, involved with natural heritage management and conservation planning. He retired in 2000. On 16 January 2003 he went to the Emergency Services Bureau as a volunteer and assisted with the prediction of fire behaviour.

### **2.3.19 Mr James Gould**

Mr James Gould gave evidence on 3 June 2004.<sup>53</sup> At the time of the fires he was a research officer with CSIRO, responsible for coordinating bushfire research programs and fire behaviour modelling, fuel management and suppression technology.

### **2.3.20 Mr Tony Greep**

Mr Tony Greep gave evidence on 22 April 2004.<sup>54</sup> At the time of the fires he was captain of the Hall Volunteer Bushfire Brigade, which attended the Mount Gingera fire on 10 January 2003. He had been a member of the Bushfire Service for 14 years.

### **2.3.21 Dr Lavinia Hallam**

Dr Lavinia Hallam gave evidence on 16 October 2003.<sup>55</sup> At the time of the fires she was a pathologist employed by the ACT Department of Health.

### **2.3.22 Mrs Jill Hardy**

Mrs Jill Hardy gave evidence on 19 May 2004.<sup>56</sup> At the time of the fires she was a resident of Weston.

### **2.3.23 Ms Marika Harvey**

Ms Marika Harvey gave evidence on 18 and 22 March 2004.<sup>57</sup> She had worked in the public relations area of the ACT Government for about six years, being predominantly involved in media liaison. At the relevant time she was Manager of Public Relations in the Chief Minister's Department, and one of her roles was to assist with media aspects of the fires; she reported primarily to Mr Castle and Mr Lucas-Smith.

### **2.3.24 Mr James Hoare**

Mr James Hoare gave evidence on 25 May 2004.<sup>58</sup> At the time of the fires he was a resident of Duffy and owned a property, Tingaringa, on Mountain Creek Road.

### **2.3.25 Mr Jason Houghton**

Mr Jason Houghton gave evidence on 4 June 2004.<sup>59</sup> At the time of the fires he was a resident of the Uriarra forestry settlement.

### **2.3.26 Mr Val Jeffery**

Mr Val Jeffery gave evidence on 17 May 2004.<sup>60</sup> In the 1950s he was a foundation member of the Tharwa Fire Brigade, which later became the Southern Districts Brigade. In 1994 he was awarded the Australian Fire Service Medal. At the time of giving evidence he held the position of Brigade Captain. Mr Jeffery has fought numerous fires, including campaign fires in both the ACT and NSW, many of which have threatened rural residences. He has completed several training courses, including in the AIIMS Incident Control System. Mr Jeffery was chairman of the Bush Fire Council from 1978 to 1991, and during that period was closely involved with the organisation and management of the non-urban bushfire suppression capability in the ACT.

### **2.3.27 Ms Riemke Kampen**

Ms Riemke Kampen gave evidence on 20 May 2004.<sup>61</sup> At the time of the fires she was a resident of Duffy.

### **2.3.28 Mr Simon Katz**

Mr Simon Katz gave evidence on 18 May 2004.<sup>62</sup> As captain of the Rivers Volunteer Bushfire Brigade, he responded to the Bendorra fire on 10 January 2003. He was subsequently involved with firefighting and organising crews throughout the period of the fires.

### **2.3.29 Mr Tim Keady**

Mr Tim Keady gave evidence on 4 March, 19 April and 7 May 2004.<sup>63</sup> He had been a career public servant in the NSW Attorney-General's Department and later became Director-General of the NSW Ministry of Police and Emergency Services. He moved to the ACT in 1996 and was appointed Chief Executive of the then Attorney-General's Department. In the same year the Emergency Services Bureau moved from the Department of Urban Services to the Attorney-General's Department (later renamed the Department of Justice and Community Safety). At the time of the fires Mr Keady was the Chief Executive of the Department of Justice and Community Safety and responsible for the Emergency Services Bureau. In that capacity he attended planning meetings at the bureau.

### **2.3.30 Ms Kate Keane**

Ms Kate Keane gave evidence on 22 and 23 March 2004.<sup>64</sup> At the time of the fires she was the emergency management support officer at the Emergency Services Bureau. She liaised with members of the Emergency Management Committee and assisted with taking notes and preparing minutes of ESB planning meetings.

### **2.3.31 Sergeant Stephen Kirby**

Sergeant Stephen Kirby gave evidence on 30 April 2004.<sup>65</sup> He is a member of the Australian Federal Police. During the week leading up to 18 January 2003 he had been the acting officer in charge of the specialist response and security team. On 16 January 2003 Commander Newton appointed him ACT police liaison officer with the Emergency Services Bureau. He had meetings with Mr Prince and others on 17 and 18 January; at these meetings he was given information about the threat posed by the fires.

### **2.3.32 Mr Dennis Kugler**

Mr Dennis Kugler gave evidence on 18 May 2004.<sup>66</sup> As a member of the Guises Creek Volunteer Bushfire Service, he responded to the Bendora fire on 9 January 2003.

### **2.3.33 Mrs Melinda Latta**

Mrs Melinda Latta gave evidence on 20 May 2004.<sup>67</sup> At the time of the fires she was a resident of Duffy.

### **2.3.34 Sir Peter Lawler**

Sir Peter Lawler gave evidence on 20 May 2004.<sup>68</sup> At the time of the fires he was a resident of Duffy. Before retiring in 1987, Sir Peter was Secretary of the Commonwealth Department of Administrative Services and had served as Ambassador to Ireland and the Holy See.

### **2.3.35 Mr Michael Lecocguen**

Mr Michael Lecocguen gave evidence on 4 June 2004.<sup>69</sup> At the time of the fires he was a resident of the Pierces Creek forestry settlement.

### **2.3.36 Mr Justin Leonard**

Mr Justin Leonard gave evidence on 26 August 2004.<sup>70</sup> He holds the degree of Bachelor of Mechanical and Manufacturing Engineering and is head of the Bushfire Research Team in the Manufacturing and Infrastructure Technology Division of CSIRO. Among other things, that division supports the building industry in Australia, with particular reference to the effects of bushfires on structures. Mr Leonard carried out research into the causes of house losses during the Canberra fires.

### **2.3.37 Mr James Lewington**

Mr James Lewington gave evidence on 19 May 2004.<sup>71</sup> At the time of the fires he was a resident of Kambah.

### **2.3.38 Ms Amy Lowe**

Ms Amy Lowe gave evidence on 22 March 2004.<sup>72</sup> She holds a Bachelor of Communications degree specialising in community relations. From 19 December 2001 to 30 October 2003 she was community education and public relations coordinator at the Emergency Services Bureau. The roles she had been fulfilling before the fires were varied, but media liaison had been a relatively small element.

### **2.3.39 Mr Ian Mason**

Mr Ian Mason gave evidence on 7 October 2003.<sup>73</sup> At the time of the fires he was acting officer in charge of the Canberra meteorological office. On the request of Mr McRae, Mr Mason attended the morning planning meetings at the Emergency Services Bureau on 15, 16 and 17 January to provide a briefing on forecast weather conditions.

### **2.3.40 Mr Howard McBeth**

Mr Howard McBeth gave evidence on 8 October 2003.<sup>74</sup> Between 1981 and 1986 he was in charge of the fire management unit of the Department of Environment and Planning with the South Australian National Parks and Wildlife Service, which managed fire on all government lands. Between 1986 and 1994 he was the Deputy Chief Officer with the South Australian Country Fire Service and its Chief Operations Officer, effectively giving him control of rural fires in that state. Since 1994 Mr McBeth has been a consultant on fire-related matters and has given evidence as an expert witness. In the early 1990s he prepared a report on fuel management in the ACT and the risk of wildfire.

### **2.3.41 Mr Brett McNamara**

Mr Brett McNamara gave evidence on 21 and 22 April 2004.<sup>75</sup> He was a district manager with the ACT Department of Parks and Conservation. With a Bachelor of Applied Science degree, which includes units in fire ecology and fire behaviour, he was the resident ranger at Bendorra Dam for several years. At the time of the January 2003 fires he was deputy captain of the Parks Brigade, and he was incident controller for the Stockyard Spur fire on 9 January 2003.

### **2.3.42 Chief Police Officer John Murray**

Chief Police Officer John Murray gave evidence on 30 April 2004.<sup>76</sup> In January 2003 he was the Chief Police Officer for the ACT and a Deputy Commissioner in the Australian Federal Police. He began his career in 1963 in South Australia and was a member of the South Australian Police Force at various ranks until 1997. From 1997 to 2000 he was an Associate Professor at Charles Sturt University, and in September 2000 he became Chief Police Officer for the ACT. He held that position until February 2004.

### **2.3.43 Commander Mandy Newton**

Commander Mandy Newton gave evidence on 13 May 2004.<sup>77</sup> At all relevant times she was Commander of Operations in ACT Policing. Apart from between 1995 and 2002, she has been a

member of the Australian Federal Police since 1983. Between 1995 and 2002 she worked with ActewAGL and, more briefly, with the Australian Taxation Office.

#### **2.3.44 Mr John Nicholson**

Mr John Nicholson gave evidence on 24 and 25 October 2005.<sup>78</sup> Since March 1999 he has operated his own consultancy firm, Community Safety Service Pty Ltd. Between 1994 and 1999 he was Director, Risk Management, with the Victorian Country Fire Authority, and between 1967 and 1994 he was employed as an operational officer with the Country Fire Authority, rising to Deputy Chief Officer in 1991.

#### **2.3.45 Mr Leonard Norris**

Mr Leonard Norris gave evidence on 21 May 2004.<sup>79</sup> At the time of the fires he was a resident of Duffy.

#### **2.3.46 Mr Reginald Park**

Mr Reginald Park gave evidence on 19 May 2004.<sup>80</sup> At the time of the fires he was a resident of Chapman.

#### **2.3.47 Ms Judy Poulos**

Ms Judy Poulos gave evidence on 27 May 2004.<sup>81</sup> At the time of the fires she was a resident of Duffy.

#### **2.3.48 Mr Trevor Roche**

Mr Trevor Roche gave evidence on 5, 6, 7 and 8 and 17, 18 and 24 October 2005.<sup>82</sup> He joined the Victorian Country Fire Authority as a volunteer in 1963. He later became a staff member and attended numerous large bushfires as a firefighter and commanding officer. He became an assistant regional officer in the authority in 1969 and regional officer in charge of the northern Victoria region in 1978. In 1990 Mr Roche was appointed Assistant Chief Officer, with responsibility for command and control and business management across three regions. In 1993 he was promoted to the position of Deputy Chief Officer, with responsibility for Country Fire Authority operations throughout the state. In 1995 he became Chief Officer, a position he held until his retirement on 26 June 2002. During his time with the Country Fire Authority, Mr Roche attended courses on many aspects of fire and other emergency management and activity. Since leaving the authority he has been involved with Emergency Management Australia, dealing with multi-jurisdiction emergency management and preparedness.

#### **2.3.49 Mr Arthur Sayer**

Mr Arthur Sayer gave evidence on 23 April 2004.<sup>83</sup> At the time of the fires he was a district works officer with Environment ACT, Parks and Conservation. Mr Sayer had about 37 years of firefighting experience, 24 of them as a government employee. Until July 2003, when he resigned, Mr Sayer was a Deputy Chief Fire Control Officer.

### **2.3.50 Mr Perry Smith**

Mr Perry Smith gave evidence on 20 May 2004.<sup>84</sup> At the time of the fires he was a resident of Duffy.

### **2.3.51 Mr Peter Smith**

Mr Peter Smith gave evidence on 8 June 2004.<sup>85</sup> At the time of the fires he was captain of the Brindabella Brigade and had been with that brigade for 30 years. He had been captain since 1990 and had qualified to group officer level. He was involved in the response to the McIntyres Hut fire and travelled to the point of ignition of that fire to help assess the area's accessibility for fire tankers.

### **2.3.52 Mrs Jane Smyth**

Mrs Jane Smyth gave evidence on 24 May 2004.<sup>86</sup> At the time of the fires she was a resident of Chapman.

### **2.3.53 Chief Minister Jon Stanhope**

Chief Minister Jon Stanhope gave evidence on 20 April 2004.<sup>87</sup> Elected to the ACT Legislative Assembly in 1998, he has been the Chief Minister of the ACT since November 2001. At the time of the fires he also held the office of Attorney-General. He was on leave between 8 and 13 January 2003, during which time Mr Ted Quinlan was acting in the role of Chief Minister. Mr Bill Wood, the then Minister for Police and Emergency Services, was on leave for a short time (including on 17 and 18 January) and Mr Stanhope also acted in that position while Mr Wood was on leave. From time to time Mr Stanhope was briefed on the fires, and he participated in the Cabinet briefing of Thursday 16 January 2003. At the relevant time Mr Stanhope's portfolio responsibilities included the Department of Justice and Community Safety, and the Emergency Services Bureau from 17 to 19 January 2003.

### **2.3.54 Constable Reece Strachan**

Constable Reece Strachan gave evidence on 16 October 2003.<sup>88</sup>

### **2.3.55 Mr Alan Thompson**

Mr Alan Thompson gave evidence on 3 June 2004.<sup>89</sup> At the time of the fires he was the Chief Executive of the ACT Department of Urban Services, which included ACT Forests. Mr Bartlett briefed him on the fires and the threat to the pine plantations.

### **2.3.56 Mr Kenneth Ticehurst**

Mr Kenneth Ticehurst gave evidence on 13 October 2003.<sup>90</sup> He is an electrical engineer and owns a company, Kattron, that specialises in lightning detection systems. He provided to the inquiry evidence on the location of lighting strikes in the area of the origin of each of the four fires.

### **2.3.57 Mr William Todkill**

Mr William Todkill gave evidence on 4 June 2004.<sup>91</sup> At the time of the fires he was a resident of the Stromlo forestry settlement.

### **2.3.58 Mr Robert Tonkin**

Mr Robert Tonkin gave evidence on 29 April 2004.<sup>92</sup> In January 2003 he was the Chief Executive of the ACT Chief Minister's Department and had held that position for almost three years. His first relevant connection with the bushfires was on Sunday 12 January, when he contacted the Chief Minister. This led to a briefing being arranged for the following day. Mr Tonkin was also present at the Cabinet briefing on 16 January and at the Emergency Services Bureau on the morning of 18 January 2003.

### **2.3.59 Ms Niki Van Buuren**

Ms Niki Van Buuren gave evidence on 24 May 2004.<sup>93</sup> She was injured whilst trying to rescue her horse from the Canberra Equestrian Centre in Chapman.

### **2.3.60 Mr Robert Webb**

Mr Robert Webb gave evidence on 7 October 2003.<sup>94</sup> He is the senior severe-weather meteorologist with the Bureau of Meteorology in Sydney. Within NSW he has responsibility for severe thunderstorm warning services and bushfire warning services in the state. He liaises with the Canberra meteorological office. During the January 2003 fires he was involved in discussions about weather patterns and the provision of briefings to senior personnel in the NSW Rural Fire Service.

### **2.3.61 Ms Janelle Wheatley**

Ms Janelle Wheatley gave evidence on 28 April 2004.<sup>95</sup> At the time of the fires she was employed by the Department of Education, Youth and Family Services as Executive Officer. Her department was required to provide community recovery services to affected persons in the event of emergency. She became aware of briefings that were being given at the Emergency Services Bureau during the week leading up to 18 January 2003. She attended the ESB planning meeting on the evening of 17 January and other meetings the following morning, where she took notes of the matters discussed. She also assisted with contacting rural lessees on 17 and 18 January.

## **2.4 Leave to appear in person**

In addition to the entities and individuals given leave to be represented by a legal practitioner, Mr John Lowe was given leave to appear in person on behalf of the ACT Sustainable Rural Lands Group.

## Notes

- <sup>1</sup> Ms Odile Arman: T4014–4079.
- <sup>2</sup> Mr Bruce Arthur: T4544–4630.
- <sup>3</sup> Mr Tony Bartlett: T5928–5982; T5990–6099; T6374–6397; T6503–6601.
- <sup>4</sup> Commissioner Ian Bennett: T1865–1902; T1904–1965; T1967–2025.
- <sup>5</sup> Mr Dannie Camilleri: T5096–5183.
- <sup>6</sup> Mr Peter Cartwright: T5315–5370.
- <sup>7</sup> Mr Mike Castle: T1225–1301; T1304–1416; T1418–1545; T1547–1669; T1671–1797; T1799–1865.
- <sup>8</sup> Mr Michael Collins: T5384–5429.
- <sup>9</sup> Mr Kevin Cooper: T4845–4872; T6126–6242; T6245–6322.
- <sup>10</sup> Mr Neil Cooper: T4707–4824.
- <sup>11</sup> Mr Tony Corrigan: T4661–4702.
- <sup>12</sup> Ms Julie Crawford: T4417–4542.
- <sup>13</sup> Mr David Dutton: T4247–4283.
- <sup>14</sup> Mr Peter Galvin: T4080–4115.
- <sup>15</sup> Mr Robert Gore: T4152–4172.
- <sup>16</sup> Mr Tony Graham: T2584–2634; T2636–2760; T2784–2893; T2895–3005; T3007–3030.
- <sup>17</sup> Ms Felicity Grant: T6100–6123.
- <sup>18</sup> Mr Dennis Gray: T3686–3707; T3709–3724.
- <sup>19</sup> Mr Richard Hayes: T3879–3920.
- <sup>20</sup> Mr Robert Hunt: T4630–4649.
- <sup>21</sup> Mr David Ingram: T3519–3593; T3647–3685.
- <sup>22</sup> Mr David Jamieson: T4136–4152.
- <sup>23</sup> Commissioner Philip Koperberg: T2072–2170; T2172–2291.
- <sup>24</sup> Ms Natalie Larkins: T2293–2351.
- <sup>25</sup> Mr Nick Lhuede: T4874–4976.
- <sup>26</sup> Mr Peter Lucas-Smith: T768–885; T887–1000; T1002–1106; T1008–1190; T1194–1225.
- <sup>27</sup> Mr Shawn McIntyre: T5183–5221; T5223–5261.
- <sup>28</sup> Mr Rick McRae: T3030–3125; T3127–3239; T3245–3356; T3358–3474.
- <sup>29</sup> Mr Brian Murphy: T3985–4011.
- <sup>30</sup> Mr Peter Newham: T5047–5094.
- <sup>31</sup> Mr David Prince: T6437–6500.
- <sup>32</sup> Ms Vivian Raffaele: T3920–3941.
- <sup>33</sup> Mr Hilton Taylor: T4979–5016.
- <sup>34</sup> Mr Andrew Winter: T4115–4128.
- <sup>35</sup> Mr Michael Anderson: T5865–5876.
- <sup>36</sup> Commander Peter Bennetts: T5892–5916.
- <sup>37</sup> Senior Constable Christopher Bird: T650–670.
- <sup>38</sup> Constable Gregory Booth: T698–712.
- <sup>39</sup> Mr Michael Boyle: T5555–5580.
- <sup>40</sup> Constable Christopher Burgess: T627–640.
- <sup>41</sup> Sergeant Jason Byrnes: T4383–4413.
- <sup>42</sup> Mr Phil Cheney: T244–318; T321–371; T381–456; T458–491; T493–559; T6800–6837; T6845–6882; T6938–7012; T7017–7110; T7117–7207; T7222–7292.
- <sup>43</sup> Mr Michael Connell: T5768–5779.
- <sup>44</sup> Mr Clem Davis: T103–108; T110–126.
- <sup>45</sup> Mr Benjamin Dearsley: T5514–5532.
- <sup>46</sup> Ms Tracey Devitt: T5684–5692.
- <sup>47</sup> Dr Peter Ellis: T559–621.
- <sup>48</sup> Mr Alan Evans: T5709–5727.
- <sup>49</sup> Mr David Ferry: T5831–5841.
- <sup>50</sup> Ms Jillian Ferry: T2563–2583.
- <sup>51</sup> Mr Graham Franklin-Brown: T5800–5812.
- <sup>52</sup> Mr Nicholas Gellie: T5017–5046.

- <sup>53</sup> Mr James Gould: T6322–6335.
- <sup>54</sup> Mr Tony Greep: T3864–3879.
- <sup>55</sup> Dr Lavinia Hallam: T640–649; T712–722.
- <sup>56</sup> Mrs Jill Hardy: T5580–5590.
- <sup>57</sup> Ms Marika Harvey: T2351–2415; T2418–2477.
- <sup>58</sup> Mr James Hoare: T5812–5831.
- <sup>59</sup> Mr Jason Houghton: T6411–6425.
- <sup>60</sup> Mr Val Jeffery: T5429–5453.
- <sup>61</sup> Ms Riemke Kampen: T5661–5669.
- <sup>62</sup> Mr Simon Katz: T5455–5485.
- <sup>63</sup> Mr Timothy Keady: T2026–2067; T3476–3519; T4836–4845.
- <sup>64</sup> Ms Kate Keane: T2511–2526; T2529–2563.
- <sup>65</sup> Sergeant Stephen Kirby: T4341–4382.
- <sup>66</sup> Mr Dennis Kugler: T5486–5514.
- <sup>67</sup> Mrs Melinda Latta: T5637–5661.
- <sup>68</sup> Sir Peter Lawler: T5669–5681.
- <sup>69</sup> Mr Michael Lecocguen: T6400–6411.
- <sup>70</sup> Mr Justin Leonard: T6743–6795.
- <sup>71</sup> Mr James Lewington: T5590–5617.
- <sup>72</sup> Ms Amy Lowe: T2477–2511.
- <sup>73</sup> Mr Ian Mason: T86–103.
- <sup>74</sup> Mr Howard McBeth: T127–187.
- <sup>75</sup> Mr Brett McNamara: T3726–3832; T3834–3863.
- <sup>76</sup> Chief Police Officer John Murray: T4287–4341.
- <sup>77</sup> Commander Mandy Newton: T5262–5312.
- <sup>78</sup> Mr John Nicholson: T8151–8190; T8192–8280.
- <sup>79</sup> Mr Leonard Norris: T5692–5709.
- <sup>80</sup> Mr Reginald Park: T5534–5555.
- <sup>81</sup> Ms Judy Poulos: T5876–5892.
- <sup>82</sup> Mr Trevor Roche: T7318–7400; T7412–7501; T7503–7599; T7607–7696; T7840–7945; T7947–8092; T8094–8147.
- <sup>83</sup> Mr Arthur Sayer: T3949–3984.
- <sup>84</sup> Mr Perry Smith: T5620–5636.
- <sup>85</sup> Mr Peter Smith: T6601–6620.
- <sup>86</sup> Mrs Jane Smyth: T5732–5757.
- <sup>87</sup> Chief Minister Jon Stanhope: T3595–3647.
- <sup>88</sup> Constable Reece Strachan: T670–698.
- <sup>89</sup> Mr Alan Thompson: T6337–6374.
- <sup>90</sup> Mr Kenneth Ticehurst: T373–381.
- <sup>91</sup> Mr William Todkill: T6425–6437.
- <sup>92</sup> Mr Robert Tonkin: T4214–4246.
- <sup>93</sup> Ms Niki Van Buuren: T5757–5768.
- <sup>94</sup> Mr Robert Webb: T31–86.
- <sup>95</sup> Ms Janelle Wheatley: T4175–4208.

# 3 The course of the inquests and the fire inquiry

As noted in Chapter 1, on 19 January 2003 I first viewed the devastation caused by the 18 January firestorm. From that date onwards, members of the Australian Federal Police began assembling evidence and taking statements from potential witnesses in anticipation of the inquests into the four deaths and the fire inquiry.

I formally opened the inquiry at a directions hearing on 16 June 2003 and held a subsequent directions hearing on 1 September 2003. I began to hear evidence on 7 October 2003. A number of delays during the inquiry resulted in the final oral submissions by counsel not being presented until 28 July 2006—three-and-a-half years after my first viewing of the fire damage.

## 3.1 Technology

It became apparent in the first few days after the firestorm that the inquiry would probably be very extensive and therefore would benefit from advanced technological support. Potter Farrelly & Associates (contracted as the 3C Consulting Group) were engaged as the technology managers for the inquiry, to provide technical advice and support in relation to management of documents and evidence (including conversion of data collected by the Australian Federal Police) and management of the e-court hearing room.

Essentially, the hearings were paperless: all key evidence was made available via computers and large-format viewing screens mounted in the court room. There was also a public gallery in an adjacent court room; it received live audio and video of proceedings as they occurred in the main court room.

The primary document repository was maintained through an electronic court book and case management system. This provided local access to all relevant documents and allowed counsel access to the documents remotely from their chambers, both in the ACT and interstate, using a secure internet connection. Daily transcript was also made available by the same internet-based system, to allow 24-hour access to all crucial materials.

Counsel provided additional information direct to the court. This was electronically processed and provided back to counsel for presentation during the inquiry or for tendering as evidence during the proceedings.

The e-court allowed counsel to present all forms of material—audio, video and paper-based. Where required, technology training was provided to counsel, to help them participate fully in the inquiry.

## **3.2 Statistics**

During 103 hearing days 95 witnesses were examined, cross-examined and re-examined (individually and to differing degrees) by some or many of the 28 counsel involved at various times in the inquiry.

All participants were assisted to some extent by the technology just described. That support involved the processing of 40 762 documents and 88 470 pages, including 20 002 audio files, 1081 maps, 84 photographs, 43 audio transcripts, and eight video files. The 103 hearing days generated a transcript of oral evidence and submissions running to about 10 000 pages.

By any measure, the inquiry was a large undertaking.

## **3.3 Leave to appear**

Many requests for leave to appear at the inquiry were made; several of them were refused. The entities and individuals granted leave to appear are listed in Chapter 2.

## **3.4 The first phase of evidence**

In the course of opening remarks on 7 October 2003, counsel assisting submitted that the firestorm of 18 January 2003 might have been preventable, or at least its intensity might have been mitigated, and referred to a lack of aggression in attacking the fires in the first few days after their ignition on 8 January.<sup>1</sup> Counsel assisting further submitted that the warnings given to the ACT community were inadequate.<sup>2</sup> They also made reference to high fuel loads.<sup>3</sup>

The first phase of the evidence ran from 7 to 16 October 2003. This period was mostly taken up with witnesses providing expert evidence. Mr Phil Cheney, from CSIRO, dealt with fire behaviour, fire spread and the progress of the fires from their ignition until the conflagration in Canberra's suburbs on 18 January 2003. Mr Kenneth Ticehurst, an expert in lightning strikes, gave evidence about the ignition of the fires. Dr Peter Ellis, a CSIRO researcher, gave evidence about how various garden types contributed to the spread of fire in the suburbs. Mr Howard McBeth gave evidence about a report he prepared in 1994, in which he predicted a firestorm reaching the suburbs of Canberra.

The first phase of evidence concluded with evidence about the four deaths.<sup>4</sup>

## **3.5 The four deaths: interim findings**

So that the families of those who died could finalise their affairs, I made interim findings after hearing evidence of the circumstances in which each of the four people had died. My interim findings were as follows:

- Mrs Dorothy (Dolly) McGrath died on Saturday 18 January 2003 at about 3.00 pm at her home—Cottage No. 5, Stromlo Forestry Settlement, RMB 113, Cotter Road, Duffy. The

cause of her death was most probably thermal injury from a fire that had entered the Stromlo Forestry Settlement.

- Mrs Alison Mary Tener died on Saturday 18 January 2003 at about 3.15 pm at her home—9 Burrendong Street, Duffy. The cause of her death was most probably smoke inhalation from a fire that had entered the suburb of Duffy.
- Mr Peter Brabazon Brooke died on Saturday 18 January 2003 at about 3.15 pm at his home—40 Tullaroop Street, Duffy. The cause of his death was most probably a heart attack suffered as an effect of a fire that had entered Duffy that afternoon.
- Mr Douglas Fraser died on Saturday 18 January 2003 between about 4.00 pm and 6.15 pm at his home—23 Burrendong Street, Duffy. The cause of his death was most probably inhalation of smoke from a fire that had entered Duffy that afternoon.

These deaths are dealt with in detail in Chapter 8.

### 3.6 The second phase of evidence

Following a directions hearing on 15 December 2003, the second phase of evidence began on 16 February 2004 and, with the exception of the interruption discussed in Section 3.7, continued until 8 October 2004. It was during this period that most of the witnesses gave their evidence.

In addition to the witnesses listed in Chapter 2, other potential witnesses made statements. On 24 April 2004 counsel assisting said they had reviewed the witness list and divided it into two types—those who would be called to give evidence in person and those who would be called to give evidence only if counsel for an interested person wished them to be called. It was, however, noted that the latter group's statements and other related material in the brief of evidence would become part of the evidence, as if those persons had been called to give evidence. Counsel for these persons made no requests that they be called to give evidence. Accordingly, their statements and related materials in the brief became part of the evidence. Counsel assisting later made the following submission:

No request was later made of us on behalf of any party that any of the make-available witnesses be called for cross-examination. In the circumstances, Your Honour is entitled to rely on the evidence of each of the witnesses marked MA in the list of witnesses circulated to Your Honour and the represented parties on 23 April 2004, as if each of them was called and sworn as to the truth of their statements and other materials provided by them.<sup>5</sup>

Evidence taking continued until 5 October 2004, at which time it was expected that the evidence would conclude with the evidence of two experts—Mr Trevor Roche and Mr John Nicholson—and with the possible recall of Mr Mike Castle and Mr Peter Lucas-Smith. Mr Roche began giving evidence on that date and continued until the end of proceedings on Friday 8 October 2004, when his cross-examination was still part-heard.

As the transcript shows, at the end of that day there was discussion between the Bench and the Bar about how long it might take to conclude the taking of evidence. There was consensus that

the evidence could be completed within about four days; that is, having resumed on Monday 11 October, counsel expected to finish by Thursday 14 October 2004.

When proceedings recommenced on Monday 11 October, Mr Glissan SC announced his appearance on behalf of a number of interested persons and said he had been briefed to apply that I disqualify myself from continuing with the inquiry on the ground of apprehended bias. He said he had been briefed in this regard during the preceding week. This means that, when counsel for some interested persons indicated on Friday 8 October 2004 their expectation that the evidence taking would probably conclude within four days, they knew of this intended application but said nothing about it.

In the light of the application, the finalisation of Mr Roche's evidence did not take place as intended. Among the grounds alleged as the basis for the application was criticism of counsel assisting. The practical effect of this was that counsel assisting could not proceed. After hearing and considering each of the grounds on which counsel relied, I concluded that a reasonable, fair-minded lay observer would not apprehend bias. I had also given careful consideration to decisions of the High Court of Australia on this subject before reaching my conclusion. The governing principles were summarised in *Johnson v Johnson*:

It has been established by a series of decisions of this Court that the test to be applied in Australia in determining whether a judge is disqualified by reason of the appearance of bias (which, in the present case, was said to take the form of pre-judgment) is whether a fair-minded lay observer might reasonably apprehend that the judge might not bring an impartial and unprejudiced mind to the resolution of the question the judge is required to decide ... two things need to be remembered: the observer is taken to be reasonable; and the person being observed is 'a professional judge whose training, tradition and oath or affirmation require [the judge] to discard the irrelevant, the immaterial and the prejudicial' ... the reasonableness of any suggested apprehension of bias is to be considered in the context of ordinary judicial practice. The rules and conventions governing such practice are not frozen in time. They develop to take account of the exigencies of modern litigation. At the trial level, modern judges, responding to a need for more active case management, intervene in the conduct of cases to an extent that may surprise a person who came to court expecting a judge to remain, until the moment of pronouncement of judgment, as inscrutable as the Sphinx ... Judges are not expected to wait until the end of a case before they start thinking about the issues, or to sit mute while evidence is advanced and arguments are presented. On the contrary, they will often form tentative opinions on matters in issue and counsel are usually assisted by hearing those opinions, and being given an opportunity to deal with them.<sup>6</sup>

I also had in mind a judicial officer's obligation to do his or her duty unless disqualified by law. This, too, was dealt with in *Johnson v Johnson*:

[There was a] salutary warning given in *Re JRL; ex parte CJL* [(1986) 161 CLR 342 at 352] that judicial officers within Australia were obliged to discharge their professional duties unless disqualified by law. They were told not to accede too readily to suggestions of an appearance of bias, lest parties be encouraged to seek such disqualification without justification. Applications of that kind might sometimes be made in the hope of securing an adjudicator more sympathetic to a party's cause. Or they might be made because of the strategic advantage that may thereby be secured, especially the interruption of lengthy proceedings [cf *Locabail* (2000) QB 451 at 479] and the delays consequent upon obtaining a fresh start in a busy court or tribunal.<sup>7</sup>

Accordingly, on 19 October 2004 I declined to disqualify myself. The following day proceedings were commenced in the Supreme Court of the ACT, and I was thus prevented from continuing with the final few days of evidence taking until after the Supreme Court ultimately found in my favour. This is dealt with in Section 3.8.

### **3.7 The first government litigation**

Some counsel sought access to a range of documents relating to the evidence of two of the expert witnesses, Mr Cheney and Mr Roche, including earlier drafts of final reports tendered into evidence and provided to all counsel. I considered this unnecessary and unreasonable and, having regard to the fact that ‘... an adjudicator may properly adopt reasonable efforts to confine proceedings within appropriate limits and to ensure that time is not wasted’<sup>8</sup>, on 26 August 2004 I declined to direct that documents be produced. The following day, proceedings were commenced in the Supreme Court of the ACT on behalf of the ACT and a number of ACT government employees.

A hearing took place on 6 and 7 September 2004. At the end of the hearing Whitlam J said he would be making some orders concerning the production of documents. In anticipation of those orders—and in an effort to reduce the loss of further time to the inquiry—at my request on 9 September 2004 counsel assisting advised the office of the ACT Government Solicitor and the legal representatives of the ACT government employees involved in the proceedings that copies of the documents were available for collection; the copies were mostly collected before His Honour made his orders on 10 September 2004. Chapter 9 provides more information about this litigation.

### **3.8 The second government litigation**

As noted in Section 3.6, after I refused to disqualify myself the ACT and a number of ACT government employees initiated proceedings in the Supreme Court of the ACT. Had that litigation been successful, I would have been unable to conclude the inquiry.

After the Supreme Court proceedings began on 20 October 2004 I was prevented from hearing the last few days of evidence. The proceedings were conducted over 10 hearing days in February, March and May of 2005, before a panel of three justices—Higgins CJ, Crispin P and Bennett J. The Supreme Court delivered its unanimous judgment on 5 August 2005. The litigation initiated by the ACT and the ACT government employees was unsuccessful. I was able to resume the inquiry, but a year had been lost.

### **3.9 Completion of evidence**

A large number of counsel were involved in the inquiry and, because during the Supreme Court proceedings they had taken up other matters, it was not possible to resume the inquiry until a directions hearing on 13 October 2005, following which Mr Roche’s evidence resumed, on 17 October. The evidence of expert witness Mr Nicholson, engaged by counsel on behalf of Mr Castle and Mr Lucas-Smith, was taken on 24 and 25 October. Counsel for Mr Castle and

Mr Lucas-Smith confirmed that they did not wish either of those witnesses to be recalled, so Mr Nicholson was the last to give evidence to the inquiry.

## 3.10 Written and oral submissions

After evidence taking was completed, I consulted counsel assisting and counsel for all represented entities or persons and set a timetable for written submissions. Because of the size of the task of preparing submissions, I granted a number of extensions of time. When all the written submissions had been filed and served, counsel assisting and counsel for the represented entities and persons were given a final opportunity to make oral submissions in furtherance of what had been submitted in writing. This also afforded counsel assisting and the other counsel an opportunity to respond to the written submissions that had been exchanged between counsel for the various represented entities and individuals. The last oral submission by counsel was presented on 28 July 2006.

## 3.11 Adverse comments in findings or reports

Thereafter, I resumed my analysis of the evidence before the inquiry and, while writing this report, which is based on that evidence, I formed in relation to certain individuals opinions that could be construed as being adverse to those individuals. Comments adverse to a person identifiable from a finding or report by a coroner are dealt with in s. 55 of the *ACT Coroners Act 1997*:

55. (1) A coroner shall not include in a finding or report under this Act (including an annual report) a comment adverse to a person identifiable from the finding or report unless he or she has, prior to the making of the finding or report, taken all reasonable steps to give to the person a copy of the proposed comment and a written notice advising the person that, within a specified period (being not more than 28 days and not less than 14 days after the date of the notice), the person may—
  - (a) make a submission to the coroner in relation to the proposed comment; or
  - (b) give to the coroner a written statement in relation to it.
- (2) The coroner may extend, by not more than 28 days, the period of time specified in a notice under subsection (1).
- (3) Where the person so requests, the coroner shall include in the report the statement given under subsection (1)(b) or a fair summary of it.

On 11 October 2006 I issued s. 55 notices to five individuals—Messrs Jon Stanhope, Mike Castle, Peter Lucas-Smith, Tony Graham and Rick McRae. In accordance with s. 55(2) of the Act, I subsequently granted extensions of time in which submissions or written statements could be provided.

Counsel for Mr Graham and Mr McRae claimed that the s. 55 notices were invalid because the response period specified in the notices was inadequate. I rejected this claim on the grounds that

the response period specified mirrored the words of s. 55 itself. In any event, the period for response by Mr Graham and Mr McRae—as well as that for Messrs Stanhope, Castle and Lucas-Smith—was extended to the maximum permitted by s. 55(2).

The solicitor acting for Mr Castle and Mr Lucas-Smith asked that I provide to her a draft copy of this report on a confidential basis, to facilitate preparation of responses to the draft comments forwarded under cover of the s. 55 notices. I declined to accede to this request: I considered it would have been improper to provide a draft copy of this report, and the context of the draft comments was clear.

Each of the five individuals provided to me a statement in response to the s. 55 notices issued, either personally or through their legal representatives. In the interest of ensuring that natural justice and procedural fairness are afforded each person, I gave careful consideration to the contents of the statements, I reviewed the relevant portions of the evidence in the light of those statements, and I made changes to some of the comments that were the subject of the s. 55 notices.

Further, in order to avoid misrepresenting any of the views expressed in the s. 55 statements—and in order to give effect to requests made by a number of the respondents, pursuant to s. 55(3)—I include their statements in full in this report, at Appendix A. I refer in broad terms in the following sections to some of the matters raised in the statements.

### **3.11.1 Mr Jon Stanhope**

Mr Stanhope, a lawyer, asserted that if there is evidence to support adverse comments about him, it would be contrary to the rules of procedural fairness for me to rely on that evidence without it first having been put to him when giving his evidence and without permitting him to challenge it through cross-examination or to adduce contrary evidence.<sup>9</sup>

This is a reference to the rule in *Browne v Dunn*.<sup>10</sup> Similar assertions were made in submissions by counsel on behalf of the ACT and on behalf of Messrs Castle, Lucas-Smith and McRae. I reject Mr Stanhope’s assertion for the three reasons I outline in Section 1.3.4 of the report. As justices of the High Court of Australia recently observed, ‘Reliance on the rule in *Browne v Dunn* can be both misplaced and overstated’.<sup>11</sup>

Mr Stanhope said in his statement, ‘The Minister does not have control of the administrative units which administer his or her areas of Ministerial responsibility; such control resides with the Chief Executive of the administrative unit’.<sup>12</sup> In relation to warnings he went on to say:

The issuing of warnings and determining the content and timing of them is an operational matter and was for those with operational experience, expertise and responsibility to make. Neither my Cabinet colleagues nor I had the relevant operational experience, expertise and responsibility to make judgments and decide whether warnings should be given or about the content or timing of any warnings.<sup>13</sup>

The Chief Minister also described his additional role as acting Minister for Police and Emergency Services:

I acted in the position of the Minister for Police and Emergency Services from the close of business on 17 January 2003 until 19 January 2003, although the Territory Controller held all relevant powers subsequent to the declaration of the State of Emergency at

2.45pm on 18 January 2003. Whilst I had Ministerial responsibility for Emergency Services for those two days, at no time did I have ‘control’ of the Emergency Services Bureau. In exercising my Ministerial responsibility, I relied upon the advice, experience and expertise of the officers in the Emergency Services Bureau in what was essentially an operational matter. I maintain that it was proper and appropriate for me to do so. Indeed, it would have been inappropriate for me not to do so where I had no reason to doubt their advice, experience and expertise.<sup>14</sup>

Chapter 7 deals with the subject of warnings and the matters with which Mr Stanhope took issue.

### 3.11.2 Mr Mike Castle

Much of what Mr Castle said in his statement is informative but was not in evidence before the inquiry. As I noted in Chapter 10 in relation to another matter, it would be necessary for me to re-open the inquiry to hear and test further evidence on many of the statements Mr Castle made. At that late stage, and in the light of the evidence of other witnesses, I considered it neither necessary nor appropriate to do so, and Mr Castle did not ask me to do so.

Mr Castle gave evidence and—as I observed throughout the inquiry—he and his counsel heard the evidence of other witnesses. Through his counsel, on a number of occasions I offered Mr Castle the opportunity to be recalled to give further evidence or to refute the evidence of other witnesses. The last such occasion was on 13 October 2005, when his counsel informed me that Mr Castle did not intend to give further evidence.<sup>15</sup>

Mr Castle drew my attention to the following statement in the McLeod report:

Experience is the basis of most of the progression of human knowledge, and there is much we can learn from our mistakes. It is inevitable therefore that inquiries of this kind concentrate on weaknesses, errors and shortcomings. They do not dwell to the same extent on those aspects where systems and people performed satisfactorily or in the way intended ... Any criticism directed at individuals because of the role they were required to perform is in no way intended to question their integrity or their honesty in doing what they felt in the circumstances was the right thing to do at the time.<sup>16</sup>

In my report, I do not question the integrity or honesty of any of the senior officers of the Emergency Services Bureau. Rather, I highlight poor judgment, insufficient knowledge and experience, and an inadequate response to the fires. I do so in an attempt to meet my statutory obligation to find out what happened, to find the truth about an event that caused the deaths of four people and much destruction. Only by doing this can we learn lessons that will help us limit the prospect of a similar result when the ACT is next confronted with a similar situation. And there will be a next time.

As CSIRO fire expert Mr Phil Cheney said in his report after the firestorm:

If similar weather and fuel conditions were to occur in the ACT, and historical accounts indicate this is possible, then a fire starting under extreme weather 40km north-west of Canberra could burn to the suburbs in 2–3 hours. It is therefore fanciful in the extreme to imagine that any emergency service organization is going to be able to stop fires and provide the total protection under these conditions.<sup>17</sup>

Mr Cheney had previously predicted to the Emergency Services Bureau the firestorm that became the subject of this report. This is discussed in Chapter 7.

### **3.11.3 Mr Peter Lucas-Smith**

To his considerable credit, Mr Lucas-Smith began his statement by acknowledging that he could have done things differently. Again to his credit, he made similar concessions when giving evidence to the inquiry about the Emergency Services Bureau and the actions taken or not taken by senior officers during the fires.

In connection with my comments about the Emergency Services Bureau's inadequate preparation for the 2002–03 fire season, in his statement Mr Lucas-Smith drew my attention to his evidence to the inquiry that three requests for additional funding for the bureau for 2002–03 had been refused and that overall ESB funding had been reduced.<sup>18</sup>

Mr Lucas-Smith dealt at some length with events that occurred in New South Wales<sup>19</sup> and observed that 'the inquiry' did not appear to criticise New South Wales.<sup>20</sup> As discussed in Chapter 1, my jurisdiction is limited to the ACT.

Mr Lucas-Smith was also critical of evidence given by fire experts Mr Phil Cheney and Mr Trevor Roche.<sup>21</sup> In contrast, I found the evidence of Mr Cheney and Mr Roche to be both credible and helpful. Their evidence is referred to throughout the report.

### **3.11.4 Mr Tony Graham**

In comparison with the few submissions made on his behalf by counsel, Mr Graham provided a detailed statement. He noted in it that many of the comments I foreshadowed making had been the subject of specific submissions by his counsel and the submissions by counsel for the ACT (which were adopted on his behalf).<sup>22</sup>

Throughout his statement Mr Graham quoted extensively from, and repeated many of, the submissions of counsel for the ACT; these submissions are provided in full on the compact disc attached to this report. Mr Graham also repeated a number of the submissions previously made on his behalf by his counsel.<sup>23</sup>

Mr Graham suggested several times that if I were to make particular comments I would be denying him procedural fairness. A number of other persons to whom s. 55 notices were issued made a similar assertion. Accordingly, I refer to this matter separately in Section 3.11.6.

Mr Graham also made various references to blame, hindsight, and statements and submissions of counsel assisting. These, too, were raised by others; they are dealt with in Sections 3.11.7 to 3.11.9.

### **3.11.5 Mr Rick McRae**

Mr McRae provided a lengthy statement in which he responded to all the comments in the s. 55 notice sent to him. As with the other statements, a thread runs through Mr McRae's that reflects the views that were expressed by others and that are dealt with in the following section.

On some matters, Mr McRae took an academic approach. For example, in relation to the risk of the fires to Canberra and rural settlements west of the urban area he said:

- 4.1 As I endeavoured to say when cross-examined by counsel assisting, risk is assessed in emergency management in accordance with the applicable Australian standard

AS 4360. Assessment of risk is multifactorial, with factors pulling in opposite directions, but with a result achieved which may then, by reference to some convention or decision, be used to guide further action or decision-making.

4.2 Applying the AS 4360 to the factors known as of late afternoon on 15 January, I did not arrive at a conclusion that there was a ‘serious risk to the Canberra urban area and the rural settlements.’ No emergency manager, basing an assessment upon the same factors, would have done so. No evidence was called from any expert, who applied at the time, or since, the information known at the time to the process required by AS 4360, and produced a result in conformity with that suggested by your Honour.

4.3 Such an assessment would necessarily produce different results for the Canberra urban area to the results for rural settlements. Also, different results would be achieved for different rural settlements.<sup>24</sup>

Mr McRae also referred to the poor facilities available to the Emergency Services Bureau in Curtin<sup>25</sup>, and he acknowledged the need for emergency managers to rethink the question of warnings.<sup>26</sup>

He described prediction of the impact of the fires on 18 January 2003 in the following terms:

15.5 Whether I should have predicted, on 17 January, the impact on 18 January may be a matter for debate, but let that debate be conducted on a proper basis. Any such debate requires a genuine analysis of the state of scientific learning at that time, and not mere hindsight-based revision of history. I say that, using the available tools and knowledge, the events of 18 January were unpredictable. I say that the developments in scientific knowledge since 18 January, including Mills’ ‘dry slot’ phenomena support my position. It is far wiser to look at the developing science, and learn lessons for the future, rather than ignore it, so that a small number of individuals can be blamed for a bad outcome.

15.6 If, upon a proper assessment of the state of scientific knowledge to date, that is, at the end of 2006, it is proper to conclude that the events of the afternoon of 18 January were predictable upon the science then known, and upon the basis of the facts then known, then, and only then, would it be possible to hold me responsible for failing to predict that which I should have predicted. And, of course, that same comment could then equally well be applied to Messrs Gellie, Lhuued and Taylor. Of course, no such criticism can, in fact, be properly sheeted home to those three. They brought independent views and approaches to bear upon the problem presented to them on the afternoon of 17 January, and nobody has, nor could, suggest that they took a wrong approach.<sup>27</sup>

### **3.11.6 Procedural fairness and natural justice**

An examination of the statements in Appendix A reveals a great many references to procedural fairness and natural justice. The general tenor of these references is that if I were to proceed to make adverse comments about individuals it would be tantamount to denying procedural fairness to those individuals. I do not agree with this assertion.

Section 55 is itself a procedural fairness provision and is designed to ensure natural justice in three ways. First, it requires that a coroner give advance notice to an individual of any proposed adverse comments, so that the individual is aware of this and can respond or put a considered and alternative view. Second, it provides for the individual to make submissions or provide a

written statement to the coroner and thereby afford the coroner an opportunity to reconsider the fairness and correctness of the proposed comment. Third, if the coroner is not persuaded by the submissions or statement the individual can insist that it be published with the adverse comments, ensuring that both points of view are reflected in the report.

I complied with every aspect of s. 55, including incorporating all five statements in this report. Indeed, I went further and provided with this report the entire transcript of evidence adduced during the inquiry, together with all the submissions in relation to that evidence.

In an inquiry of this type it can be expected that different people will reach different conclusions on the available evidence. The fact that I drew conclusions from the evidence that differ from those drawn by the individuals to whom s. 55 notices were issued does not itself signal a denial of procedural fairness.

In a similar vein, it was also claimed that I had not applied the *Briginshaw* test<sup>28</sup> to the standard of proof in relation to the evidence from which I drew my conclusions. Leaving aside the fact that *Briginshaw* applies in litigation between parties, which is not the case in this inquiry, s. 47 of the ACT *Coroners Act 1997* provides that rules of evidence do not apply in a coronial inquiry. Furthermore, Dixon CJ acknowledged in *Briginshaw* that the standard of proof will vary according to the applicable circumstances: ‘The nature of the issue necessarily affects the process by which reasonable satisfaction is attained’.<sup>29</sup> This has been affirmed by the High Court on a number of occasions in recent years. For example, in *Cassell v The Queen* it was said:

With reference to the requirement of ‘strict proof’, it is trite that, whatever force this expression may have as a forensic flourish, there is not some standard of persuasion which is fixed intermediate between satisfaction beyond a reasonable doubt required upon a criminal inquest and the reasonable satisfaction which in a civil issue *may*, not must, be based upon a preponderance of possibility.<sup>30</sup> [emphasis added]

Similarly, in *Chief Executive Officer of Customs v Labrador Liquor Wholesale Pty Ltd* the High Court again affirmed the need to take account of the nature of the proceedings or the matter at issue and acknowledged that this would affect the process by which reasonable satisfaction on the evidence is attained.<sup>31</sup>

### 3.11.7 Blame

Each of the statements referred to my comments as attributing blame and so suggested, by implication, that I exceeded my jurisdiction. As noted in Section 1.3.4, the aim is to seek out the truth and to learn from it. As also noted in Section 1.3.4, however, once the truth is established it is often impossible to learn from mistakes made without finding fault on the part of individuals. This was acknowledged by the ACT Supreme Court in *R v Doogan*, when the Full Bench observed that in various situations a coroner will be obliged to make findings as to the nature of acts and/or omissions, even if they reflect adversely on the reputation of one or more people involved in the relevant incident.<sup>32</sup>

### **3.11.8 Hindsight**

Section 1.3.8 discusses the question of hindsight. For the present purpose, I repeat what I said: wisdom acquired through hindsight is of great assistance when one seeks to avoid making the same mistakes if a similar situation arises. It also helps to ensure that foresight informs future decision making.

In short, what was of concern for this inquiry was not hindsight: it was a lack of foresight based on a long history of firestorms in Australia, dating back to at least 1851.

### **3.11.9 Statements and submissions by counsel assisting**

In a number of the s. 55 statements reference is made to the fact that on occasion my comments were not consistent with statements or submissions made by counsel assisting during the inquiry. To this I say three things:

- The legal responsibility to make findings is mine alone.
- Although I considered all the statements and submissions by counsel assisting—as I did all the statements and submissions of all other counsel—I am not obliged to accept everything said or submitted by counsel assisting.
- I was urged to take up counsel assisting’s position only on those statements or submissions that were favourable to the individuals concerned. No suggestion was made that I should adopt all of counsel assisting’s submissions—favourable or otherwise. Such a proposition would include the submitted findings concerning responsibility in relation to one of the deaths and the submitted finding concerning perjury by one of the witnesses, neither of which submissions did I adopt.

## **3.12 Delay**

The question of delay was dealt with in a number of the written submissions made to me. At various points in the inquiry I too expressed concern about delay. No useful purpose is served by analysing the reasons for the delay now that the inquiry is finished. Rather, I note for the record in the following paragraphs the fact that there was considerable delay and the events that occasioned that delay.

When I began the inquiry I expected to have it completed and the report published by the end of 2004. Regrettably, that was not possible. The lengthiest delay was occasioned by the second government litigation initiated by the ACT and a number of ACT government employees. As noted in Section 3.8, this delayed recommencement of the inquiry for a year. In addition, there were several short periods of delay, both before and after the second government litigation, all of which drew out the time taken from commencement of the inquiry to completion of this report.

Among the shorter periods of delay were adjournments to allow witnesses to obtain independent legal advice and representation, the first government litigation, the application by the ACT and some ACT government employees for me to disqualify myself from continuing to conduct the inquiry, the granting of extensions of time for the filing and serving of written submissions, the

consequences of a heart attack suffered by one of the expert witnesses, and the unavailability of another expert witness and counsel at particular times.

### **3.13 Apparent corporate loss of memory**

In Section 3.2 I refer to the sheer volume of information to be dealt with by the inquiry. When seeking to establish the facts of what occurred at the Emergency Services Bureau between 8 and 18 January 2003, the inquiry was fortunate in having available to it a large number of written documents and audio recordings from the bureau. Many of the witnesses associated with the bureau appeared to suffer from a corporate loss of memory in relation to that 10-day period. Words to the effect of ‘I can’t recall’ and ‘I don’t remember’ were a frequent response by witnesses who attended the bureau for meetings or as part of their day-to-day employment and were questioned about events during that period. For example, the then head of the Department of Justice and Community Safety, Mr Tim Keady, offered such a reply on 85 occasions; the person responsible for public relations, Ms Marika Harvey, on 95 occasions; the ESB person responsible for planning, Mr Rick McRae, on 139 occasions; the Chief Fire Control Officer, Mr Peter Lucas-Smith, on 196 occasions; the ESB Executive Director, Mr Mike Castle, on 315 occasions; and the ESB Operations Manager, Mr Tony Graham, on 358 occasions.

This apparent corporate loss of memory exacerbated the difficulty of establishing the facts of what occurred within the Emergency Services Bureau. As a result, and as is apparent in the chapters that follow, it was necessary to rely to a considerable extent on the content of documents that became part of the evidence in the inquiry.

### **3.14 The conduct of some counsel**

A small number of counsel approached the inquiry very aggressively, leaving me with the impression that they were seeking to turn the inquiry into adversarial litigation rather than seeking the truth about what happened between 8 and 18 January 2003. This behaviour continued for most of the inquiry; it was not conducive to a determination of the facts.

Similarly, the content of some of the written submissions by counsel for some interested persons was offensive and gratuitously demeaning of some witnesses. Instead of attacking the evidence, counsel attacked the witnesses personally. To put it in the vernacular, they played the man and not the ball. This approach was unhelpful and unprofessional.

I mention this in the hope that the counsel concerned, and others who participate in inquests and inquiries, will in future think twice before attempting to convert a truth-seeking inquiry into an adversarial contest. In Chapter 9 I make a recommendation in this regard for the benefit of participants in future inquiries.

### 3.15 The experts

During the early stages of the investigation and collection and examination of the various materials, it became clear to me that I would be assisted in my task and the subsequent conduct of the inquests and inquiry by people who were experts in fire behaviour, bushfire fighting, and command and control operations in an emergency situation.

I arranged for the engagement of Mr Phil Cheney and Mr Trevor Roche, whose qualifications and experience are detailed in Chapter 2. Both Mr Cheney and Mr Roche were contracted by the ACT Government but were tasked by me to conduct a wide-ranging investigation into the circumstances of the fires, their development, and the response of the authorities between 8 and 18 January 2003. Mr Cheney and Mr Roche each provided a report of their investigations and gave evidence to the inquiry.

Mr John Nicholson also gave evidence; his qualifications and experience are detailed in Chapter 2 too. He was engaged by the solicitor representing Mr Castle and Mr Lucas-Smith and prepared a report that was tendered into evidence. Unlike the investigations of Mr Cheney and Mr Roche, Mr Nicholson's investigation was limited to an examination of the decision not to fight the Bendora fire overnight on 8 January 2003, warnings to the community, and the organisation of the Emergency Services Bureau at the time of the fires.<sup>33</sup>

In submissions, some counsel representing interested persons were critical of the roles played by the experts during the inquiry and the evidence given by them. Some of the submissions are vehement in their criticism; some are, in my opinion, offensive. Some counsel submitted that the evidence of Mr Roche, in particular, should be accorded little weight or ignored in its entirety. Additionally, counsel for the ACT submitted that counsel assisting lacked 'detachment and objectivity' in treating Mr Roche as a favoured witness<sup>34</sup>, and counsel for the NSW represented persons submitted that it would be an error of law to rely on Mr Roche as an expert.<sup>35</sup> Similarly, counsel representing Ms Odile Arman submitted that all but one part of Mr Nicholson's evidence should be put aside; the part they accepted related to measurement of the gradient of the Bendora site, which, counsel submitted, was a matter of fact and measurement and was accurate.<sup>36</sup>

For my part, I found the information provided by Mr Cheney and Mr Roche very helpful. Both men are highly experienced in their respective fields, and I am grateful to them for the work they did on my behalf. As with all evidence of this type—as, indeed, with evidence of any type—it is a matter for the court, tribunal or other body to determine what portions of the evidence given by witnesses should be accepted and what portions should be rejected, on the basis of longstanding legal principles. I did this throughout the inquiry.

## Notes

<sup>1</sup> Submissions of counsel assisting, 2 April 2006, p. 14.

<sup>2</sup> ibid., p. 14.

<sup>3</sup> ibid., p. 15.

<sup>4</sup> ibid., pp. 15–16.

<sup>5</sup> ibid., p. 20.

<sup>6</sup> *Johnson v Johnson* (2000) 201CLR488, at 492 and 493.

<sup>7</sup> ibid., at 504.

<sup>8</sup> ibid., at 508.

<sup>9</sup> See Appendix A—statement by Mr Stanhope, para. 3.3.

<sup>10</sup> (1893) 6R67.

<sup>11</sup> *MWJ v R* (2005) ALR 2222 at 448, para. 40.

<sup>12</sup> See Appendix A—statement by Mr Stanhope, para. 6.

<sup>13</sup> ibid., para. 7.

<sup>14</sup> ibid., para. 18.

<sup>15</sup> T7822.

<sup>16</sup> See Appendix A—statement by Mr Castle, pp. 34–35.

<sup>17</sup> DPP.DPP.0008.0001, Report by Mr Cheney on fuel management in the ACT, p. 20.

<sup>18</sup> See Appendix A—statement by Mr Lucas-Smith, p. 3, point 5.

<sup>19</sup> ibid., pp. 16, 18–20.

<sup>20</sup> ibid., p. 19.

<sup>21</sup> ibid., pp 17, 20.

<sup>22</sup> See Appendix A—statement by Mr Graham, p. 1.

<sup>23</sup> ibid., pp 13–15.

<sup>24</sup> See Appendix A—statement by Mr McRae, p. 10.

<sup>25</sup> ibid., p. 34.

<sup>26</sup> ibid., p. 40.

<sup>27</sup> ibid., p. 29.

<sup>28</sup> *Briginshaw v Briginshaw* (1938) 60 CLR 336, a High Court of Australia decision relating to the standard of proof.

<sup>29</sup> ibid., p. 363.

<sup>30</sup> (1999–2000) 201 CLR 189 at 193 per Gleeson CJ, Gaudron, McHugh and Gummow JJ.

<sup>31</sup> (2003–2004) 216 CLR 161 at 176.

<sup>32</sup> [2005] ACT SC 74 at para. 31.

<sup>33</sup> HIL.DPP.0001.0001, Report of Mr Nicholson, p. 6.

<sup>34</sup> Submission of counsel representing the ACT, para. 191.

<sup>35</sup> Submissions of counsel representing NSW represented persons, para. 280.

<sup>36</sup> Submissions of counsel representing Ms Arman, paras 5.9–5.10.



Part Two

# About the fires



## 4 The situation leading up to the fires

In *R v Doogan*, the ACT Supreme Court said:

To take but one example, it may be thought that the thickness of the vegetation at the site where the fire commenced had some causal relevance and, if the first respondent came to that view, then she would clearly be entitled to make a finding to that effect. However, that observation may evoke other questions. Why was the vegetation in that state? Was there some failure on the part of a government agency to detect its growth and embark upon fuel reduction measures? If so, was this attributable to lack of resources, public policy related to conservation of the natural environment and/or other considerations? The answers to those questions could, in turn, evoke yet others. How much does the ACT Government spend on the construction of fire breaks and other fuel reduction measures in and around Canberra? Is that amount of money appropriate having regard to the Government's competing responsibilities such as those relating to the provision of adequate funds for education, public health facilities, and law and order? As a matter of public policy, has an appropriate balance been struck between the need to protect housing on the fringes of Canberra and the need to ensure that the surrounding bushland is maintained in its natural state? If not, is that because the legislature has been misled as to the relative importance of wilderness areas? ... Each of these questions could, of course, lead to yet others and, ultimately to a virtually infinite claim of causation ... Whilst none of these suggested issues could be said to be irrelevant, they are somewhat remote from the concept of the cause and origin of the fire, and any adequate investigation of them would involve not only substantial time and expense, but also delving into areas of public policy that are properly the prerogative of an elected government rather than a coroner or, indeed, any other judicial officer ... A line must be drawn, at some point beyond which, even if relevant factors which come to light will be considered too remote from the event to be regarded as causative. The point where such a line is to be drawn must be determined not by the application by some concrete rule, but by what is described as the 'common sense' test of causation affirmed by the High Court of Australia in *March v E & MH Stramare Pty Ltd* (1991) 171 CLR 506.<sup>1</sup>

This statement makes it clear that I am prevented from investigating matters of government policy. As the court noted, however, it remains for me to apply the High Court 'common sense' test. The state of the vegetation, and fuel loads generally, are thus relevant as a matter of fact. Accordingly, this chapter provides a factual statement of fuel management and fuel loads, the weather conditions at the time of the January 2003 fires, and a brief history of fires in the ACT. It also describes the structure and operation of the Emergency Services Bureau at the time of the fires and pre-fire preparation by the bureau and the community.

I was greatly assisted by the careful analysis of counsel assisting in describing the weather conditions in the days leading up to the fires and an assessment of the fuel loads and fuel management and the general state of fire preparedness. The analysis is non-controversial; apart from counsel for the ACT, who suggested, primarily, that the analysis is not relevant and is beyond my jurisdiction in some respects<sup>2</sup>, no counsel for interested persons took any exception

to it. For my part, I found the analysis highly relevant, especially because it puts into context my conclusions, findings and recommendations, as well as providing a valuable background for an analysis of the actions of the authorities.

This is significant in the context of submissions made by some counsel for interested persons, and for the ACT, that the fires of January 2003 in the ACT were ‘extraordinary’, that their intensity could not be foreseen, and that therefore they were beyond the expectation of anyone involved with the firefighting effort.<sup>3</sup> There is no doubt that firefighting authorities were overwhelmed and that events were beyond what most, if not all, of those involved had experienced. That is not to say, though, that information and knowledge about the potential for a serious fire event was non-existent. For example, counsel representing Mr McRae submitted, ‘In Mr McRae’s opinion the fuel loads were too high, and … he set about in his document [‘Phoenix Imperative’] agitating for properly managed fuel reduction’. Counsel urged me to find that:

Mr McRae undertook regular surveys of the state of the fuel across the ACT, and combined those observations with detailed treatments of weather, actual and anticipated, in order to give the ESB regular predictions as to the likely conditions during the ensuing fire season. The tone of Mr McRae’s writing abundantly justifies a finding that he was intent upon directing that serious attention be given to the messages conveyed therein. It is unmistakable that he was taking steps to ensure that it was accepted that there was a pressing need to be ready for an extremely dangerous fire situation. Mr McRae’s abiding concern with readiness is also amply reflected in the views expressed during training sessions, no doubt resulting in the sobriquet ‘Dr Doom’. Indeed, Mr McRae’s views as to the capacity of a fire to impact houses beyond the immediate interface were, in fact, proved to be correct on 18 January 2003.<sup>4</sup>

Counsel for the ACT conceded in submissions that ‘none of the [ESB] officers denied the proposition that there were heavy fuel loads in the areas of the fires’.<sup>5</sup> Counsel also submitted, however:

The proposed factual review of fuel management is entirely historical and on the ‘wrong side of the line’ of the Coroner’s jurisdiction as delineated by the Full Court. The problem is apparent from the narrative in the submissions, which includes the following comment by Counsel-Assisting at paragraph 134:

The report of Mr McBeth is notable not only because he is critical of the lack of fuel management planning practices in place in the ACT at the time of his report, but also identifies in unequivocal terms the inevitability of what he describes as a conflagration fire disaster in the ACT and on its urban rural interface …<sup>6</sup>

Counsel for the ACT then continued:

The reference to the McBeth report is made for the apparent purpose of including the critical views of a person who has strong views in support of broad scale fuel reduction. When read in conjunction with paragraphs 17, 107 and 108, the commentary by counsel-assisting in the extract above clearly invites critical comment from the Coroner concerning the fuel regime at the time of the fire, rather than a finding as to the fact of the fuel levels. This is done in circumstances where the Court has no jurisdiction to make those findings or comments, and it would be improper for a Coroner to do so.<sup>7</sup>

I agree with the submission of counsel for the ACT that it is outside my jurisdiction to comment on the efficacy of ACT government policy. I do not, however, accept the remarks made about the ‘apparent purpose’ of counsel assisting in referring to the McBeth report. I regard that report as

relevant because in 1994 Mr McBeth predicted and forewarned the government that commissioned him that a wildfire disaster would affect Canberra.

I have a statutory obligation to find the origin and cause of the fires. I also have a statutory obligation to find, if possible, the circumstances in which the fires occurred. To ignore the warnings given in the years preceding the fires and to ignore the circumstances that existed in the lead-up to the fires would, in my view, defeat the purpose of the legislative provisions—especially when interpreted with the benefit of the provisions of the *Legislation Act 2001*, which authorise me to interpret the provisions in a way that would best achieve the purpose of the Act (s. 139) and in consideration of the overall legislative context of the Act (s. 140).

The description that follows is predominately in the words of counsel assisting, which I adopt. As I worked my way through the analysis, I made minor changes to the text but, by and large, the description is identical to that submitted by counsel assisting, which was served on counsel for all interested persons.

## 4.1 Fires in the ACT

### 4.1.1 The Rural Fire Control Manual

At the time of the January 2003 fires the Bush Fire Council, constituted under the *Bush Fire Act 1936*, was required by that Act to ‘in writing, prepare a Rural Fire Control Manual containing particulars of all aspects of the operation and organisation of the [Rural Firefighting Service]’.<sup>8</sup> The Bush Fire Act also contained provisions governing the matters to be included in the *Rural Fire Control Manual* and the process for approval of the manual. The manual in force at the time of the 2003 fires was the *Rural Fire Control Manual* of July 1992. It governed all aspects of the organisation and structure of the ACT’s Rural Firefighting Service—administration, organisational structure, infrastructure and equipment, safety, training, fire protection, fire control, incident management, and so on.

The following extract appeared in Section 2.7 of the manual and was headed ‘Characteristics of fire and fire weather in the ACT’:

Between January and March the daily fire weather is determined by the passage of high and low pressure systems across southern Australia. The most serious weather occurs just after a high pressure system has moved out in the Tasman Sea and a cold front is approaching across Victoria and southern NSW. Strong north-westerly winds often precede the front and as they are generated from dry air from the interior of Australia they may be extremely dry and very hot. Most of the major fires in recent years have occurred in these months when strong north-westerly winds precede the southerly change. If the change occurs while the fire is still burning there is a sudden wind shift from the north-west to the south-west and large areas of country can be burnt. Under the worst recorded conditions grass fires can travel up to 18 to 20 km per hour and fires more than 60 km away may threaten the ACT. An area of more than 60,000 hectares may be burnt in eight hours and if only two or three fires break out at the same time it is possible for them to burn most of the ACT. Also, it must be remembered that fires starting within the ACT under these conditions have the potential to burn through to the south coast.

It is important that we recognise that, under these extreme fire weather conditions, which may occur every five years or so, it is impossible for any fire suppression organisation to control the fire if it is burning in abundant fuels. While much can be done with early detection and rapid initial attack, if a fire burns from some distance away and enters the ACT in a broad front then fire suppression forces available in both rural and urban fire brigade services will be overwhelmed. Prevention of loss of life and damage to property can be undertaken only by individual home-owners. Thus it is vitally important for the ACT Bush Fire Council to promote a sound understanding of fire spread and what can be done under severe conditions to protect life and property and extend this to individual home-owners through the volunteer bushfire brigade movement.

The suburban area of Canberra has never been directly hit by a large fire travelling in from the west. However, the potential weather to create widespread havoc within the suburban area has existed and there are adequate examples in history to indicate the potential for a bushfire disaster. In 1939 fires burning west of the Brindabella ranges in the Mountain Creek and Flea Creek catchments rained firebrands on Capital Hill, now the site of Parliament House.

During a severe summer the orientation of the pressure systems over southern Australia means that a cold change occurs roughly on a seven day interval. Therefore, during the week the fire danger conditions may be low to moderate immediately after a cool<sup>9</sup> change and gradually build up to extreme just before the next cool change passes.

The extract is notable in the context of the 2003 fires in a number of respects:

- It identifies precisely the weather pattern confronted on 17 and 18 January 2003, including the fact that ‘the most serious weather occurs just after a high pressure system has moved out in the Tasman Sea and a cold front is approaching across Victoria and southern NSW. Strong north-westerly winds often precede the front and as they are generated from dry air from the interior of Australia they may be extremely dry and very hot’. Later in the extract, there is a direct reference to this weather pattern occurring ‘roughly on a seven day interval’ during a severe summer.
- It includes a reference to the speed of travel of fires under extreme conditions and the area that can be burnt in eight hours.
- It comments on the capacity of firefighting authorities to have an impact on wildfires in these extreme conditions and notes that the fire suppression forces available in both rural and urban services will be overwhelmed.
- It acknowledges that ‘much can be done with early detection and rapid initial attack’.
- It confirms the importance of a well-informed community in preventing fire spread and saving lives.
- It refers to historical fires to support the assertion that ‘the potential weather to create widespread havoc within the suburban area has existed and there are adequate examples in history to indicate the potential for a bushfire disaster’.

In re-examination, Mr Peter Lucas-Smith was asked about emergency planning in the ACT and, in particular, the Emergency Management Committee's decision not to have a bushfire management plan. In explaining why there was no bushfire management plan, Mr Lucas-Smith noted:

From the bushfire side of things, what we had was a Bush Fire Act which described the powers and responsibilities for fire suppression in the ACT and also required the production of a rural fire control manual which outlined the structure and processes in relation to rural firefighting in the ACT. So we were already well on our way, I suppose, in a sense, to having a full operational plan.<sup>10</sup>

In evidence, Mr Rick McRae said he was familiar with the *Rural Fire Control Manual*. He broadly agreed with Section 2.7 of the manual but disagreed with some of the content. In relation to the speed at which fires can travel and the area that can be burnt in eight hours, Mr McRae thought there was a 'confounding in that material of grass fires and forest fires, which have different characteristics'. He expressed the view that 'perhaps it needs to have the distinction between grass fires and forest fires fleshed out' but went on to say, 'But it is not to say I disagree with it'.<sup>11</sup> Later Mr McRae described some of the concepts referred to in the document as simplified but, 'if you accept the simplification, I agree with what is in the document'. It was suggested to Mr McRae that 'the message [the passage] is trying to convey is that it is important not to underestimate the potential of fires taking hold in the ACT', to which Mr McRae responded, 'Totally agree'. He also agreed with the reference to fire suppression forces being overwhelmed if a fire enters the ACT on a broad front.<sup>12</sup> Further, he accepted that the potential existed for fires to create 'widespread havoc within the suburban area'.<sup>13</sup> In relation to the 1939 fires 'raining fire brands on Capital Hill', Mr McRae commented that the spotting distance achieved from those fires was 'near an Australian record, to my understanding' and that the expression 'raining fire brands' was overstating what occurred, to the extent that it was referring to long-distance spotting. In the context of discussing spotting distances, Mr McRae noted, 'You will get burnt leaves falling out. That's quite a common thing near large bushfires. Burnt leaves, black but cold, they are not fire brands. Raining fire brands sounds very unusual to me. Usually if they occur they will occur in small numbers'.<sup>14</sup>

Mr Tony Graham confirmed that in January 2003 the *Rural Fire Control Manual* still governed the operations of the ACT Bushfire Service. Parts of the section just quoted were read to him during his evidence. Asked if he was familiar with the statements in that section, he responded, 'To the point that I have read the *Rural Fire Control Manual* through, yes. But I haven't read it for some time, so I wouldn't necessarily agree with all of those particular passages'. He was aware that the manual referred to the calamities that can arise under extreme conditions such as those prevailing at the time of the January 2003 fires, but he could not recall reading that an area of more than 60 000 hectares could be burnt in eight hours 'and it is certainly not something I have ever experienced'. He said he did not believe he had read numbers like that in any other document but did not disagree with it. Mr Graham also confirmed that he was not aware at the time of the fires that during a severe summer 'a cold change occurs roughly on a seven day interval'.<sup>15</sup>

#### 4.1.2 Previous fires

During his evidence in the first phase of the inquiry, Mr Phil Cheney provided a brief summary, supported by a PowerPoint presentation, of fires in and near the ACT between 1920 and 2001. At least three of the early fires Mr Cheney referred to were noted by Mr Lucas-Smith during his

briefing of the ACT Fire Brigade and ACT Ambulance Service on 16 January 2001, in the context of the potential of the January 2003 fires.<sup>16</sup> In relation to the 1939 fire, Mr Cheney confirmed:

The fire came from north of Wee Jasper and burnt into this area, which is called Mountain Creek, and finally burnt out and skipped through the pine plantations in Uriarra and stopped when it came out to the grassland and the Murrumbidgee River ... This was a similar drought situation, except that the fire control people had the benefit of rabbits and those pastures were really completely eaten out and almost bare, and so there was very little burning in grassland areas of the ACT, although spot fires ... landed in Civic Centre ... and also on Capital Hill ... plus other spots which were in the grassland in the vicinity of Mt Stromlo.<sup>17</sup>

When discussing the fire known as the Royalla fire, which began on 13 January 1939, Mr Cheney explained that the shape of the fire could be created only because the areas in the middle of the fire that were unburnt had 'burnt 1 or 2 years before ... The shape of that fire and many fires in high country up to 1939 and before were constrained by the degree of burning by graziers and other people in the intervening period'.<sup>18</sup>

In relation to the 1952 fires Mr Cheney explained that these were two fires that started in January and February. He referred to the second of the fires as the 'Stromlo fire' and said it 'occurred from lightning in February ... and burnt through the grassland up over Mt Stromlo and didn't go much further than Narrabundah Hill and the present location of Duffy, which at that stage was open farmland. Again, it was controlled once it came out of the forest and into the grassland'.<sup>19</sup>

Mr Cheney included in his PowerPoint presentation maps of a fire in the Tumut Valley between 3 and 13 March 1965. This fire occurred in weather conditions similar to those experienced in Canberra in January 2003. He said:

It had similarities to the fire problems that authorities were faced with this [2003–03] season. It started in the Tumut ravine ... under very high fire danger conditions, made a brief run down to the south and then a run up ... towards the east. They had 3 days in which to try and contain it before there was an extreme weather forecast and they had set out to establish control lines ... and they were unable to complete that within the 3 days that they had.<sup>20</sup>

When these fires made their major runs on 6 March, Mr Cheney said, 'They had basically one day spread distances of between 30 and 40 kilometres'.<sup>21</sup>

### *The Pago fire*

Mr Cheney included in his presentation and evidence a more detailed description of a fire known as the Pago fire, which started on 21 December 1972, 'in a similar location to the Bendora fire. It started off Warks Road ... on a south-easterly aspect and it started in a forest with 1926 alpine ash and it burnt under somewhat more severe conditions'. Mr Cheney explained that he 'wanted to include this fire because in some respects it reflects some operation and cultural changes that have happened in the last 30 years'. He later explained that at that stage ACT Forests was responsible for the fire, under the direction of Mr Tony Fernside, who was Chief Fire Control Officer. At the time, Mr Cheney was involved in fire research and attended the fire as part of the ACT's firefighting force.<sup>22</sup>

Mr Cheney showed that at the time of the Pago fire the weather conditions at Canberra airport were very similar to those on 8 January 2003—'35 degrees Celsius, 15 per cent humidity, with a

wind speed of 32 kilometres an hour, which gave us a Forest Fire Danger Index just going into the extreme range, with a drought index of 103. I think it was 104 on 8 January [2003].

Although the Pago fire occurred earlier in the season, Mr Cheney explained that there had been ‘a hot spring and a short intense drying period. I don’t think the real levels of drought were as bad on this fire as they were in this year [2003], although the index is about the same in Canberra’.<sup>23</sup> The ignition was followed by two days of very high to extreme fire danger.<sup>24</sup>

The fire was detected at 3.07 pm and probably started a little before 3.00 pm. The initial attack involved a single light unit that came in at about 3.30 pm and failed. Bulldozers and support tankers were brought in at 6.00 pm:

They used a ... variety of suppression actions. Direct attack with bulldozers on the western and eastern flanks, some burning out from roads and fire lines, mostly after midnight when the actual position of the fire was known and some lines had been constructed. I think importantly it was contained by 09:00 hours and then patrolled for the following 3 weeks.<sup>25</sup>

Mr Cheney’s presentation referred to the construction of a hand-tool control line along the south-eastern flank. He also included some photographs demonstrating the intensity of the Pago fire and summarised his evidence on the fire in the following terms:

So in summary, this was a fire that started in alpine ash forests. The fuels were up to 40 tonnes per hectare ... Controlled overnight by combined attack with bulldozers, tankers, hand-tool attack and burning out and held for periods of very high to extreme fire danger. I’d just like to add that the direction of the fire attack was held by two very competent forestry foremen ... and really their knowledge of the country and knowledge of tracks and access and what could be done with bulldozers was fairly critical and the crews being able to bring that under control. And they had a very experienced bulldozer operator, who was on the job and really didn’t need instruction about how to build a line around fires.<sup>26</sup>

### ***The 2001 fires***

The fires that started to the west and north-west of Canberra on 24 December 2001 constituted the largest wildfire event faced by the ACT emergency authorities since their restructuring in 1995. The Stromlo fire burnt 1240 hectares, including 510 hectares of plantation, in two days, burning under very strong west-north-west winds. A further 111 hectares was burnt in the Huntly fire. Mr Tony Bartlett’s report on the fires describes such features as frequent spotting over control lines for distances greater than 1 kilometre, rapid fire spread (including a rate of spread of 2.5 kilometres an hour in the Stromlo plantation) and difficulties with containment.<sup>27</sup> The fires of January 2003 exhibited similar features, although on a more dramatic scale. The 2001 fires were contained by the end of the second day, having in some places burnt up to the urban fringe. Containment was assisted by a burning-out operation successfully completed on the first night of the fires.<sup>28</sup> There were no significant injuries and there was no major damage to built assets.

Mr Bartlett emphasised the importance of quick deployment of the incident management team following the outbreak of fire and said, ‘Sufficient resources need to be provided to ensure that the Planning and Logistics Sections operate effectively at the fire control headquarters’. He recommended that these sections be ‘adequately staffed on a two shift basis’.<sup>29</sup> Similar things were discussed on 16 January 2002, as part of a Bushfire Operation Strategic Debrief for Senior Officials.<sup>30</sup> Mr Bartlett also observed, ‘When a forest fire is burning under the weather conditions that prevailed on 24 December it is impossible to halt the forward spread of the fire.

The Tuggeranong Parkway which might have operated as a major north south firebreak was no barrier to the progress of the fire'.<sup>31</sup>

The fires of December 2001 were the subject of an inquiry, and it is neither necessary nor appropriate to traverse the ground covered in that inquiry. Those fires do, however, form part of the background to the subject matter of this inquiry in three respects:

- First, they prompted a rethink of the approach to fuel management in the ACT, resulting in a revision of the 2002–2004 Bushfire Fuel Management Plan, which was then being prepared. This revision saw a move towards broad-scale fuel-reduction burning in forested areas—an approach that had been strongly advocated by a number of experts over a long period. But, realistically, little could have been done to start implementing the planned broad-scale fuel reduction before the January 2003 fires. The result was that—apart from areas affected by the 2001 fires and some additional prescribed burning by ACT Forests, under the direction of Mr Bartlett and prompted by the experience of the 2001 fires<sup>32</sup>—in January 2003 fuel loads in Namadgi National Park to the west of Canberra were at maximum, or ‘equilibrium’, levels.<sup>33</sup>
- Second, the area burnt by the 2001 fires prevented the spread of the January 2003 fires northwards through Black Mountain and around Government House and Yarralumla. Mr Cheney considered that, were it not for the 2001 fires, the 2003 fires would have burnt onto Black Mountain but probably not much further than Aranda: ‘... but if it had burnt on to Black Mountain when the winds shifted from north-west to westerly, that would have had a similar impact on O’Connor as it did on Duffy. It may have been a bit less because it would have been an hour or two later in the day but I suspect not much’.<sup>34</sup>
- Third, dealing with the 2001 fires appears to have led to a perception on the part of some involved in dealing with the January 2003 fires that, as in 2001, the fires could be halted at the urban fringe.<sup>35</sup> This is despite the fact that it was known that weather conditions in January 2003 (particularly those forecast for Saturday 18 January) would be much worse than those in December 2001. In an article in the *Canberra Times* on 29 November 2002 Mr Lucas-Smith was quoted as describing the fires experienced in December 2001 as ‘probably only an entrée to what’s potentially going to occur this year’.<sup>36</sup> Mr McRae broadly agreed with this assessment.<sup>37</sup> Further, between the December 2001 fires up and the afternoon of 15 January 2003 Mr McRae repeatedly warned senior ESB officers of the severity of conditions, even when compared with earlier bad seasons: ‘The fires last Christmas pushed ESB and many agencies of Government to their limits. And yet these fires occurred under Fire Danger Indices in the high 30s. An El Nino drought with strong winds would push Fire Dangers over 100’.<sup>38</sup> On Saturday 18 January 2003 the Forest Fire Danger Index at Canberra airport reached 102.<sup>39</sup>

## 4.2 Fuel management and fuel loads

### 4.2.1 The Cheney report on fuel management

The history of the management of forest and grass fuels in the ACT is summarised by Mr Cheney in his report on fuel management in the ACT:

Since settlement basic fuel reduction in both forest and pastoral lands has reduced the impact of bushfires. There are few official records of deliberate burning-off, but oral histories suggest that burning-off in the Cotter catchment was extensive between 1926 and 1945 and low-intensity fires in the spring of 1938 reduced the impact of the 1939 fires and crash grazing (grazing pastures until they are eaten out) was common around homesteads on the rural leases until the 1970's.

Broad-area prescribed burning under specified weather was introduced in the 1960's by Alan McArthur who developed the first prescribed burning guide after conducting experimental fires in dry forests at Kowen and on Black Mountain. The first trials were carried out on the foothills of Black Mountain (between the current location of Bruce Stadium and Aranda) and in the headwaters of Blundells and Lees Creek between Piccadilly Circus and Bulls Head. The first prescribed burn ignited from aircraft in eastern Australia was conducted in the Flea Creek catchment in 1967.

Broad-area burning was conducted on the bushfire lease area during the late sixties and seventies but after 1985 an active hazard reduction burning program has not been pursued because the fuel loads were not considered to be heavy in areas adjacent to assets. After 20 years fuels in most forest types would be approaching their equilibrium levels.

Within the ACT, the last major burning in forest areas was 118 hectares on the western slopes of Mount Tennent. Apart from the burning of debris after harvesting pine plantations, fuel reduction by burning was generally less than a few hectares and focused around the assets within the reserves.

Since 1990 fuel management has focused on the urban interface and planned at the micro scale (and in my opinion managed to the micro scale as well) (2002–2004 ACT Bushfire Fuel Management Plan). The primary focus was fuel management to protect assets of value (with some notable exceptions such as the Stromlo Observatory) both on the urban fringe and within the areas managed by government land management agencies. My review of the draft 2002–2004 Bushfire Fuel Management Plan pointed out the lack of broad-scale fuel management programs particularly in areas managed by ACT Forests and Environment ACT. In my opinion, the condition of the fuels adjacent to the urban areas of the ACT, setback distances from forest vegetation and the compact nature of ACT urban development provided Canberra with the safest interface of any city within the equivalent or higher rainfall zone anywhere in Australia. Other fire experts agree.

The fact that bushfire burnt into the urban area under extreme conditions did not reflect a failure of fuel management on the urban interface but rather a failure of fuel management in the forest areas. Heavy fuels hindered suppression efforts early in the fire development and contributed to the fires burning a large area before the onset of extreme fire weather that then drove them into Canberra. While not reducing the effort on the urban edge, fuel management is required in the forests to assist suppressing fires at an early stage.<sup>40</sup>

Mr Cheney's summary is broadly consistent with the fuel management documents identified and summarised during the first phase of the inquiry<sup>41</sup> and with the McLeod report.<sup>42</sup> The McLeod report also makes reference to the establishment of the Task Force on Bushfire Fuel Management Practices, chaired by Mr Graham Glenn AO, to identify possible inadequacies in the then current bushfire fuel management approach:

The Task Force's principal recommendation called on government land managers to produce bushfire fuel management plans for the land over which they had control and specified that these plans should be submitted to and approved by a Bushfire Fuel Management Committee.<sup>43</sup>

#### 4.2.2 The McBeth report

The work of the Task Force on Bushfire Fuel Management Practices was preceded by a review of the fire hazard-reduction practices of the ACT Government, with particular emphasis on the role and functions of the then ACT Parks and Conservation Service. The review was carried out by Mr HR McBeth, who noted in his review report that he was to 'provide an expert opinion on the capacity of the activities undertaken by the Service to modify the impact of bushfires (either including deliberate, accidental and natural ignitions) on the urban interface with lands under its management'.<sup>44</sup>

Both the report by Mr McBeth and the work of the task force were prompted by 'a difficult bushfire season in New South Wales in 1993–94 including a number of fires in the ACT that threatened property, one of which caused minor property damage in Curtin'.<sup>45</sup>

Mr McBeth was critical of the lack of fuel management planning and activity in the ACT at the time.<sup>46</sup> He also pointed out the inevitability of what he described as a 'conflagration fire disaster' in the ACT and its urban–rural interface:

The 'Bush Capital' Canberra population as a whole migrated to the Capital with its industry or enterprise base being predominantly Government Administration and Ancillary Services. The vast majority of these people came from other urban communities with no tradition, experience or understanding of living in the bush or with successive bushfires ... Although major fires swept across the ACT 'Bush Capital' in 1936 and again in 1952, Canberrans have not been subjected to the ravages and trauma of events like Hobart 1967, Ash Wednesday in 1981 in South Australia, the deaths and mutilation of fire fighters in the Royal National Park, Sydney, 1983 or the 1983 Bushfire Disasters in Victoria and South Australia.

Culturally, socially, politically and departmentally the ACT community is and has been lulled into a sense of false security with regard to the ravages of bushfire.

If the existing Government Statutes, Departmental Structures, Reporting Relationships and Programming of Wildfire Mitigation Works continue as currently structured, it is inevitable that significant loss of assets will accrue together with loss of life during the next single, multiple or configuration fire event.

The urban rural interface will obviously bear the brunt of such losses.

The author stresses a set of climatic conditions will eventuate producing 'fire weather' conditions of such an intensity that such losses will occur.

It is not if such a disaster will occur, but when.<sup>47</sup>

Mr McBeth said that, in order to reduce the impact of the type of fire he predicted would occur in the ACT, resulting in loss of life and significant property damage, ‘Individuals, families, street communities and government agencies as a whole must manage the only manageable component of fire physics [that is, fuel loads] in a collective cooperative manner’.<sup>48</sup>

Mr McBeth attached to his report a document by Mr Cheney, commenting on the Hannon Group’s September 1991 report on ACT Fire and Emergency Services. Although this document is concerned primarily with the then proposed restructuring of emergency services in the ACT, it does include observations similar to those made by Mr McBeth:

The fundamental basis for disaster management, which includes bushfires in Australia, is to carry out an analysis of the worst case scenario. Our knowledge of fire behaviour and fire weather is adequate to realistically put a worst case scenario to the people of the ACT and perhaps to estimate a frequency of occurrence and to estimate the damage which is done ... My estimate is that a 1-50-year conflagration fire will burn a total area of around 60 000 hectares in 1 day and severely damage suburban dwellings where they are adjacent to forests, hill parks and nature reserves. Under this scenario the firefighting resources of the ACT will be totally overwhelmed. They will not have enough tankers or pumbers to attend every house threatened, and by and large destruction will be limited only by the action that residents themselves take both before the fire occurs to reduce the fuels around their homes and during the fire to suppress embers and spot fires starting in their gardens and dwellings.<sup>49</sup>

In evidence to this inquiry Mr McBeth was asked whether, during the time of his investigations in 1994, anyone made requests in relation to attempts to improve the fuel-reduction regime. His evidence was that the only people he could recall who had what in his opinion was the appropriate level of anxiety about the matter were Mr Lucas-Smith and Mr McRae.<sup>50</sup>

#### 4.2.3 Mr McRae’s ‘Phoenix Imperative’ document

The same concern is reflected in ‘The Phoenix Imperative: some thoughts on the Namadgi fire age bottleneck’, a document prepared by Mr McRae in February 2002, and the evidence of both Mr Lucas-Smith and Mr McRae concerning the questions raised in that document.<sup>51</sup> Mr McRae’s document is introduced by the following warning:

In recent history Namadgi National Park has rarely carried fire, and when it did they were often very large wildfires—over 20 000ha. The park is in a vicious cycle—by keeping fire out most of the time, we are endorsing the occasional very large wildfire. However very large wildfires are the ones that are able to leave the reserve and damage property elsewhere. They are also the fires that can cause the most impact on biodiversity management goals.<sup>52</sup>

In promoting an active fire management program, Mc McRae made a number of remarks in the document about the fuel loads then present in Namadgi National Park and the consequences of a fire starting in the park:

Namadgi National Park covers a large fraction of the ACT, and is the area in which extensive landscape fires are most likely to occur. While there are few valued (non-environmental) assets within the Park, the exception being the water supply catchment, its neighbours could suffer large losses from fires leaving the Park.

For most of the Twentieth Century the area suffered very large wildfires every decade on average. The legacy of these was that its fire age distribution was concentrated in a few large clusters. However there has been no large fires in 20 years now, and basically the entire area is now at or near equilibrium—ie. maximum fuel loads. Only around 20ha out of 120 000 would be fuel reduced in any way.

The potential for a drought to occur shortly as a new El Nino forms in the Pacific Ocean raises the spectre of the highland fuels in the Park becoming flammable. Should they be ignited, then a fire could easily become a landscape fire if the FDI [Fire Danger Index] is high enough. Difficult access makes rapid suppression harder than elsewhere in the Territory.<sup>53</sup>

Mr McRae broadly recommended a fuel-reduction program involving burning areas of the park in rotation, to achieve a ‘fire age spectrum’ where roughly 20 per cent of the park will have been burnt in the last 10 years, a further 20 per cent in the last 10–20 years, 30 per cent in the 20–50 year age class, and the remaining 30 per cent over 50 years. Mr McRae noted that, when this spectrum is achieved, ‘This also gives a high likelihood of a large head fire eventually reaching fuel-reduced ground, and becoming more controllable’.<sup>54</sup> Thus, consistent with Mr Cheney’s report<sup>55</sup>, Mr McRae’s document promoted broad-area fuel reduction—as distinct from fuel-reduction burning targeting particular assets<sup>56</sup>—and reinforced the point that the purpose of fuel management is to assist in fire suppression.

In this regard, Mr Cheney identified the aim of fuel management as ‘to alter the structure of the fuel bed and the load of the available fuel to make firefighting safer and easier’.<sup>57</sup> Mr Cheney went on to explain:

Hazard reduction burning will reduce the total load of fine fuel and is also effective in reducing the height and flammability of elevated fine fuel such as shrubs and suspended dead material. Burning is the only practical way of reducing the fibrous bark on trees, which is the prime source of firebrands that cause spotting. Hazard reduction reduces fire behaviour by:

- reducing the speed of growth of the fire from its ignition point;
- reducing the height of flames and rate of spread;
- reducing the spotting potential by reducing the number of firebrands and the distance they are carried down wind; and
- reducing the total heat output or intensity of the fire.

Prescribed burning is not intended to stop forest fires, but it does reduce their intensity and this makes fire suppression safer and more efficient. Prescribed burning is not a panacea nor does it work in isolation. It must be used in conjunction with an efficient firefighting force.<sup>58</sup>

#### **4.2.4 The state of the fuel in January 2003**

##### ***The ACT***

To the knowledge of at least Mr Lucas-Smith and Mr McRae, none of the potential advantages of broad-area fuel- or hazard-reduction burning described by Mr Cheney were available to those tasked to fight the Bendora, Stockyard Spur and Mount Gingera fires, each of which burnt within

Namadgi National Park from 8 to 18 January 2003. Mr Lucas-Smith confirmed that there had been no rigorous burning program, as recommended by Mr McRae in his ‘Phoenix Imperative’ document.

The Bush Fire Council organised a field trip with the land management agencies and the people responsible for the catchment, so that they could inspect the fuel loads and talk about the problems raised in Mr McRae’s document. The result was a ‘fair bit of discussion’, but there was still a need for more work to be done.<sup>59</sup> Mr Lucas-Smith was a ‘little disappointed’ that the land managers were not responding more actively to the matters that had been raised. He had not seen any plans being developed, either through the Bushfire Fuel Management Committee or by the land management agencies, to start to tackle the problem of high fuel loads in many of the ACT catchment areas.<sup>60</sup>

Mr McRae acknowledged that the risk had not been mitigated but considered that the fact that nothing had been done by January 2003 to implement the burning program he recommended in February 2002 was acceptable because a great deal of preparation was necessary.<sup>61</sup>

Mr Bartlett gave detailed evidence about the fuel-reduction work ACT Forests did during 2002. He noted that the 2000–2002 Fuel Management Plan was supposed to provide details of what ACT Forests should do in the period covered by the plan, but he said he found the plan confusing.<sup>62</sup> He nevertheless ensured that ACT Forests took some steps beyond what was in the plan. These he referred to in his evidence<sup>63</sup> and in his supplementary statement.<sup>64</sup> It is unclear what, if any, effect this work had in mitigating the spread and intensity of the fires after they burnt into plantation areas on 18 January 2003<sup>65</sup>; in any case, the work is not relevant to a consideration of fuel loads and consequential fire spread and intensity in native forest areas because ACT Forests was working in the plantations.

In this regard, Mr Bartlett noted in evidence that, when he was fighting the fires, he could see that the fuel loads in the Bendora area were very heavy. He agreed it would be reasonable to say the fuel loads were heavy in all locations and that did have some impact on firefighting operations.<sup>66</sup> He thought the fuel loads would generally have been greater than 25 tonnes per hectare and in some places quite a bit more than that. In his view, in eucalypt forest that is the point at which the fuel level is in ‘equilibrium’, or ‘as high as it can get’.<sup>67</sup>

### ***Brindabella National Park***

The state of the fuel in Brindabella National Park, which is under the control of the NSW National Parks and Wildlife Service—and, more particularly, in the area of the park affected by the McIntyres Hut fire—is referred to in the joint submission of the NSW Rural Fire Service and the NSW National Parks and Wildlife Service to the NSW coronial hearing:

In January 2001 an additional 6192ha was added to Brindabella National Park, including the section east of the Goodradigbee River, and a large area NE of Mt Coree. The majority of these additions had not been burnt for a long period, with areas along the Goodradigbee not subject to fire since 1972 and most of the area north-east of Mt Coree last burnt in the 1939 fires. **The site of the McIntyre’s Hut ignition on 8 January 2003, the eastern edge of the Baldy Range ignition and the area where the fire broke containment lines on 17 January 2003 are all located within the area added to Brindabella National Park in January 2001.**<sup>68</sup> [original emphasis]

A chart in the submission summarised the estimated fuel loads in each of those areas at the time of the fires.<sup>69</sup> Notably, the fuel load at the McIntyres Hut ignition point was estimated at

10–14 tonnes per hectare and that at the Baldy Range ignition point was estimated at 12–20 tonnes per hectare. This compares with a fuel load of up to 30 tonnes per hectare estimated for the area of the Mountain Creek ignition points. The submission discussed whether a program of block burning in the park would have had any impact on the development of a major fire event. It concluded that the impact would probably be minimal:

Table 2 compares the influence of fuel loads on rate of spread given the conditions prevailing at the McIntyre's Hut ignition on 8 January. It demonstrates that even if the surface fuel loads had been reduced from 14 to 4 tonnes/ha (which would require a higher intensity hazard reduction burn than would be desirable), the fire would have reached the top of Webb's Ridge about one hour later (ie at approximately 1830 hrs instead of 1730 hrs). Given the time required to travel ... to the area, and the presence of other fires in the locality and the associated risk, this would have made no difference in the ability to put firefighters in front of the fire that night, nor the decision to go to an indirect containment strategy.<sup>70</sup>

This accords with the evidence of, among others, Mr Cheney in relation to the likely futility of, and risks associated with, attempting to control the head of the fire at the Webbs Ridge track on the afternoon or evening of 8 January 2003.<sup>71</sup>

## 4.3 The Emergency Services Bureau

This section outlines the structure and operation of the Emergency Services Bureau in order to cast light on the organisational dynamics at the time of the fires. It also looks at aspects of those dynamics that appeared to directly affect decision making about both the initial response and the issuing of warnings.

### 4.3.1 The creation and structure of the Emergency Services Bureau

The history and structure of the Emergency Services Bureau are described in a number of documents produced in evidence to the inquiry<sup>72</sup> and can be summarised as follows:

At the time of the January 2003 fires, with the exception of policing, emergency services in the ACT were provided by the ... ESB. Policing is and was provided by arrangement with the Australian Federal Police ... The ESB was a government agency having the responsibility for emergency management and other support arrangements throughout the Territory ... [It] was an administrative unit within the Department of Justice & Community Safety, responsible to the Minister for Police and Emergency Services and comprised four emergency service response organisations, specifically the ACT Ambulance Service, the ACT Bushfire Service, the ACT Emergency Service and the ACT Fire Brigade. These operational services were supported by a corporate administration function comprising a number of units and four operational and administrative support units within the ESB. Within its corporate portfolio, amongst other matters, the ESB was responsible for public safety education, public safety information and community support relating to public safety and emergencies. The organisational structure of the ESB as at January 2003 is set out in a charter at page 6 of the ... McLeod Inquiry Report.<sup>73</sup>

Five aspects of the Emergency Services Bureau's structure and operational arrangements formed, on the evidence, part of the matrix informing the broader questions of initial response and warnings:

- the ‘service management team’ concept
- the position of the Media Unit in the organisation’s structure
- ESB headquarters as a control centre
- the allocation of roles
- the weight of the response.

#### 4.3.2 Operational arrangements

##### *The AIIMS Incident Control System*

The *Rural Fire Control Manual*<sup>74</sup> confirms that, at least since publication of that manual in July 1992, bushfire emergencies in the ACT have been managed in accordance with the Australian Inter-Service Incident Management System Incident Control System.<sup>75</sup> In very broad terms, under that system an incident is managed by an incident controller, or IC, whose principal responsibility is described in Mr Roche’s report.<sup>76</sup> The role of the incident controller is supported by three subsidiary roles—planning, operations and logistics. As the name suggests, the operations officer is generally responsible for managing the response to the incident—in this case the January 2003 fires. The Roche report states:

During large incidents, the role of the Operations Officer shifts away from front line activity into appraising the performance of divisions and providing information to the IC. The Operations Officer’s time should be allocated to: crisis resolution; supporting Division Commanders; strategic planning; briefing the IC; and ensuring that communication systems are effective.<sup>77</sup>

The planning officer is responsible for collecting, evaluating and disseminating current and forecast information about the incident. There are a number of units under the planning officer, among them the situation unit, which is engaged in the collection, analysis and processing of information and incident predictions, and the information services unit. In his report, Mr Roche noted:

An Information Officer or Media Officers attached to the Information Services Unit will usually be the first point of contact for the media or other agencies to obtain information pertinent to the incident. The Information Services Unit is expected to develop strategies to manage the media, communicate across agencies and to government and to keep the community informed. For multi-agency incidents, only one Information Unit should be established with staff appointed by other responsible agencies integrated into the Situation Unit.<sup>78</sup>

Finally, the logistics section is responsible for ensuring that the required facilities, services and materials are readily available and that adequate planning occurs in the areas of response, resource availability and staffing. It also has a number of sub-units, ranging from air support to catering.

### ***The service management team***

Mr McRae described the system of incident management used by the Emergency Services Bureau at the time of the fires in January 2003 as ‘a local variant of the AIIMS ICS system. In a lot of areas, local arrangements force some tweaking. It is our response to make ICS allow us to fulfil the obligations under the Bush Fire Act’.<sup>79</sup> In his statement Mr McRae described the service management team thus:

At that time, management of bushfires in the ACT used the concept of a Service Management Team to coordinate overall activity and to provide centralised roles. The SMT is organised and run in the same way as an IMT [incident management team]. SMT roles and responsibilities, and their linkages to IMTs were clearly defined in standard operating procedures then current. The SMT is housed in ESB headquarters while IMTs work in the field.<sup>80</sup>

In evidence Mr McRae said the document he had referred to in his statement as ‘standard operating procedures’ was a document headed ‘The SMT role in ICS’.<sup>81</sup>

That document defines the ‘SMT role’ in the following terms:

The SMT is the executive of the ACT [Bushfire Service], which has legal responsibility for all bushfire incidents outside the built-up area, and includes the Chief Fire Control Officer, DC [Duty Coordinator] and any other officer assigned to the SMT. The SMT is structured in the same way as the IMT—ie Controller, Operations Officer, Logistics Officer and Planning Officer. The SMT establishes policy, gives direction and allocates authority and resources to the IC. Given that the ACT is a small jurisdiction, it is not practical to duplicate certain functions.

The document then goes on to identify certain functions that ‘are only available through the SMT’, among them some specialised resources and fire weather forecasts. Under the heading ‘SMT responsibilities’, the document provides, ‘The SMT delegates to the IC the responsibility for effective management of the incident. In some circumstances this delegation may be in writing, but generally it is verbal’. The document notes that the incident controller has responsibility for incident objectives (in consultation with the service management team) and the strategy or strategies to achieve objectives. Notably, the service management team’s responsibilities include: ‘Identify hazardous and adverse conditions that may compromise firefighter and community safety, monitor multi-jurisdictional concerns, manage media participation, and monitor social and policy concerns’.<sup>82</sup>

### ***Implementation of the service management team concept***

In his statement and evidence Mr Bartlett referred to concerns he had about the Emergency Services Bureau’s implementation of the AIIMS Incident Control System during the December 2001 fires and said, ‘Some of the fundamental problems were still evident in the 2003 fires’.<sup>83</sup> Mr Bartlett considered, ‘On the basis of my experience, for ICS to be effective there is a strong need to have a close link between the planning and operational sections’.<sup>84</sup> Mr Bartlett said that, despite the importance of that close link, in his view there was anything but a close link between those sections during the 2001 fires, and the problem was still evident in the 2003 fires.<sup>85</sup> Later in his evidence, while expressing the view that the planning and logistics needed to support operations in the management of a fire need to be located as close as possible to the fire, Mr Bartlett clarified, ‘In a number of cases in the ACT that could be at Curtin. It is not so much the location that is an issue; it is the management responsibility for those sections’. Mr Bartlett agreed there is no problem with planning being done at Curtin, provided the product of the

planning is being disseminated effectively to the controllers in the field—‘and also the input from the field people into the planning as well. It is a two-way process’. Mr Bartlett referred in particular to the absence of a clear plan for deploying resources: ‘That’s why people were sitting around until it was worked out as to where they were going to go’. He said there was no routine incident planning process during the 2001 fires and there were similar problems in the 2003 fires.<sup>86</sup>

Mr Bartlett also referred to the importance of control headquarters being adequately staffed on a two-shift basis:

In order to develop the plans to deploy the people for the day shift, you have to have someone working during the night; and conversely the other way. The people on the day shift work during the day, and then the last task they do is hand over the plans for the night shift. So it needs to be a 24 hours a day operation.

In Mr Bartlett’s view, the criterion for determining whether, for example, an overnight planning section should be operating is whether the fire is likely to continue beyond the first 24-hour period: ‘If people are going to be working on the second day then someone needs to plan during the first night what they are going to be doing’. Mr Bartlett said he had a fairly strong conviction that the January 2003 fires were not going to be put out on the first day.<sup>87</sup>

More broadly, Mr Bartlett confirmed that he did not have a problem with the way the service management team is described in the ‘SMT role in ICS’ document but added, ‘That wasn’t the way it operated in 2003’. According to Mr Bartlett, the difference was that:

The document … indicates that there would be full incident management team set up for each incident—and that is certainly not what happened in 2003—and that the role of the Service Management Team would be more coordination rather than detailed operational planning for an incident.

Mr Bartlett said there was a pressing need for a full incident management team for the Bendorra fire: ‘It needed the capacity to have a planning section that could develop the details of deployment for a particular day’. He also referred, in his statement and his evidence, to a number of instances when ComCen was giving instructions directly to firefighting resources under his control and he had to override ComCen.<sup>88</sup>

When discussing the concept of the service management team, Mr McRae gave evidence that he ‘certainly expected’ there would be a planning unit in the field, comprising a dedicated planning officer with, under him or her, dedicated officers in the situation unit and perhaps other elements of the planning cell ‘if the situation required it’.<sup>89</sup> He agreed that by about 9 January the fires had developed to a stage that warranted having someone in those roles. He thought some of those tasks were being performed in Curtin and some in the field, but he did not have a good recollection of what was being done in the field ‘because I was busy managing what was needed in Curtin’. Mr McRae said he did not know whether there was a dedicated planning unit operating in the field at any stage until 18 January. He went on to say, ‘It was never the intention that planning in Curtin would be doing all of the planning functions for all of the [fires]’ but he did not have ‘a strong recollection of what the structure was in the field’. It was put to Mr McRae that, as the planning officer within the service management team and with all the resources available to him, he would have been aware if there was someone fulfilling a discreet planning function in the field because he would have been communicating with that person. He responded:

There was a problem with communications which prevented me from directly communicating with the Incident Management Team in the field ... That was to do with the physical separation between the parts of our headquarters where the radio is and the part of the headquarters where the planning section had to operate.<sup>90</sup>

Later in his evidence Mr McRae referred to Mr Hilton Taylor travelling to the Bendora fire ‘as a representative of my section ... He wasn’t tasked to the incident controller in the field. He was tasked to me ... As I say, his goal was to make sure the information was synchronised’. Mr McRae agreed that it was part of his role to support the incident controllers in the field.<sup>91</sup>

Mr McRae would not agree that, in a general sense, the entire planning function in relation to the period from 8 to 18 January was being conducted under his supervision from Curtin. According to him, ‘All of our key officers are trained in ICS, and that includes trained to operate as planning officers ... In the absence of a dedicated planning officer the incident controller does those functions’. He assumed the planning function was to some extent being carried out in the field and that the incident controllers in the field were responsible for ensuring this was being done adequately, either by them, having absorbed all functions, or by someone dedicated to that task.<sup>92</sup> Mr McRae said responsibility for incident prediction to support strategies and tactics lay with the field controllers and incident prediction to support coordination lay in Curtin and was ultimately his responsibility.<sup>93</sup> He later explained that he would expect a person in the field who is performing the planning task to be predicting for the current shift and the next shift.<sup>94</sup>

Mr McRae also confirmed in evidence his view that responsibility for completing incident action plans rested with the incident controllers in the field and any planning staff they had nominated. He suspected that the problems encountered during the fires with the preparation and provision of incident action plans were ‘more fundamental, to do with the training that was given to people beforehand and our inability to adequately exercise these roles’. Mr McRae agreed that, in hindsight, it was fairly clear people did not properly understand the way the service management team structure was supposed to work.<sup>95</sup>

In relation to ‘The SMT role in ICS’ document, it was put to Mr McRae that having a service management team with each of the functional roles filled at Curtin and, at least in a theoretical sense, having an incident controller in the field, again with each of the functional roles under the incident controller being filled, ‘creates the very vice that this document is seeking to avoid; namely duplication’. Mr McRae responded, ‘With hindsight, we know it created a number of issues. We have put considerable effort into fixing them. We didn’t anticipate these issues arising until we were in the middle of a large incident’.<sup>96</sup>

Mr Graham gave evidence that he would not necessarily agree that the service management team is a variation on the standard ICS structure:

We still had incident management teams and we had an incident controller; and each of the fires were allocated an incident controller and a number of people to make up their team. What we were doing back at Curtin was we were providing a strategic overview. We were providing them with the additional resources that they might require.

He considered that the role of the service management team was similar to that performed by the NSW Rural Fire Service at its Rosehill headquarters.<sup>97</sup> He agreed, however, that, unlike the fully constituted incident management team managing the McIntyres Hut fire from Queanbeyan, the ACT incident controllers in the field might from time to time have had someone fulfilling a role not unlike that of an operations officer, but at no stage did the incident controllers have a

planning officer working under them. Mr Graham noted that there were instances when people from the Planning Section in Curtin went into the field to provide guidance, but he said they were working under Mr McRae. Mr Graham agreed that, in reality, what the incident controller in the field was having to do in order to ensure that those other functions within the ICS structure were being fulfilled was to refer back to Curtin, and he accepted that that was a major difference between what was operating at Queanbeyan and what was operating in the field in respect of the ACT fires.<sup>98</sup>

Mr Graham could not specifically recall a discussion with Mr Bartlett on 12 January during which Mr Bartlett expressed concern about the lack of planning and support for operational staff at Bendora and the need for a forward control point, in response to which Mr Graham provided some support staff ‘but indicated that they would only be available to assist with crew changeovers and that the main planning function would continue to be undertaken in Curtin’. He agreed, however, that this was consistent with his approach to managing the fire and that he would have said that to Mr Bartlett. He also agreed that the only planning function was in Curtin. He went on to accept that, although people in the field might have the title ‘incident controller’, in fact, because they had no planning function supporting them in the field and had to rely on Curtin for that, the reality was that they were fulfilling a role equivalent to a division commander under the ICS structure.<sup>99</sup>

Mr Graham also agreed in evidence that, while the tactics were being determined in the field, ‘In terms of the strategies, I would suggest it was probably a fairly equal mix of who was devising what. And certainly as the incident was escalating, the development of strategies were being done more in the field than back in Curtin’. On the other hand, Mr Graham agreed that there was very little being done in the field to take things beyond the next shift.<sup>100</sup> He also accepted that the role of field officers designated as incident controllers might have been made difficult by the fact that they had primary responsibility for a particular incident but effectively no planning or other support in the field.<sup>101</sup>

Mr Roche noted in his report;

The concept of the SMT is not unique to the ACT. Most firefighting agencies replicate the functions of an IMT at their corporate operations headquarters to ensure adequate support is provided to the IMT. It also needs to be recognised that the agency with prime responsibility for the incident will be required to ensure that senior officers of the organisation who have an executive management responsibility are kept informed and government is adequately advised of each situation. This is a function that should remain at the corporate headquarters. Where multiple events occur and multiple agencies are involved, it is likely that more than one IMT will be established. Under these circumstances the functions and activities of each IMT need to be coordinated and resource allocation prioritised. It is also prudent that media and public information is managed centrally to ensure that stakeholders receive the total picture rather than having to piece elements together.<sup>102</sup>

He went on to report, however:

When agencies operate using this framework, there must be clear and unambiguous delineation between what are the responsibilities of the headquarters team and those of the IMT. Although the concept of an SMT appears to have been well intentioned, I am firmly of the belief that the manner in which the concept was applied in January 2003

caused significant confusion among personnel, poor planning and inadequate information to the community.

Mr Roche referred in his report the evidence of witnesses suggesting that personnel assigned to key positions had conflicting opinions on the role of the incident controller in the field and the service management team at ESB headquarters.<sup>103</sup>

### ***The management and role of the Media Unit***

In his evidence Mr Castle confirmed, ‘The media cell that was established is actually part of the planning function within the ICS system, so the planning—the media people that actually were obtaining information were part of the planning function’.

He also confirmed that the Media Unit was physically located in the same area as the Planning Section<sup>104</sup> and that under the ICS structure the Media Unit sits within the planning cell but that, for the purposes of the 2003 fires:

The decision would appear to have been made by Mr Castle to treat the media along the lines specified in the media part of the ACT Emergency Plan, which is something that is a well-practised process. It is my understanding that’s why Ms Harvey was brought in. What that required to mesh media into the Service Management Team structure was for Ms Harvey to be working to Mr Castle or Mr Lucas-Smith as required but in terms of locking the media unit into the ICS structure, is still to report to me. What that means is, if there is content of media material she works with Mr Lucas-Smith or Mr Castle. But if she needs to ask for a meal to be provided then she comes to me.

Mr McRae said he did not have any responsibility during the fires for media releases by the Emergency Services Bureau. Asked if he could identify the individuals who did have responsibility for the content and issuing of media releases, he said:

In terms of content there is perhaps not an easy answer to that. We would discuss at planning meetings from time to time media information, and in that sense the whole team was having some input into media content. But after the planning meetings, it was my understanding that Ms Harvey and Mr Castle and perhaps others would go and do the wordsmithing to come up with a polished media release.

Mr McRae’s evidence was that the person with responsibility for making the decision that information needed to be transmitted to the public, whether in the form of a media release or in another form, ‘would be Mr Castle or perhaps Mr Lucas-Smith from time to time’. He considered this arrangement ‘a very slight variation’ on what is contemplated under the ICS structure.<sup>105</sup>

Mr David Prince and Ms Marika Harvey also gave evidence that Ms Harvey reported to Mr Castle and Mr Lucas-Smith.<sup>106</sup> Ms Harvey confirmed that it was the responsibility of Mr Castle and Mr Lucas-Smith to make sure that, where a threat had been identified, people were notified of that threat. She said the people who were responsible for giving her the instruction to deliver a warning to the community were either or both of Mr Castle and Mr Lucas-Smith ‘and possibly some of the other high level public servants who were involved at that stage and directing us what we needed to be doing’. The context of this evidence suggests that the ‘high level public servants’ Ms Harvey was referring to were Mr Tim Keady and Mr Robert Tonkin.<sup>107</sup>

In his statement Mr Nick Gellie remarked on the fact that the Media Unit was, in effect, operating outside the Planning Section:

The community relations aspect of planning was not initiated. This meant that a lot of stress was placed on public relations via media, rather than creating a string of local networks to prepare the community for potential threats. This should have been given a lot more priority and attention in the lead up to and during the fire emergency.<sup>108</sup>

### ***ESB headquarters as a control centre***

It appears to have been universally accepted by those with whom the question was raised in evidence that the layout of ESB headquarters hampered the efficient management of the fire emergency in January 2003. But no witness suggested that this contributed in a material way to deficiencies in the initial response to the fires or to the development and dissemination of timely information and warnings to the ACT community.<sup>109</sup>

In particular, Mr Graham was asked about his previously expressed concerns about the layout of the facility at Curtin and whether the layout might have impeded those responsible for issuing warnings to the Canberra community. He responded:

No, that's not what I was saying. What I was saying, it was difficult from my point of view for me to make the necessary contacts with the people that I may have had to make contact with—for example, Mr Lucas-Smith, Mr McRae, Mr Castle and others—because in my view the layout is not conducive for us doing that.

He agreed that if the person responsible for issuing warnings to the Canberra community is, for instance, present at a planning meeting where the level of risk is being discussed, there would be nothing about the facility at Curtin that would prevent that person leaving the meeting and immediately doing something in order to have a warning issued.<sup>110</sup>

### ***Allocation of roles***

Mr Graham confirmed in evidence that he was the rostered duty officer for 8 January 2003. He explained the arrangements for allocation of roles during an emergency:

If it is a relatively minor incident then the duty coordinator, whoever that might be, will manage the incident by him or herself without any external assistance. When they need external assistance, then they will call for it from somebody else. So if I wasn't the duty coordinator and somebody else was, they would in fact from a service management team point of view fulfil the roles of operations and incident controller and planning and logistics. When we get to a major event when a full service management team is established, I would ordinarily fill the operations officer role.

He said there was no document that described the scaling-up process, and he also explained that if Mr Lucas-Smith, as the incident controller, wanted someone else to fill the operations officer role instead of Mr Graham, then Mr Lucas-Smith ‘would certainly do that’.<sup>111</sup>

### ***The weight of response***

The Emergency Services Bureau uses colour codes to identify the level of response readiness—from green to blue to yellow to orange to red. The status of readiness determines, among other things, the deployment of firefighting tankers and light units upon reports of smoke or fire. On Tuesday 7 January 2003 the ACT had a day of extreme fire danger: the readiness level was set at red. A total fire ban had been declared in the ACT and surrounding NSW district. A total fire ban in the ACT had also been declared for 8 January, to harmonise with the one declared by NSW for the Southern Tablelands. The weather forecast for 8 January was for possible storms later in the day, and on that day the ACT had a readiness status of orange.<sup>112</sup>

The ESB Standard Operating Procedure for weight of response then in force<sup>113</sup> provided that the weight of initial response for an orange state of readiness was three tankers and two light units. SOP 7 also provided that if the initial response was found to be insufficient, the incident controller may request, through ComCen to the duty coordinator, the assistance of additional units. SOP 7 was derived from Section 9.1 of the *Rural Fire Control Manual* of July 1992.<sup>114</sup>

## 4.4 The weather

### 4.4.1 The relevance of antecedent weather conditions

Antecedent weather conditions contribute significantly both to the likelihood of fires occurring during a fire season and to the difficulty of suppressing fires that do occur. More particularly, data about antecedent weather conditions constitute one of the most important variables in the indices of fire danger and fire behaviour on which firefighting authorities rely when planning their response to fires and fire risk. For this reason, like other fire authorities throughout Australia, the Emergency Services Bureau continuously monitored weather patterns in the lead-up to the 2002–03 fire season, using information from the Commonwealth Bureau of Meteorology and internationally available data.<sup>115</sup>

The weather that directly affected the area in and around the ACT was particularly adverse in 2002, resulting in recognition by the Emergency Services Bureau as early as January 2002 of the consequences for bushfire development. The material demonstrates that a bushfire impact on Canberra’s suburbs was also in contemplation during that year. This section deals with factors that are relevant to a full understanding of the evidence about the predictions of fire spread undertaken at the time of the fires and thus the extent to which the threat from the fires was, or should have been, identified.

### 4.4.2 Rainfall

In 2001 and 2002 most of central and western NSW and the north-western corner of the ACT experienced ‘decile 1’—rainfall in the lowest 10 per cent of all records.<sup>116</sup> In 2002 ACT rainfall was in the lowest 20 to 30 per cent on record.<sup>117</sup> Between July and December 2002 in much of NSW rainfall was in the lowest 10 per cent on record; at that time all of the ACT was in that lowest 10 per cent.<sup>118</sup> Finally, for the three months from October to December all of the ACT remained within the lowest 10 per cent and a number of areas in NSW, including near Goulburn, north-east of the ACT, experienced their lowest rainfall on record.<sup>119</sup> By January 2003 the Bureau of Meteorology had recorded 270 millimetres of accumulated rainfall at Canberra airport, against an average of 470 millimetres.<sup>120</sup>

### 4.4.3 Temperatures

Between October and December 2002 the area of NSW around the ACT had an average maximum temperature 2–3°C above average. In evidence in connection with the Bureau of Meteorology submission, Mr Robert Webb described this as a ‘large number’.<sup>121</sup> The submission itself stated, ‘When examining the maximum temperature for the months leading up to and including the fires ... a very large positive anomaly is evident. The average maximum temperature in November 2002 was 5° above normal’.<sup>122</sup>

#### **4.4.4 The fire danger rating system**

The fire danger rating system was developed in 1966 by AG McArthur. Mr Cheney briefly described the system:

With minor modifications, [it] has been used by all fire authorities across Australia for the past 35 years. The system combines an index of soil moisture deficiency with the weather variables of temperature, relative humidity, wind speed and recent rainfall to produce an index of the difficulty of suppression of fires occurring in a standardised fuel type broadly characterised by a dry eucalypt forest carrying 12.5 tonnes per hectare of fine fuel.<sup>123</sup>

The weather variables making up the fire danger rating system vary both from day to day and diurnally. The soil moisture deficiency is determined by longer term rainfall and temperatures. The index of soil moisture deficiency that is incorporated in the fire danger rating system is known as the ‘drought factor’, which is in turn calculated by reference to the Keech–Byram Drought Index.

The Bureau of Meteorology submission provided an explanation of the KBDI and summarised the changes in it in the period leading up to January 2003:

In NSW and the ACT, fire authorities use the [KBDI] to measure the level of dryness of the soil. The index is calculated in millimetres and is the theoretical amount of rain required to bring the upper levels of the soil to saturation. It incorporates daily rainfall and maximum temperature data. Rising temperatures during the Spring of 2002 saw a rapid increase in the KBDI values reaching the extreme levels of more than 100mm late in December 2002 ... The combined effects of very dry and hot conditions between October and January can be clearly seen in the rapid rise in KBDI during this period, the rate of increase far larger than would be typically expected.<sup>124</sup>

#### **4.4.5 The McArthur meter and Project Vesta**

The components of the McArthur forest fire danger rating system, including the drought factor and the KBDI, were explained by Mr Cheney in his report<sup>125</sup> and his evidence.<sup>126</sup>

In his report on fuel management<sup>127</sup> Mr Cheney detailed his work on Project Vesta; he discussed it further during his evidence. In his report he introduced the topic thus:

The development of more sophisticated burning guides requires a better understanding of fire behaviour in fuels of different structure and composition. Recent work by CSIRO (Project Vesta—work in progress) has identified the importance of fuel structure in determining fire behaviour and has developed a system for quantifying fuel structure with a numerical index that can be used as a fuel predictor variable to replace fuel load.<sup>128</sup>

Mr Cheney explained in evidence that the project involved carrying out field experiments:

at as high a level of fire danger as we possibly could and therefore it took years to extend our knowledge of high intensity fires ... The question arose because the original fire behaviour guides, including the McArthur meter, the prescribed burning guides, both in the eastern states and in Western Australia used only fine fuel loads as the major variable that described the effects of fuels on fires.

Mr Cheney referred to a number of research projects that resulted in accumulating data calling into question the basic premise that the rate of fire spread was directly proportional to the amount of fine fuel consumed. He had begun preparations for Project Vesta in 1989. He described the extensive preparation, the number of years over which the burning of the experimental fires occurred, the extent and frequency of burning, the size of the areas burnt, and the analysis conducted during the burning operations and afterwards.<sup>129</sup>

Later in his evidence—when discussing predictions of fire spread for 18 January that might have been made on the evening of 17 January—Mr Cheney referred to the fact that his predictions were based on the ‘McArthur forest fire danger meter Mk5 with x3 correction and the CSIRO grassland fire spread meter’. Mr Cheney confirmed that the ‘x3 correction’ was the recommendation that had emerged from Project Vesta and added, ‘There is also a warning on that meter printed in 1992 that it may underestimate at high wind speeds …’ Mr Cheney went on to explain:

It was indicated on the meter that it may under-predict at high wind speeds, which is on the back of the meter in the footnote just above the top of the table, I think. The initial work that prompted Vesta was the fact that under certain conditions we knew that McArthur was underestimating. As indicated on the meter, we thought that was primarily for high wind speeds only. In the Vesta work where we started the fire at a size that reflected its potential rate of spread for the prevailing conditions, we found that this was being borne out on wind speeds which were lower than 20kmh or so that is indicated on the meter.

Mr Cheney confirmed that on the back of the McArthur meter the word ‘warning’ appears in bold type and is followed by the words: ‘The fire behaviour information provided in this table is a guide only. No warranties, guarantees or representations are made that it is 100% accurate. Current research indicates that this table may under-estimate rates of spread at high wind speeds’.<sup>130</sup>

In his report Mr Cheney said:

During Project Vesta CSIRO recognised that the Forest Fire Danger Meter under-estimated fire spread on large fires at wind speeds above 20km/hr and a warning was sent to all fire agencies to multiply the value calculated by the McArthur Meter x3. The ESB planning officer did not accept that this recommendation applied to the ACT and suggested that in fact the meter would over-predict.

Mr Cheney confirmed in evidence that the warning sent out about the Project Vesta finding was adding a little more detail to the warning that already appeared on the back of the McArthur meter and offering a multiplier that could be used.<sup>131</sup> The warning was sent out in the form of a pamphlet dated 1999<sup>132</sup>, which began:

A preliminary examination of the behaviour of experimental fires conducted during Project Vesta has raised a number of important points … The fire spread table on the back of the McArthur Mk 5 Forest Fire Danger Meter under-predicts the potential rate of spread (ROS) over most fire danger indices … Forest fires in fuels with a developed shrub layer taller than 1 metre can spread up to three times faster than predicted by McArthur’s forest fire spread table; fires in litter fuels with a low shrub layer can spread two times faster.

The minutes of a meeting of the Fire Controllers Group on 27 January 2000—attended by, among others, Messrs Graham, Ingram and McRae—confirmed that one of the items for

discussion was ‘some comments and notes from Phil Cheney’, which include reference to Project Vesta and, in particular, that Project Vesta ‘found that the McArthur meters can under-predict the rate of spread possibly by a factor of 3’.<sup>133</sup>

Mr McRae said in evidence that he was ‘very aware that one of the early findings in relation to the work of Project Vesta was that there was scope for the McArthur meters to under-predict rates of spread in forest fuels’. He agreed that Project Vesta found that the under-prediction could be by as much as a factor of three. When asked whether he had any reason to doubt that finding, he replied, ‘Well, some years prior to that I had seen a research paper done by Stephen Kessell which indicated that, on the basis of wildfires in south-east Australia, the McArthur system could over-predict by a factor of 3’. Mr McRae also agreed that another of the Project Vesta findings was that in certain conditions, usually with very low winds, the McArthur meter would over-predict: ‘So the situation we were in was that the fundamental tool that we were tooled up to use had to some extent been undermined and we didn’t have an alternative to work with that would have had higher confidence on it’.<sup>134</sup> Mr McRae confirmed that, when calculating the fire spread predictions on the night of Friday 17 January 2003, he did not factor in the Project Vesta findings.<sup>135</sup>

Later in his evidence Mr McRae agreed that Mr Cheney was effectively responsible for Project Vesta, which was the most detailed research on fire spread undertaken in recent years.<sup>136</sup> Later still, he repeated that he was aware Project Vesta had found there could be deficiencies with the McArthur meter as a prediction tool, but ‘I still don’t have a sufficient replacement … to use’. He was aware of published work from Project Vesta saying that in certain conditions large fires could spread up to three times faster in the forest than indicated by the McArthur meter: ‘I was aware that was published work, as was other work’. Mr McRae said, however, that neither he nor anyone in his team included in their fire spread projections the Project Vesta correction.<sup>137</sup>

Mr Cheney was asked whether he was familiar with the research by Mr Kessell, referred to by Mr McRae. He knew a little about it and, after describing what he understood of it, confirmed that it was based in part on an American model of fire spread, which in turn relied on theoretical research using a wind tunnel. Mr Cheney was not aware of any research apart from Project Vesta that had assessed the accuracy of the McArthur meter to the same degree as Project Vesta, which involved lighting up to 100 test fires in the field. Mr Cheney responded:

No. There had been other research done by ourselves in Western Australia prior to Vesta which basically led up to setting up the project, because on a limited data base, yes, we came to the conclusion that it was under-predicting when fires were large, at wind speeds which were probably higher than 10–15kmh.<sup>138</sup>

Mr Roche confirmed in evidence that, as an operational firefighter, he was aware of Project Vesta. His evidence was:

For the majority of my career, in fact as far back as I can recall, I have always been aware that there were issues associated with the low end and the high end of the McArthur meter. At these lower values the meter tended to over-predict, and at the very high to extreme scales the meter tended to under-predict. Therefore, in an operational sense when the meter was in use it was always made on the basis of using the outcomes from calculations as conservative figures one way or the other. It really didn’t matter down the lower end of course, but certainly at the higher end it did.<sup>139</sup>

As the Chief Officer of Victoria’s Country Fire Authority, Mr Roche had informed all CFA operational personnel of the findings of Project Vesta, and the brochure was circulated to all of

his senior operational managers. ‘I issued instructions to people when they were planning, when they were using those predictions in an operational sense, that they were to take into account the fact that the meter was under-predicting.’<sup>140</sup>

#### 4.4.6 The deteriorating conditions during 2002

When referring in evidence to the Keech–Byram Drought Index chart on page 17 of the Bureau of Meteorology submission, Mr Webb explained that, with rainfall in September 2002, the KBDI actually fell to a value of zero (that is, fully saturated) but, with warm and dry conditions from October to January, the index rose very rapidly—apparently far more rapidly than one would expect.<sup>141</sup> By January 2003 the official KBDI was 120 millimetres, significantly exceeding the extreme level of 100 millimetres.

As noted, Mr McRae had himself identified these deteriorating conditions from as early as 4 January 2002, when he expressed a lack of confidence in the official KBDI—that is, the KBDI as issued by the Bureau of Meteorology:

There are some on-going issues associated with the drought indices, especially for the ACT’s highland sites. There is not a high confidence in the official KBDI of 39mm. Ecowise supply us with fire forecasts based on river hydrology, and these have long proven a useful ‘reality check’ for our indices. These show that rivers in the region are drying out rapidly, and indicate considerable potential for large forest fires.<sup>142</sup>

Mr McRae agreed that there was the potential for the official KBDI to be again overstating the level of moisture in the fuels in January 2003.<sup>143</sup>

On 23 January 2002 Mr McRae sent the first of a series of emails discussing the deteriorating outlook for the 2002–03 fire season. That email, sent to Messrs Bennet, Lucas-Smith, Graham and Ingram and copied to Ms Vivien Raffaele, had the following subject line: ‘Doom & gloom such as not even the dark Kingdom of Mordor has seen!’ Its importance rating was high. The email began:

It now appears more likely than not that we have just started down the path to a full blown El Nino (I estimate 67% chance) ... The actual observations are closely tracking the evolution of events up to and during January 1997. This went on to form a ‘Big One’ ... Unfortunately, if this forecast is correct, we currently have a drought index running at around 100mm more than at this time in 1997. Oops. Even ACTEWAGL is gloomy as the rivers are low as are the dams ... An El Nino would be very likely to trigger water restrictions for Canberra. This has significant flow on effects for interface residents and firefighters ... I would like to give everyone a big happy ‘heads up’ on this—please think about the preparedness required. I hope I am wrong.<sup>144</sup>

On 30 May 2002 Mr McRae provided an ‘El Niño update’. After a detailed explanation of the data used to predict the likelihood of certain weather events, he stated, ‘As of 18th May it appears likely that we are now in the next evolutionary phase, which will very likely produce an El Nino event by October 2002. The risk is now, in my opinion, rising to around 0.9 [that is, 90 per cent].’<sup>145</sup> Later in the email, Mr McRae listed what was required in order to be prepared for the coming fire season. The list included land managers needing to do everything possible to mitigate risks on their land, the community needing to be warned to take steps to protect themselves, planning needed to guide the response to large and complex fire situations, and strategic planning for areas such as the Cotter catchment. Mr McRae concluded by estimating the

probability of a ‘nasty El Niño’ for the coming summer as 0.5, 50 per cent. Later that month Mr McRae provided a further update concerning the likelihood of an El Niño event. It begins, ‘I was wrong. I underestimated!’<sup>146</sup>

On 12 August Mr McRae sent to Mr Graham an email summarising the outlook. After explaining that there was still some uncertainty about the ‘species of El Niño’ that would be faced, Mr McRae continued:

There are a few things that are fairly certain, however. (1) the warm pool near the dateline is already strong affecting the weather in India, Indonesia and eastern Australia. All of these areas are entering or are in dry spells. In eastern Australia, Canberra is almost the greenest patch east of the Divide—but it is clearly unseasonally dry here, despite the rainfall we are getting. Lake George is dry, and Canberra’s water supply is drying out—Corin @ 47%; Bendora @ 60% and Googong @ 82%. Other areas are very dry, and many parts of NE NSW are already into their fire season. (2) it remains fairly windy. This has been the case since before the Xmas events. Fire danger reflects dryness and windiness. If the drought and the winds occur together, then we will get extreme fire behaviour. This gives us the potential for fires that are far more serious than those last summer. While there are no guarantees that this will eventuate, the risk is far higher than for a normal year, requiring careful planning and preparation.<sup>147</sup>

The minutes of a meeting of the Land Managers Fire Liaison Group on 15 August 2002, attended by, among others, Mr Lucas-Smith and Mr Graham, record that the Emergency Services Bureau reported to the meeting, ‘El Nino is here and it is already worse than in 1997 and could be worse than 1994. This has dire consequences if it is linked with a particularly windy summer’.<sup>148</sup> Mr Graham gave evidence that either he or Mr Lucas-Smith would have provided this report to the meeting, basing it on information given to them by Mr McRae. Mr Graham thought the seriousness of the situation was something of which he was aware in August 2002.<sup>149</sup>

On 18 October 2002 Mr Webb circulated to Mr Graham, Mr McRae<sup>150</sup> and others the Bureau of Meteorology’s October climate briefing.<sup>151</sup> The briefing provided detailed information and tables and referred to rainfall deficiencies and above-average temperatures as at October 2002. It concluded:

This outlook presents a serious situation within NSW, particularly given the current severe rainfall deficiencies in many parts. The continued severity of the coming fire season will still depend on the individual systems that pass over NSW and continued vigilance will be required.<sup>152</sup>

Mr McRae’s email updates on weather conditions continued; a further email on 6 November 2002 began:

What’s that you say? Not enough doom and gloom of late? Well, at Risk Management we’re responsive to our customers needs. So sit back, get comfortable and BRACE! BRACE! BRACE! I’ve just done a detailed grass curing assessment and the results are fairly worrying. Overall the curing has risen in the last 8 days by between 10 and 45 points. This is unprecedented in my records … if the curing climbs at the rate that it did in the last drought from this base (November 16, 1997) then we will be near fully cured by November 18 2002. This would leave us with full flammability for the entire summer, and the winds are consistently up! I hope it rains. There are few mm forecast for mid-November. It seems certain now that we will have a drought for the entire summer, and the winds will be nasty and the water will be scarce. The forests are

apparently nearly fully flammable already and should remain that way. Severe fire activity is likely.<sup>153</sup>

The following day, there was another email from Mr McRae, with the subject title ‘Doom & Gloom (contd)’. Mr McRae wrote, ‘What’s new? In the last 57 days we have had just on 12.3mm of rainfall. That’s bad. It’s now 41 days since we had any real rainfall. If you do the maths, that’s now 1000 hours! So ALL dead-and-down timber of any size is now fully flammable’. After setting out his calculations of drought factor and related indices, he continued, ‘Had enough? Wait there’s more. The ACT’s total water storage is now below 61% of maximum capacity, and falling … More? In any normal year, today would have been a rainy day. Instead all we got was a massive spike in RH [relative humidity] to 72%!!!!’<sup>154</sup>

Mr McRae provided another update on 14 November 2002<sup>155</sup>; this was followed by an email on 15 November 2003 entitled ‘You thought I was finished with the doom and gloom?!!!’ This email contained Mr McRae’s assessment of the hydrology forecast just provided to him by EcoWise Environmental. In summary, Mr McRae explained that the EcoWise forecast indicated that on a scale of ‘low/attention/action/critical’, which reflected the rapidly growing potential for bushfires, each of the river flow traces was at or approaching ‘critical’. He concluded:

All up, it is a gloomy scenario, with the catchment hydrology indicating a potential for fires of over 10sq.km. The eastern side of the ACT is the most threatened, and the Tinderrys in NSW are a dangerous place. The rapid drying out suggests that, without rainfall, within a month we will have no moisture to get in the way of a major, landscape-scale wildfire. The Cotter River is still flowing, as you would expect due to its peatlands and highly sheltered mountain slopes. These will dry out rapidly when summer sun angles return. We should not confuse subsoil water flows with moist fuels. The original work on bushfire potential from hydrology showed that while river flows can drop, most of the time when they do a ‘death roll’ [my term] we get serious fires.<sup>156</sup>

The content of Mr McRae’s 15 November email was echoed at a meeting of the Land Managers Fire Liaison Group on 21 November 2002, attended by Messrs Graham, Lucas-Smith, McRae and others.<sup>157</sup> The minutes of the meeting record that Mr McRae reported to the meeting, ‘64 days since rain—none in the last 48 days means over 1000hrs with no rain, which means the big timber is now dry’. Mr McRae confirmed in evidence that the minutes show there was a substantial discrepancy between the Keech–Byram Drought Index and the soil dryness index. The result of this was that, although the Bureau of Meteorology was suggesting a drought factor of 9, the soil dryness index confirmed that the drought factor had already reached its maximum level of 10.<sup>158</sup>

Mr McRae sent further email updates on 2, 3 and 10 December 2002 and 6 January 2003. The first of these provided details of rainfall for the period from September, which he described as showing a ‘serious rainfall deficiency’. He calculated that, while the drought factor was then at 9, ‘in 3 days [it] will return to 10. It does not qualify as useful rain in any way. We got to 55 days without effective rain’.<sup>159</sup> Mr McRae’s outlook as at 30 December 2002 was as follows:

A mixed bag … The drought level increases steadily. The ACT and the highlands adjacent are now uniformly at a drought factor of 10. This is bad … The equatorial wind anomalies have backed off again … this again opens the door for some rain to sneak into the region over the next 2 weeks. This is good, unless the rain comes as thunderstorms. The models do indeed forecast some rain in forthcoming days—perhaps as much as 25mm. However, based on recent performance of the rain in actually falling and hitting the ground, this may translate to about 5mm … I guess the SOI [Southern

Oscillation Index] for December will come in at minus 14. This is bad. The El Nino is far from mature, and has a long way to go yet. This, too, is bad. ACT water supplies continue to drop by about 1% every 10 days. I estimate that we are now at 54.5%. That's about 3 months to Stage 2 water restrictions. *We have to remember that, due to reductions in watering, the flammability of the urban interface may reach levels that we have not seen before, and extra forethought is required for bushfire protection. Fire fronts could move through gardens, and embers could start spot fires well within the suburbs.* It appears that the only significant fire in New South Wales is in the south of Kosciusko NP. This is a bad sign. The 'fire problem' has reached our region.<sup>160</sup> [emphasis added]

The concern about the urban interface area Mr McRae expressed in this email and, more particularly, his reference to embers starting spot fires 'well within the suburbs' echo concerns he expressed during training sessions he conducted at the Emergency Services Bureau leading up to January 2003. This subject arose in an email sent to Mr McRae after the fires by someone who had attended one of the training sessions. In the email—which came to be described during the inquiry as 'the Dr Doom email'—the sender, Mr Peter Mills, said:

I cannot help remembering your words during one training session at ESB (when you had your Dr Doom hat on, grrrr) and said to us, when the fire (big one) hits Aranda one day we will probably pull it up two or three streets in (to the suburb), quite ironic ... I now know you were not kidding us.<sup>161</sup>

Mr McRae said in evidence he did not recall the particular training session to which Mr Mills was referring: 'But it's—firstly, it's the sort of thing I do say repeatedly to get the message across. However, the qualifier is it is two or three rows of houses in, not streets, that I say when I talk about these matters'.<sup>162</sup>

Mr McRae was asked whether the view he expressed at the training sessions was limited to a fire in the Aranda bushland or did he place it more widely than that. He answered:

Well, I have used it as a rule of thumb for all of Canberra's interface for how far bushfire impacts would be expected to occur. That's consistent with national research ... I would apply it anywhere in the urban edge where we felt there was going to be a bushfire impact. It doesn't mean I expect the bushfire impact everywhere on the urban edge.<sup>163</sup>

Later in his evidence, in relation to what he had said in the training sessions in the lead-up to the fires (as referred to in the Dr Doom email), Mr McRae described what on 15 and 16 January he was expecting the fires' impact on the urban edge might be. It should be noted that he thought the impact he referred to in his response would occur not on 18 January 2003 but on the following Monday, 20 January: 'We would probably pull up the head fire right on the urban interface. But what a lot of people call the momentum of the fire in terms of embers and firebrands would be likely cause some damage up to three rows of houses in'.<sup>164</sup>

Finally, two days before the lightning strikes that started the fires, Mr McRae reported:

Hi. Outcomes of today's helicopter flight ... (1) We went searching for green grass (outside of the city!) and found none. All we found that was green was green graminoids (grass like objects) in the highland swamps. All else was basically over 95% cured—including the dry lands adjacent to the highland swamps. (2) The river flows are not good. (3) Grasses in highland areas (such as Brandy Flat – Half Moon Creek) are fully cured—this is not good at all. (4) Many farm dams are at or below 10% full.

(5) Few head of livestock are to be seen. The photo comparison with the 1997 situation shows that at the end of that drought the swamps were drier, but Corin Dam was a lot fuller. There is no rain in the horizon at all—up til past January 15<sup>th</sup>. Result: GLOOM.<sup>165</sup>

These observations were reflected in Mr Lucas-Smith's evidence and led him to conclude, 'This meant that in January 2003 the ACT forest and grassland were in a volatile state'.<sup>166</sup>

## 4.5 Pre-fire preparation

### 4.5.1 The relevance of aspects of pre-fire preparation

A number of factors raised during the inquiry in relation to the period leading up to the fires are directly relevant to a consideration of the adequacy of the initial response and warnings. Fuel management and the state of the fuel loads, as discussed, are one. The others are:

- community awareness of risk and appropriate preparations
- pre-planning of aircraft and heavy plant
- access to the fires
- recognition of the importance of a rapid, aggressive response.

These factors are to some degree interdependent. For example, there is evidence to suggest that there can be a trade-off between fuel management on one hand and ease of access and a rapid, aggressive response on the other. The potential consequence of an approach to fuel management that involves little or no prescribed burning can to some extent be mitigated by a rapid, aggressive response.<sup>167</sup> And a rapid, aggressive response will be facilitated by well-maintained fire trails and helicopter access points, pre-planning and pre-positioning of aircraft and heavy plant, and well-trained and -equipped remote area firefighting teams.

Each of these factors, and their effect on the development and impact of the fires, was discussed by Mr McRae in his report and evidence. The cross-examination of Mr Roche served to highlight the evidence about what in fact was done by the Emergency Services Bureau and other responsible agencies in the lead-up to the fires in each of these areas. Other evidence to the inquiry—particularly that of Mr Val Jeffery and Mr Tony Bartlett—helps clarify how a different approach to one or more of these factors might have produced a different result for the people of the ACT on 18 January 2003.

#### *The evidence and cross-examination of Mr Roche*

In Part 5 of his report, under the heading 'Risk management', Mr Roche referred to evidence demonstrating that the NSW Rural Fire Service and key operational personnel from the ACT Bushfire Service recognised the expected severity of the 2002–03 fire season; he asserted, 'The evidence suggests that little if anything was done in the lead up to the season by either ESB or the DUS [the Department of Urban Services] over and above normal pre-season preparations'.<sup>168</sup> Mr Roche then expressed the opinion that a risk analysis of the emerging conditions, in accordance with the methodology outlined in the Australian Standard on risk management,

would have identified an extreme level of risk warranting immediate action to limit the risk ‘and to ensure both the organisation and the community were well informed and prepared’. Mr Roche then set out a number of examples of the actions that, in his opinion, should have occurred, among them concentrated initial and ongoing community education and awareness campaigns, possible adjustments to the weight of attack criteria for individual and multiple incidents, increased access to aircrafts, hire of heavy plant and its pre-positioning, and inspection of and familiarisation with primary and secondary access routes in high-risk or vulnerable areas.<sup>169</sup>

On behalf of Mr Bartlett and the ACT, Mr Roche was cross-examined extensively in connection with this section of his report. In particular, Mr Roche agreed that Mr Bartlett’s supplementary statement said there was a consciousness—at least in ACT Forests—of the need to be prepared for the fire season. In the context of Mr Bartlett’s reference to actions relating to remote area firefighting<sup>170</sup>, however, the additional RAFT capability arranged by Mr Bartlett before the fire season was not used on 8 or 9 January 2003.<sup>171</sup> Mr Bartlett’s evidence was that, despite his offers of assistance to Mr Lucas-Smith and Mr Graham, neither he nor the ACT Forests crews he had on standby were deployed on 8 or 9 January or, indeed, on the morning of 10 January.<sup>172</sup> He also confirmed that on the morning of 10 January the ACT Forests personnel were ready to be deployed that day, apart from the personnel Mr Bartlett had made available to work in the ESB Planning Section.<sup>173</sup>

Later in cross-examination Mr Roche agreed with counsel for the ACT that the actions listed in his report were things that, on the evidence available to him at the time, should have been done but were not done.<sup>174</sup> In relation to the visit by members of the ACT Bushfire Service to residents of Chauvel Circle in Chapman in November 2002, Mr Roche said, ‘One visit to one location is not what I consider to be a concentrated initial and ongoing community awareness campaign’.<sup>175</sup> Mr Roche was shown documents dealing with bushfire prevention that had been distributed to householders. He agreed that the documents did highlight a bushfire risk but said they were ‘not directed enough to personalise the risk that I have talked about’.<sup>176</sup>

On the question of the weight of response, it was suggested to Mr Roche that the fact that there were people available to be called on—regardless of whether they were stood up—constituted an adjustment to the weight of response that Mr Roche had asserted was lacking. Mr Roche would not agree with that proposition. More particularly, it was put to Mr Roche that he acknowledged that a number of people who recognised the danger were ready to be deployed and ‘that is an adjustment to the weight of attack by reference to the severity of the season, irrespective of whether they are deployed or not’. Again, Mr Roche disagreed: ‘I don’t agree that the weight of attack was adjusted so they were deployed. In fact, the evidence says that they weren’t’.<sup>177</sup>

In relation to aircraft, Mr Roche agreed that at the time of his report he did not have the details of what aircraft were available to the ACT but maintained, ‘Arrangements should have been made to secure or to ascertain … the availability of additional aircraft’.<sup>178</sup> In relation to heavy plant, Mr Roche was shown the statement of Mr Ingram, prepared and provided late in the inquiry. Mr Roche agreed that the annexure to the statement listed various places from which the Emergency Services Bureau could obtain graders and bulldozers. It was suggested to him that there are nine ‘pieces of heavy plant recognised and listed on the database of ESB available’. Mr Roche would not agree with that analysis of the document, saying, ‘My understanding of this list is a list of equipment whereby ESB or BFS [the ACT Bushfire Service] … could have tried—I emphasise tried—to obtain that equipment in the event of a fire. I have seen nothing in this that says it was available—unfettered availability to the BFS during the season’.<sup>179</sup>

Mr Roche was asked further about this in re-examination, and he explained:

My experience is that ... it doesn't matter how much you ring up prior to a season or prior to a fire occurring and saying, 'Will your plant be available this year?' then my experience is that answer is always qualified on the basis, 'Yes, if it is not doing something else'. No-one is going to leave expensive machinery sitting idle just in case an agency may need it. The only way, in my experience, of being sure that it will be available is, in fact, to contract it, so that the operator or the owner is realising a return on his investment. Otherwise, there is no guarantee it will be available.<sup>180</sup>

Mr Roche also mentioned the availability of a float, the availability of experienced operators, and ensuring the suitability of the equipment for the task at hand as being important factors in attempting to arrange to hire heavy equipment at short notice.<sup>181</sup>

In connection with inspection and familiarisation of primary and secondary access routes, Mr Roche was referred to a memorandum entitled 'Namadgi National Park Pre-suppression Plan'.<sup>182</sup> He agreed that the purpose of the memo was to provide an update on the progress of the Namadgi National Park Pre-suppression Plan and to say that more efficient access and egress areas and better access to water points was required. Mr Roche did not, however, accept that the memo dealt with the kinds of things he was referring to in his report: 'It is not an inspection. It is a document that says "This appears to have been undertaken" and the purpose of that particular dot point ... is that ... there should have been an on-ground inspection ... and familiarisation of those things'.<sup>183</sup>

Mr Roche added, 'There is a significant difference between those who have the responsibility to carry out fire suppression in that area to have a look at it compared to a document that somebody prepared'.<sup>184</sup>

### ***The evidence of Mr Val Jeffery***

In his statement Mr Val Jeffery summarised the Bush Fire Council's approach to pre-planning of resources and rapid, aggressive response:

The Bush Fire Council owned its own bulldozer, grader and float as well as tankers and light units. Having our own bulldozer, grader and float allowed these to be used in trail maintenance as well as fire suppression ... The Bush Fire Council encouraged early detection and rapid aggressive initial response. The BFC maintained aggressive standby arrangements, particularly on days of high to extreme dangers. For instance it was recognised that the western areas provided the greatest risk to the ACT so standby was increased in those areas as the forecast weather conditions dictated. Units to respond to fire calls were called out by experienced CFCO or DCFCO's [Chief Fire Control Officer or Deputy Chief Fire Control Officers]. Fire fighters on standby did no other work on that day. On those days, water carrying equipment were reinforced with bulldozers and graders on standby. Members on standby during days of very high to extreme weather would expect if responding to a bushfire, to remain at the fire overnight until relieved by day shift crews next morning. Further, when Forestry was managing the Cotter Catchment, they were encouraged by and supported with funds by BFC to carry out regular hazard reduction and trail maintenance ... With the inception of the Emergency Services Bureau ... in about 1994 the BFC was directed that it would be only an advisory body despite the Bush Fire Act still being in place ... the Chief Fire Control Officer ... moved from direct operational involvement as his administrative duties increased with his takeover of the Emergency Service component. Responsibility for turnout of units to fire calls moved from experienced CFCO or DCFCOs to Duty

Officers with considerably less experience in operational requirements. The policy of working fire fighters on other duties whilst on standby was introduced causing problems when fire attack needed to be carried on past knock off or overnight ... this meant that rather [than] having crews for example at Bulls Head ready should there be a fire to the west of the ACT, the crews were now at their depots some distance away and were expected to work their normal duties. During days of very high extreme weather the BFC would have a dozer on a float and the grader stood up at Stromlo Depot and a second Forestry dozer on a float as well as a grader at Uriarra Forestry Depot. This would be at BFC's expense. This would mean that the time taken to respond equipment and mount an important aggressive initial attack on a fire in the mountains or to the west of Canberra would be reduced dramatically.<sup>185</sup>

### ***The evidence of Mr Bartlett***

During his taped record of conversation Mr Bartlett described an alternative response to the fires on the afternoon and evening of 8 January 2003. He was asked what should have been deployed to the fires on the evening of 8 January, and he prefaced his answer by saying he did not have the role and also did not have information about what resources were available. After then referring to identifying resources that could be deployed immediately and using whatever mechanism was most efficient to get them to the fire, he continued:

Having done that, I would have said, 'Right, I need an incident management team here and in particular I want to appoint planning people and we want to think about strategic issues associated with fighting these fires. What happens if we don't get a rake-hoe trail around this fire tonight? What are we going to need tomorrow?', and start that planning process ... I certainly would have thrown everything that was available at it initially. I wouldn't have held it back because ... I've always worked on the principle that you fight the fire you've got.<sup>186</sup>

In his evidence Mr Bartlett was asked about this answer, and he agreed that the point he was making was that it was his opinion that on the afternoon of 8 January whatever was available to be sent to those fires should have been sent. He was then asked whether throwing everything there was to be thrown at these fires would have included the deployment of bulldozers and other heavy machinery. He replied:

I would have, first of all, deployed the RAFT crews and made some arrangements to see what the availability of bulldozers were. But generally in forest fire situations, particularly in dry summers, you usually put a trail around it manually first and then follow that up with a bulldozer train afterwards.<sup>187</sup>

### **4.5.2 Community awareness of risk and appropriate preparations**

An important consideration for the inquiry concerns warnings about the impact of wildfire on the residents of Canberra and nearby forestry settlements. Central to this is the state of community awareness and preparation for such an event.

#### ***The Emergency Services Bureau's mission and objectives***

The Emergency Services Bureau submitted to the McLeod inquiry that the bureau's mission was 'To work with the community to preserve life, property and the environment'. After then setting out the values established by the bureau, the submission continued, 'The ESB provides a range of emergency services and related functions consistent with its obligation to the ACT

Government. These are: Compliance; Community Education, Awareness and Assistance; Preparedness; Response and Recovery'.<sup>188</sup>

When discussing the bureau's mission and objectives, Mr Castle observed in his statement:

The philosophy focuses on self-help in that ESB advice to the community is about self-helping, helping neighbours, helping people. This allows the organisation to set priorities and establish the efficient use of the emergency services. This can be narrowed down to helping those in most need and leading to a recovery and review process. This in turn leads to improved prevention measures and strengthening the philosophy of community resilience and feedback to improve our systems.<sup>189</sup>

Consistent with this, Mr Castle confirmed in evidence that it was the bureau's position in relation to the risk of bushfire that, if adequate preparations have been made and a person is able-bodied, that person should be entitled to remain and protect their home.<sup>190</sup> On the other hand, Mr Castle also agreed in evidence that the concept of self-help and helping neighbours depends on an awareness that there is a risk and an understanding of what to do when confronted with the risk, which in turn raises the question of education programs.<sup>191</sup>

At the time of the fires the Emergency Services Bureau had established a Risk Management Unit to be responsible for, among other things, community education, but Mr Castle described the unit as 'embryonic'.<sup>192</sup> Before the creation of that unit, the individual services within the bureau had been responsible for community education, with the Bushfire Service broadly responsible for educating the community about the risk of fire.<sup>193</sup>

#### ***Community awareness materials and the community's appreciation of risk***

Mr Castle was asked in evidence about a bundle of what was described as 'community awareness' documents. The documents were in a folder, which also contained a summary that made reference to the dissemination of each of the documents. The following were the main documents in the folder and Mr Castle's evidence about them:

- the *Will You Survive?* brochure, which the summary said was 'letterbox dropped' along with a series of fridge magnets 'after the bushfires in early 1994'. Mr Castle said this was done before his time at the Emergency Services Bureau. As he understood it, the letterbox drop referred to in the summary occurred at houses on the edge of Canberra.<sup>194</sup> He confirmed that, although the brochure had been updated and reprinted in 1997, there had been no further targeted campaign for distribution of the brochure. Instead, it had been distributed 'at community events, Canberra Shows, field days, school fetes, other public forums and on request by groups or persons'.<sup>195</sup> Generally, the brochures would be available wherever Bushfire Service volunteers had a stand, and they would be handed out by volunteers<sup>196</sup>
- the *ACT Fire Prevention Handbook*, printed and distributed in 1995, 1996 and May 2002.<sup>197</sup> Mr Castle said primary schools were the 'primary target' for the handbook, although he thought it was also available 'for the same sorts of venues as the Canberra Show'.<sup>198</sup> Mr Castle understood that the intention was to give a copy to every primary school student, but no one had checked to see whether this occurred<sup>199</sup>
- a 'Letter to the householder'<sup>200</sup> and other documents issued to residents in connection with hazard-reduction work. Mr Castle said these documents were not part of 'a general mail-out

to every householder that lived on an interface' but rather were sent to targeted areas of bushfire fuel-reduction work.<sup>201</sup> When asked about the part of the document dealing with what to do if a resident decides to stay and protect their property—and in particular the bullet point saying 'Fill bathtub with water'—Mr Castle replied 'I think we could improve on that and I believe we have ... I don't think the particular purpose to everybody was perhaps quite as clear as it could be'. Mr Castle agreed that the intention was not for people to immerse themselves in the bath<sup>202</sup>

- other materials such as the 'Bushfire action guide' fridge magnet<sup>203</sup> (there was no letterbox drop of this that Mr Castle was aware of<sup>204</sup>), promotional material, information issued in December 1998 concerning the Standard Emergency Warning Signal<sup>205</sup>, and a children's colouring book.<sup>206</sup>

A number of other documents were discussed with Mr Castle during his evidence, among them newspaper articles and documents forming part of the pre-season publicity. It was put to Mr Castle that a common theme in these publications was to identify people living adjacent to bushland or grassed areas, who should clean around the areas immediately adjacent to their homes as part of their bushfire preparation. He responded, 'That's correct, because people who have a road around them already have a space'.<sup>207</sup> Mr Castle was also asked about the briefing for residents of Chauvel Circle, Chapman, on 24 November 2002, which had been arranged at the request of Mrs Jane Smyth, who was herself a witness during the inquiry.<sup>208</sup>

Mr Castle was not aware of any publication directed at community members living in the urban–rural interface that pointed out they were in an area that was at risk.<sup>209</sup> More particularly, he was asked whether residents of suburbs such as Duffy understood that they were at risk. He responded:

You specifically mentioned Duffy. Duffy does not have a common back fence with the grasslands, it has a road on two of its most vulnerable borders, one of which has in places 40–50 metres of mowed grass area along it. So in terms of that, you used Duffy in this example, there are probably others that are more intimate with the interface.<sup>210</sup>

Mr Castle said residents of Warragamba Avenue and Eucumbene Drive should have been aware in January 2003 that their homes were at risk of the impact of bushfire—'I suppose by mere proximity to those areas'.<sup>211</sup> Mr Castle did not have a view about how well people in Duffy, particularly those on Warragamba Avenue and Eucumbene Drive, understood in January 2003 the nature of the risk they faced. He believed, however, there was 'a level of awareness and information given to the public on which they can make some reasonable assessment'<sup>212</sup>, 'I am saying I believe we made the information available'.<sup>213</sup> Mr Castle later agreed that 'we [the Emergency Services Bureau] could improve' the information made available to residents in the area of the urban–rural interface, to help them understand they are at risk from the impact of bushfire<sup>214</sup>, but he had no reason to believe that residents in places such as Duffy did not have an adequate understanding that they were exposed to such a risk.<sup>215</sup>

At the conclusion of the review of the community awareness material, Mr Castle confirmed that the *Will You Survive?* document was 'possibly the primary source of information'. He was shown parts of the document that depicted what appeared to be farming properties and referred to 'equipment for you to consider at your country home' and was asked, 'If a person who perhaps lived on Eucumbene Drive or Warragamba Avenue was at a fair or a place of that type and was shown this document they might be forgiven for thinking that it didn't apply to them?'

He replied, ‘I don’t think I could assess whether that was the case. It would depend on their own thoughts about their own property’. Asked more generally about whether the community awareness material would suggest to someone who did not back onto an area of park, forest or bush that they were at risk of fire, Mr Castle said:

I think general education level of people would assess that if they live in what is described as a ‘bush capital’ there is some understanding what that means. Each of those items that we have gone through at various stages, I think, pointed out that it doesn’t only refer to people that back onto bushland.

He went on to agree that the material pointed out that people who are either in the bush or have houses adjoining bushland, forest or parks lands are at greater risk.<sup>216</sup>

Mr Castle agreed that a person living in the suburb of Duffy, for example, whose house did not back onto bushland, park or forest could be forgiven for not appreciating that the community awareness material was relevant to them—‘but that does not mean to say they had that view and that they weren’t taking heed of the information or the efforts that we had put in to advising people that there were risks’. He considered the events of December 2001 had given people living in areas such as Duffy a greater understanding: ‘I think as at January 2003 they would have had a realisation that there was some risk to them’. He was confident that these people had a degree of understanding about the risk.

Mr Castle was familiar with the potential for apathy and complacency in relation to bushfire risk among urban communities: ‘I think all emergency managers right throughout the country and perhaps even world-wide face an issue of “It won’t happen to me” … in terms of general community knowledge and understanding, there is almost an optimistic view that “It won’t happen to me”’.<sup>217</sup> It was later put to Mr Castle that, if people do not appreciate the fundamental fact that they live in an area or in a house that is at risk of bushfire, they are not going to absorb the community awareness information. He responded, ‘I think anybody that doesn’t realise that they are at potential risk—it is back to the complacency that you referred to earlier’.<sup>218</sup>

Mr McRae described in his evidence how, in his role as Acting Manager of the Risk Management Unit in the period leading up to 2 January 2003, he had no direct responsibility or role in connection with community education. It was not part of his remit to manage the development or dissemination of publications such as *Will You Survive?*<sup>219</sup> In relation to the extent of awareness of the bushfire risk in the Canberra community, he ‘felt that it was probably as high as its ever been, given the community’s awareness following the Christmas 2001 event and also the fact that the fire agencies had been doing material for the media in the lead up to the bushfire season to make the community aware of what they should be doing’. He thought that the level of community awareness was adequate.<sup>220</sup> He later gave the following evidence:

Bearing in mind that I wasn’t involved in any formal feedback process that was actively seeking that opinion, my feeling would be that, because of the then recent experience of the ’01 fires, a lot of the community had a raised awareness of the potential for bushfires to hit the urban interface. We generally felt that the people living right on the urban edge can see the fuel so they are most aware. The further you go inside the suburbs, the awareness drops off quite rapidly.<sup>221</sup> My expectation would be that those who see the broad acre land uses out of their lounge room windows would tend to have a higher awareness than those who don’t. But then you have the effect of nature strips and whatever else. Depends on someone’s background, their experience in all the phases of their lives. Perhaps they lived in the Blue Mountains—I don’t know.<sup>222</sup>

### **Pre-season publicity**

In October 2002 the Emergency Services Bureau began publicising the potential severity of the coming fire season. An article in the Tuggeranong *Chronicle* on 15 October 2002 reported, ‘With an exceptionally dry winter already marked by unseasonal bushfires in New South Wales, Canberrans have been warned they could face the worst bushfires of 20 years’.<sup>223</sup> The article quoted Mr Lucas-Smith as saying:

We are expecting a long and severe season extending well into April. We don’t expect any real problems until the end of November, however ... The thing that pushes us over the edge is the wind. If there is no wind, we still have fires, but not nearly as severe ... the wind will dictate the severity of the fire season.

An article about the need to prepare ‘now’ for the bushfire season, quoting Mr Lucas-Smith as saying conditions were much worse than at the same time in the preceding year, appeared in the *Canberra Times* on 22 October 2002.<sup>224</sup> Similar concerns were referred to in a short article in the *Chronicle* later that month.<sup>225</sup>

On 13 November 2002 the Legislative Assembly passed a resolution that, among other things, noted, ‘The fast approaching summer contains bushfire conditions that are anticipated to eclipse those of 2001–2002 with severe weather conditions likely to exacerbate a desperately dry situation’.<sup>226</sup> It appears this resolution prompted a publicity campaign aimed at arson offenders in the ACT. It was primarily a juvenile crime prevention campaign.<sup>227</sup>

On 29 November 2002 a report in the *Canberra Times* provided to residents advice about preparing homes for fire and referred to comments by Mr Lucas-Smith:

Mr Lucas-Smith said that clearing the bush would make a big difference, enabling some fires to be stopped quickly before they spread. This was particularly important this year as the season was expected to be bad. ‘What we saw last December was in real terms probably only an entrée to what’s potentially going to occur this year,’ he said.

Mr Lucas-Smith said that the conditions were even worse than they were at the end of 1982 before the Ash Wednesday bushfires in Victoria and large fires in the ACT and NSW. The conditions were now as bad as would be expected at the end of February with no moisture in the grass. At least 75mm of rain was needed to avert the current level of danger.<sup>228</sup>

### **Expert evidence on community awareness**

Mr Roche dealt with the question of community safety and education in Part 10 of his report. He said that the aim of community education is to:

- Have the community understand the risks associated with a wildfire (the hazards);
- Have the people personalise the risks;
- Provide advice to the community on what may be expected when a wildfire approaches and/or impacts their property;
- Provide advice on the options that the community has to ameliorate the risk to themselves and their property.<sup>229</sup>

Mr Roche summarised the education programs implemented by the Emergency Services Bureau in the preceding several years and echoed the *Rural Fire Control Manual* in noting, ‘Fire

services have long recognised that during a wildfire, their resources will more than likely be insufficient to afford protection to every individual and structure in the area at risk'. He then stated that this recognition imposes two significant obligations on fire services:

[First] to inform the community that in the circumstances of a wildfire with a potential to impact multiple properties, the fire service will not be able to attend every property at risk ... secondly, having informed the community of its limitations, the service then has the obligation to advise the community of what they can do individually and collectively to protect themselves and their property in the absence of a fire service presence.

Mr Roche said:

The traditional method of the distribution of suitable material through schools, letterbox drops and other events, similar to that used by the ESB ... suffers from two flawed assumptions:

- that the act of distributing information in this manner creates an awareness that the individual and their property is at risk from a wildfire; and
- that this awareness will result in a range of actions by the community designed to ameliorate the risk and, when the risk is real, actions to secure their own safety and the survival of their property.<sup>230</sup>

He completed Part 10 of his report with a brief analysis of residents' evidence concerning their knowledge of the actions they should contemplate or initiate when threatened by wildfire and concluded:

There can be little argument that the Canberra community was neither well prepared nor informed concerning the escalating risk that they were presented with in January 2003. In my opinion, by current standards, the steps initiated by the ESB to raise community awareness before the event was superficial and largely inadequate.<sup>231</sup>

Later in his report he referred to the importance of having the community understand and accept that they are at risk from a wildfire. He noted that, in his experience, 'The most successful way of achieving this is to have the community participate in the process of defining what they are at risk from and, subsequently, what steps they can take to minimise their exposure'.<sup>232</sup>

Mr Roche summarised the results of a workshop held by a Victorian Country Fire Authority research team in 1999. The resultant report sought to identify the central elements of community and individual preparedness. Mr Roche noted that in the report 'an awareness of the hazard and recognition of the risk were considered to be fundamental elements of preparedness'.<sup>233</sup>

In evidence, Mr Roche acknowledged, 'It takes a long time for the community to generally understand the risks they face from wildfire and is an ongoing program, particularly in those communities where there is perhaps a transitory population'. He elaborated on his views about the difficulties of a program based largely on dissemination of information by letterbox drops and the like.<sup>234</sup> In cross-examination, he repeated his view that 'passive mediums have been shown not to have the penetration that is really required'.<sup>235</sup> He discussed as an example the 'Letter to the householder'<sup>236</sup>: 'Unless people see it as individually applying to them then the tendency—and I can only speak from my own experience—is to put what a lot of people call "junk mail" straight into the rubbish tin'. He had similar concerns about the *Will You Survive?*

document, agreeing that it was a document that provided advice about bushfire dangers and what to do but again identifying the problems with the need to personalise the message.<sup>237</sup>

Mr Roche confirmed in evidence that he had not analysed the 411 victim impact questionnaires (see next section), which showed that about 86 per cent of people who were at home on 18 January said they knew what precautions to take and took some. He did, however, express concern about the validity of the survey and the questions asked.<sup>238</sup> In re-examination he said if there was a level of understanding on the urban–rural interface before the fires, as suggested by an analysis of the survey forms, then ‘It seems to me that the losses that occurred were out of step with the understanding that, I would assume, people would have if there was an extensive pre-season information publicity campaign’. He referred to the article by Mr Nicholson, attached to Mr Nicholson’s supplementary statement<sup>239</sup>, and, in particular, Mr Nicholson’s statement in the article that:

We should understand and accept that effective bushfire risk mitigation not only requires a technologically advanced and well-trained and resourced fire response capacity, but a well-informed, prepared and empowered community which is well aware of the bushfire threat it faces and prepares accordingly is also fundamental to achieving bushfire mitigation.

Mr Roche said he agreed with that statement and added, ‘I believe that had there been that level of understanding to that extent in the community then the losses may have been, and should have been, significantly less’.<sup>240</sup>

Mr Nicholson did not deal directly in his article or the attachment to it with the adequacy of the community education program implemented by the Emergency Services Bureau in the period leading up to the fires of January 2003. In the context of the adequacy of warnings provided to the community as the fire approached Canberra, he did, however, make the point that: ‘In providing advice and warnings to the community, advance work needs to be done to identify what they are to be told and how advice to leave will be given. Then, work needs to be done well in advance to identify where people who choose to leave will go’.<sup>241</sup> He went on to criticise Mr Roche for referring to the deficiency in the provision of warnings as the fires approached Canberra as ‘a failure of the [service management team]’. Mr Nicholson explained, ‘It is a far more long term issue than a few hours before the arrival of the fires at the edge of Canberra’. He then referred to the Country Fire Authority’s heavy investment in community preparedness and the fact that, compared with the CFA or the NSW Rural Fire Service, at the time of the fires the Emergency Services Bureau’s capability was limited.<sup>242</sup>

In an earlier draft of his report Mr Nicholson had begun the paragraph criticising Mr Roche with the sentence: ‘Clearly, as far as advice and warnings regarding the 18 January fires were concerned, the Canberra community, including its emergency services, were not well prepared’. In evidence, Mr Nicholson discussed his decision to delete this sentence<sup>243</sup>, saying that, although he had deleted it, ‘Clearly, as far as advice and warnings regarding the 18 January 2003 fires are concerned “the Canberra community, including its emergency services, were not well prepared”, and I wouldn’t back away from that’.<sup>244</sup> Later in his evidence Mr Nicholson agreed with Mr Roche that, for warnings to be effective, the risk people face must be personalised: ‘If you really want to reach the target you almost have to personalise it, street corner meetings, even getting into people’s homes’. He agreed that people need to understand that it is *their* risk and, in relation to the citizens of Canberra, his opinion was that that had not been achieved ‘to the extent that it could have been’.<sup>245</sup>

He confirmed in his evidence that he still held the opinion expressed in the article attached to the attachment to his article<sup>246</sup>:

And what of the average citizen? Probably the majority of Canberrans prior to the fires in early January 2003 at risk from bushfire where the country meets the urban area? From the extensive and sometimes graphic television coverage of the run of the fires into Duffy and other suburbs, newspaper photographs and discussions with people with homes directly involved, it seems most people had not given any thought to how a bushfire might affect them, particularly those residents abutting the open space surrounding it within Greater Canberra.

He added, ‘It is just a sad fact of life that until people are subjected to what I have called a ‘a watershed event’ or directly impacted, they tend not to take notice. That is human nature. That is very sad, actually’.<sup>247</sup>

### ***The survey of households***

At the conclusion of the inquiry counsel for Mr Castle tendered a statement from Ms Dee Watson. In the statement Ms Watson explained that she had been tasked by Mr Castle to analyse the bushfire victim questionnaires completed by police officers and contained in the brief of evidence. She set out in her statement the questionnaires she considered and the topics covered by the questionnaires and attached a number of spreadsheets analysing the questionnaire responses.<sup>248</sup>

Other evidence to the inquiry confirms that the questionnaires were completed only by Canberra residents whose home was destroyed or who suffered serious injuries.<sup>249</sup> A total of 411 people responded. Ms Watson’s analysis showed that 378 of the respondents either owned or rented houses that were destroyed. Of those, 286 (75.7 per cent) were at home on 18 January. Of the respondents who were at home on the day, 246 (86 per cent) answered ‘Yes’ to the question, ‘Were you aware of how to prepare your house for a bushfire threat?’ It appears that 33 (13.4 per cent) of the 411 respondents took no action, despite knowing how to prepare, and a number apparently took some action despite not knowing how to prepare.

Because of the lack of information yielded by the questionnaires, the analysis could not identify what constituted a knowledge of how to prepare. In particular, it could not distinguish between people who might have had a general understanding that they should clean, block and fill their gutters and wet down areas outside their home and whether their knowledge and understanding extended to the risks of ember attack and how to respond, what clothing to wear, the dangers of late evacuation, and so on. Anecdotal observation—including the evidence given by residents during the inquiry, as referred to by Mr Roche and Mr Nicholson—suggests that the level of knowledge and understanding might not have been very detailed.

The last element of the questionnaire asked respondents an open question: ‘Did you have any issues you consider relevant for the Bushfire Coronial Investigation Team to pass on to the Coroner for the Inquiry?’ Ms Watson’s summary of the questionnaires disclosed that the almost universal theme among respondents in their answer to that question concerned the inadequacy or complete absence of information and warnings about the fires.<sup>250</sup> This was echoed by residents who gave evidence and presented submissions to the inquiry.

#### 4.5.3 Pre-planning of aircraft and heavy plant

In his October 2005 statement Mr Ingram confirmed, ‘Each year a number of services or contractors that may be required during the fire season were contacted to ensure their continued readiness to assist if required, and to update their contact details. I undertook this task for both Aircraft and Plant readiness’. Mr Ingram attached to his statement a copy of the aircraft and helicopter list for October 2003 and a copy of the plant list for the 2001–02 and 2003–04 fire seasons. He did not attach the aircraft and helicopter list for 2002 or the plant list for 2002–03. He said in his statement he was unable to locate these lists but he believed they both were similar to the lists for the preceding year. His statement notes that Mr Ingram ‘used the same information from year to year, but did make calls prior to each season checking for the accuracy of the information’.<sup>251</sup>

Consistent with the evidence of Mr Roche<sup>252</sup>, there is nothing in Mr Ingram’s statement about the weight of response, pre-planning and pre-positioning of resources or arrangements in respect of aircraft to suggest that anything was done in the lead-up to the 2002–03 fire season beyond the Emergency Services Bureau’s usual pre-season preparations. In particular, there is nothing in Mr Ingram’s statement to suggest that actions of the kind referred to by Mr Jeffery as having been implemented by the Bush Fire Council before the Emergency Services Bureau was established were implemented by the bureau in anticipation of what had been clearly identified within the bureau as an unusually severe season. Messrs Castle, Graham, Ingram, Corrigan and McNamara all either confirmed that nothing had been done in terms of preparation that went beyond what might be seen as a standard response to a fire season—even though the 2002–03 season was an extreme one—or were unable to point to anything that had been done.<sup>253</sup>

Mr Lucas-Smith was asked whether in the lead-up to a fire season heavy machinery had been pre-positioned at staging points such as Bulls Head and Piccadilly Circus. He responded:

Not to that extent. Generally when we get to the red readiness or orange levels, the machines we can get access to are primarily from ACT Forests. They will continue to work or cease work depending on the sort of work they were doing, their float capability will be nearby. They know where they all are. All it takes is a phone call from us to determine where they are. They know what is required to move them. The difficulty is, of course, you tell me where the next fire is going to start and I will make sure I have got all the resources there. We don’t know that. So wherever we stage resources will not necessarily be in the right place.

Mr Lucas-Smith went on to make a point similar to that made by Mr Roche in relation to the difficulty of having heavy equipment on standby. Asked whether there were places in a forest or national park where you could make an educated guess, Mr Lucas-Smith said, ‘I would think ACT Forests would put a higher value in relation to their machines and their commercial product’.<sup>254</sup>

In his statement and in evidence Mr Lucas-Smith confirmed that the Emergency Services Bureau did not start to organise heavy plant until after the afternoon planning meeting of 9 January 2003.<sup>255</sup> This was confirmed in the evidence of Mr Graham, who had earlier said he did not think the bureau had contracted or in any way obligated anybody to provide plant, ‘but I do believe that David Ingram had made contact with several providers of plant around the territory to determine their availability if required’. Mr Graham also gave evidence that he understood the value—particularly if a fire starts in a remote area—of having heavy plant available at the earliest opportunity.<sup>256</sup> When later asked why it was not until 9 January that any thought had been given to the likelihood that heavy plant was going to be an essential firefighting tool with

these remote fires, he responded, ‘We needed to know where the fires were. If the fires were burning alongside a track and burning uphill towards the track, they could have been contained immediately’. He subsequently agreed that on the evening of 8 January he could have been speaking to people such as Mr Bartlett or Mr Cooper at ACT Forests, saying to them, ‘Look, we don’t quite know where these fires are yet, but as soon as we find out, there is a chance we might want to get a dozer onto it quickly. What have you got available?’ He did not do that because ‘I just don’t think it was considered at the time’.<sup>257</sup>

Mr Ingram said he was asked at some time on the afternoon of 9 January about obtaining bulldozers. He explained in evidence that he tasked Mr Norm Nelson to see if he could obtain any. Asked what Mr Nelson did in order to obtain bulldozers that day, Mr Ingram replied, ‘He tried and tried, as far as I am aware, he contacted ACT Forests—I believe Peter Beutel in Forests—to see what resources they had … they didn’t have anything available at that time, as I believe he told me’.<sup>258</sup> Mr Ingram said he was advised after the fire that Mr Bartlett had made an offer to locate bulldozers on 9 January, but he was not aware of that at the time. Mr Ingram confirmed that Mr Nelson was able to obtain a dozer through ACT Forests, which he arranged to arrive on the morning of 10 January. ‘I have since found out that two of the other bulldozers that were available at the time were actually broken down, and they were waiting for replacements to turn up.’<sup>259</sup>

#### **4.5.4 Fire trail maintenance and access to the fires**

The memorandum entitled ‘Namadgi National Park Pre-suppression Plan’<sup>260</sup> confirms that the need for development of a pre-suppression plan for Namadgi National Park was ‘highlighted during the development of the Bushfire Fuel Management Plan 2002–2004’. The memorandum contemplates the development of a plan that would respond to concerns about vehicle access points, water points, and access by remote area firefighting teams. In this regard, the memorandum acknowledges, among other things, ‘Many track/trails within the Park are unsuitable for use by fire tankers, often due to the lack of passing and turnaround areas or due to overhanging trees’. It also notes, ‘Some areas of the park are so far from vehicle access tracks that RAFT members would have to walk for many hours before undertaking any attack on a fire such as a slow moving, low intensity fire resulting from a lightning strike’. The memorandum contemplates that the working draft of the Pre-suppression Plan would be available by 29 November 2002. It appears that the draft was completed in December 2002.<sup>261</sup>

There is, however, no evidence that any substantive work was done on implementation of the plan before the fires in January 2003. In his statement Mr Graham Blinksell described fire trail maintenance in Namadgi National Park as ‘basically non-existent’.<sup>262</sup> Mr Lucas-Smith discussed impact of these concerns with fire trail maintenance at the time of the January 2003 fires in his evidence. He said the ‘considerable discussion over maps’ referred to in his statement<sup>263</sup> related to the fact that ‘the maps showed a series or network of trails and we didn’t know whether those trails actually really existed on the ground or whether they were on the maps. We needed some assistance in relation to that’. He agreed that it was ‘certainly an advantage’ to know before a fire happens where the trails are, which trails are workable, which ones need to be cleared and which could be used as containment lines, rather than waiting until the fire arrives. He confirmed that the Emergency Services Bureau did not have that information:

It was certainly an issue that we had had a number of discussions with land management agencies over a number of years on and off in relation to trails and trail networks in the ACT. You need to remember these are trails and management trails

primarily in lands not managed by the Bushfire Service, and the Bushfire Service have no control or responsibility for any of these trails.<sup>264</sup>

Mr Lucas-Smith explained that the bureau did not have resources to check in the off-season on the status of maps:

It was issues raised with the land management agencies over a number of years. They responded to it. They knew what the condition of their trails were. We had asked to be advised in relation to that a number of times. There was a fair bit of discussion even going on about access ... through locked gates and a whole range of different things. The land management agencies were responding. They were compiling a pre-suppression operations map which included trails and helipads and that sort of stuff. Up until that time I had only ever seen that map once, and it was very much in an embryo stage, and that was in a workshop in relation to highlands fire issues.<sup>265</sup>

Mr Lucas-Smith agreed that it was ‘an appalling situation’ to find out—as Mr Gray did when he tried to get to the Stockyard Spur fire on the night of 8 January—that the track that would have taken him down to the fire was covered with logs.<sup>266</sup>

Mr McNamara confirmed in evidence that the Bendorra Break was not suited to any form of vehicle at the time of the 2003 fires: ‘It was overgrown’. He agreed that there were references to it on maps at that time but that in the 12 years he had been involved with Namadgi National Park there had been no means of actually using a vehicle on the Bendorra Break. Similarly, in the 12 years he had been involved with the park he had not known the Stockyard Spur trail to have been in an adequate state for traffic. He said that at the time he gave evidence there was a process for developing a strategic approach to the maintenance of the trails but, as far as he was aware, there was no such process in 2003.<sup>267</sup>

Mr Sayer knew the Stockyard Spur and Gingera areas well and had been travelling through them on and off for a number of years. He considered there were sufficient trails to get into the areas but that ‘from the firefighting perspective, there is probably a lack of east–west trails, which gives you the better containment lines. Most of the trails through there are south–north’. He explained that an east–west trail offers a better chance of containing a fire because it is possible to work to an edge of the fire. Mr Sayer was not sure whether in January 2003 the Mt Franklin Road had been adequately maintained.<sup>268</sup> Mr Cheney also commented on the absence of a trail on the Stockyard Spur – Corin Dam road; he thought such a trail would have offered rapid access into the Stockyard Spur fire.<sup>269</sup>

#### **4.5.5 The importance of a rapid, aggressive response**

The October 2005 statement of Mr Ingram that was put to Mr Roche in part-response to the matters raised on page 39 of Mr Roche’s report, as discussed, confirms that for many years before 2003 a pre-season preparedness strategy had been developed for the ACT Bushfire Service; this included preparation by Mr Graham of a Pre-Season Planning Checklist.<sup>270</sup> The checklist identified a number of tasks that are performed as part of normal preparations for a fire season. One such task is the pre-season workshop. Mr Ingram confirmed in his statement that the workshop exercise for 2002–03 involved fires in Namadgi National Park. The ‘Namadgi Burn Scenario 2002’, developed in the latter part of 2002 for the workshop<sup>271</sup>, was as follows:

It is January 2003. We are in an El Nino year. The ACT has just experienced the driest winter/spring and early summer on record. By November the Byram–Keech Drought

Index (BKDI) was 132, the highest recorded for so early in the fire season. The ACT is experiencing its worst drought on record, with November temperatures averaging 6.4°C above average and no significant rainfall since September 2002. Surface litter fuels are very dry and the moisture content of the green foliage of understorey shrubs and trees is depleted and often close to wilting point. The Emergency Services Bureau and Government Land Management Agencies have been on a high readiness level since November 2002 and are ready to respond immediately to fire calls or smoke sightings.<sup>272</sup>

Mr Graham agreed that a number of the elements of the scenario were similar to those in fact experienced in January 2003. He recalled that Mr McRae was largely responsible for putting the exercise together and that Mr Graham assisted Mr McRae in running the exercise on the day.<sup>272</sup>

A number of witnesses were asked about the outcomes of the workshop and, in particular, the outcome that ‘in any fire situation in the Cotter Catchment, the Emergency Services Bureau … would attack the fire aggressively’.<sup>273</sup> Mr McRae said that was an outcome of the workshop he was aware of and that it was a philosophy he would agree with.<sup>274</sup> Mr Graham could not specifically remember that comment being made, ‘but I would accept that that would be standard practice … As a matter of course, we will say we will fight fires aggressively’. Mr Graham believed this approach had been reinforced by the Namadgi Burn Scenario exercise.<sup>275</sup> In the context of evidence concerning a different document—Mr McRae’s ‘Phoenix Imperative’ document—Mr Lucas-Smith had agreed that a quick response and quick suppression were something he was very much conscious of.<sup>276</sup> The outcome of the Namadgi Burn Scenario is consistent with the statement in the *Rural Fire Control Manual* that ‘much can be done with early detection and rapid initial attack’.<sup>277</sup> It is also consistent with the historical approach of the Bush Fire Council (as demonstrated by Mr Cheney’s evidence in relation to the response to the Pago fire), with Mr Jeffery’s statement, and with other evidence presented during the inquiry.<sup>278</sup>

## Notes

<sup>1</sup> *R v Doogan* [2005] ACTSC74 at paras 25, 27 and 29.

<sup>2</sup> Submissions of counsel representing the ACT, paras 138–171.

<sup>3</sup> *ibid.*, paras 73–118; submissions of counsel representing Mr Castle and Mr Lucas-Smith, paras 350–355.

<sup>4</sup> Submissions of counsel representing Mr McRae, paras 9–11.

<sup>5</sup> Submissions of counsel representing the ACT, para. 152.

<sup>6</sup> *ibid.*, para. 153.

<sup>7</sup> *ibid.*, para. 154.

<sup>8</sup> *Bush Fire Act 1936*, s. 5KA(1).

<sup>9</sup> ESB.AFP.0028.0112 ACT Bushfire Council *Rural Fire Control Manual for the ACT Firefighting Service*, July 1992, paras 2.9–2.10.

<sup>10</sup> T1215–1216.

<sup>11</sup> T3108–3109.

<sup>12</sup> T3110.

<sup>13</sup> T3111.

<sup>14</sup> T3111–3112.

<sup>15</sup> T2852–2854.

<sup>16</sup> T1053–1054.

<sup>17</sup> T305. DPP.DPP.0001.0003, Mr Phil Cheney, ‘Historic wildfires’ PowerPoint presentation.

<sup>18</sup> T308–309.

<sup>19</sup> T306.

<sup>20</sup> T310.

<sup>21</sup> T309.

<sup>22</sup> T312.

<sup>23</sup> T313.

<sup>24</sup> T313–314.

<sup>25</sup> T314.

<sup>26</sup> T317.

<sup>27</sup> DPP.DPP.0006.0222, Mr Bartlett, ‘Stromlo plantation fire report, 19 February 2002’, p. 1.

<sup>28</sup> *ibid.*, p. 8.

<sup>29</sup> *ibid.*, pp. 20–21.

<sup>30</sup> AUS.AFP.0035.0392, ACT Christmas 2001 debrief, 16 January 2002. p. 7(iii).

<sup>31</sup> Bartlett report, p. 20.

<sup>32</sup> ESB.DPP.0013.0099, Bartlett supplementary statement, 4 September 2000, paras 11–14.

<sup>33</sup> ESB.DPP.0001.0074, Mr McRae, ‘Phoenix imperative: some thoughts on the Namadgi fire age bottleneck’, February 2002, p. 2.

<sup>34</sup> T311–312.

<sup>35</sup> For example, Mr Lucas-Smith, T1200; Mr Castle, T1776; Ms Harvey, T2405; Ms Crawford, T45090.

<sup>36</sup> ESB.GSO.0005.0312, *Canberra Times*, 29 November 2002.

<sup>37</sup> T3089.

<sup>38</sup> ESB.DPP.0013.0085, email from Mr McRae, ‘El Nino update’, 30 May 2002.

<sup>39</sup> BOM.AFP.0092.0001, Bureau of Meteorology submission, 25 August 2003, p. 27; DPP.DPP.0008.0051, Mr Cheney, ‘Origin and development of the bushfires that spread into the ACT, 8–18 January 2003’, p. 52.

<sup>40</sup> DPP.DPP.0008.0001, Mr Cheney, ‘Fuel management in the ACT’, 7 June 2004 pp. 18–19.

<sup>41</sup> T188–244.

<sup>42</sup> McLeod, Ron, *Inquiry into the Operational Response to the January 2003 Bushfires in the ACT*, ACT Government, Canberra, 1 August 2003, pp. 87–89.

<sup>43</sup> *ibid.*, p. 87.

<sup>44</sup> AFP.AFP.0087.0005, McBeth HR, *The Fire Hazard Reduction Practises of the ACT Government, ACT Parks and Conservation Service*, 24 September 1994, p. 2.

<sup>45</sup> McLeod report, p. 87.

<sup>46</sup> McBeth report, p. 24.

<sup>47</sup> *ibid.*, pp. 23, 26.

<sup>48</sup> *ibid.*, p. 6.

- <sup>49</sup> AFP.AFP.0087.0005, McBeth report attachment 2, paras 18, 20.
- <sup>50</sup> T155–156.
- <sup>51</sup> ESB.DPP.0001.0074, Phoenix Imperative document.
- <sup>52</sup> *ibid.*, p. 1.
- <sup>53</sup> *ibid.*, p. 2.
- <sup>54</sup> *ibid.*, p. 3.
- <sup>55</sup> Cheney fuel management report.
- <sup>56</sup> T3102.
- <sup>57</sup> Cheney fuel management report, p. 9.
- <sup>58</sup> Cheney fuel management report, p. 10.
- <sup>59</sup> T781–782.
- <sup>60</sup> T1216.
- <sup>61</sup> T3103.
- <sup>62</sup> T6011.
- <sup>63</sup> T6012–6013.
- <sup>64</sup> ESB.DPP.0013.0099, Bartlett supplementary statement, paras 11–14.
- <sup>65</sup> See, for example, Cheney fuel management report, p. 27–28.
- <sup>66</sup> T6534.
- <sup>67</sup> T6534–6535.
- <sup>68</sup> RFS.AFP.0093.0002, NSW Rural Fire Service and the NSW Parks and Wildlife Service, Submission to the Coronial Inquiry into the January–February 2003 Brindabella Range Fires, August 2003, p. 32.
- <sup>69</sup> *ibid.*, p. 34.
- <sup>70</sup> *ibid.*, p. 35
- <sup>71</sup> T340–341.
- <sup>72</sup> MLI.DPP.0007.0240, ESB submission to the McLeod inquiry, p. 13ff; DPP.DPP.0009.0001, Report by Mr T Roche, Part 2, p. 15ff; McLeod report, p. 5ff.
- <sup>73</sup> Roche report, p. 15.
- <sup>74</sup> *Rural Fire Control Manual*, p. 10.2ff.
- <sup>75</sup> Roche report, Part 9.
- <sup>76</sup> *ibid.*, p. 140.
- <sup>77</sup> *ibid.*, p. 143.
- <sup>78</sup> *ibid.*, p. 148.
- <sup>79</sup> T3055.
- <sup>80</sup> ESB.AFP.0110.0481, Statement of Mr McRae, p. 7.
- <sup>81</sup> ESB.DPP.0001.0001, ‘The SMT Role in ICS’, 2002.
- <sup>82</sup> *ibid.*, p. 1–2.
- <sup>83</sup> T6003.
- <sup>84</sup> ESB.AFP.0001.1140, Statement of Mr Bartlett, para. 116.
- <sup>85</sup> T6002–6003.
- <sup>86</sup> T6095–6097.
- <sup>87</sup> T6098.
- <sup>88</sup> T6579.
- <sup>89</sup> T3056.
- <sup>90</sup> T3057–3058.
- <sup>91</sup> T3059–3060.
- <sup>92</sup> T3060–3061.
- <sup>93</sup> T3079.
- <sup>94</sup> T3080.
- <sup>95</sup> T3078.
- <sup>96</sup> T3082.
- <sup>97</sup> T2598–2599.
- <sup>98</sup> T2600–2601.
- <sup>99</sup> T2622–2624.
- <sup>100</sup> T2622–2624.

- <sup>101</sup> T2625.
- <sup>102</sup> Roche report, p. 153–154.
- <sup>103</sup> *ibid.*, p.154.
- <sup>104</sup> T1233–1234.
- <sup>105</sup> T3274–3275
- <sup>106</sup> T6465; T2432.
- <sup>107</sup> T2431–2432.
- <sup>108</sup> ESB.AFP.0111.0308, Statement of Mr Gellie, p. 7.
- <sup>109</sup> T3438; T1147; T3102–3103; T1936–1937; T1998; T5051; T4311.
- <sup>110</sup> T3020–3021.
- <sup>111</sup> T2636–2637.
- <sup>112</sup> ESB.AFP.0110.0551, Statement of Mr Lucas-Smith, paras 11–13.
- <sup>113</sup> ESB.AFP.0052.0056, Standard Operating Procedure No. 7, Response, Version 2/1997, p. 0069.
- <sup>114</sup> *Rural Fire Control Manual*, p. 9.2.
- <sup>115</sup> T784–785.
- <sup>116</sup> T38, BOM.DPP.0001.0009, Bureau of Meteorology PowerPoint presentation, slide 4.
- <sup>117</sup> T39, *ibid.*, slide 5.
- <sup>118</sup> T39, *ibid.*, slide 6.
- <sup>119</sup> T39, *ibid.*, slide 7.
- <sup>120</sup> T40, *ibid.*, slide 8.
- <sup>121</sup> T41, *ibid.*, slide 11.
- <sup>122</sup> BOM.AFP.0092.0001, Bureau of Meteorology submission, p. 16; also BOM.DPP.0001.0009, Bureau of Meteorology PowerPoint presentation, slide 13.
- <sup>123</sup> Cheney report, p. 3.
- <sup>124</sup> Bureau of Meteorology submission, pp. 16–17; see also the KBDI chart at p. 18.
- <sup>125</sup> Cheney report, p. 4–5.
- <sup>126</sup> T260–270.
- <sup>127</sup> Cheney fuel management report, p. 12ff.
- <sup>128</sup> *ibid.*, p. 12
- <sup>129</sup> T6811–6814.
- <sup>130</sup> T6872.
- <sup>131</sup> T6873, Cheney report, p. 55.
- <sup>132</sup> DPP.DPP.0008.0138, Project Vesta warning pamphlet.
- <sup>133</sup> AUS.AFP.0075.0122, Fire Controllers Group meeting 49, 27 June 2000.
- <sup>134</sup> T3094.
- <sup>135</sup> T3095–3096.
- <sup>136</sup> T3299–3300.
- <sup>137</sup> T3398–3399.
- <sup>138</sup> T6873–6876
- <sup>139</sup> T7398.
- <sup>140</sup> T7398–7399.
- <sup>141</sup> T43.
- <sup>142</sup> DUS.AFP.0001.0331, Email from Mr McRae, 4 January 2002.
- <sup>143</sup> T3090.
- <sup>144</sup> ESB.DPP.0013.0085, Email from Mr McRae, 23 January 2002.
- <sup>145</sup> ESB.DPP.0013.0086, Email from Mr McRae, 30 May 2002.
- <sup>146</sup> ESB.DPP.0013.0088, Email from Mr McRae, 31 May 2002.
- <sup>147</sup> ESB.DPP.0013.0089, Email from Mr McRae, 12 August 2002.
- <sup>148</sup> AUS.AFP.0040.110, Minutes of a meeting of the Land Managers Fire Liaison Group, 15 August 2002, p. 2.
- <sup>149</sup> T2627–2628.
- <sup>150</sup> BOM.DPP.0001.0001, Email from Mr Webb, ‘October seasonal climate briefing’.
- <sup>151</sup> BOM.DPP.0001.0002, Bureau of Meteorology, ‘NSW climate outlook’, October 2002.
- <sup>152</sup> *ibid.*, p. 6.

- <sup>153</sup> ESB.DPP.0013.0090, Email from Mr McRae, 6 November 2002.
- <sup>154</sup> ESB.DPP.0013.0091, Email from Mr McRae, 14 November 2002.
- <sup>155</sup> ESB.DPP.0013.0093, Email from Mr McRae, 14 November 2002.
- <sup>156</sup> ESB.DPP.0013.0094, Email from Mr McRae, 15 November 2002.
- <sup>157</sup> DUS.AFP.0001.0291, Minutes of a meeting of the Land Managers Fire Liaison Group, 21 November 2002, p. 2.
- <sup>158</sup> T3093.
- <sup>159</sup> ESB.DPP.0013.0095, Email from Mr McRae, 2 December 2002.
- <sup>160</sup> ESB.DPP.0013.0097, Email from Mr McRae, 30 December 2002.
- <sup>161</sup> ESB.AFP.0012.0326, Email from Mr Mills to Mr McRae, 31 January 2003.
- <sup>162</sup> T3113–3114.
- <sup>163</sup> ibid.
- <sup>164</sup> T3366.
- <sup>165</sup> ESB.DPP.0013.0098, Email from Mr McRae, 6 January 2003.
- <sup>166</sup> Statement of Mr Lucas-Smith, paras 6–10.
- <sup>167</sup> DUS.AFP.0001.0294, Report Fire Management Planning Workshop, Australian Alps Liaison Committee, 3 May 1995
- <sup>168</sup> Roche report, p. 37–38.
- <sup>169</sup> ibid., p. 38–39.
- <sup>170</sup> Mr Bartlett's supplementary statement.
- <sup>171</sup> T7969–7970; ESB.AFP.0001.1140, Mr Bartlett's statement, para. 29.
- <sup>172</sup> T5951–5952.
- <sup>173</sup> T5957.
- <sup>174</sup> T7991.
- <sup>175</sup> T7992.
- <sup>176</sup> T7996.
- <sup>177</sup> T8012–8014.
- <sup>178</sup> T8015
- <sup>179</sup> T8017.
- <sup>180</sup> T8142.
- <sup>181</sup> T8142–8143.
- <sup>182</sup> AUS.AFP.0035.0016, Namadgi National Park Pre-Suppression Plan.
- <sup>183</sup> T8021.
- <sup>184</sup> T8022.
- <sup>185</sup> DPP.DPP.0006.0268, Statement of Mr Jeffery, paras 17–22.
- <sup>186</sup> DPP.DPP.0004.0023, TROC with Mr Bartlett, Q 74–75.
- <sup>187</sup> T5946.
- <sup>188</sup> MLI.DPP.0007.0240, ESB submission to McLeod inquiry, p. 17.
- <sup>189</sup> ESB.AFP.0111.0117, Statement of Mr Castle, para. 17.
- <sup>190</sup> T1264.
- <sup>191</sup> T1251.
- <sup>192</sup> Statement of Mr Castle, p. 32.
- <sup>193</sup> T1255.
- <sup>194</sup> T1267–1268
- <sup>195</sup> T1268–1269.
- <sup>196</sup> T1270.
- <sup>197</sup> ESB.GSO.0005.0199, *ACT Fire Prevention Handbook*.
- <sup>198</sup> T1282.
- <sup>199</sup> T1283.
- <sup>200</sup> DUS.AFP.0001.0587, 'Letter to the householder'.
- <sup>201</sup> T1288.
- <sup>202</sup> T1289.
- <sup>203</sup> ESB.GSO.0005.0252, Bushfire Action Guide fridge magnet.
- <sup>204</sup> T1284.

<sup>205</sup> ESB.GSO.0005.0245; ESB.GSO.0005.0247; ESB.GSO.0005.0250; ESB.GSO.0005.0251, SEWS information.

<sup>206</sup> ESB.GSO.0005.0258, *Survive Fire* colouring book.

<sup>207</sup> T1305.

<sup>208</sup> T1306.

<sup>209</sup> T1272.

<sup>210</sup> T1273.

<sup>211</sup> T1273–1274.

<sup>212</sup> T1275.

<sup>213</sup> T1277.

<sup>214</sup> T1278.

<sup>215</sup> T1279.

<sup>216</sup> T1328–1329.

<sup>217</sup> T1325.

<sup>218</sup> T1331.

<sup>219</sup> T3037–3038.

<sup>220</sup> T3039.

<sup>221</sup> T3045.

<sup>222</sup> T3047.

<sup>223</sup> ESB.GSO.0005.0300, Tuggeranong *Chronicle*, ‘A bushfire warning’, 15 October 2002.

<sup>224</sup> ESB.GSO.0005.0310, *Canberra Times*, ‘Prepare now for bushfire season’, 22 October 2002.

<sup>225</sup> ESB.GSO.0005.0302, *Chronicle*, ‘Start of bushfire season call for vigilance’, 29 October 2002.

<sup>226</sup> ESB.AFP.0110.0834, Minute from Executive Director, ESB, 23 December 2002.

<sup>227</sup> T0888.

<sup>228</sup> ESB.GSO.0005.0312, *Canberra Times*, ‘Plan aims to avert fire threat’, 29 November 2002.

<sup>229</sup> Roche report, p. 171.

<sup>230</sup> *ibid.*, p. 173.

<sup>231</sup> *ibid.*, p. 174.

<sup>232</sup> *ibid.*, p. 176.

<sup>233</sup> *ibid.*, p. 179.

<sup>234</sup> T7426–7427.

<sup>235</sup> T7844.

<sup>236</sup> ESB.GSO.0005.0269, ‘An important bushfire safety message’.

<sup>237</sup> T7845–7846.

<sup>238</sup> T7935.

<sup>239</sup> ESB.DPP.0014.0056, Mr Nicholson’s addendum; ESB.DPP.0014.0077, Mr Nicholson’s article.

<sup>240</sup> T8140.

<sup>241</sup> HIL.DPP.0001.0001, Report of Mr Nicholson, p. 16.

<sup>242</sup> Nicholson report, p. 17.

<sup>243</sup> T8205–8208.

<sup>244</sup> T8208, ESB.DPP.0014.0094, Mr Nicholson’s draft report.

<sup>245</sup> T8210.

<sup>246</sup> ESB.DPP.0014.0077, Mr Nicholson’s article, ‘Bushfire shock and awe—will we ever learn?’, May 2003.

<sup>247</sup> T8210–8211.

<sup>248</sup> ESB.DPP.0013.0234, Statement of Ms Watson.

<sup>249</sup> AFP.AFP.0102.0001, Statement of Constable Goldsmith, p. 1.

<sup>250</sup> ESB.DPP.0013.0237, final column under the heading ‘Comments’.

<sup>251</sup> ESB.DPP.0013.0196, Statement of Mr Ingram, October 2005, paras 6–7.

<sup>252</sup> T7970.

<sup>253</sup> T1346; T2633; T3523; T4668; T3737.

<sup>254</sup> T0865.

<sup>255</sup> Statement of Mr Lucas-Smith, para. 37; T0863.

<sup>256</sup> T2633–2634.

- <sup>257</sup> T2662–2663.
- <sup>258</sup> T3552.
- <sup>259</sup> T3553.
- <sup>260</sup> AUS.AFP.0035.0016, Namadgi National Park Pre-suppression Plan minute.
- <sup>261</sup> T820.
- <sup>262</sup> ESB.AFP.0108.0089, Statement of Mr Blinksell, para. 10.
- <sup>263</sup> Statement of Mr Lucas-Smith, para. 48.
- <sup>264</sup> T858–859.
- <sup>265</sup> T859–860.
- <sup>266</sup> T860.
- <sup>267</sup> T3840–3841.
- <sup>268</sup> T3977–3978.
- <sup>269</sup> T335–336.
- <sup>270</sup> ESB.DPP.0013.0196, Statement of Mr Ingram, 15 October 2005, p. 1.
- <sup>271</sup> DUS.AFP.0001.0601, Namadgi Burn Scenario, 2002.
- <sup>272</sup> T2631.
- <sup>273</sup> AUS.AFP.0035.0019, Namadgi Fire Workshop, 8 November 2002, Outcomes.
- <sup>274</sup> T3116–3117.
- <sup>275</sup> T2631–2632.
- <sup>276</sup> T780
- <sup>277</sup> ESB.AFP.0028.0112, *Rural Fire Control Manual*, p. 2.9.
- <sup>278</sup> T5832; T6434.

# 5 Chronology of events: 8 to 18 January 2003

It is important to record what appears to have been the situation that applied from the time the fires ignited, during the afternoon of 8 January 2003.

## 5.1 The origin of the fires

The origin of each of the four fires that are directly relevant to this inquiry—the Bendora fire, the Stockyard Spur fire, the Mount Gingera fire and the McIntyres Hut fire—was the subject of thorough investigation by Mr Phil Cheney and is detailed in his report<sup>1</sup> and in his evidence to this inquiry.<sup>2</sup> The conclusions Mr Cheney reached are supported by the report from Kattron Lightning Data Search<sup>3</sup> and by Mr Kenneth Ticehurst's evidence concerning the Kattron report.<sup>4</sup> Mr Ticehurst gave evidence that the lightning detection system Kattron operates is accurate to within 500 metres<sup>5</sup> and that on 8 January 2003 the system recorded only one lightning strike within 500 metres of the point of origin of each of the four fires identified by Mr Cheney.<sup>6</sup>

In the case of the Bendora fire, Mr Cheney concluded that the fire was ignited by a lightning strike at 3.11 pm at grid reference 644785. Mr Cheney also referred to an alternative point of origin at grid reference 644791, where a large tree adjacent to the Bendora break had burnt out. In Mr Cheney's opinion, however, a point of origin at this location is inconsistent with the observations of Mr Cliff Stevens, Deputy Captain of the Forests Brigade and a logging supervisor with ACT Forests, who observed a fire and a column of smoke at grid reference 644785 when he first attended the scene at around 5.50 pm on 8 January, and concluded that, with only one column of smoke, there was only one fire in the vicinity. Further, when inspecting the area in May 2003 with Mr Stevens, Mr Cheney observed that the crowns of five trees in the vicinity of grid reference 644785 had either recently died or appeared sickly and were browning off, consistent with death that occurs around the site of a lightning strike. Although fire had burned up the lower bark on the tree boles, the damage to the crowns was not a result of heat scorch. Mr Cheney concluded that the point of origin of the Bendora fire was in the vicinity of these five trees at grid reference 644785, as suggested by the Kattron data and Mr Stevens' observations on 8 January.<sup>7</sup>

Mr Cheney commented that the 30-minute delay between the time the Kattron system recorded the lighting strike in the Bendora area and the first reported sighting of smoke in the area by the Mt Coree fire tower probably have resulted from confusion with the smoke from the Stockyard Spur fire. That fire was ignited by a lighting strike three minutes later, but both fires were directly in a line of 180° from that fire tower, although the Stockyard Spur fire was at a higher elevation.<sup>8</sup>

Mr Cheney's identification of the point of origin of the Stockyard Spur and Mount Gingera fires was less precise. In the case of the Stockyard Spur fire, Mr Cheney noted that the helicopter *Firebird 7* was carrying out reconnaissance in the area and at 3.57 pm described the location of the Stockyard Spur fire as grid reference 633651, on the crest of the hill and with a fire area of

about 50 square metres. Mr Cheney also noted that it is probable that the smoke reported from the Mt Coree fire tower at 3.25 pm was from the Stockyard Spur fire, which was ignited by lighting at 3.14 pm.

Mr Cheney noted that it appears the fire at Mount Gingera was not accurately plotted in its early stages. A report from helicopter reconnaissance suggests, however, that the fire was burning just inside the ACT, on the south-east ridge of Mount Gingera. On that basis, Mr Cheney concluded that the point of origin of the Mount Gingera fire was in the vicinity of grid reference 619606 and that the source of ignition was a lightning strike at 3.35 pm.<sup>9</sup>

For the McIntyres Hut fire, the point of origin is identified in the joint submission from the NSW Rural Fire Service and the NSW Parks and Wildlife Service to the NSW coronial inquiry, conducted by NSW Deputy State Coroner Mr Carl Milovanovich in August 2003.

Mr Milovanovich found that the McIntyres Hut fire was caused by lightning strike at about 3.00 pm on 8 January 2003, in an area known as McIntyres Hut – Webbs Ridge, in Brindabella National Park, at grid reference 587965.<sup>10</sup>

## 5.2 8 January 2003

### 5.2.1 Notification of the fires and the first response

Mr Tony Graham was the rostered duty coordinator for bushfire and emergency services on 8 January 2003. ComCen (the communication centre at the Emergency Services Bureau) advised him at about 3.20 pm that a number of lightning strikes had been reported by the fire towers in rural areas of the ACT.<sup>11</sup> Mr Graham and Mr Peter Lucas-Smith started analysing the information that was coming in from the fire towers. At about 3.30 pm Mr Graham dispatched Mr David Ingram to the police complex at Weston, where he was to meet up with the ACT Bushfire Service-contracted helicopter *Firebird* 7 and conduct an aerial reconnaissance.

Mr Graham gave evidence that fire tower reports provide only very limited information about a fire<sup>12</sup> and described the purpose of Mr Ingram's reconnaissance as to 'provide a description of the fire behaviour, fire size, assets threatened, and the precise location of the fires'.<sup>13</sup>

Mr Lucas-Smith said in his statement that at about 4.00 pm he confirmed with Mr Graham that 'we had responded appropriately' to the reported fires and that, 'as these fires were small and resources were still in the process of being responded, I left the management of this initial response to Mr Graham'.<sup>14</sup>

Mr Ingram took off in *Firebird* 7 at 3.44 pm, flying in the direction of Corin Dam and directly over the fire site at Stockyard Spur. At 3.57 pm he reported to ComCen that the Stockyard Spur fire had burnt about 50 square metres and that 'there was no apparent vehicle access to that fire's location'.<sup>15</sup> Mr Ingram then flew north to the Bendorra fire, and at 4.02 pm he reported that this fire was 'about 100 metres down from a ridge line and burning mainly on the ground and not yet up into the tree canopy. However, during this transmission the flames appeared to reach the treetops and I suggested that this fire would require water bombing before the previous one'.<sup>16</sup> It seems that Mr Ingram did not at this stage report on the size of the Bendorra fire.

Immediately following Mr Ingram's reports, at 4.03 pm Mr Graham commenced the process of deploying units to the Bendorra and Stockyard Spur fires. Mr Graham said:

The initial deployment to the fires was based on using rostered resources. Because the ACT fires were situated in the Namadgi National Park I responded Parks Brigade units along with the Parks Brigade officers as the field incident controllers to the Bendorra and Stockyard Spur fires. At 16:03 hours, the ComCen operator, following my instructions, deployed the nearest and most appropriate units, being the Forest Brigade units Forests 7 (Cliff Stevens), 15 and 25 to the vicinity of the Lees Creek camp area, the site of one of the early smoke reports. These units then continued onto the site of the Bendorra fire. A short time later, I also responded Gungahlin 20 (this unit was at Camp Cottermouth on the Cotter Road at the time) and Parks 12 and 22, and the Captain of the Parks Brigade Odile Arman (Parks 1) as the field incident controller, to the Bendorra fire.<sup>17</sup>

The firefighting vehicles deployed to the Bendorra fire were Forest 7 (Mr Stevens in a four-wheel-drive vehicle), Forest 15 (a tanker), Forest 25 (a light unit), Parks 12 (a tanker), Parks 22 (a light unit) and Gungahlin 20 (a light unit).<sup>18</sup> This response was one light unit more and one tanker less than designated as the appropriate response under the Emergency Services Bureau's Standard Operating Procedures applicable for an 'orange' day, 'SOP 7'.

At the same time, Mr Graham arranged for Mr Denis Gray (Parks 9) to respond to the Stockyard Spur fire as the field incident controller, along with two tankers and a light unit, those being Parks 10, Rivers 10 and Parks 20.<sup>19</sup> The weight of response to the Stockyard Spur fire was thus one tanker and one light unit less than required under SOP 7.

No units were sent to the Mount Gingera fire on the afternoon or evening of 8 January 2003.<sup>20</sup>

In his statement Mr Lucas-Smith said the response to the Stockyard Spur and Bendorra fires 'was made in accordance with our SOPs, which is designed to maintain adequate coverage for the entire ACT District should it be required, especially in light of recent arson activity on Black Mountain and the potential for additional lightning strike fires to emerge'.<sup>21</sup> He confirmed the configuration of the response to the Bendorra and Stockyard Spur fires, which, as just noted, was less than required under SOP 7 (although only marginally so in the case of Bendorra).<sup>22</sup>

### **5.2.2 Formation of the service management team and initial risk assessment and strategy**

According to Mr Lucas-Smith's statement, a short while after 4.00 pm

It became apparent that there were multiple lightning ignitions in and around the ACT and so I assembled the Service Management Team (SMT), consisting of Tony Graham as Operations Officer, Rick McRae as Planning Officer and myself as Controller. Dave Ingram, who would normally be included in the SMT as the Logistics Officer, was at this stage in Firebird 7 (the ACT's contracted helicopter), conducting an initial reconnaissance. The SMT is responsible for the control, coordination and strategic management of all bushfire activity in the ACT and is scaled up as incidents grow.<sup>23</sup>

In evidence, Mr Lucas-Smith confirmed that he convened the service management team because, once multiple fires had been confirmed, he 'saw a potential for a complex fire event' that would require a planned and coordinated response. He also confirmed that the initial objective was to attack the fires immediately and directly, to 'suppress them as quickly as we possibly could to prevent their further spread'.<sup>24</sup>

Although Mr Lucas-Smith was aware at this early stage that the fires—particularly the McIntyres Hut fire—could pose a threat to ACT rural assets and the pine plantations at Uriarra and Pierces Creek, he said it ‘did not cross my mind that these fires at that stage on 8 January had the potential to impact on urban ACT’. He said he was certainly aware that the fires had the potential to spread, but the ACT Bushfire Service had already successfully responded to 92 fires that summer, and he believed they had the time and capacity to control the new fires.<sup>25</sup>

Mr Rick McRae said that when he saw multiple smoke plumes he immediately recognised the need for the service management team to be convened in order to organise a rapid, ‘measured’ response to the fires.<sup>26</sup> He went to ESB headquarters at about 4.00 pm and accompanied Mr Lucas-Smith and Mr Graham to ComCen: ‘We wanted to be there to receive information at the earliest opportunity and to dispatch responses in the quickest possible manner’.<sup>27</sup> Mr McRae noted that some initial uncertainty about the number and location of the fires was quickly resolved as further information was received, particularly from Mr Ingram during his aerial reconnaissance.

In evidence, Mr McRae said he was aware that a quick and aggressive initial response was needed. He was referred to the findings of the Namadgi Fire Workshop that he held in November 2002, one outcome of which had been that ‘in any fire situation in the Cotter Catchment, the ESB would attack the fire aggressively’.<sup>28</sup> McRae also gave evidence, however, that a ‘measured response’ to a fire in a remote location might be preferable to a rapid initial attack if the latter cannot be achieved. Further, he said that, after a storm of the kind that had ignited the fires they were then observing, there was always a concern that additional fires might spring up for up to a week after the lightning strikes.<sup>29</sup> This evidence accords with that of Mr Cheney, who noted the problem of ‘sleepers’—smouldering material created by lightning strikes that is too small to be detected by satellite imagery or fire lookouts but can ignite a fire days later, when conditions are favourable to fire spread.<sup>30</sup>

Mr McRae said he recognised by late afternoon on 8 January that the McIntyres Hut fire was a matter of concern: it had made a significant run, was creating a smoke plume that differed from the plumes of the other fires, and was spreading in an ‘extreme fashion’. In contrast, he said, Mr Ingram’s aerial reconnaissance showed that, although the three ACT fires ‘were certainly spreading, they weren’t spreading catastrophically’.<sup>31</sup> Mr McRae noted that he had no role in dispatching resources to the fires on 8 January but instead focused on planning functions and, in particular, on validating fire tower calls and confirming the locations of all fires in the ACT.<sup>32</sup>

Meanwhile, Mr Arthur Sayer, who, along with Mr Graham and Mr Tony Bartlett was one of the ACT’s three deputy Chief Fire Control Officers, heard the fire towers’ reports about sightings of smoke plumes in the Brindabellas. Mr Sayer arrived at the ACT Parks central depot, at the corner of Athlon and Sulwood Drives within 30 to 45 minutes of hearing those reports. He spoke with other ACT Parks officers who were there:

I was concerned about the location of the fires and their remoteness. I said that if we do not get onto them quickly, they would become a fairly big problem for us. I also expressed my concern that we had several fires at once and this would mean having to spread our resources carefully in order to catch the fires early. I said to Mr Wells and Mr Galvin that I thought heavy machinery, and in particular bulldozers, should be responded immediately to put effective containment lines around the fires. Although I expressed this opinion to Mr Wells and Mr Galvin, none of us had any responsibility for taking action in response to any of the fires. It was just something I discussed with them.<sup>33</sup>

On the same afternoon, Mr Bartlett was in a meeting that concluded at around 4.00 pm. When he left the meeting he could see the smoke plumes in the Brindabellas and could hear radio traffic in relation to various smoke sightings. He went straight to ESB headquarters at Curtin, arriving at about 4.20 pm:

Being a Deputy Chief Fire Control Officer, I went straight into the Operations Room to enquire as to what I could do. I was worried about the McIntyre's Hut fire and the potential threat it posed to our forest resources at Uriarra and Pierces Creek. I met Tony Graham and Peter Lucas-Smith and was advised that there was no role for me at that present time as they were still trying to confirm the number of fires and their specific locations. I indicated that from what I had seen on my way over to ESB that there was a need to deploy additional resources as quickly as possible. Tony Graham informed me that until he had received confirmation from the on-ground incident controllers about resource requirements he was not willing to deploy additional resources to the fires.<sup>34</sup>

Mr Lucas-Smith did not remember the conversation with Mr Bartlett but accepted that it may have occurred and in the manner described by Mr Bartlett.<sup>35</sup> Similarly, Mr Graham did not recall the discussion with Mr Bartlett but agreed it could have happened.<sup>36</sup>

Although Mr Bartlett had no operational role at this time, his evidence was that, because fire suppression is often time-critical, in his experience it is generally preferable to deploy additional resources to remote fires and to then recall them if they are not needed, rather than to withhold deployment and then have to wait for those resources to arrive if they are in fact needed:

With my experience at fighting fires in remote mountain areas, I had an opinion that we needed to deploy more than just the standard weight of attack ... my experience ... from a number of fires [is that] it's very nice when you actually arrive there and then find there are already other resources on their way. People can always be turned around and sent home when they are not needed ... it is always better to have resources rolling in my view.<sup>37</sup>

In this context, Mr Bartlett said he was not asked about the availability of heavy plant or additional personnel from ACT Forests at that time.<sup>38</sup> His evidence was that at that time he had around 25 firefighting staff at work and available for immediate deployment, and at least 19 of that group were trained for remote area firefighting work. He said these personnel could have been used in a combination of roles, including to make up RAFT crews, as planners, or to crew the two Forests tankers and three light units.<sup>39</sup>

Mr Neil Cooper was with Mr Bartlett when they first heard reports of the fires. Mr Cooper returned to the ACT Forests Stromlo depot at about 4.30 pm and started 'holding ACT Forests personnel back after normal knock-off, just in case they were needed'. Some ACT Forests units had already been detailed to the Bendora fire, and Mr Cooper started making arrangements with ACT Forests staff because 'we could see that the fires were building rapidly, especially in the McIntyres Hut area, and it was going to require overnight shifts'. Mr Cooper said he recognised that the ACT pine plantations could be threatened by the McIntyres Hut fire, the smoke from which was 'particularly angry'.<sup>40</sup> He also stated:

At the time, we were experiencing benign weather conditions. We were under a south-easterly air stream. However, we were also aware that weather patterns come in roughly 5 day cycles where benign conditions are followed up by strong north-westerly wind. Every 15 minutes or so we checked outside and even from the office at Stromlo the smoke plume from the McIntyre's Hut fire was huge by the time it completed its initial

afternoon run. I regularly sent people on a short drive down the Cotter Road to obtain information and descriptions of what was coming. The sight of this smoke plume reinforced our belief as to the urgency that needed to be given to the situation. My concerns were mainly on the McIntyre Hut fire although I was fully aware of the urgency that was required to address the other fires in the ACT.<sup>41</sup>

At 4.46 pm Mr Ingram again flew over the Stockyard Spur fire in *Firebird* 7 and reported that the fire had increased to about 70 square metres, with a flame height between 1.0 and 1.5 metres, and was burning in a small hollow and moving very slowly.<sup>42</sup> *Firebird* 7 then returned to the Bendorra fire, and at 4.55 pm Mr Ingram reported that this fire was about 100 square metres, with a flame height about 1 to 2 metres, and burning very slowly uphill.<sup>43</sup>

Mr Bartlett noted in his statement that at about 5.20 pm he was still at the Emergency Services Bureau, expecting the situation would be clarified and he would be allocated a role in managing the initial response or resource allocation. After spending over an hour there, however, he became aware that his assistance would not be required, so he made ready to return to the ACT Forests headquarters at Stromlo to coordinate the ACT Forests response. As he walked out of ESB headquarters, he:

observed a huge column of smoke blowing right across town from the McIntyre's Hut fire, which caused immediate concern. I went back into ESB and spoke to Mike Castle, suggesting that he come outside and observe the same smoke plume for himself, rather than relying on information coming from other sources before a response was initiated. After assessing this smoke for himself, he advised that he was going to communicate the significance to those responsible in the Operations Room and so I advised that I would be returning to ACT Forests to await further instructions. I had also been made aware that some of our ACT Forests staff members had been deployed to the Bendorra Fire ...<sup>44</sup>

### 5.2.3 Response to the Bendorra fire

#### *Arrival at the fire*

As noted, Mr Ingram made his first report from *Firebird* 7 about the Bendorra fire at 4.02 pm, at which time he did not provide an estimate of the size of the fire. In his second report, at 4.55 pm, he described the fire as about 100 square metres, with a flame height of about 1 to 2 metres, and burning very slowly uphill.<sup>45</sup> At 5.13 pm ComCen contacted *Firebird* 7 on behalf of Mr Graham, asking for a full situation report on the Bendorra fire. Mr Ingram replied that the fire was about 100 metres by 50 metres, fire in the understorey had not burnt up into the trees, and the flame height was 1.0 to 1.5 metres.<sup>46</sup>

This 5.13 pm situation report represented the first of several apparent discrepancies in the reported size of the Bendorra fire. If both Mr Ingram's estimates were correct, it would appear that in the 18 minutes between his 4.55 pm and 5.13 pm reports the fire had grown from about 100 square metres to about 5000 square metres. Although from his position in the helicopter Mr Ingram could give only an approximation of the fire's size as a result of the smoke and turbulence and having to see through the tree canopy, his reports nevertheless suggested a big increase in the fire's size in less than 20 minutes, suggesting a very rapid expansion that is inconsistent with his earlier description of the fire as 'burning very slowly'.

On hearing Mr Ingram's first report of the fire at 4.02 pm, Mr Graham immediately directed units to the fire, as noted. Mr Cliff Stevens (Forests 7) arrived at the Bendorra area at about

4.40 pm, accompanied by the Forests 15 tanker. He left the tanker to follow and drove ahead to look for the fire, reaching the fire ground at about 5.50 pm. He then set about marking the track in to the fire ground.<sup>47</sup>

When she was first deployed to the fire Ms Odile Arman (Parks 1) had been told she would take charge of the fire as incident controller.<sup>48</sup> At 5.58 pm she contacted the *Southcare 1* helicopter that was water bombing the Bendora fire and asked it the size of that fire. *Southcare 1* responded, ‘At present the ... fire front is ... approximately on a 750-metre front’.<sup>49</sup> If correct, this estimate would suggest that the fire was much larger than had been reported to ComCen by Mr Ingram 45 minutes earlier.

Ms Arman arrived at the site of the Bendora fire at approximately 6.50 pm. All the other units were there before her, and the crews constituted a total of 14 firefighting personnel. On Ms Arman’s arrival, Mr Stevens informed her that they were a long way from water and, being familiar with the area, offered to find a water source. Ms Arman agreed that Mr Stevens should find and mark the track to water.<sup>50</sup>

### ***Initial tactics***

Ms Arman noted in her statement that she had two initial objectives: the first was to make an assessment of the fire so that she could give a situation report to ComCen; the second was to start directly attacking the fire. Ms Arman decided that to properly assess the fire she needed to walk around its perimeter. She said Mr Stevens suggested that she not go alone because the ground was rough, there were a lot of large trees with fire burning actively, and they could hear falling timber.<sup>51</sup>

Shortly before beginning her walk around the fire, Ms Arman again spoke by radio with *Southcare 1*; at 6.53 pm she was informed, ‘We estimate the fire’s stayed fairly contained over the last hour, hour and a half. We estimate it’s between ... 500 metres and ... 750 metres square’. Ms Arman responded, ‘That’s 500 by 350’, to which *Southcare 1* responded, ‘Negative, 500 metres square to 750 metres square’. The exchange concluded with Ms Arman saying, ‘Copied that. We’ve got some units on scene now and we’ll be running up some canvas hoses up to it. Parks 1 out’.<sup>52</sup> In her statement, Ms Arman summarised this exchange: ‘At about that time, *Southcare 1* advised me directly via radio that the fire was about 500 to 750 square metres in size. This was significantly at odds with their previous report, at about 18:00 hours, that the fire was on a front of 750 metres’.<sup>53</sup>

This appears to indicate a misunderstanding on the part of Ms Arman of the report from the *Southcare 1* helicopter, in which the fire was explicitly described as being ‘500 metres square to 750 metres square’, an estimate that was reiterated when queried. Far from being inconsistent with the earlier estimate of the fire as being on ‘a front of 750 metres’, the estimate by *Southcare 1* of the fire as ‘500 metres square to 750 metres square’ appeared to reinforce the earlier estimate, suggesting as it did that the fire was burning in a square of 500 metres to 750 metres *along each side*—as distinct from a fire of 500 to 750 *square metres*, which would have meant a fire burning in a square approximately 25 metres along each side. The apparent discrepancy between what Ms Arman understood to be *Southcare 1*’s estimate of the fire’s size (500 to 750 square metres) and what *Southcare 1* was apparently estimating the size to be—approximately 250 000 to 550 000 square metres—is obviously important. Further, the fact that Ms Arman subsequently spent an hour walking around the perimeter of the fire suggests that the fire was at that time considerably larger than 30 metres along each side and that *Southcare 1*’s estimate of a fire up to 750 metres along each side was closer to the reality.

Ms Arman believed that, before leaving on her reconnaissance of the fire, she had spoken to the Parks crew about starting direct attack on the fire. She could not recall the specific conversation, nor could she recall whether the Forests crews were part of the conversation.<sup>54</sup> Her report to *Southcare 1* at 6.53 pm, however, confirms that she had given some instruction to begin direct attack at this time. The evidence of others present at the Bendorra fire and under Ms Arman's command also confirms that the crews of the Parks 12 tanker and the Parks 22 light unit were given instructions to begin a direct attack on the fire before Ms Arman left to assess the fire. The crew of the Forests 15 tanker was not directed to begin direct attack at this time.<sup>55</sup>

#### ***Ms Arman's reconnaissance and fire assessment***

Ms Arman started to walk around the fire at about 7.00 pm. She was accompanied by Forests crew member Mr John Kane.<sup>56</sup> The two of them walked in a clockwise direction. The slope was moderate, but debris on the ground made the going difficult, so they walked relatively slowly, taking short rests as they walked upslope. Ms Arman noted that the slope flattened out toward the top of the fire. As she walked, she marked out the fire ground on a 1:100 000 map she had with her.

The southern edge of the fire was burning very slowly and not noticeably spreading further south. The western flank was on an uphill slope and in more open terrain, but it was flatter than the southern flank and there was less understorey and debris. The fire was burning very slowly, upslope in the westerly direction.<sup>57</sup> Ms Arman described the north side of the fire as having moved partly into a gully line where the vegetation was much more dense. She and Mr Kane continued around to Wombat Road, traversing the eastern flank of the fire, where they encountered the Parks crew spraying water on the fire. Ms Arman observed that the fire activity seemed more intense on this flank, probably because of higher fuel loads. The crews were having difficulty with their hoses because of the debris and other obstacles on the ground; 'Having to drag hoses upslope added to the problem and they had to be mindful of the fact that they were below any falling timber, which was quite dangerous'.<sup>58</sup>

More generally, the vegetation where the fire was burning included some large mountain gums and brown-barrel eucalypts. Ms Arman said:

The fire appeared to be drawing in on itself. However some distance in from the fire edge, the flame height averaged about 2 metres, particularly around the base of trees where bark had accumulated to some depth. Some of the trees were in fact burning quite well, with tongues of increased intensity well up the trunks of the trees. When I wrote up my brief notes that evening I described it as a low to moderate intensity fire.<sup>59</sup>

Ms Arman was walking only 1 or 2 metres from the fire edge, and she gave evidence that the fire's intensity 'wasn't too dramatic. Certainly you could work alongside it'. For most of the fire's circumference, the flame height at the edge was about half a metre. Although she could also see flame heights averaging 2 metres further into the fire area, Ms Arman believed the fire was of sufficiently low intensity to be susceptible to direct attack with water and rake-hoe teams.<sup>60</sup> She said she could 'hear timber falling occasionally' from somewhere within the fire area, although she could not see whether it was entire trees falling or just branches.<sup>61</sup> It was consistent with Ms Arman's experience that falling timber would normally occur in an area where the fire had been burning for some time, but this would depend on the size of the trees and the presence of existing hollows.<sup>62</sup>

Ms Arman's evidence included a video recording of a visit she made to the site of the Bendora fire, where she walked around the area of the fire as she recalled it from the night of 8 January 2003. She was accompanied on the site visit by police investigation officers (among others), and her responses to questions asked by the police officers are included in the recording. The video provides a very helpful visual representation of the area of the fire, as supplemented by Ms Arman's descriptions. Despite this, and apart from a reference Ms Arman made to difficulties that probably would have been encountered with rake-hoe work in the dense vegetation on the north-western flank of the fire, Ms Arman said nothing during the video recording that added materially to her other evidence.<sup>63</sup>

In her statement Ms Arman said that after she completed her reconnaissance, at about 8.00 pm, she estimated the size of the fire to be 300 by 400 metres, although she noted, 'This estimate was fairly crude and was made difficult by the fact that we were scrambling upslope and there was a lot of vegetation and ground obstacles to negotiate'.<sup>64</sup> She later said she had probably overestimated the fire's size and that it was closer to 200 by 300 metres.<sup>65</sup> Nevertheless, having walked around the fire, Ms Arman was definite that the fire was much larger than 20 by 25 metres, which she had incorrectly understood to be *Southcare 1*'s estimate of the fire's size at 6.53 pm—namely, a fire of 500 to 750 square metres, rather than the estimate of 500 to 750 metres square that *Southcare 1* had in fact provided.<sup>66</sup> Notably, even by Ms Arman's most conservative estimate, the Bendora fire covered some 60 000 square metres by 8.00 pm, considerably larger than Mr Ingram's estimate of 5000 square metres, as provided to ComCen at 5.13 pm. Ms Arman also observed that the fire was moving slowly, but she did not stop to measure its rate of spread.<sup>67</sup>

On completing her reconnaissance, at 8.01 pm Ms Arman provided a situation report to ComCen.<sup>68</sup> She did not provide an estimate of the fire's size at this time. She then directed *Southcare 1* to continue water bombing inaccessible areas of the fire.

When Ms Arman returned from her reconnaissance she had encountered the Forests crew on Wombat Road, and it was apparent to her that they had not been fighting the fire. She directed the Forests tanker crew to start a direct attack on the fire.

#### ***Mr Graham's telephone conversations***

At 7.03 pm, about the time Ms Arman was setting off to assess the Bendora fire, Mr Graham had a telephone conversation with Mr Bruce Arthur from the NSW Rural Fire Service about the status of the fires in the region. Towards the end of the conversation, Mr Arthur said to Mr Graham, 'So I don't, you guys don't envisage doing much tonight, I guess?' Mr Graham replied, 'I don't think so, no'. Mr Arthur then said, 'Hopefully—I mean, until we know what this thing's doing, you can't put people in that country today'. Mr Graham replied, 'No, no exactly'.<sup>69</sup>

When questioned about this telephone conversation, Mr Graham said that in his remarks he was reflecting on all the fires, not just the McIntyres Hut fire, and, accordingly, that he was agreeing with Mr Arthur's sentiment in relation to the entire fire event. He could not, however, remember the specific thoughts that were going through his mind at the time. He did not at that stage have a detailed report from Ms Arman. When asked whether his remarks suggested a preference for the Emergency Services Bureau sending more crews or keeping crews at the fires overnight, he said he might have had a leaning one way or the other but he could not now recall. Mr Graham was clear, though, that, while he may have had a 'leaning', he had not made up his mind about

overnight deployment when he responded to Mr Arthur's assertion that 'you can't put people in that country today' and that he was still 'open to various scenarios'.<sup>70</sup>

At about 7.31 pm ComCen contacted Mr Ingram in *Firebird 7*, asking him to provide an estimate of the size of the Bendora fire. Mr Ingram responded, 'Yeah, estimated at this stage about 500 square metres. Over'.<sup>71</sup> His earlier report, at 5.13 pm, was of a fire of 50 metres by 100 metres, which is 5000 square metres. In evidence, Mr Ingram confirmed that his 7.31 pm report was a mistake, and that the fire he could see when he provided his report was in fact 5000 square metres—about the size of a rugby field.<sup>72</sup> Even Mr Ingram's amended estimate of the fire's size was still very much smaller than the estimates made by *Southcare 1* and by Ms Arman about half an hour later.

Some 12 minutes after Mr Graham's telephone conversation with Mr Arthur, and still before Ms Arman's situation report, Mr Graham telephoned Mr Lucas-Smith. It is likely that at the time of the call Mr Lucas-Smith was in his car, on his way to a meeting with representatives of NSW Rural Fire Service and NSW Parks at Queanbeyan to discuss the McIntyres Hut fire.<sup>73</sup> The full text of the conversation, which began at 7.42 pm, is as follows:

Lucas-Smith: Hello.

Graham: Yeah, gidday Peter. Tony.

Lucas-Smith: Yeah.

Graham: That Bendora fire.

Lucas-Smith: Yep.

Graham: Approximately 500 square metres, burning very slowly.

Lucas-Smith: OK, is Odile on it?

Graham: Don't know. We can't, we've just spoken to Parks—ah—Forest 15 and they're goin' to go and grab Odile. She's in the scrub at the moment. That's the message we got.

Lucas-Smith: OK. So what they are they going to be able to do anything tonight do you think?

Graham: I would be very doubtful that they could. I'd ...

Lucas-Smith: So we'd be looking at crews back tomorrow?

Graham: Yep.

Lucas-Smith: OK. I wonder if you could organise that.

Graham: OK.

Lucas-Smith: That with Odile. Need to make sure we are, that we don't commit ourselves beyond what we might end up needing to commit to the McIntyre fire.

Graham: Yep, sure.

Lucas-Smith: But I think we need to, if we can get them out of the way the better.

Graham: Yep.

Lucas-Smith: But McIntyre's will most likely be tankers with back-burning operations any way so ...

Graham: Yep. OK.

Lucas-Smith: So we might use other resources for that.

Graham: Sure. Not a worry. I'll work on that and let you know when you come back.

Lucas-Smith: Thanks, mate.

Graham: Righto.

Lucas-Smith: See ya.<sup>74</sup>

Mr Lucas-Smith gave evidence concerning his telephone conversation with Mr Graham, saying that from the conversation he knew that Ms Arman was 'in the scrub', that Mr Graham was doubtful that they were going to be able to do anything that night, and that the fire was 500 square metres, which is a 'small fire', and that it was burning very slowly.<sup>75</sup>

Mr Lucas-Smith said Mr Ingram, Mr Graham and Ms Arman were experienced officers and he trusted their judgment. He agreed, however, that as Chief Fire Control Officer he was entitled to have a say in strategy and that in the end he had to take responsibility for the subsequent decision to withdraw crews from the Bendora fire that night. Mr Lucas-Smith accepted that he effectively approved the decision not to do anything further that night in the phone call with Mr Graham, without knowing the full details of the situation. He also emphasised, however, that he would not become involved in making recommendations without information from the fire ground, and that he trusted the officers involved to make the right decision in the light of that information when it became available.<sup>76</sup>

The transcript of the telephone conversation between Mr Graham and Mr Lucas-Smith reveals that Mr Lucas-Smith was misled in relation to one important detail—the size of the Bendora fire at that time. Mr Lucas-Smith gained the impression that it was a 'small fire' of 500 square metres and that it was 'burning very slowly', as had been reported to ComCen by Mr Ingram. In fact, the size estimates of both *Southcare 1* and Ms Arman strongly suggest that the fire was at least 100 times larger than was reported to Mr Lucas-Smith by Mr Graham in their 7.42 pm telephone conversation.

As noted, *Southcare 1*'s estimate at 6.53 pm had the fire at *at least* 250 000 square metres and thus 500 times larger than Mr Lucas-Smith was told. Following her reconnaissance, at 8.00 pm Ms Arman estimated the fire to be 120 000 square metres; she then revised the estimate down to 60 000 square metres in her evidence. Hence, even by Ms Arman's more conservative revised estimate, the fire was 120 times larger than reported to Mr Lucas-Smith. If *Southcare 1*'s larger estimate of 750 metres square was correct, the fire was over 1000 times bigger than was reported to Mr Lucas-Smith.

As far as Mr Lucas-Smith could recall, the only discussion he had with Mr Graham about tactics for the Bendora fire was the 7.42 pm telephone conversation. Ms Arman's concerns were not discussed during that conversation. Mr Lucas-Smith said he was not aware of being involved in any discussion about Ms Arman's concerns for the crews' safety on the night of 8 January until he had returned to Curtin, after the decision had been made to withdraw the crews and after the crews had in fact been withdrawn.<sup>77</sup>

As noted, at the time of his 7.42 pm telephone conversation with Mr Lucas-Smith, Mr Graham had not yet received from Ms Arman a situation report based on what she had seen in her reconnaissance of the fire. That was the crucial piece of information Mr Graham was waiting for before starting to ‘firm up’ a decision about the overnight deployment of crews at Bendorra. Mr Graham agreed that his comment to Mr Lucas-Smith during the conversation that ‘I would be very doubtful that they could’ fight the fire overnight, followed by a discussion about crews for the following day, suggested that Mr Graham was starting to develop a view that it was very unlikely the crews would remain at Bendorra overnight.<sup>78</sup> When asked what factors had caused him to start to think that way, Mr Graham responded, ‘I think we knew at that time, we had a better idea of the location of the fire. We knew there were crews on it. We knew there had been some falling timber’. He later agreed that he could not find any references to falling timber having been made before the telephone conversation.<sup>79</sup> When Mr Graham concluded his conversation with Mr Lucas-Smith, he believed Mr Lucas-Smith would not have been opposed at that time to having crews withdraw from Bendorra if that had been the decision of the incident controller.<sup>80</sup>

Mr Graham gave evidence that he did not believe he had a preference for withdrawing the crews at the time he spoke to Mr Lucas-Smith; instead, he was going to keep an open mind on the question until he had heard back from Ms Arman. He acknowledged making his comments about withdrawal to Mr Lucas-Smith but said, ‘I think as the evening progresses, there is no way I led Odile Arman or anybody else into giving any kind of view of whether the crews should remain overnight’. Eventually Mr Graham conceded that his conversation with Mr Lucas-Smith shows there was a leaning towards a view that it was not appropriate to leave crews at Bendorra overnight, despite the fact that the Emergency Services Bureau had not yet received a situation report from Ms Arman. Mr Graham did not agree, however, that a decision had actually been made to withdraw crews at that point.<sup>81</sup>

#### ***Ms Arman’s situation report to ComCen***

Ms Arman provided her situation report to ComCen at 8.01 pm: ‘OK, this fire’s doing about 100 metres from the Warks Road uphill. It’s drawing into itself. It’s not moving very fast. We can access the eastern side of it from Warks Road with tankers and light units but we will need rake-hoe lines around the top section’. ComCen then repeated the situation report: ‘Fire 100 metres from the road moving uphill slowly. Eastern access is possible but will require rake-hoe lines on top side with water-bombing assistance. Is that correct?’ Ms Arman responded, ‘That’s affirmative on the western side, which is the uphill side’. Ms Arman then received a message from the *Southcare 1* helicopter: ‘Parks 1 *Southcare 1*. We’re inbound to your position this time. ETA 10 minutes with a bucket of water and copied your last on the high side the western side of the fire’. Ms Arman responded, ‘That would be great, thanks. Parks 1 out to you’.<sup>82</sup>

A few moments later, ComCen and Ms Arman had a further exchange:

ComCen: Yeah received your sitrep. Any further information for me, Parks 1?

Ms Arman: No could you ask the Duty Coordinator what he’d like us to do given that it’s going to be dark soon. Not really sure whether we should be sending a rake-hoe team in.

ComCen: Parks 1, I understand that teams will be removed from location this evening and returned tomorrow, but I will check with the Duty Coordinator to confirm that.

Ms Arman: I’ll wait for you to get back to me. Parks 1 out.<sup>83</sup>

Mr Graham referred to this exchange in his statement:

At 20:01 hrs Odile Arman spoke to me via ComCen about whether to keep ground crews on the fire ground overnight and sought advice through ComCen about whether to stand her crews down for the evening. While crews are trained and capable of night time operations, this is usually conducted once the strategies have changed from direct attack to indirect attack. When this happens crews are generally not presented with the immediate danger of falling timber, and avenues of retreat are more accessible.

I discussed Odile Arman's concerns with Peter Lucas-Smith and Rick McRae. I can no longer recall whether these conversations were in person or by phone. I can only recall discussing these concerns with them.

The three of us agreed with the assessment made by Odile Arman of the risks to fire fighter safety of the Bendora fire ... and, based on this, the SMT [service management team] supported her position that her crews should not remain at this fire overnight for safety reasons. This decision was confirmed in a telephone conversation between Odile Arman and myself that 21:18 hrs that evening.<sup>84</sup>

It is clear from the evidence of both Mr Lucas-Smith and Mr Graham that the only conversation that took place between Mr Lucas-Smith and Mr Graham before the decision was made to withdraw crews from the Bendora fire was their telephone conversation at 7.42 pm, as detailed. Mr McRae did not take part in that discussion.<sup>85</sup> In evidence, Mr Lucas-Smith disagreed with the first paragraph in the cited extract from Mr Graham's statement (in which Mr Graham suggested that night-time operations are usually conducted once strategies have changed from direct attack to indirect attack) and agreed that if the conditions were right there would be no problem with an overnight crew engaging in direct attack.<sup>86</sup>

Mr Graham thought he was at ComCen when Ms Arman gave her situation report at 8.01 pm. Ms Arman said that she had unintentionally omitted to give her estimate of the fire's size in her report<sup>87</sup>, and Mr Graham said he was not conscious of this omission. Mr Graham recalled Ms Arman asking for advice about whether or not she should fight the fire overnight. He did not, however, recall hearing her ask what the Duty Coordinator would like them to do and her being told that the ComCen operator's understanding was that the 'teams would be removed from the location that evening and returned tomorrow' but that the ComCen operator would check with the Duty Coordinator to confirm that. Asked whether he could explain how the ComCen operator would have had the understanding that crews would be removed that evening, Mr Graham suggested, 'He or she may have overheard discussions that I was involved in— maybe overheard the telephone conversation I had with Mr Lucas-Smith at 19:42. But I don't know'. In this regard, Mr Graham said he believed he was in ComCen at the time of his telephone conversation with Mr Lucas-Smith and so may have been overheard, although he could not remember talking to the ComCen operators about overnight crew deployment.<sup>88</sup>

Mr Graham then instructed the ComCen operator to ask Ms Arman whether she intended remaining or leaving crews on location overnight and to provide an estimate of how many crews would be required next morning.<sup>89</sup> The precise message was: 'Yeah, Parks 1. Compliments of the Duty Coordinator. Do you intend remaining or leaving crews on location overnight? If not, crews will be going in first thing in the morning and could you give us an estimate on how many crews would be required for that'. Ms Arman responded, 'I'll get back to you. Give me a few minutes to work that out. Parks 1 out'.<sup>90</sup>

Mr Graham said that, when he asked that the message be sent, he did not believe he had an expectation of what the response would be and that he had not formed a ‘solid view’ on whether he was expecting Ms Arman to remain at the fire or to withdraw overnight. He emphasised in his evidence that he did not believe there was any suggestion on his behalf that Ms Arman should withdraw.<sup>91</sup> He suggested, however, that he ‘may have had a leaning’ and that based on that leaning he combined his question about whether or not Ms Arman would remain at the fire overnight with a further request that she provide information that was primarily relevant at that time only if the decision was made to withdraw. (Regardless of the decision to stay or go, there would have been a requirement for crews to return the following day, although if overnight firefighting occurred resource allocation for the following day would generally be determined at a later point, in the light of firefighting progress and fire developments overnight, as observed and reported to ComCen by the incident controller.<sup>92</sup>)

#### **5.2.4 The decision to withdraw from the Bendorra fire**

At 8.14 pm Ms Arman responded to the question from ComCen about her intentions in relation to the Bendorra fire:

An update on what’s required for tomorrow. There’s not too much that we can do this evening. We’ll need at least two rake-hoe teams first thing in the morning to work the southern and northern sides of the fire and, if it’s possible, to have some water bombing done on the western side … we also require at least one heavy tanker.<sup>93</sup>

In her statement Ms Arman said she then awaited further direction from ComCen. That direction came approximately two minutes later: ‘Parks 1, compliments of the Duty Coordinator. Thanks for your attendance at this incident. You may return to your area and crews will be returning in the morning’.<sup>94</sup>

#### ***Factors influencing Ms Arman’s decision to withdraw***

In her statement, her interview with investigators and her verbal evidence Ms Arman referred to a number of factors that influenced her thinking on whether or not to stay and fight the Bendorra fire on the night of 8 January.

The primary factor influencing her decision to withdraw overnight was her concern for the firefighters’ safety. In her view, the fire was too big for the crews to contain or put out that night. They were not able to run canvas hoses around the entire perimeter of the fire, so the crews would have had to construct rake-hoe containment lines along substantial sections of the perimeter. Ms Arman said this would have been a time-consuming and physically demanding activity because of the steep terrain and dense vegetation at the fire ground, particularly if it was done at night without good visibility. In this context, Ms Arman was conscious that the crews had been working since 7.30 am and was concerned about accidents happening as a result of the fatigue that would be likely to affect crews working for another 12-hour shift, through the night and in demanding terrain. (Ms Arman did not know whether the Gungahlin crew had been working since 7.30 am because they were volunteers.<sup>95</sup>) Ms Arman had also become increasingly anxious about the threat from falling timber as the fire progressed during the night and the possibility of an accident arising from this: ‘The falling timber was going to pose a definite threat during the night when crews would not be able to see so well to avoid falling trees, branches and other material while trying to work upslope’.<sup>96</sup>

Ms Arman's safety concerns were compounded by her view that the fire was in a remote area a considerable distance from Canberra, which meant there was no ready access to medical care in the event of injury. She was also worried about the effects of fatigue on crew members' ability to safely drive home following their shifts if they were asked to do another 12 hours of hard physical work.<sup>97</sup>

Ms Arman was, however, also aware of the countervailing considerations. She acknowledged in her evidence that overnight firefighting can be done safely and that it was consistent with her experience that fire behaviour on the first night is usually at its most benign.<sup>98</sup> She also agreed that it would have been possible to arrange SES support during the night if she had decided to stay.<sup>99</sup>

The second factor influencing Ms Arman's decision to withdraw was related to her safety fears; it concerned what she identified as a tendency in recent years not to have crews staying overnight at fires in remote areas on the first night. In support of this, she referred to a fire at Rendezvous Creek earlier in the fire season, where crews were not put in on the first night. She said she assumed this was for occupational health and safety reasons and that this was one of the reasons she sought guidance from ComCen.<sup>100</sup> In her statement she noted that she made her 'recommendation against the background of recent remote area fires, where I knew that crews had been withdrawn by ESB on the first night for safety reasons'.<sup>101</sup> For his part, Mr Graham said he did not think anybody at the Emergency Services Bureau held the view that, generally speaking, it was undesirable to have overnight firefighting<sup>102</sup>, although, as noted, he did say he believed that overnight firefighting is 'usually conducted once the strategies have changed from direct attack to indirect attack'.<sup>103</sup>

The third factor influencing Ms Arman's decision was what she described as an ambiguity in relation to who was responsible for making the crucial decision whether or not to continue firefighting overnight. She described the locus of responsibility for such strategic decision making as a 'grey area'<sup>104</sup> and said that, in a strict sense, it is the role of the incident controller at the fire ground to make the decision about whether or not to fight a fire overnight. She said that there is, however, often a good deal of discussion between the duty coordinator and the incident controller at a fire ground about various tactical and strategic decisions, so often such decisions are made jointly. Ms Arman said she was asking for guidance from ComCen because, although she felt as incident controller, that she had responsibility for making the decision, the fact that it was a 'grey area' meant she wanted advice from the Emergency Services Bureau and to have her final decision confirmed by them.<sup>105</sup> She also said she was seeking guidance because she did not know what was going on elsewhere in the ACT in terms of the other fires then burning.

The fourth factor influencing Ms Arman's decision to withdraw overnight from Bendorra was closely related to the third; it was ComCen's response to her original request for guidance, the ComCen operator having said that he understood that firefighter teams would be removed from the fire ground overnight but that he would confirm this with the Duty Coordinator. That response gave her the impression it had been decided at the Emergency Services Bureau that crews would be withdrawn from the fire ground that night. In fact, Ms Arman's question to ComCen—'... could you ask the Duty Coordinator what he'd like us to do given that it's going to be dark soon. Not really sure whether we should be sending a rake-hoe team in'—was never directly answered. In her evidence Ms Arman stated, 'In hindsight I should have clarified that issue with them'.<sup>106</sup> Despite not receiving a direct answer to her question, Ms Arman said, however, that the ComCen operator's comment 'did influence me a bit ... did throw me a bit

because they gave me the impression that … they were going to have some involvement in the decision making’.

In her interview with investigators after the fires, Ms Arman said she: ‘had a bit of a feeling we weren’t going to leave crews, but they were still asking me what I wanted to do, so I was a little confused there. I decided to proceed to make a recommendation and see how they would respond to that’.<sup>107</sup> Ms Arman further stated her belief that if the Emergency Services Bureau had wanted her to stay and fight the fire overnight, they would have told her so:

Well, I would have thought so, yes, given there have been times when they have given out an instruction for a—on a specific thing so I would have thought for something like that they—if they felt we should, they would have told me, yeah. I was uncertain about whether we should withdraw or not and did raise it with Tony Graham, who was the Duty Coordinator, later in the evening—when I had an opportunity to get in mobile range and asked him about it because I said I wasn’t 100% certain about whether we should do that. But he said it was supported.<sup>108</sup>

In evidence, Ms Arman further described her uncertainty about the decision to withdraw and her belief that the service management team would provide some oversight in relation to that decision: ‘In the back of my mind, I did have the impression that we weren’t going to keep crews and I knew at that point I’d have to make a recommendation. I did see it as a recommendation and I thought that if they weren’t happy with that they would say so’.<sup>109</sup>

The final factor taken into account by Ms Arman when deciding whether to withdraw was the fact that the fire was moving fairly slowly.<sup>110</sup> Ms Arman agreed that she would have had an awareness of what the forecast was for that night and the following morning when she was considering the various factors that influenced her decision, although she was not sure whether that forecast influenced her thinking. She was certainly aware of the drought affecting the ACT but said it was difficult to gauge the effect of this in relation to the decision immediately before her that evening.<sup>111</sup> She also thought it was going to be another ‘orange’ alert day the following day.<sup>112</sup> Although Ms Arman did not assess what the unattended fire’s rate of spread might be overnight, she doubted that the fire would grow excessively and was reasonably confident that it would not cross Wombat Road.<sup>113</sup> She did, however, expect the fire to be larger the following morning when the returning crews arrived.

In making the decision to withdraw overnight, Ms Arman thought it might be possible—albeit difficult—to contain the fire the following day.<sup>114</sup> She was not sure of what resources were going to be supplied the next day and conceded that there were a number of other factors she did not have information about that would have been relevant to assessing the longer term strategic implications of withdrawing from the fire on the night of 8 January. She said she was ‘not really putting a lot of thought into’ what would happen if the fire did expand significantly overnight and could not think of any other factors she took into account in weighing up the consequences of withdrawing.<sup>115</sup>

When asked about her level of experience, Ms Arman agreed that someone with more experience might have made a decision different from the one she made on the night of 8 January: ‘I guess my depth of experience is not as deep as—is not as extensive—as some other people, and if I erred on the side of caution I did that in the interests of the crew … [and] their safety and their welfare’.<sup>116</sup>

### ***The attitude of the crews***

As noted, an important factor in Ms Arman's thinking on the night of 8 January 2003 was the welfare of the crews and the fact that at least the Forests and Parks crews had been working since 7.30 that morning and she was 'very reluctant to ask them to start an overnight 12 hour shift'.<sup>117</sup> Ms Arman's recommendation to withdraw crews overnight was, however, made without her having consulted any other personnel present at that time.<sup>118</sup> A number of the crew members who were there that evening provided statements to the inquiry.<sup>119</sup>

Mr Cliff Stevens is an experienced firefighter, having worked for 35 years with ACT Forests as a logging supervisor and having fought many fires during that time.<sup>120</sup> On the decision to withdraw from the Bendorra fire, Mr Stevens said the following:

Before I got back from marking the trail to the water source I heard ComCen talking to Parks 1 via radio about what resources she would want overnight. I assumed this was after a SITREP would have been sent through, about the size of the fire and what sort of assistance might be required. She replied that there wasn't much she could do that evening and she set out the crews required for the next morning. After the fires, I spoke to Parks 1 about the decision to pull crews off that night. She said to me that she had understood that ComCen wanted her to 'pull crews out and not leave them in overnight'.

I got back from my reconnaissance to find water some time shortly after 8.15 pm ... the fire was about 150 metres long and 120 metres in width. I did a visual estimate of the fire size, based on my experience over the years. This estimate was based on where I could see the smoke rising for each end of the fire, although I could not see the flame edge and was making my guesstimate from the road edge. There is no doubt in my mind that we could have got it out. We had the tanker and light unit that came in with Parks 1 and my crew (another tanker and light unit). The tankers already had the hoses rolled out from both units. I think the Parks unit had about 4 or 5 lengths of hose out, and I think our unit had approximately 3 lengths. A length is about 30 metres; end to end is about 120 metres for 4 hoses. I reckon about 2 or 3 hose lengths would have reached that fire easily.

Access to the fire from Wombat Road was on the shady side of the hill, on the east facing slope. Light was still sufficient to walk around the fire ground when I arrived back from making the track to the water source.

By the time I arrived back at the fire ground the decision to leave for the night had already been made. I did not enter discussion with the incident controller about it at the time. I do not recall any other conversation by others with her about the decision—although I was not present at the time it was made.

The light units are ineffective in that territory. The fire was virtually only trickling around at that stage, although there was a bit of fire up towards the canopy in some of the trees; but it was running up the candlebark on the sides of the trees. They were gum trees, and there was a lot of ground material; it was pretty thick and hard to get through. It was not a real problem because we did not have a lot of breeze (about 5kms at that time). It was fairly calm and it was towards the cooler part of the evening, about 8.15 pm, when the decision was made to leave. The only danger at night, in my opinion, is stumbling around in the bracken and bush and falling over things. There is that risk, but we have faced that risk many times before. There were no fire breaks or trails in place, but the incident controller and one other person had walked the fire ground.

I believe we had adequate resources to put out the fire that night. I believe we should have stayed there and put the fire out. I know my crews were prepared to stay and wanted to stay. But the decisions were already made upon my return from searching for top-up points for water to the crews standing by on scene. I also observed the crews rolling hoses up and I gave them a hand.<sup>121</sup>

After the fires, during her interview with investigators, Ms Arman was asked whether she thought about discussing what options she had with the crews. Her response was, ‘No, I didn’t ... Cliff Stevens was still on his reconnaissance, he hadn’t actually come back. Had he come back that might have been a different story but he hadn’t’.<sup>122</sup>

Mr Stevens’ crew included three firefighters on the Forest 15 tanker. The driver of the tanker was Mr Doug Mitchell. At the time of the fires Mr Mitchell had had over 28 years’ experience with ACT Forests and NSW Forests and had performed firefighting duties during all that time. In his statement Mr Mitchell described how the Forest 15 tanker crew waited for an hour or more until they had instructions from the incident controller as to whether to fight the fire or not. They had rolled out five lengths of canvas hose in preparation for fighting the fire, but Ms Arman then told them not to put any water on it. Mr Mitchell continued, ‘I then heard Parks 1 say “pack up the hoses we are going home”. Each length of hose is about 30 metres, so we had about 150 metres rolled out. We were at the fire, 150 metres from our tanker on the road, and we were not to do the job’.<sup>123</sup>

The remaining crew members on the Forest 15 tanker (Ms Tamera Beath and Ms Rebecca Blundell), two crew members on the Parks 12 tanker (Mr Andrew Hewlett and Mr Matthew Brooke) and one of the two crew on the Parks 22 light unit (Mr Stephen Harding), also provided statements. Each of these crew members was well trained but relatively inexperienced in remote area firefighting. They all described problems with the difficult terrain and dense undergrowth. Some of them made reference to concerns about falling trees or branches. They too, in various ways, expressed surprise or disappointment at Ms Arman’s decision to withdraw from the fire ground and a willingness to remain at the fire, at least for some time.<sup>124</sup>

Ms Arman was unaware of these views when she made her decision to withdraw. In evidence, she reiterated that she did not ask anyone how they felt about working overnight. She noted, however, that, from what Mr Kane said about leaving the light unit to ensure the fire did not cross Wombat Road, she gathered he would have been happy to have stayed.<sup>125</sup>

#### ***Mr Graham’s role in the decision to withdraw***

Mr Graham did not question Ms Arman on her decision to withdraw or, specifically, on how she had reached the view that there was ‘not much they could do that evening’. He said the Emergency Services Bureau supported her decision but that he played no role whatsoever in providing advice or debating with her or hearing what her concerns were. He said she made the decision without any input from the Emergency Services Bureau, other than what might have been implied in earlier communications with ComCen, as already discussed.<sup>126</sup>

Mr Graham also gave evidence that, in selecting an officer to act as incident controller for a particular incident, considerable reliance is placed on their rank within the organisation, rather than on their specific experience. In this context, Mr Graham said, ‘The obligation is upon them [the appointed officer] to advise us whether or not they are able to perform the function that we have asked them to do’. He also noted that Ms Arman was not the first choice for incident controller for Bendorra that evening but that Mr Brett McNamara, who had been chosen in the

first instance, was too far away, at the southern end of Namadgi National Park, to respond in time.<sup>127</sup> Notwithstanding this, Mr Graham said he had ‘enormous confidence’ in Ms Arman’s abilities, so did not question her decision to withdraw.<sup>128</sup>

Mr Graham also acknowledged that ‘we could have done better’ than simply accept the decision to withdraw on the basis of only the statement from Ms Arman that ‘there’s not much we can do this evening’. Mr Graham agreed he could have provided some input into that decision: ‘I believe that we in ESB could have taken greater consideration of the information we were getting back from Odile about overnight resourcing and possibly could have questioned her further’.<sup>129</sup> He also agreed that ‘ESB and the service management team within ESB could probably have questioned in some greater detail—or in some detail—the reason behind the decision to withdraw’,<sup>130</sup> in order to ‘understand better the reason behind her decision’.<sup>131</sup> Mr Graham conceded that he should have taken that opportunity and that the failure to do so was a deficiency in the way the matter was handled. Asked whether anyone else should have taken that opportunity, Mr Graham responded, ‘At that point I was the only person in the Service Management Team in one of the key roles in the operations centre, so there was nobody else for me to refer that decision to at that time’. He did, however, agree that he could have telephoned or otherwise contacted Mr Lucas-Smith at that point, but he did not try to do that.<sup>132</sup>

In evidence, Mr Graham emphasised the joint nature of decision making between on-ground incident controllers and the service management team located at Curtin: ‘The decision is made by the Incident Controller on the ground with endorsement of the Service Management Team’. On the question of responsibility for the decision to withdraw, Mr Graham’s evidence was, ‘I think it is a joint decision. I think if the Incident Controller out at the incident ground feels strongly enough that the need to withdraw is paramount, then that decision must be supported’.<sup>133</sup> This evidence is consistent with Ms Arman’s evidence suggesting that the locus of responsibility for strategic decision making in this context is a ‘grey area’. Mr Graham agreed that at the beginning of a fire incident greater weight would usually be given to the views of the fire ground incident controller because they will usually have far more information than the service management team at that time. He also agreed that this balance generally shifts in favour of the service management team as the incident escalates.<sup>134</sup>

Additionally, Mr Graham referred to his view that ‘if the Incident Controller believes categorically there is a need to withdraw crews, then I would support that 100%’. He agreed, though, that Ms Arman’s response to the question from ComCen about her intentions—‘There’s not too much we can do this evening’—was not a ‘categorical statement’.<sup>135</sup> Once again, this evidence is consistent with that of Ms Arman, who said she did not see her position on the question of withdrawal as ‘categorical’ but, rather, as ‘a recommendation’ that the ESB personnel would overrule if they disagreed with.<sup>136</sup>

On the evening of 8 January 2003 Mr Graham knew the ACT was experiencing drought conditions, and he recognised that in these conditions the fires had the potential to be very difficult to contain. He was also aware that, generally speaking, the first night is usually the time when a fire is easiest to control and agreed that to lose that opportunity by withdrawing crews was a very significant decision.<sup>137</sup> He also said, however, that he was unaware of, and so never gave consideration to, the typical summer weather pattern experienced in the ACT—a pattern of benign conditions followed by strong north-westerly winds, occurring over a five- to seven-day cycle.<sup>138</sup>

Ultimately, Mr Graham said he supported Ms Arman's decision, then and afterwards, because it was essentially her decision to make as the on-ground incident controller and the decision was made on the basis of a number of legitimate considerations—in particular, her concern for the safety of her crews: 'The safety of firefighters is paramount and has been something that we've always recognised and something that we've preached and taught and will continue to do so. We've got to make sure that our members are safe'.<sup>139</sup>

The lack of urgency with which Mr Graham apparently regarded the Bendora fire on 8 January, despite the generally adverse fire conditions, was in part revealed by the fact that he did not recognise the need to make arrangements to ensure that bulldozers would be available on the morning of 9 January to help put containment lines around that fire—or, indeed, to assist in relation to the other fires then burning in the ACT. Moreover, Mr Graham had not looked at the possibility of deploying additional crews or finding out from ACT Forests whether it could deploy additional crews during the night of 8 January.<sup>140</sup>

Mr Graham accepted that in the afternoon and evening of 8 January Mr Sayer, Mr Bartlett and Mr Cooper were talking about what needed to be done in order to immediately effect an aggressive attack on the ACT fires and that the need for an aggressive attack was something they immediately recognised. He agreed that he did not experience that same level of concern on 8 January.<sup>141</sup> He accepted that Mr Sayer, Mr Bartlett and Mr Cooper had considerably more experience in bushfire fighting than he did at that time and that they were recognising risks and concerns that he was not perceiving because of their additional experience.<sup>142</sup>

But Mr Graham would not accept that he was insufficiently experienced in bushfire behaviour and bushfire fighting to be in the position he was in—Duty Coordinator and Operations Officer in the service management team—and to make the sorts of decisions he was being called on to make that night.<sup>143</sup> More specifically, it was suggested to Mr Graham that one of the reasons he was not more actively testing Ms Arman and ensuring that the decision to withdraw was a properly formulated one was that he did not have the experience to recognise what these fires could do if the opportunity to fight them on the first night was lost. Mr Graham did not accept this, arguing, 'I had some considerable experience in the role that I was fulfilling at the time, being an Operations Officer in our terminology in our Service Management Team. It was experience that I had gained through what would probably number in the hundreds of fire events over my time there'. He agreed that, in order to make the necessary strategic judgments, a person in the position he was in on 8 January needed to be able to understand how bushfires worked but said that, although he could not say whether his understanding was sufficient at that point, he was nevertheless confident he had the capacity to do the job required.<sup>144</sup>

It was suggested to Mr Graham that the way in which the decision to withdraw from the Bendora fire was handled was 'negligent'. Mr Graham responded that he 'wouldn't describe it that way'.<sup>145</sup> Asked whether it was a failure in the decision-making process, Mr Graham replied, 'In the endorsement of the decision making, I would accept that it could have been done better ... Whether or not it was failure are words others may use'. Mr Graham went on to clarify that in saying that it 'could have been done better', he was referring to his own conduct and not to that of Ms Arman.<sup>146</sup>

#### ***Mr Lucas-Smith's evidence on the decision to withdraw***

As noted, Ms Arman acknowledged that someone with more experience might have made a decision different from the one she made on the night of 8 January.<sup>147</sup> This acknowledgment was echoed by Mr Lucas-Smith in his evidence, when he recalled that he and Mr Graham had a

discussion about Ms Arman's concerns after he had returned to the Emergency Services Bureau in Curtin and the crews had already been stood down: 'Once I heard the information from the discussions that had taken place between Tony Graham and Odile Arman, I thought there probably should have been a little bit more in-depth consideration'. Mr Lucas-Smith's evidence was that the decision to withdraw was not a decision he particularly agreed with and that 'If I had been on the fire ground, I may have done things differently'.<sup>148</sup> He also said, however, that, although Mr Graham had had only minimal experience as a Field incident controller, he felt Mr Graham was nevertheless 'absolutely' qualified to participate in the decision to withdraw crews from Bendorra on 8 January because of his very substantial experience during his six years as Operations Officer, coordinating ACT resources in response to probably 'well over a thousand incidents'.<sup>149</sup>

Mr Lucas-Smith said he did not express in his statement any disagreement with the decision to withdraw because he saw it as a 'hindsight issue'.<sup>150</sup> He later agreed that, despite material in his statement effectively condoning the decision to withdraw, his view was that, 'With people with more experience in highland firefighting under those sort of conditions, they might have made a different judgment. If I had been sitting in Odile Arman's position, I think I would have made a different decision, but I was not'. Mr Lucas-Smith also agreed that if he had been at ESB headquarters in Curtin he might have been a bigger contributor to the decision, but he was focused on the threat from the McIntyres Hut fire at this time and the Bendorra fire did not appear to be as great a threat because it was a much smaller fire (particularly as it had been reported to him) and was burning at lower intensity.<sup>151</sup>

Mr Lucas-Smith also gave evidence about whether some of the difficulties encountered at Bendorra on 9 January 2003 might have been avoided if a different decision had been made on the night of 8 January: 'If we made the decision to direct attack on the night of the 8th, at first light on the morning of 9th we would have had heavy plant in there opening those trails and doing what we could to limit the growth of that fire'.<sup>152</sup>

#### ***Expert evidence on the decision to withdraw***

##### ***Mr Phil Cheney***

Mr Cheney said, 'Pulling out of the fire overnight, I believe, lost a really valuable opportunity to bring this fire under control. The resources that were there ... probably wouldn't have been able to control the fire, but they could have been able to make a fairly substantial start on control'.<sup>153</sup>

Like Ms Arman herself and Mr Lucas-Smith, however, Mr Cheney thought Ms Arman lacked the experience necessary to make the decision to stay and attack the Bendorra fire overnight on 8 January 2003. In his report, after noting that Ms Arman apparently felt that keeping crews at the fire overnight posed significant safety risks, Mr Cheney expressed the opinion that Ms Arman:

did not have the experience to control the fire in this type of forest. It is the responsibility of the Service Management Team to know the level of training, experience, level of firefighting proficiency of all firefighters under their command and be able to assign the person appropriate to the task at hand. They should have been able to assess the seriousness of the situation and recognised that a more experienced person should replace the Incident Controller.<sup>154</sup>

Mr Cheney confirmed in evidence that if Ms Arman's decision was based on her later comment that she did not feel competent to tackle the fire, he would support her decision:

Because that is the whole basis of the AIMS system. If someone is not competent or capable of handling a particular situation, then you replace them with someone who is ... I believe in this case, because I believe there were more experienced firefighters available that night, the decision should have been made by the incident control team to put them in place of Ms Arman. It is certainly not a criticism of Ms Arman herself.<sup>155</sup>

Mr Cheney also explained in evidence what he meant by his reference in his report to 'the seriousness of the situation':

I am referring to the whole situation they were facing. They had four fires going to the west of the ACT. Three of them were areas of their direct responsibility and a fourth one which, if not brought under control, was going to have a serious impact on ACT forests and ACT itself. The condition of the fire season was known. The drought index was such that the fires weren't going to go out overnight and in fact weren't going to slow down much overnight, as subsequently turned out. I think those conditions were known or should have been known.<sup>156</sup>

He later confirmed that, if those responsible for the appointment of Ms Arman as incident controller were of the opinion that she was experienced, 'they were mistaken because, by her admission and her own actions, she demonstrated that she was not experienced'. He had formed that opinion on the basis of what Ms Arman said, his view of her conduct that night, and, in particular, his view that this 'was not a particularly difficult or particularly dangerous fire situation for someone who was experienced in that fuel type'.<sup>157</sup>

Mr Cheney was extensively cross-examined in relation to his opinion about Ms Arman's decision to withdraw from the Bendorra fire on the night of 8 January. He confirmed that he was aware that one concern that motivated Ms Arman's decision related to firefighter safety, in connection with which he said:

I think you have to look at safety from both angles. You have to look at safety for the firefighter and you have to look at safety for the public as a consequence of the firefighters not taking action ... If it comes to a choice—and I think this is a decision that undoubtedly is a legal one—then I think the weight has to be given that the risk to the firefighter must be expected to be higher because they are trained [compared with] the risk to the untrained resident or citizen of Canberra who may be threatened by the fire. Now there is no doubt that firefighting is a dangerous business and there is no doubt that people can get injured in that situation, but that is a risk that is inherent in this job. If it is not faced with the associated risk of the consequences of not controlling that fire, then we are not going to progress very much at all in the firefighting business.<sup>158</sup>

This comment by Mr Cheney was the subject of some very strongly worded submissions on firefighter occupational health and safety; it is discussed in detail in Chapter 6.

Mr Cheney agreed that he would expect that there would be falling trees at Bendorra that night, but noted:

My experience in that terrain is that that occurs within inside the fire area, it doesn't occur principally right on the edge of the fire because it takes some time for trees to burn down. As far as falling limbs alight in the tops of trees, that is something which

firefighters experienced and trained to work in that vegetation type and that topography should be trained to be aware of to minimise the risks. Obviously they are not going to completely eliminate it because they have to do a dangerous job, but good training and experience can minimise it.<sup>159</sup>

Mr Cheney also commented on some notes made by the CSIRO team that travelled to the Baldy Range spot fire on the night of 8 January and, in particular, a statement in the notes that the team did not drive through the fire area because of the danger of falling trees. Mr Cheney said the CSIRO team told him ‘they didn’t drive through the fire area because of the danger of falling trees within the area, as I understood it’. His evidence was that if they had had the task of constructing a line around the perimeter of that fire he thought their statements would have been quite different.<sup>160</sup> Mr Cheney later confirmed that he knew that in February of 2004 a bushfire fighter in Western Australia was killed by a falling tree, but he did not know any of the details: ‘It is not uncommon but it is usually firefighters in vehicles travelling along roads or firefighters felling falling trees … I am aware it was a real hazard. It was a real hazard in our experiments, which we had to manage’.<sup>161</sup>

Mr Cheney agreed that a tree that is within a distance equivalent to its own height from the fire edge has the potential to be a hazard to firefighters working on the fire edge. He also agreed that such a tree has the potential to bring down other trees or branches, thus being a hazard beyond its own length. This means each tree burning inside the fire line must be taken into account for the hazard it presents. He argued, however:

This situation was no different to the situation faced by firefighters later on in the week. When they were burning out from roads and through the same sorts of forest they were faced with the same hazard of trees coming down across the road in the areas where they were working and being a threat to them and falling on them. There is no real difference between this and doing burning out from a road where you have to patrol it to watch out for spot fires.<sup>162</sup>

Mr Cheney was subsequently cross-examined further about this and essentially repeated the views just outlined. In particular, he confirmed that from an early stage and until the time he gave evidence it had been his view that the ACT Bushfire Service should have stayed on 8 January and fought the fires, including the Bendorra fire.<sup>163</sup> Mr Cheney also confirmed that people who were experienced in suppressing forest fires and knew that the fire danger was low to moderate on the night of 8 January should have been aware that the fire was ‘eminently put outable under those conditions’. He concluded that Ms Arman should have stayed and fought the fires, and he suggested that if she had the fire should have been put out.<sup>164</sup>

In his report Mr Cheney explained how the Bendorra fire might have been controlled if it had been decided to stay and fight the fire on the night of 8 January:

The fire started in a stand of alpine ash regeneration (probably from fires in 1926) that had been last burnt in January 1979 by CSIRO and ACT Forests staff as a buffer for a high-intensity summer experimental fire in the Bushranger Creek experimental catchment. The area containing the fire was bounded by Wombat Road, the Bendorra fire break, which had been closed off and was poorly maintained, and a track constructed to secure the buffer burn that connected Wombat Road to the Bendorra Arboretum. This track was overgrown and had not been maintained but was marked on the 1:25 000 Tidbinbilla map sheet. In my opinion, the prescribed burn in 1979 had reduced the surface fuels to a non-flammable condition and removed a proportion of hollow stags killed in 1926. Although the fuels had accumulated for 24 years, the area

was less hazardous than similar stands in the area that had not been prescribed burnt. In my experience, the past practice would have been to attempt to control fire by a direct attack with water and secured with a mineral earth trail constructed by hand tools. Hollow trees that caught alight and threatened to burn down would be flagged to keep people away from the potential drop zone and patrolled throughout the night to watch for firebrands being thrown across the control line. To back up the direct attack, a bulldozer would have been transported to the nearest point and directed to open up the Bendora break and the old control line between Wombat Road and Bendora Arboretum. Sunrise on 9 January occurs at 0558 hours and there is enough light on clear mornings for machines to start working up to an hour earlier (nautical twilight 0453). A bulldozed line would have been put in the next morning to replace or strengthen the hand tool line, smouldering logs would have been pushed further onto the burnt area, burning hollow trees with the potential to throw embers across the line would have been felled and the fire line patrolled for up to 30 days to detect and suppress re-ignition within the burnt area. In the event of an initial attack being unsuccessful a crew would have been stationed overnight to prevent the fire from crossing Wombat Road towards the east, where it would be burning in more difficult terrain.<sup>165</sup>

*Mr Trevor Roche*

In his report, Mr Roche also expressed the opinion that the actions of Ms Arman that night:

suggest to me that she lacked the necessary experience to recognise fully the implications of the decision she was called to make and to undertake a detailed assessment of the pros and cons of withdrawal. A firefighter with more experience may have weighed the factors differently and concluded that firefighting should have continued overnight, with support from fresh resources and at least one dozer first thing on the morning of 9 January.<sup>166</sup>

Mr Roche noted that, despite her request to ComCen, Ms Arman received no guidance and no planning support from the ESB service management team. He suggested that in the absence of broader strategic advice, in making her decision on overnight deployment, Ms Arman:

appears to have focused almost entirely on the immediate issues affecting her and her crews and spent little time factoring in the risks of not continuing with direct attack on the fire overnight ... she made no assessment of the likely unattended fire spread overnight ... and does not appear to have factored in the weather for the next day.<sup>167</sup>

He concluded, 'In all the circumstances, I do not criticise the Field IC [incident controller] for her failure to reach a different decision. She appears to have recognised her own lack of experience and uncertainty about the decision, sought advice and was not adequately supported'.<sup>168</sup>

Mr Roche also set out in his report a detailed analysis of the measures that could have been taken to redress Ms Arman's safety concerns and that strongly influenced her decision to withdraw. He said:

Under the control of experienced personnel, firefighting at night is no more dangerous than at any other time, providing basic safety steps are implemented. Such a position is supported by the fact that from 10 January onwards, firefighting continued in the ACT on a 24 hour basis. During the course of this activity, I believe firefighters were confronted with significantly more difficult circumstances associated with fire behaviour, terrain and allocated tasks than existed at Bendora on the evening of 8 January. I am unaware of any significant injuries occurring during this period that

were attributed [to] the risks canvassed by the Field IC in her assessment conducted prior to the decision to withdraw from Bendorra ...<sup>169</sup>

In evidence, Mr Roche confirmed the view expressed in his report, concluding that the decision to withdraw was, assessed objectively, the wrong decision.<sup>170</sup>

On the question of the consequences of the decision to withdraw, Mr Roche's evidence was that withdrawing from a fire was a very significant decision to make because, generally, fires do not become smaller overnight. He identified the factors he considered demonstrated that it was an important strategic decision—among them the drought conditions, the fact that multiple fires were already burning, and the lightning activity across the ACT, giving rise to the possibility that additional fires might ignite during the ensuing days: 'Therefore the more you can deal with the ones that you know about ... the more flexibility it gives you ... if additional fires do show up in subsequent days'.<sup>171</sup>

Like Mr Cheney, Mr Roche was extensively cross-examined on his views about the decision to withdraw from the Bendorra fire on the night of 8 January. In relation to the problem of falling trees or limbs, he reiterated that the difficulty presented by falling trees or limbs is not necessarily accentuated at night. His evidence was that he had a fair amount of experience of night-time firefighting and that:

In more circumstances than not the limbs that are likely to fall or the trees that are likely to fall are clearly visible because of the burning—the glow and the flame. Just as equally during the day that might not be so visible, particularly where the fire has been burning within a very dry tree or limb for some period of time and is not emitting a significant quantity of smoke that can't be discerned from the general smoke in the area. So the risk of falling limbs and falling trees is equally a risk at night or during the day and is something that the incident controller must consider in making a decision of a particular strategy or tactics.

In this context, he emphasised that reduced visibility at night is only one factor that needs to be considered among a range of factors relevant to firefighter safety.<sup>172</sup>

Like Mr Cheney, Mr Roche set out in his report the firefighting tactics that could have been implemented overnight on 8 January with a view to containing the Bendorra fire:

This would have required an initial commitment of at least 3 RAF [remote area firefighting] teams with tanker and light unit support. Despite the terrain and condition of the understorey on the south-eastern sector of the fire, the RAF teams should have been able to achieve a construction rate of around 100 metres per hour. With some hot trailing, supported by tankers and extended hose lays, containment of the fire perimeter could have been achieved overnight or at the latest mid morning on the 9 January. Whether this objective was implemented by, in part, utilising the initial response crews with adequate supplementation, or deploying other crews was problematic given that they all faced the same issue of not having been at rest or off duty during the day ... These circumstances will always apply and are an expected part of firefighting on the first day of operations. In my opinion, this formula would have constituted an 'aggressive initial attack'.<sup>173</sup>

If tactics of the kind outlined had been employed on 8 January 2003, Mr Roche believed the Bendorra fire could have been contained in 24 hours and secured before the weather deteriorated.<sup>174</sup> He emphasised that 'the primary factor in achieving this objective was adequate first response resources and overnight fire suppression activity'.<sup>175</sup> He confirmed this view in his

verbal evidence and elaborated on the tactics that, in his opinion, would have resulted in containing and ultimately securing the Bendora fire before the onset of deteriorating weather conditions:

Well, as I understand it there had already been hose lines extended from at least one firefighting vehicle. I think there could have been a lot of work done on the lower portions of that fire down towards Wombat Road to contain the southern and northern flanks of the fire and commence a hand trail up around the higher elevations where the ground tended to flatten out more. That would have given them a head start for the resources that were going to be deployed the following morning and certainly limited the growth of the fire overnight.<sup>176</sup>

In response to the view expressed by Mr John Nicholson in his report—that there was ‘no imperative’ to leave personnel at the Bendora fire overnight—Mr Roche said:

I believe there is always an imperative to extinguish a fire as quickly as possible notwithstanding that there are safety considerations, but my view again is that they can be adequately dealt with … So the need to deal with the fires that were known as rapidly as possible to free up resources to deal with other ones that weren’t extinguished overnight or might have shown up is an imperative in my view. Whilst the immediate weather forecasts may not have indicated a change in the weather immediately or a deterioration in the weather immediately, our well-concreted experience on the normal weather cycles is that within a period of some five to eight days there was going to be a deterioration.<sup>177</sup>

During cross-examination it was suggested to Mr Roche—by reference to a photograph of the Bendora fire taken at 9.00 pm on 8 January, showing the fire burning up the trunks of trees (as reproduced at page 66 of Mr Roche’s report)—that ‘You are not going to stop a fire like that from continuing to burn just with a rake, are you?’ He responded: ‘Yes, you are. I’ve seen it done hundreds of times’. Mr Roche confirmed that firefighters can stop a fire that is burning up the trunks of trees by putting a rake–hoe line around it, and he rejected the suggestion that the Bendora fire could have effectively been controlled only if the roads in the area had been used as containment lines. He went on to explain that the rake–hoe line would be an initial containment line, particularly concentrating on the north-eastern flank, backed up by the deployment of heavy machinery at first light on 9 January to clear the Bendora Break and other tracks and roads as an ‘insurance policy’.<sup>178</sup> Mr Roche also explained that he would not have sought to construct a hand trail at the bottom of the fire. As he said in his report, he would have hand-trailed up the flank of the fire off Wombat Road and then let it burn back to the road.<sup>179</sup>

Mr Roche rejected the suggestion that containment of the fire was dependent on a bulldozer clearing the Bendora Break to allow vehicular access before the fire crossed the break: ‘That was the security line. Containment initially was dependent on crews working that night to put a hand trail up in that area’. He also rejected the suggestion that construction a hand line in that area would have been dangerous:

As the night wore on, the humidity would have increased, the moisture of the fuels would have increased and the fire would have dropped significantly in intensity … There are always circumstances that may arise during the course of any fire where, due to fire behaviour, reduction in fire behaviour, access, etc, you do get across ahead of it.<sup>180</sup>

Mr Roche agreed that the evidence of Mr Hayes—that the fire crossed the Bendora Break early on the morning of 9 January—suggests that the fire would have crossed that break before it could have been cleared the following morning. Mr Roche argued, however, that the fire crossed the Bendora Break as rapidly as it did only because ‘the hand trail hadn’t been put in’. Despite being further pressed on this point, Mr Roche reiterated:

As I said, my strategy was not—the clearing of the Bendora break was not the initial dependent strategy. The hand trail was. The hand trail wasn’t put in and, therefore, in the absence of that, the fire crossed the Bendora break, which then made it more difficult. That is not to say that the strategy should not have continued to be the Bendora break, because it was easily accessible, even though it had crossed it, and then hand trail a little bit or bulldoze a little bit that had crossed over. There are a number of alternatives that were available.

He agreed that he had heard Mr Hayes’ evidence of the scale of the fire that day, and he was asked, ‘There was no practical way at all that he could have controlled that fire heading north, was there?’ Mr Roche replied, ‘I think once the night and the morning of the 8th passed without action then the task was becoming more difficult’.<sup>181</sup>

*Mr John Nicholson*

Notwithstanding Ms Arman’s evidence that her position on whether to stay was not categorical and that if the Emergency Services Bureau had overruled her she would have been ‘happy to accept’ this<sup>182</sup>—and despite the views of most of those present (particularly Mr Stevens) at the Bendora fire on the night of 8 January and the evidence of Mr Lucas-Smith, Mr Cheney and Mr Roche that the decision to withdraw was an objectively wrong one and the product of inexperience—Mr Nicholson concluded: ‘The Incident Controller made the right decision, the decision that would not expose her firefighters to risk of injury or death, when there was no imperative to do so. Based on what was known at the time, it would have been *reckless* of the Incident Controller to do the opposite’.<sup>183</sup> [emphasis added]

Mr Nicholson noted in his report that Ms Arman’s taped record of conversation, in which she had said her decision was not categorical, was among the documents he reviewed for the purposes of his report<sup>184</sup>, but he did not refer to Ms Arman’s evidence about her attitude to being overruled by the Emergency Services Bureau.

In reaching his conclusion, Mr Nicholson began by summarising the views of Mr Roche and Mr Cheney; then he set out a passage from a Victorian Country Fire Authority operations update dealing generally with aspects of safety (but not specifically with overnight firefighting) and followed this with a substantial extract from Ms Arman’s statement. He also noted that Ms Arman made no reference to weather forecasts before deciding to recommend that the crews be withdrawn, but he nevertheless set out details of those forecasts. Mr Nicholson also referred to documents supporting a ‘safety first’ approach to firefighting and to problems with terrain, fatigue and falling trees. In relation to falling trees, he reported, ‘Anyone with any knowledge of the Australian bush is well aware of the tendency for Eucalypt species trees to shed limbs or indeed fall over at any time, not just when affected by fire or wind’.<sup>185</sup>

In relation to Ms Arman’s decision not to consult with her crews at Bendora, who it appears were willing to fight the fire overnight, Mr Nicholson argued:

Consultation (or participative management?) with subordinates is fine, up to a point, but ultimately the Incident Controller is responsible for the well-being of her/his subordinates. Fighting fires in remote and mountainous territory is dangerous and needs

to be treated with respect. In my opinion, the Incident Controller ultimately realised her responsibility and accountability for the well-being of her people and made her decision accordingly.<sup>186</sup>

In evidence, Mr Nicholson confirmed that in reaching his conclusions he did consider the consequences of withdrawing, even though he did not deal with it in any detail in his report. He agreed that he did not conduct any analysis in his report of Mr Cheney's reasoning about the consequences of not fighting the fire on the night of 8 January. He also initially gave evidence that he was not aware that Mr Lucas-Smith had given evidence that, if he had been in Ms Arman's position, he would have made a different decision.<sup>187</sup> After being reminded of what Mr Lucas-Smith said on the matter, however, he said he thought he might have seen that reference. It was put to Mr Nicholson that Mr Lucas-Smith's position was that, although he supported Ms Arman, if he had been in her position he would have made a different decision. Mr Nicholson was asked if he was surprised that Mr Lucas-Smith gave that evidence 'bearing in mind your view that to continue to fight the fire that night would have been reckless'. He replied that it was a reasonable statement.<sup>188</sup>

Mr Nicholson agreed that it is appropriate to do firefighting at night if the weather and terrain are favourable and the fire intensity is low. He volunteered, 'Probably one of the principal issues involved there is usually when the fire is at its most quiet'. He also agreed that, if the fires were small and direct attack was the best strategy, that would be an overwhelmingly strong reason to attack the fires on the first night if at all possible.<sup>189</sup> Moreover, he broadly agreed with the evidence of Mr Lucas-Smith, to the effect that if firefighters were keeping to the fire's edge for the purpose of direct attack the risks would not be significantly greater at night than during the day and that if the fire intensity is such that crews could engage in direct attack with hand tools then that is acceptable practice, with the only caveat that there is an increased risk associated with using chainsaws at night.<sup>190</sup>

Mr Nicholson at first gave evidence that when he walked around the entire perimeter of the fire 'it went from reasonable slope to very steep slope'.<sup>191</sup> He later clarified that he did not walk around the entire perimeter of the fire and that the slope was moderate near the top.<sup>192</sup> He added that he understood there was some night firefighting from 10 January onwards and 'he would be the first to agree' that sometimes, notwithstanding the risks, night-time firefighting becomes an absolute necessity:

There have been occasions in the bush where the reconnaissance has been done overnight so that the plans can be developed in the early hours of the morning and the people and machinery in position to go to work at first light. It's a reasonable position too.<sup>193</sup>

Mr Nicholson was asked about notes he made of discussions with Ms Arman—in particular, a note to the effect that Ms Arman had told him her crews could have chased a fire that got over the road but that Mr Nicholson decided not to pursue this with her 'probably because I didn't consider it an issue at the time'.<sup>194</sup> He was also asked about an email he sent to counsel for Mr Lucas-Smith and Mr Castle, in which he refers to 'Odile's peace of mind'. Mr Nicholson explained that he: 'had a personal view that she had been somewhat traumatised by all of this ... I just had a view that I wanted to talk with her in a calm sort of way to see how she really felt about some of these things'. Mr Nicholson rejected the suggestion that the visit to the site of the Bendora fire was in part about him helping Ms Arman 'gain some peace of mind, in the knowledge that he would at least be on her side'. He had referred to her peace of mind in the

email, he said, ‘because it was something that occurred to me. I was not out there to defend her. I just wanted to see what the circumstances were’.<sup>195</sup>

#### ***Ms Arman’s report to Mr Graham following the withdrawal***

At 9.18 pm Ms Arman made a telephone call to Mr Graham in order to provide more information about the water point and as much information as she could for the crews that would arrive the next day. The call lasted 9 minutes and 23 seconds. In her statement, Ms Arman said:

I told him I was unsure about the recommendation to withdraw crews overnight. He said words to the effect of ‘we were hoping you would do that’. I don’t recall discussing that issue with him in detail and I cannot recall expanding with him the safety concerns I weighed up against the likely effectiveness of the crews, in coming to my recommendation.<sup>196</sup>

In evidence, Ms Arman confirmed her recollection of the conversation and said that, although she did not recall Mr Graham saying anything about anyone else’s views on the topic, or to whom he was referring when he said ‘we’, she assumed that he was referring to the service management team.<sup>197</sup>

Mr Graham agreed that he and Ms Arman had had a discussion along the lines just described. He did not, however, recall whether he said ‘we were hoping you would do that’ and thought it unlikely that he made such a comment ‘but whether I did or not I just don’t know’. He said he did not know why he would have said it ‘because I don’t think that was in our thinking at all. We were asking her to make the decision about that’. He also said he did not recall Ms Arman telling him she was unsure about her recommendation to withdraw.<sup>198</sup>

#### **5.2.5 Preparations for the following day**

In her radio transmission to Mr Graham at approximately 8.14 pm on the evening of 8 January 2003 Ms Arman said the resources required for the following morning were ‘at least’ two rake-hoe teams and ‘at least’ one heavy tanker.<sup>199</sup> In evidence, Ms Arman said her thinking was that the resources she had asked for would do on the following morning pretty much what she would have tasked them to do had she remained at the fire that evening. She had said ‘at least’ because she knew various fires had been reported, and she was not sure what resources would be available to the Emergency Services Bureau to send out the following morning. She had been trying to convey that what she had asked for was the absolute minimum.<sup>200</sup>

During her subsequent telephone conversation with Mr Graham, at 9.18 pm, following the withdrawal from the fire, Ms Arman again discussed resources for the following day. She recalled saying to Mr Graham that resources additional to the minimum that she had earlier asked for would be better. She thought she had said to Mr Graham that she would like to have at least four rake-hoe teams.<sup>201</sup> Ms Arman was pressed in cross-examination on behalf of Mr Graham about her recollection of the telephone conversation and, more particularly, her comment to him that she would have liked more resources, including four rake-hoe teams. In response, Ms Arman said that could not recall her precise words but was sure she had said to Mr Graham something to the effect that she would have liked to have had four rake-hoe teams.<sup>202</sup> She could not remember whether she had discussed the size of the fire during the phone call.<sup>203</sup> She thought that rake-hoe teams would be adequate to the task and was not thinking of bulldozers at that time, and she did not discuss bulldozers with Mr Graham that evening.<sup>204</sup>

Mr Graham said in evidence that during his telephone discussions with Ms Arman about resources for 9 January ‘we agreed on the number of resources to be allocated to the Bendora fire the following day. These crews were to deploy at first light to appraise the situation, and to commence fighting the fire’.<sup>205</sup> Mr Graham had a discussion with Mr Lucas-Smith and Mr McRae on their return to ESB headquarters from Queanbeyan. He said he spoke about the fires and related to them what he had discussed with Ms Arman during the telephone conversations with her. He did not recall any discussion with other members of the service management team that night about resourcing for the following morning.<sup>206</sup> This accords with the evidence of Mr Lucas-Smith and Mr McRae.<sup>207</sup>

Later that evening Mr Graham contacted the agency representative for ACT Parks and asked them to organise a Parks officer to be the incident controller at the Bendora fire at 6.00 am the following day. He subsequently received a call confirming that Mr Rick Hayes (Parks 6) had been assigned to the task. Mr Graham organised the Rivers RAFT crew, Rivers 21 (a light unit) and the Guises Creek RAFT crew to attend the Bendora fire the next morning, advising them to assemble at the intersection of Brindabella Road and Warks Road at 6.00 am. He thought the travel time from there to the Bendora fire would be about 30 minutes and, allowing for briefing time, the crews would probably be actively fighting the fire by 7.00 am.<sup>208</sup>

It is noteworthy that the resources allocated to the Bendora fire for 9 January comprised significantly fewer firefighting vehicles than had been part of the initial response on the evening of 8 January—and fewer still than the weight of response according to SOP 7 for a ‘code yellow’ day (two tankers and two light units<sup>209</sup>). Thursday 9 January 2003 was a ‘code yellow’ day.<sup>210</sup>

At 9.48 pm on 8 January Mr Graham spoke to Mr Hayes about his (Mr Hayes’) intended response to the Bendora fire the following day. During the conversation Mr Graham confirmed to Mr Hayes that he would have two rake-hoe teams comprising six personnel each, plus the Guises Creek tanker. He also mentioned that Ms Arman had alerted them to the danger of falling trees. Mr Hayes asked whether Ms Arman had provided a size for the fire, and Mr Graham responded, ‘About 500 square metres’. It thus seems unlikely that during the telephone conversation between Ms Arman and Mr Graham Ms Arman had corrected the earlier misinformation Mr Graham had received suggesting that the fire was quite small. Just before concluding his conversation with Mr Hayes, Mr Graham asked him to provide a basic situation report as soon as he reached the fire ground, including ‘if you think that the size has changed at all’. Mr Hayes said, ‘We can soon work its size out amongst ourselves’.<sup>211</sup>

In evidence, Mr Graham agreed that a radio transmission from *Firebird* 7 at 5.13 pm referred to the Bendora fire being about 100 metres by 50 metres wide, and accepted that there appeared to be some discrepancy between this estimate and the estimate of 500 square metres with which he was working for determining resource allocation for the following day. He said, however, he never had cause to change his understanding of the size of the fire as being 500 square metres.<sup>212</sup> In fact, as noted, it appears almost certain that by the evening of 8 January the Bendora fire was much larger than the 500 square metres Mr Graham understood it to be—much larger than even Mr Ingram’s amended estimate of 5000 square metres. Mr Cheney estimated that by 9.00 pm the fire covered about 4.5 hectares; this is broadly consistent with Ms Arman’s revised estimate of 200 by 300 metres, or 6 hectares. The evidence suggests, however, that at no time on 8 January did Mr Graham receive a more accurate estimate of the fire’s size from Ms Arman (or from *Southcare 1*).

Mr Graham thought the resources Ms Arman had requested for the following day were appropriate for a fire of 500 square metres but said in his evidence that, if he had thought the fire was 500 metres square (that is, 250 000 square metres) on the night of 8 January, ‘We would have markedly increased the response’ for the following morning.<sup>213</sup> But when on 9 January he became aware that the Bendora fire was 20 hectares (that is, 200 000 square metres), Mr Graham did not allocate additional resources, he said, because no request for additional resources was made to him by the fire ground incident controller.<sup>214</sup>

As Planning Officer, Mr McRae was briefed on the decision to withdraw from Bendora on his return to ESB headquarters from Queanbeyan. He agreed with the decision to withdraw, and he believed such a decision would not have been made lightly. He thought the Bendora fire was about 1 hectare at that time and, although he did no formal modelling of fire growth that night, he estimated that the fire would approximately double in size overnight<sup>215</sup> and so would still be amenable to direct attack the following morning.<sup>216</sup> He explained that, although a change in wind direction, forecast for that evening, would cause the fire to grow, accurate predictions of fire spread and fire behaviour at Bendora could not be made that evening because topographical features in mountainous areas can cause localised effects such as inversion layers and localised changes to wind direction.<sup>217</sup> Mr McRae thought some self-extinguishment was possible—perhaps in the order of 30 per cent—but said he had no expectation that the entire Bendora fire would self-extinguish overnight.<sup>218</sup> He could not recall if he expressed his views on the fire’s probable rate of spread to anyone else at ESB headquarters that evening.<sup>219</sup>

### ***Fire development overnight***

There is uncertainty about when during the night the fire crossed the Bendora Break. Mr Hayes arrived at the site of the fire at 7.12 am on 9 January.<sup>220</sup> He observed that the fire was an unusual shape, and it was difficult to say how big it was. He confirmed that the fire had crossed the Bendora Break by the time he arrived and that it was ‘burning in long fingers’,<sup>221</sup> such that he was unable to walk right round the fire or see all the way around it from access trails: ‘It was a long fire from north to south—it had crossed Bendora Break by the morning’.<sup>222</sup> In his interview with investigators Mr Hayes estimated that the fire would have first crossed the Bendora Break at some time between 11.00 pm on 8 January and 3.00 am on 9 January.<sup>223</sup>

## **5.2.6 Response to the Stockyard Spur fire**

### ***Initial assessment***

The Stockyard Spur fire was the first fire reached by Mr Ingram in *Firebird* 7 on the afternoon of 8 January 2003. At 3.37 pm he reported to ComCen

Yes, ComCen, grid reference for that first fire near Corin Dam is 633 651 ... Further to that the area burnt probably is about 50 square metres at this stage right on the crest of the hill there ... At this stage there doesn’t seem to be any vehicle access into this fire. We’ll go check out the other fire that you requested and then come back and have a look at this one because we may be able to get water onto this one fairly quickly.

Mr Ingram subsequently suggested water bombing the Bendora fire first but was instructed by Mr Graham to start water bombing the Stockyard Spur fire.<sup>224</sup>

The pilot of *Firebird* 7 then landed in order to prepare the helicopter for water-bombing operations, leaving Mr Ingram on the ground because of weight restrictions. The pilot water

bombed until 4.33 pm, when ComCen asked him to stop, so as to continue with further aerial observation. After collecting Mr Ingram, *Firebird* 7 flew back to the Stockyard Spur fire, and at 4.46 pm Mr Ingram reported, ‘The fire is increased to about 70 square metres with a flame height between one and one and a half metres. The fire is actually burning in a small hollow and is only moving very slowly ...’<sup>225</sup>

### ***Initial response***

At about the same time as Mr Graham arranged for crews to respond to the Bendora fire he instructed the ComCen operator to deploy Mr Dennis Gray (Parks 9) to the Stockyard Spur fire as field incident controller, with two tankers and a light unit, being Parks 10, Rivers 10 and Parks 20, with a total of nine personnel. This response was slightly less than the three tankers and two light units required for an ‘orange’ day under SOP 7, but Mr Gray said, ‘A remote fire is a little bit different from a fire around the town’, in that tankers are of no use if they cannot be brought close to the fire. Accordingly, Mr Gray said his first priority was to determine the precise location and access routes to the fire, and his evidence was that adequate resources had been deployed for that initial purpose.<sup>226</sup> The ESB radio transcript confirms that ComCen instructed Mr Gray and the other units to go to the Stockyard Spur fire at 4.18 pm.<sup>227</sup>

### ***The attempt to locate the fire***

It took Mr Gray at least an hour-and-a-half to reach the car park at Mt Ginini; he arrived there at 5.57 pm. It appears that the Mt Ginini car park was about 3.5 to 4 kilometres from the fire ground. Unaware that the Stockyard Spur track had grown over, Mr Graham referred Mr Gray to that track as a possible access route to the fire.<sup>228</sup> Mr Gray, accompanied by a crew member from Parks 20, Ms Meg Doepel, set off to try to locate the track that was marked on the map as leading through to the Stockyard Spur area. Mr Gray followed the Mt Franklin Road down to the vicinity of Pryors Hut but could not find the track leading up along Stockyard Spur. (In this regard, Mr Brett McNamara, a manager with the ACT Parks and Conservation Service, gave evidence that in his 12 years of working in Namadgi National Park the Stockyard Spur track had never been open or accessible to vehicles and that, although it was marked on the maps in use in January 2003, it has been removed from the new maps of the area.<sup>229</sup>) Unable to find the Stockyard Spur track, Mr Gray and Ms Doepel returned to the Mt Ginini car park, and he and other crew members walked down into the Morass Flats area to try to find an alternative route to Stockyard Spur.<sup>230</sup>

At 6.47 pm Mr Gray radioed ComCen to ask if *Firebird* 7 was still in the air nearby because he wanted ‘some up-to-date information on this fire that we’re supposed to be looking after. We’re not on the fire ground as yet’. *Firebird* 7 was delayed briefly before returning to the area. At 7.05 pm Mr Ingram radioed Mr Gray directly: ‘We’ve just flown over that fire. It’s only—the original call was 50 square metres. We’ve just flown over it, it’s now about 100 metres by 75 metres’. Mr Gray responded, saying he was on foot walking towards the fire. There was then an exchange—also involving ComCen—in which *Firebird* 7 attempted to pinpoint Mr Gray ‘so we can have some idea how far away he is and how the fire is going’.<sup>231</sup>

It appears from the estimates of the fire’s size provided by Mr Ingram that the Stockyard Spur fire grew considerably during the late afternoon, despite being described as ‘only moving very slowly’. Mr Ingram estimated that the fire was 50 square metres at 4.33 pm (about an hour after smoke was first sighted), and 70 square metres at 4.46 pm. Less than three hours later it had grown over 100 times to 7500 square metres.

### ***The decision to withdraw***

At 7.12 pm ComCen sent Mr Ingram a message: ‘*Firebird 7* from the CFCO. Would you be able to water bomb that fire sufficiently to contain it to allow ground crews to come back in tomorrow?’ The pilot’s response, conveyed by Mr Ingram, was that water bombing would be ‘very difficult in that area at that stage’, with the effect that there would be no water bombing.<sup>232</sup> Further exchanges between Mr Ingram and Mr Gray confirmed that Mr Gray was still some distance from the site of the fire. At 7.14 pm ComCen contacted Mr Gray and asked him to estimate his time of arrival at the fire. Mr Gray replied, ‘ComCen, I don’t think we’ll make it tonight’. ComCen responded, ‘Parks 9, copy that. CFCO also believes you should not go to the fire tonight and return to your vehicles’.<sup>233</sup>

A few moments later Mr Ingram contacted ComCen from *Firebird 7* and reported, ‘We’ve just had another look at that fire and the pilot said he’s happy now to put the bucket on and [indecipherable] away that fire and see if he can contain it a little if you require that. Over’. ComCen responded, ‘*Firebird 7*, the CFCO would like you to check out the fire south of you at Mt Gingera. Do you copy?’ *Firebird 7* answered, ‘Mt Gingera. We’re on our way. *Firebird 7* out’. ComCen added, ‘*Firebird 7*, further to that we’ve also directed Parks 9 to walk back to the vehicles and leave that fire’.<sup>234</sup>

In his statement Mr Gray said he was surprised that he was given instructions to withdraw from the Stockyard Spur area and thought he would be walking in to fight that fire: ‘All the crews had seen the smoke going up and assumed that we were going to be out there all night. We all had back packs with enough food to sustain us for the first 12 hours’.<sup>235</sup> Mr Gray qualified that assessment, however, during his interview with investigators<sup>236</sup> and in his evidence; he explained that, in effect, the cited comment in his statement was referable to his expectation that he and his crews would be relocated to fight other fires that night, rather than withdrawn entirely from firefighting operations: ‘Being firefighters, we all felt that if there is a fire burning, we should do something. But that day I know I initiated the call to abandon that night shift. That was my own decision and now I still believe that’. Thus Mr Gray maintained in his evidence that the decision to withdraw from the Stockyard Spur fire on the night of 8 January was correct.<sup>237</sup> The fitness of the crew members with him was one thing he factored into his decision making about withdrawal from the fire ground that night; he thought extremely fit RAFT crews were needed for a task of that degree of difficulty. He was also concerned about the amount of provisions his crews had with them that evening.<sup>238</sup>

### ***Preparations for the following day***

At 7.44 pm Mr Gray called ComCen to advise that he had located a track leading down from the Mt Ginini car park: ‘We can drive vehicles to about 1 kilometre and a half from that fire. Quite an easy trail down through the car park down through tree plants’. ComCen asked for an estimate of how long it would take to cover that 1.5 kilometres to the fire. Mr Gray estimated an hour or possibly longer.<sup>239</sup>

Mr Graham believed that he spoke to Mr Gray about the resources needed for the following day.<sup>240</sup> In contrast, Mr Gray said he had no discussions, either before or after he left the fire ground, with anyone at the Emergency Services Bureau about what resources were needed for a night shift or for the next morning shift. He said he could have made some suggestions but did not. Asked what he might have suggested if he had been asked, he responded, ‘RAFT teams. Maybe get a machine up there to re-open that road, or whatever’.<sup>241</sup>

Although Mr Gray had a discussion at 8.56 pm with Mr Brett McNamara, who had been tasked to lead a RAFT crew to the fire the following morning, this discussion essentially concerned the location of and possible access routes to the fire, and they did not discuss resources.<sup>242</sup> The resources ultimately despatched to the fire for the morning of 9 January 2003 were a RAFT crew of 12 under the command of Mr McNamara as field incident controller.<sup>243</sup>

#### ***Expert evidence on the decision to withdraw from the Stockyard Spur fire***

##### ***Mr Phil Cheney***

Apart from noting that, ‘although the fire was detected at 15:25 hours and the location confirmed by helicopter at 15:57 hours, it appears that [no] crews were despatched until around 17:00 hours’, Mr Cheney did not comment in his report on the decision to withdraw from the Stockyard Spur fire. The evidence shows, however, that, although there was a delay between when the Stockyard Spur fire was first located by the helicopter and the despatch of crews to the fire, it was not as long as suggested by Mr Cheney: crews were despatched by ComCen at 4.18 pm.<sup>244</sup> Mr Cheney confirmed that, after travelling for an hour, the crews found they did not have vehicular access to the fire; he commented:

Not only should the Stockyard Spur fire trail [have] been maintained in a trafficable condition but the fire trail should be linked to the Corin Dam Road. There is a spur with reasonable gradient about 1km north of the Corin Dam and I believe that this connection should be constructed in the future. This link would provide a rapid access to the mountain country west of Corin Dam via the Corin Dam Road.<sup>245</sup>

Mr Cheney estimated that at midnight the fire was probably no more than 300 by 200 metres in size. He thought the fire development overnight would probably have been so mild that the fire would have died out in the light fuels but been sustained by smouldering in the deeper litter beds and larger log material.<sup>246</sup>

##### ***Mr Trevor Roche***

While not criticising Mr Gray’s decision to withdraw because of his inability to locate the fire, Mr Roche said he considered that this difficulty might have been resolved had the helicopter landed and taken Mr Gray on a reconnaissance of the fire: ‘The value of the mission would have been in adequate planning and resourcing for the subsequent operational period’. Mr Roche went on to suggest that on the evening of 8 January a request should have been made for deployment of a bulldozer at first light to assist with creating access to the fire and constructing a containment line. Mr Roche also thought the fire lent itself to alternative response strategies not then available to the Emergency Services Bureau, among them ‘air attack with long term retardant and crew deployment by medium helicopter’.<sup>247</sup> He suggested that the Emergency Services Authority give serious consideration to acquiring such capability.

Although not referred to in his report, Mr Roche’s comments about crew deployment by medium helicopter are consistent with the concern expressed in the context of preparation of the Namadgi National Park Pre-Suppression Plan:

Some areas of the Park are so far from vehicle access tracks that RAFT members would have to walk for many hours before undertaking any attack on a fire such as a slow moving, low intensity fire resulting from a lightning strike. Re-identifying remote helicopter landing sites in strategic areas should be undertaken and those sites should be assessed for any maintenance work that may be required.<sup>248</sup>

Mr Roche concluded his analysis of the initial response to the Stockyard Spur fire by expressing the following opinion:

Had access been more readily gained and resources despatched in accordance with SOP 7, there was in my judgment an excellent chance that this fire could have been contained overnight. At 24:00 hours on 8 January, the Stockyard Spur fire was probably no more than 300 metres x 200 metres in dimension. Even with the crew that was available, good overnight progress could have been made to contain that fire. By the time the Field IC [incident controller] arrived at the fire the following morning, it had doubled in size and by 14:56 was approximately 35 hectares with a perimeter of 2.2km.<sup>249</sup>

In evidence, Mr Roche accepted that, contrary to what he (Mr Roche) had said in his report, Mr Gray had not given evidence that he could have driven to the site of the Stockyard Spur fire and that his recollection of the evidence was ‘obviously wrong’. Mr Roche did not, however, resile from his view that the Stockyard Spur fire could have been contained had a more effective response been initiated on 8 January.<sup>250</sup>

In contrast with Mr Roche’s view, Mr McNamara’s opinion was that, given the remote location of the Stockyard Spur fire, in steep and heavily forested terrain, had Mr Gray proceeded he would probably not have found the fire before 9.00 pm, and even if he had found it and stayed to fight it overnight, with the fire’s size as it was and having only nine crew, he would have been unable to do much to control it that night.<sup>251</sup>

### 5.2.7 Response to the Mount Gingera fire

#### *Initial assessment*

At 6.01 pm *Firebird* 7 flew over the Mount Gingera fire and Mr Ingram reported to ComCen, ‘Area burned about 20 square metres. Appears to be a lightning strike. Flame height about one to one and a half metres burning in the understorey. Um, no easy access into this one [indecipherable]. Rocky outcrop. Over’.<sup>252</sup> *Firebird* 7 returned to the location at 7.20 pm, whereupon Mr Ingram reported to ComCen, ‘We’re at that fire now at Mt Gingera. Grown very little in size, probably only about another 5 square metres, if that. Flame height is still only about half a metre to one metre and it’s burning very slowly at the top of the ridgeline. Over’.<sup>253</sup>

#### *The decision not to fight the fire*

In his statement Mr Graham noted, ‘The SMT (less David Ingram) discussed the Gingera fire and agreed not to put crew into this area to try and round up that fire. The terrain was fairly rough, there wasn’t any vehicle access and the perimeter of the fire was difficult to get around by foot because of the rugged terrain’.<sup>254</sup> It is not clear how the service management team had become aware of these difficulties with the terrain around the perimeter of the fire on the evening of 8 January 2003. In evidence, Mr Graham said that, in a general sense, the team discussed the fact that the Gingera fire was further out from Canberra than the Stockyard Spur fire, so the travel time would have been much greater, and that, according to reports, there was no easy access to the fire, which was small and was not growing quickly:

It was a relatively small fire based on the information that we had received on several occasions from *Firebird* 7. And I think it was a decision that by not resourcing it what were the implications, and it was thought that they would be minimal ... It was a reasonably small fire and between two flights that *Firebird* 7 undertook ... the fire had

only grown 5 metres. It wasn't a fire that was moving very quickly. I believe that was the reason behind the decision not to resource it.<sup>255</sup>

Mr Lucas-Smith was further concerned that location of the Gingera fire raised questions about safe ingress and egress for fire crews, since both the Gingera and Stockyard Spur fires were primarily accessible via the Mt Franklin Road, and it was possible that this route might be blocked by 'known or unknown fires to the north'.<sup>256</sup>

Reports from the crews responding to the Mount Gingera fire a little after midday on 9 January 2003 suggest that the trip from Tidbinbilla Nature Reserve to the point on the Mt Franklin Road adjacent to the fire would have taken two to two-and-a-half hours. In contrast with the difficulty of gaining access to the Stockyard Spur fire, however, the walk from the Mt Franklin Road along existing walking tracks to the Mount Gingera fire edge would have taken about 20 minutes.<sup>257</sup> One of the crew members responding to the Mount Gingera fire on 9 January estimated that the fire 'was only 300 metres west of the Mt Franklin Road'.<sup>258</sup>

In his report Mr Roche confirmed that the Gingera fire was about 300 to 400 metres west of the Mt Franklin Road, then continued:

No ground crews attended this fire on 8 January. There was no ground or detailed aerial reconnaissance of the fire and, accordingly, no estimate of the resources required to achieve containment was undertaken. In my opinion, this fire could have been attacked overnight on 8 January had resources in accordance with SOP No.7 and RAF teams been despatched shortly after it was detected and the location confirmed. The fire was located in sub-alpine country and, while there may have been an amount of downed material due to snow damage and snow grass, the substantial length of the perimeter could have been contained with hand tools hot trailing the fire edge. Direct attack using tankers and extended hose lays in combination with the hand crews was an option, particularly given the reasonably close proximity of the Mt Franklin Road.<sup>259</sup>

Mr Roche's evidence in relation to the initial response to the Mount Gingera fire was unchallenged.

### ***Preparations for the following day***

There is no evidence that any arrangements were made on the evening of 8 January for crews to respond to the Mount Gingera fire on the morning of 9 January. Crews were first sent there at noon on 9 January.<sup>260</sup>

#### **5.2.8 Response to the McIntyres Hut fire**

##### ***Initial assessment***

In January 2003 Ms Julie Crawford was area manager for the Queanbeyan area of the NSW National Parks and Wildlife Service. She was incident controller for the McIntyres Hut fire from the time the ignition was reported until 1.00 pm on Thursday 9 January 2003, when under s. 44 of the NSW *Rural Fires Act 1997* a declaration was made, effectively transferring responsibility for that fire to the NSW Rural Fire Service.<sup>261</sup>

Shortly after 4.00 pm on 8 January Ms Crawford heard the Mt Coree fire tower announce the McIntyres Hut fire. In response, Ms Crawford directed the field supervisor, Mr Graham Todkill, to dispatch a category 9 tanker (a light unit that carries 400 litres of water), to the area.<sup>262</sup>

Ms Crawford also dispatched a divisional commander, Mr Rob Hunt, in a separate vehicle to accompany the tanker. At about 4.40 pm Ms Crawford contacted the NSW Department of Land and Water Conservation to check the availability of bulldozers and arrange for their transport to Brindabella National Park. At about 5.10 pm Ms Crawford also instructed Mr Scott Seymour, the NSW Parks and Wildlife Service Ranger for Tablelands, to contact Brindabella Airlines and arrange a surveillance flight.<sup>263</sup> Ms Crawford could not speak to Mr Seymour while he was in the plane and so he reported to her when he returned.<sup>264</sup> In addition to these initial responses to the McIntyres Hut fire, late that afternoon Ms Crawford also began responding to several other fires burning within her jurisdiction. These other fires are not directly relevant to this inquiry.

While Ms Crawford was making the arrangements just described the Mt Coree fire tower continued to provide to her reports on the development of the McIntyres Hut fire. At 5.24 pm the fire tower commented on the column of thick smoke rising from the fire.<sup>265</sup> Ms Crawford did not have a report on the actual size of the fire at this time, but the reports from the fire tower made it clear to her that this was a big fire.<sup>266</sup> At about the same time Ms Crawford was receiving, from the deputy captain of the Rural Fire Service's Fairlight Brigade and a landholder at Brookvale, reports of a fire on the west side of the Baldy Range and of embers and ash flying over the Brookvale property.<sup>267</sup> Indeed, one of the reasons for Ms Crawford's early request for bulldozers was that they would be needed for property protection work in the Dingo Dell area.<sup>268</sup> Mr Bruce Arthur, District Fire Control Officer for the Yarrowlumla district, gave evidence that, when looking from the back verandah of the fire control centre at Queanbeyan late that afternoon, he could clearly see the convection column rising above the McIntyres Hut fire, some 54 kilometres away, impressing on him that this was already a very large fire.<sup>269</sup>

These initial reports are consistent with the findings of Mr Cheney, who concluded that soon after the McIntyres Hut fire was ignited by lightning on the dry eastern slopes above the Goodradigbee River the fire burned rapidly upslope in the extreme fire conditions—including a Forest Fire Danger Index of 50—reaching the top of Webbs Ridge and crossing the Webbs Ridge fire trail at about 6.30 pm, before conditions calmed at about 8.00 pm. Mr Cheney concluded that the fire had burnt intensely in its initial uphill run, generating a strong convection column that was clearly visible from Canberra (as noted by several witnesses) and throwing firebrands that were most probably responsible for the spot fires that soon ignited downwind of the main fire.<sup>270</sup>

When Ms Crawford deployed Mr Hunt shortly after 4.00 pm his instructions had been to make some observations and report back from as close as he could get to the McIntyres Hut fire. Ms Crawford had hoped that Mr Hunt would be able to get very close to the fire, but by the time he was approaching Brindabella National Park it was becoming apparent that it was highly unlikely he would be able to approach the fire edge. In evidence, Mr Hunt explained that on the way to the Mt Coree fire tower he could see a great deal of smoke and that the smoke was ‘lying over’ (as a result of the wind). He explained that the volume of smoke and its aspect suggested that he should proceed very carefully.<sup>271</sup> Mr Hunt reported his observations about the smoke and the apparent size of the fire to Ms Crawford while en route, and their discussion turned to the question of a safe area for observation. They knew the Mt Coree fire tower operator was still in the tower and that the tower site provided a relatively safe, well-located vantage point for observation. The distance from the Mt Coree fire tower to the fire was 6 to 7 kilometres in a straight line.<sup>272</sup>

Mr Hunt arrived at the Mt Coree fire tower shortly after 6.00 pm. He said that from the fire tower he could see that the fire was a ‘significant fire’ in the vicinity of Webbs Ridge, and that strong

wind was still pushing the smoke column over. He could also see smoke from a small fire on the Baldy Range. In Mr Hunt's view, if the Baldy Range fire was a spot fire there was a high probability that there might be other fires in the area behind Dingi Ridge, which Mr Hunt could not see from the fire tower.<sup>273</sup>

Mr Seymour noted at 5.40 pm during his aerial reconnaissance that the McIntyres Hut fire covered about 200 hectares. He reported this to Ms Crawford after his return from the reconnaissance flight, at about 7.30 pm.<sup>274</sup>

In evidence, Ms Crawford referred to a number of factors she took into account when deciding not to send personnel closer to the fire than the Mt Coree fire tower. To begin with, she knew from the reports she had received that the fire was already far too large for effective direct attack. Further, she was familiar with the very steep terrain where the fire was burning and thought it would be unsafe to have personnel walking around the sheer edges of what she described as 'mountain goat country', particularly with night drawing in. Ms Crawford also knew of a number of other fires in the area, including the fire on Baldy Range, which had been reported from the tower as being started by embers from the main fire, and this suggested the possibility of other still undetected fires in the area. Additionally, she referred to a phone call from a person living to the east of McIntyres Hut who reported embers and smoke over their house and gale force winds and referred to the risk of falling trees blocking tracks. In combination, these factors led Ms Crawford to conclude that she could not guarantee a safe refuge area and an escape route for personnel sent close to the fire:

I am the Incident Controller; I am responsible for the welfare of the crews that I send in. Under those conditions I just didn't send them in; I told them to come back. You have to weigh up, even if you do get in, what are you going to do? ... You are going to be far more effective the next day when you know exactly what you have got.<sup>275</sup>

Ms Crawford agreed that photographs used in Mr Cheney's PowerPoint presentation of the smoke column from the McIntyres Hut fire showed the fire to the west (being the main run of the McIntyres Hut fire) as being less active at 6.37 pm than it appeared to have been at 5.30 pm. Ms Crawford said, however, that by the time of the meeting at which the strategy for the fire was determined she also had information from landholders at Dingo Dell and Fairlight, who reported embers going over their homes and a big fire on Baldy Range, and who were much closer to the Baldy Range spot fire than where the photographs in Mr Cheney's presentation were taken.<sup>276</sup> Ms Crawford had also obtained from ACT Forests personnel, via Mr Neil Cooper, information about the Baldy Range spot fire.<sup>277</sup>

Mr Cheney reported that by 8.00 pm, shortly before the start of the meeting to discuss strategies for the McIntyres Hut fire:

the fire behaviour had subsided as the weather conditions became milder with lower wind speeds and increased relative humidity on the western slopes of the Goodradigbee River. The fire had burnt out the entire catchment of the creek up to Webb's Ridge and the flank fires were burning quietly. On the eastern side of Webb's Ridge the fire behaviour was very mild and there were several small spot fires close to the Dingi Dingi trail that were burning quietly. At 21.30 hours the spot fire in the Baldy Range appeared to be burning quietly on the southern aspects of a knoll on both sides of the track with very low flame heights mostly less than 0.3m.<sup>278</sup>

At about 8.00 pm Mr James Gould, a CSIRO scientist researching fire behaviour, and three colleagues, observed three spot fires in the vicinity of the Dingi Dingi trail. Mr Gould described

these as ‘lower intensity’ fires, with flame heights of 1.0 to 1.5 metres and perimeters of around 50 metres. They then travelled along the Baldy Range trail until they arrived at the Baldy Range spot fire at around 9.30 pm. Mr Gould observed that the fire was burning on both sides of the trail, and that flame heights were less than a metre.<sup>279</sup> Mr Gould and his colleagues had no radio and were not within mobile phone range, so their observations were never passed on to the Rural Fire Service or the National Parks and Wildlife Service at Queanbeyan.

At 8.00 pm Mr Blundell, deputy captain of the RFS Fairlight Brigade and a landholder at Brookvale, again telephoned the Queanbeyan National Parks and Wildlife Service office, reporting a ‘fire at approximately grid reference 630998 on Baldy Range, wind change 30–40 km, south, fire heading towards Dingo Dell’.<sup>280</sup>

### ***The interagency meeting at Queanbeyan***

At about 8.30 pm an interagency meeting was held at the Queanbeyan office of the NSW National Parks and Wildlife Service. The meeting was organised and chaired by Ms Crawford and was attended by Mr Hunt, Mr Seymour and Mr Tony Flemming from the NSW National Parks and Wildlife Service, Mr Arthur and Mr Jim Lomas from the NSW Rural Fire Service, and from the ACT, Mr Lucas-Smith, Mr McRae, Mr Tony Bartlett and Mr Neil Cooper, whom Mr Lucas-Smith had appointed as the ACT Liaison Officer to the NSW incident management team at Queanbeyan.<sup>281</sup> Ms Crawford had invited the ACT representatives because of the potential threat the fires, especially the McIntyres Hut fire, posed to ACT assets.<sup>282</sup>

The matters discussed during the meeting are briefly described in the NSW submission to the NSW coronial inquiry, and in submissions from NSW to this inquiry.<sup>283</sup> The meeting was not formal in terms of structure and agenda; rather, it was described as being more in the nature of a brainstorming meeting, at which those present provided what information they had about the fires and contributed to a general discussion on strategy.<sup>284</sup> The meeting discussed eight distinct fires that had been reported as burning in the area.<sup>285</sup> This inquiry is, however, directly concerned only with matters pertaining to four of those fires—the three ACT fires burning in the Brindabellas and the McIntyres Hut fire and its associated spot fires.

Mr Lucas-Smith briefed the meeting on the fires in the ACT. Mr Hunt briefed the meeting on his observations of the McIntyres Hut fire from Mt Coree, and Mr Seymour briefed the meeting on his observations of the fire during his aerial reconnaissance. During the afternoon numerous reports of the large quantity of smoke from the fire had been received; in particular, Mr Seymour reported that at 5.40 pm the convection column above the fire was 6000 feet high and the fire’s size was about 200 hectares. Ms Crawford said that after a review of the McIntyres Hut fire situation—notably the large size of the fire, but also the very steep terrain in which it was burning, the dryness of the fuels and the presence of other spot fires—‘we all agreed that we had lost direct attack … Direct attack was out of the question’.<sup>286</sup>

With direct attack ruled out, the initial strategy devised and accepted for responding to the McIntyres Hut fire was to establish a broad area of containment using the Goodradigbee River to the west, the power line trail to the south, the fire break on the eastern perimeter of Brindabella National Park to the east, and Doctors Flat Road and the Webbs Ridge trail to the north.<sup>287</sup> Ms Crawford said that, because the terrain was so steep in the park, in general existing roads or natural barriers would need to be used as containment lines. It was recognised, however, that tracks would need to be cut to complete some sections of the proposed containment lines—particularly from the end of the power line trail down to the Goodradigbee River in the southwest corner of the proposed containment area.

Those at the meeting were aware that the area within the proposed control lines was about 10 000 hectares, and the large size of this containment area was a matter of concern. It was generally agreed, however, that with the limited number of usable control lines available, and the need to implement a containment strategy as quickly as possible, the proposed broad-area containment strategy represented the best response available.<sup>288</sup> For example, Mr Cooper's evidence was that 'There was obviously concern that we were turning a 200-hectare fire into 10 000 hectares. However, if that strategy was to be implemented quickly, I think it was the best that we could come up with at the time'.<sup>289</sup>

Mr Lucas-Smith gave evidence that at this time he was aware that the McIntyres Hut fire posed a 'realistic risk' to ACT assets—especially the Pierces Creek and Uriarra pine plantations—and said that, although he might not have raised this at the meeting, 'it was the very reason why I was there'. He was aware of the risks associated with the proposed very large containment area but said he agreed that this appeared to be the best strategy available to them.<sup>290</sup>

Similarly, Mr McRae gave evidence that he believed that at that stage the McIntyres Hut fire was 'the biggest concern, by far' for the ACT because the fire had already made a major run and, with no suppression going on, 'had it made another run it could have threatened the ACT directly'. In particular, Mr McRae said, 'There was a concern that if more west-north-westerly winds arose, the McIntyres Hut fire may progress to threaten the ACT pine plantations in its path'. He said the presence of Mr Lucas-Smith and himself at the Queanbeyan meeting was 'a clear demonstration of where our priorities ... [and] concerns lay at that time'.<sup>291</sup> Mr McRae also noted, however, that, despite the awareness of the threat posed by the McIntyres Hut fire, the service management team decided to focus ACT resources on the Bendorra fire because of its proximity to Canberra and because the Mt Franklin Road was the primary route providing access through the Brindabellas to all three ACT fires. It was therefore important to keep this road open.<sup>292</sup>

Mr Bartlett gave evidence that he was comfortable with the containment strategy formulated for the McIntyres Hut fire at the interagency meeting.<sup>293</sup>

### ***Indirect firefighting tactics***

Before reviewing the strategies and tactics adopted for the McIntyres Hut fire, it is useful to provide some information about the nature of indirect firefighting and the function of containment lines in that context. In his report Mr Cheney provided the following brief description of the 'indirect attack' and 'remote indirect attack' methods of bushfire fighting:

#### **Indirect attack**

In this method the control line is established at some distance away from the fire edge, and the fuel between the fire line and the fire edge is burnt out ... Established roads, fire trails and natural barriers can be used and fire lines constructed by bulldozers can be placed in more accessible locations ... Burning out is usually not conducted immediately following line construction but can be delayed until weather conditions are suitable. The disadvantage is that a considerably larger area is involved [compared with when direct suppression or parallel attack is used] and the fuels between the fire edge and the fire line must be burnt out before the return of dangerous weather conditions.

#### **Remote indirect attack**

This is a variation of indirect attack where the planned control lines are based on the existing fire trail networks. Where this network is sparse the area that is committed to

the operation is very large and often firelines may be many kilometres from the fire edge. This method is becoming more common for controlling fires in national parks where access roads are few or have been closed down for management purposes.

The success of the operation depends on the speed that burning out can be conducted around the perimeter and whether the large area of unburnt fuel within the containment lines can be burnt out before the onset of severe weather conditions. If unburnt fuel remains inside the containment lines there is always the potential for the fire to burn with sufficient intensity to throw spot fires well beyond the lines.<sup>294</sup>

It is important to emphasise that a containment line by itself will generally not stop an uncontrolled fire that is running towards it. Rather, a containment line serves as a cleared path from which burning operations can be conducted while conditions are favourable—ideally, while the prevailing wind is blowing *away* from the containment line toward the main fire. The process of burning vegetation from a containment line towards the main fire is called ‘burning out’. In contrast with burning out, a ‘back-burn’ is a more dangerous operation performed to consolidate a containment line; it is done when the prevailing wind is blowing *toward* the containment line from the direction of the main fire. Back-burning towards a containment line can generally be conducted safely only if conditions are relatively benign, so that the back-burning fire can be stopped by firefighters waiting for it to reach them at the containment line. In this regard, Mr Cheney noted:

Back-burning is a risky operation and a general rule of thumb is that back-burning will not succeed if the head of the fire cannot be controlled directly. However back-burning does provide a small window of opportunity if applied by firefighters with a good knowledge of fire behaviour and can make the task of stopping the head of a fire easier and safer than waiting on the break and fighting the fire directly.

Back-burning is used loosely, particularly by the media, and is confused with the operations of burning out and prescribed burning.

In contrast with back-burning, Mr Cheney described burning out as follows: ‘Burning out is setting fire from a control line in order to burn out the fuel between the control line and the fire edge. The operation is generally easy and safe if applied with the wind blowing towards the fire but must be planned and applied with the knowledge of where the fires will travel down wind’.<sup>295</sup>

Thus, consolidation of containment lines by burning out or back-burning vegetation between the containment line and the main fire is done to ensure that there is a deep area of burnt material between the containment line and the main fire, so that when the main fire does finally burn toward the containment line in unfavourable conditions its approach is blocked by the burnt-out area, where no fuel is available. As Mr Peter Smith, Captain of the Brindabella Fire Brigade, stated in his evidence:

In any running fire any kind of a line will probably not hold. The important thing about a containment line is that it doesn’t represent a containment until it has been burnt in from that line quite deeply. The fact that it is a line on the map route really means nothing until you really have undertaken that back-burn from the trail. It is exceedingly important that a containment line is burnt in that way so that the edge is quite black, so that a fire can’t come back through there ...<sup>296</sup>

It is important that a containment line can be effectively patrolled by firefighters, ideally, although certainly not necessarily, by ground crews supported by tankers. Easily patrolled

containment lines are generally essential for the safe conduct of burning-out and/or back-burning operations and also to allow firefighters to deal with any break-outs of the main fire across the containment line. In some circumstances, however, a natural barrier—such as the Goodradigbee River in this instance—can be used as an effective containment line, even though it might need to be patrolled by air rather than by ground crews.

It is also important to note that, because of the need to be able to effectively patrol a containment line, and in some circumstances to use that line as an avenue of escape from the fire, burning out and back-burning can be conducted safely only from completed sections of containment lines.

Finally, it is important to note that burning out and back-burning necessarily take some time to complete *after* the construction of the containment line from which the burn will be conducted.

#### ***The Baldy Range trail as the eastern containment line***

As noted, because of the need to complete containment lines and burning operations before the onset of adverse fire weather, the large size of the containment area proposed for the McIntyres Hut fire at the interagency meeting on 8 January was of some concern to those present. One controversial matter that arose during the inquiry concerned whether the choice of the eastern perimeter of Brindabella National Park as the eastern containment line was appropriate in the circumstances or whether it would have been better to instead use the Baldy Range trail. It was suggested that if the latter had been used line, this would have greatly reduced the size of the containment area and should therefore have reduced the amount of time needed to effect the containment strategy.

At 8.23 pm Mr Cooper telephoned Mr Simon Bretherton, whom Mr Cooper had sent with Mr Tony Mennen to gather field information on the location of the fire front.<sup>297</sup> Ms Crawford said:

He [Mr Cooper] said they were on the Baldy fire trail and heading out. I said, ‘Has it crossed the trail? Tell me what is happening’. He said they didn’t go that far down. I asked could he send them down to the Baldy spot fire to confirm it was over the trail. We believed it was. ‘Confirm that’. He rang them back. He came and told me, ‘No, it is across the trail and they are getting out of there’. I said, ‘Isn’t there something they can do?’ He said, ‘No, they are not even in a fire unit’.<sup>298</sup>

Ms Crawford did not remember anyone saying at the meeting that the fire on the Baldy Range was containable. Her memory was that it was reported, ‘They are there. It is across the track and we are getting out’. Hence, on the basis of her understanding of the information provided to her at the meeting by those who were observing the Baldy spot fire at that time, Ms Crawford formed the view that the Baldy trail had been lost as a possible eastern containment line.<sup>299</sup>

Mr Cooper’s evidence was that during the meeting in Queanbeyan and the discussion about the McIntyres Hut fire Mr Bretherton told him the fire had burnt across the Baldy track, had a low flame height, and was burning back against itself on the eastern side. Mr Bretherton reported that he could not walk around the spot fire, continue down the track or see the end of the fire, so he could not estimate the fire’s size. Mr Cooper suggested to him not to proceed any further down the track because Mr Bretherton had no firefighting equipment, having been sent only on reconnaissance. Mr Cooper said Ms Crawford asked him if there was anything they could do and he replied that there was nothing they could do because they had no firefighting capacity. Additionally, they had no jurisdiction to fight a fire in NSW.<sup>300</sup> That information was passed around the room in Queanbeyan.<sup>301</sup> Hence, on the basis of his interpretation of the information

provided by Mr Bretherton, Mr Cooper understood that the Baldy Range spot fire was controllable.<sup>302</sup>

Ms Crawford's version of what Mr Cooper had told her and her interpretation of that information was put to Mr Cooper. His evidence was that 'Julie's interpretation may have been we had lost that. It certainly wasn't meant to be that way when I delivered that information. It was always my perception that we might be able to contain that spot fire with rake-hoe crews the next day'.<sup>303</sup>

Mr Bartlett's recollection of the effect of Mr Bretherton's information was that 'the fire behaviour on the Baldy Range was sufficiently intense that he did not feel confident of driving through the fire'.<sup>304</sup> Mr Hunt referred in evidence to the information from Mr Cooper's crew to the effect that the Baldy Range fire was across the track and they were getting out. He was not sure why they were getting out but he thought they were getting out for safety reasons. Mr Hunt had himself seen Mr Bretherton and Mr Mennen going up to the Baldy Range spot fire and knew they were not carrying water.<sup>305</sup>

Mr Arthur had no distinct recollection of considering at the meeting the use of the Baldy Range trail as the eastern containment line, but he was sure it would have been discussed. He recalled, however, that information received from ACT sources—that is, information from Mr Bretherton, as relayed by Mr Cooper—suggested that it might not have been realistic at that time.<sup>306</sup> On being shown the videotape of the Baldy spot fire, taken at 9.00 pm on the night of 8 January, Mr Arthur agreed that the fire shown on the tape was eminently suppressible. He also agreed that it was 'a generally accepted principle' that the first night of a fire often presents the best opportunity for firefighters to effect some kind of direct suppression.<sup>307</sup>

There is in the evidence some conflict about whether or not it was agreed at the meeting that using the Baldy Range trail as the eastern containment line would be reconsidered the following morning. Mr Cooper's memory was that they were going to try to use the Baldy Range trail as the first option, the fall-back option being Dingo Dell Road. He was definite that at no stage did he convey any opinion that, on the basis of the information he had from Mr Bretherton, the Baldy Range trail could not be used as a containment line because of the intensity of the fire burning across it.<sup>308</sup> Mr Arthur gave evidence that selection of the eastern and northern containment lines on 8 January was necessarily 'provisional' and would be subject to change if ground reconnaissance the following morning indicated that those containment lines identified on the maps were in fact unsuitable in practice:

They were subject to reconnaissance on the ground. I mean, we did a map reconnaissance. You can't pull a map reconnaissance and guarantee that that is going to work. What we did that night using the information provided by the rangers who were familiar with the area, and by people who had overflowed it, is that we set provisional boundaries for the containment lines. They were subject to ground reconnaissance the next morning to see if they actually were suitable. Something on a map may not necessarily be suitable on the ground ...

I would suggest ... the only firm lines we set that night were the 07 power line trail because we had nowhere else to go and the Goodradigbee River because we had nowhere else to go. The north and the eastern lines were provisional.<sup>309</sup>

In contrast, Ms Crawford's recollection of the meeting was that the Baldy Range trail was 'just wiped' as a consideration for an eastern containment line.<sup>310</sup> In her evidence, however, she agreed that, although at the meeting she had dismissed the Baldy Range fire trail as a viable eastern containment line, she accepted that, if the fire on Baldy Range could have been

controlled, the Baldy Range trail would have become an eastern control containment line, reducing quite considerably the area they had to burn and also moving that control line back away from assets outside the park.<sup>311</sup> Ms Crawford gave evidence that after he left the meeting Mr Arthur must have continued to consider the possibility of using the Baldy Range fire trail because he organised for officers to reassess that fire at first light the following morning, dispatching them from Queanbeyan to the Baldy Range at about 6.00 am.<sup>312</sup>

#### ***Expert evidence about selection of the eastern containment line***

##### ***Mr Phil Cheney***

On the general response and strategy adopted on 8 January in relation to the McIntyres Hut fire, Mr Cheney noted in his report:

The decision to take indirect action on the fire seemed to be based on the observations taken by the helicopter pilot when the fire was making its upslope run, the observations from Mr Hunt from Mt Coree at 18:30 hours and Mr Arthur's observation of the convection column from Queanbeyan some 55km from the fire that afternoon. No evidence was presented that anyone from NSW Rural Fire Service reached the fire anywhere on the ground that night or reported the fire behaviour after 18:30 to the incident controller. Although Mr Cooper reported that Simon Bretherton had inspected the Baldy Range spot fire and that it was on both sides of the trail and containable by ground crews, no arrangements were made to assemble crews to attack the spot fire on the first night or at first light the next morning.

Two long-standing axioms of firefighting are that: 'fires always look worse from a distance' and that 'fires always look worse at night'. The point of these is that fires must be inspected on the ground to plan the most appropriate suppression strategy.

Another general principle is to treat spot fires as separate fires and, wherever possible, suppress them while they are small, even if it is possible that they will be overrun by subsequent events.

Ms Crawford said in evidence that gale force winds could have brought down trees, blocked roads and made it unsafe for firefighters. However, by 20:30 hours the area was under the influence of light variable winds and the [CSIRO] research team going to the fire did not feel under any threat and were not obstructed by fallen timber on the way along Two Sticks Road and Dingi Dingi trail.<sup>313</sup>

On the Baldy Range spot fire, Mr Cheney stated:

The spot fire on Baldy range was burning mildly at 21.30 hours and could also have been contained by hand crews working at night. Had this been done it would have been possible to use the Baldy Range fire trail as the eastern perimeter rather than having to construct a new fire break on the eastern perimeter of the Park. These fires would have been very mild overnight with most of the perimeter dying out in light fuels and reigniting from heavy log material the following day when the fuel moisture dropped.

In this section of his report, in relation to the Baldy Range spot fire and the section of fire to the west of the Lowell fire trail Mr Cheney concluded:

Securing these two small sections of the fire perimeter on the first night would have reduced the planned operation to around 7200 hectares but more importantly the fire could have then been contained within trafficable fire trails giving the burning-out operation a much higher chance of success.<sup>314</sup>

Mr Cheney confirmed in evidence his view that the fire controllers at Queanbeyan, or a team reporting directly to them, should have gone out and inspected the area of the McIntyres Hut fire on 8 January. He added that, having not inspected the fire that night, they should have immediately deployed resources to attempt an initial attack at first light on 9 January.<sup>315</sup>

In cross-examination Mr Cheney was referred to Mr Blundell's 8.00 pm report about a fire in the region of Baldy Range and winds of 30–40 kilometres an hour in the area. Mr Cheney agreed that those are 'pretty strong' winds<sup>316</sup>, but he later queried where that record was from because 'that was not the wind speed that other people who went to the site recorded on site ...'<sup>317</sup> Later in cross-examination Mr Cheney was specifically asked whether, in light of the information available to those present at the Queanbeyan meeting (at least as disclosed by the evidence of Ms Crawford and Mr Bartlett), he agreed that the strategy adopted that night—including treating the Baldy Range spot fire as lost and with it the Baldy Range trail as an eastern containment line, subject to an inspection of the spot fire at first light the following day—was reasonable. Mr Cheney did not think the strategy was reasonable:

... because they should have known that they were on falling fire danger and that the early reports would be expected to be of higher intensity fire than you would get later on at night. The other reports were from people remote from the fire. I don't even know whether Mr Bretherton actually got to the fire. He didn't have a firefighting vehicle and he didn't do a thorough assessment of the spot fire at the time he was there. So they needed more information. I believe they should have known they were going into a falling fire danger, that the fire behaviour would decrease in that country at night and that they needed to get a proper assessment of what it is doing and where it was on the ground.<sup>318</sup>

#### *Mr Trevor Roche*

In his report, Mr Roche discussed the question of setting a time frame for completion of the McIntyres Hut fire indirect containment strategy. Having written of the importance of calculating a time frame, Mr Roche concluded:

Had a calculation of that kind been undertaken on the night of 8 January or, at the latest, during the day on 9 January, the IMT [incident management team] could have estimated how long the strategy as determined at the meeting would realistically have taken to complete. In my assessment, given the typical 4–5 day weather cycle at that time of year as acknowledged by the IC [incident controller], it is likely that it would have then been evident that there was a real possibility that the strategy would not be completed in time. This should then have prompted urgent reconsideration of all the elements of the strategy. Such reconsideration should have included an immediate assessment and resourcing of the Baldy Range trail as the eastern containment line and options for speeding up the consolidation of the other containment lines ... Had a thorough ground reconnaissance been undertaken as the weather abated on the afternoon and early evening of 8 January, it would have been evident that a direct attack on the section of the fire west of the McIntyre's Hut trail and on the part of the fire east of the Baldy Range trail would have been successful ... taking into account the vegetation and terrain in the area of the McIntyre's main fire and the Baldy spot fire, a RAF [remote area firefighting] team using the appropriate tools should have been able to construct a line around a fire at a minimum rate of 100 metres per hour. Given the location of the sections of the fire, support could have also been provided by tankers. I estimate that the section of the McIntyre's fire west of the McIntyre's Hut trail and the area of the Baldy Spot fire east of the Baldy trail, could have been contained and probably mopped up overnight on 8 January with the deployment of 3 or 4 RAF teams and 5 or 6 tankers.<sup>319</sup>

In cross-examination Mr Roche conceded that he had not included in his report a reference to the conversation between Mr Cooper and Ms Crawford, from which Ms Crawford had concluded that the Baldy Range trail had been lost as a possible containment line.<sup>320</sup> Mr Roche agreed there was nothing in the conversation, as he understood it to have occurred, that he would point to as showing that the Baldy Range spot fire was in a fit state to attack there and then.<sup>321</sup> He also agreed that, in his experience, an incident controller does not rely on a single piece of information but instead depends on people to provide information from a range of different sources and then weighs up this information in order to make strategic decisions.

Moreover, Mr Roche said that ‘to make a major decision like was made that night, you look for a corroboration before you make the decision’.<sup>322</sup> He suggested that planning can be done on an interim basis, ‘but depending on when the commitment was to occur, [it might be desirable] not to make that commitment necessarily until corroborating information was received’.<sup>323</sup> Mr Roche conceded that he could not explain why he did not refer in his report to the importance of obtaining corroborative information.<sup>324</sup> He later repeated that he did not believe there was sufficient information from the meeting of 8 January for those managing the fire to set about devising and beginning to implement a strategy:

They should have got further information before they commenced the attack ... for instance, the people I would have sent to take a look at the fire would have taken firefighting equipment with them. I would have expected, had they arrived there with that firefighting equipment, reviewed the position and saw ‘we can do something here’, at the same time as sending back the information they would commence the attack then.<sup>325</sup>

Mr Roche agreed that he did not include in his report an analysis of the time it would have taken to contain the fires to the east of the Baldy Range trail and to the west of the Lowell’s trail: ‘It is not a detailed calculation. We are talking about a very, very small distance here in both cases ... The information I needed, or is needed to perform that calculation, is before the court’.<sup>326</sup>

He explained that the reference in his report to not being able to complete the task in two shifts was a reference to ‘the overall strategy of the full containment line and the removal of all material within the containment line for the four fires. Not the Baldy Range fire—not the eastern part of the Baldy fire. Not the western part of the McIntyre’s fire. We are talking about there the whole fire’.<sup>327</sup>

#### ***The Goodradigbee River as the western containment line***

There is some evidence that there was a reference during the Queanbeyan meeting to Lowells trail or the McIntyres track being used as the western containment line.<sup>328</sup> The weight of the evidence would suggest, however, that this possibility was not discussed at the meeting.<sup>329</sup> On the other hand, use of the Goodradigbee River as a containment line was discussed, and it was ultimately agreed the this river would form the western containment line for the McIntyres Hut fire.

Ms Crawford considered the Goodradigbee River a suitable western containment line. To being with, it was there without any work needing to be done on it. Moreover, because it was a river and was therefore situated at the lowest point in the terrain, it gave firefighters the option of letting the fire burn slowly down to it<sup>330</sup>, which was preferable to a containment line on a ridge, towards which a fire would typically burn more quickly because of the effect of the uphill slope. Ms Crawford also felt that, although using Lowells trail would have greatly reduced the total area of containment, the Goodradigbee River would require fewer resources to monitor because

it could be substantially patrolled by aircraft and was accessible by trails at either end and in the middle section. Ms Crawford thought it would be possible to control any fires that spotted over the river by water bombing and by winching ground crews into the area if necessary.<sup>331</sup> She did not think anyone at the meeting disagreed with the decision to use the Goodradigbee River as the western containment line.<sup>332</sup>

Ms Crawford acknowledged it could have been possible to construct a containment line around that portion of the fire west of Lowells trail but that this was not her preferred option.<sup>333</sup> She said it would have been necessary to time the burning off along that trail very carefully because as soon as the burning off began the northern containment line would come under pressure. Moreover, as noted, she felt the river could be immediately established as a control line and then patrolled primarily by air.<sup>334</sup>

Mr Arthur also gave evidence that he thought the Goodradigbee River was the most practical choice for the western containment line<sup>335</sup> and that, once made, this decision was never rethought and he did not see why it needed rethinking. Consistent with Ms Crawford's view, Mr Arthur believed the Goodradigbee River control line would be largely controllable by air and they could have dealt with spot fires on the western side of the river by using helicopters—in particular, the Ericsson sky crane, which carries 9000 litres and was available from 10 or 11 January. If necessary, crews could have been winched in to control spot fires, as well as coming in by road from the Brindabella Valley, Tumut and Yass.<sup>336</sup>

Mr Arthur said he had several times flown over the area where the hand line would need to be constructed along Lowells trail and that it would be difficult terrain in which to construct a containment line. He also pointed out that on the NSW Parks and Wildlife Service map part of the track is marked 'No Tankers', and this would mean that firefighters trying to construct a hand line there would not be able to put heavy or medium tankers on the trail to support them, although he thought they might have been able to get a light unit onto that part of the track.<sup>337</sup>

Mr Bartlett's view about using the Goodradigbee River as the western containment line was that he was following the advice of local people because he did not know the Goodradigbee River well.<sup>338</sup> Mr Cooper's recollection was that there was some concern about the river because of its low water level and a lot of weedy growth along the river. In his mind, it was always a less-than-secure containment line, but it appeared to him that there was no other option.<sup>339</sup> Mr Lucas-Smith said that he also broadly agreed with the strategies determined for the McIntyres Hut fire that evening, including use of the Goodradigbee River as the western containment line.<sup>340</sup>

The question of whether the terrain in the area of the point of origin of the McIntyres Hut fire, to the west of Lowells trail, would have precluded the construction of a hand line around that part of the fire was also discussed in later evidence by Mr Peter Smith, captain of the Brindabella Fire Brigade. Referring to a video of the area, Mr Smith gave evidence that, because the area was 'relatively open' and had a 'shaly-type soil', the conditions were quite good for rake-hoe work.<sup>341</sup> In his statement Mr Smith said he was:

surprised the Brindabella Brigade was not responded to any fire on the afternoon of the 8th January 2003. By the evening of the 8th the prevailing weather conditions were very mild. I believe an opportunity was lost by not attacking the fires on the evening of 8th January. In my opinion it could have been done safely because of the low flame height, high humidity, cooler temperatures and calm wind conditions. I could observe from my property that fire activity on the McIntyre's Hut and Baldy Range Fires had abated.<sup>342</sup>

Later in his statement Mr Smith said:

I believe a Category 7 Tanker or Category 9 Tanker would have been capable of reaching the ignition area and base of the McIntyre's Hut Fire located near or at grid reference 588 964. It would take around 30 minutes to reach Lowell's Flat from the Brindabella Fire Station. I believe a rake hoe team would have been capable of putting in up to a 300 metre hand line trail on either the evening of the 8th January 2003 or early on the morning of 9th January 2003 to the western side of the McIntyre's Hut ignition point to link the two sections of the McIntyre's Hut trail. The trail would have been put in to contain the fire to the eastern side of the McIntyre's Hut and Lowell's trail. Brindabella Brigade members were involved on the Dingi Dingi Range Fire on 1st January 2000 where members put in 1 kilometre of rake hoe line in country that is considerably steeper than the McIntyre Hut trail/Lowell's trail.<sup>343</sup>

In his evidence, Mr Smith said that, having been to the area again since making his statement about the feasibility of putting in the proposed 300-metre hand-line trail, he thought it would probably have been even easier than he described in his statement. Moreover, he felt that any crew sent in to construct a rake-hoe line in that area on 8 January 2003 would have been 'utterly safe'.<sup>344</sup>

#### ***Expert evidence about selection of the western containment line***

Mr Cheney, who accompanied Mr Smith when he later visited the area with a category 7 tanker, agreed with Mr Smith's observations. He added that, as far as he knew, the steepness and general accessibility of the trail was the same at the time of the fire as when he and Mr Smith returned to the area. He said that, although he did not know whether there were sufficient resources to patrol Lowells trail if that had been used as the western containment line, resources should have been gathered to perform that task. He pointed out that for some time the fire that was spreading above both Lowells trail and the McIntyres track proceeded in advance of the fire below, so the fire was actually not crossing the trails in those sections. Mr Cheney's evidence was that, once the lower fire had been contained, perhaps a single light unit could have patrolled the line by working along the road, keeping pace with the fire and watching for spots or rolling debris coming across the road.<sup>345</sup> There was, however, no evidence put before the inquiry about the actual state of Lowells trail at the time of the fire.

In response to the evidence of Mr Arthur and Ms Crawford about using aerial support and winching crews in to control spot-overs along the Goodradigbee River, Mr Cheney gave evidence that at the time he knew there were sections of the Goodradigbee River that ran through quite inaccessible gorges and, although he did not know exactly what the fuels were like, he suspected that, as with most river banks, abundant fuel was probably present, including blackberries.<sup>346</sup> Mr Cheney gave further evidence about the danger of using the river as a control line because of its position in the topography and about difficulties with using helicopters to deal with spot-overs along the river:

The problem there is that if you allow a fire to burn down into a river and there is a spot-over across the river, there is only one direction for the spot to go and that is upslope—and it will do it pretty rapidly, as happened subsequently on the 17th. It is far easier if you are, as the McIntyres trail was, located partially on the slope that any spot-over is going to burn upslope and burn back into the trail. So the suppression problem of controlling it just below the trail is far easier than an independent spot fire which goes across the river and then makes a run of 500 to 600 metres upslope; and it will do that very rapidly. The problem that the firefighters faced in the river was considerable because they were wandering along in quite dense blackberries, up to 2 metres, falling

in the river, which was boulder strewn and very unstable under foot. In fact, that was an extremely dangerous place to put volunteers or any firefighters into that point. While it would have been possible to winch firefighters in, I don't think a prudent fire controller would have done that because of the dangers of winching someone into a fire having the potential to run upslope very rapidly. And that's when people get killed, when they get put in a position when there is a fire underneath them.<sup>347</sup>

### ***The time required to complete the containment strategy***

As noted, a number of people present at the Queanbeyan meeting on the evening of 8 January acknowledged that the strategy decided on at the meeting would require a very large burning-out operation. Mr Lucas-Smith described it as a 'huge burn'.<sup>348</sup> Ms Crawford did not object to the suggestion that the area was about 10 000 hectares and agreed that 'it was a very large area. That's what we were always concerned about. It was a huge area'.<sup>349</sup> Mr Arthur also agreed that it was a large area and accepted that it was about 10 000 hectares.<sup>350</sup>

It appears, however, that there was little or no attempt made that night to estimate how long the burning-out operation would take. Ms Crawford had no recollection of those present talking about time frames for establishing and then consolidating the proposed containment lines: 'No one asked how long it would take. I think we were all coming from the point of view we needed to move on this quickly; we needed to get it going as quickly as possible. There was no specific time frame put down'.<sup>351</sup>

Mr Arthur realised there was a degree of urgency about the broad containment strategy and that it would be preferable to have a smaller containment area.<sup>352</sup> He did not, however, recall any discussion at the meeting about how long the containment strategy was going to take to implement:

We set objectives and in those objectives we set, if you will, provisional times in it. They were objective driven, not time driven ... so firefighting is objective driven, not time driven. There is a time penalty on it. If you don't do things in certain times, the situation may well get worse but you have to achieve the objectives. Now, we tried to do that within a set time but a whole range of factors will alter that—bulldozers that can't do tasks, men who can't complete the task in enough time, different issues.<sup>353</sup>

Both Ms Crawford and Mr Arthur did agree that at that time of the year it was inevitable that the weather would deteriorate again and that certainly during the following week the chances were that hot north-westerly winds would occur.<sup>354</sup>

Mr Cooper thought the question of how much work would need to be done on the containment lines was discussed, but his impression was that it was not thought to be a huge amount of work. He acknowledged, though, that by 10 January the amount of work required to complete containment lines and burning-out operations had become problematic.<sup>355</sup> Mr Bartlett considered that the size of the burning-out operation and the likely changes in weather were factors that heightened the importance of starting the burning-out operation as soon as possible.<sup>356</sup> Mr Smith said he would have recommended a much smaller containment area 'but, given the judgment was made for the bigger one, it would have been absolutely imperative ... to begin back-burning on the 9th'.<sup>357</sup>

The NSW submission to the NSW coronial inquiry stated that after the meeting NSW Parks and Wildlife Service officers completed aircraft request forms, seeking aircraft for 9 January for reconnaissance and water bombing, and forwarded these at 11.26 pm to Rural Fire Service State

Operations (which allocates aircraft resources for fire across the state). The submission continued, ‘a Situation Report was prepared at midnight. In that report, the strategy is to “complete control lines dayshift 9/03 and back-burn from them in the evening of 9/03. Back-burn to be consolidated with Aerial Incendiaries 10/03”’.<sup>358</sup>

Ms Crawford was asked about the situation report, which had been prepared by Mr Seymour for 6.00 am to 6.00 pm on 9 January, was signed by Mr Seymour at 2.45 am on that day, and was signed off by Mr Arthur at 6.00 am that day.<sup>359</sup> Ms Crawford’s evidence was that the time frames set out in the situation report were not set at the meeting she chaired on the evening of 8 January 2003.<sup>360</sup> She agreed that the equivalent times stated in the related incident action plan, also prepared by Mr Seymour in the early hours of 9 January 2003, were unrealistic.<sup>361</sup> Mr Arthur also agreed that the strategy as set out in the situation report did not reflect what was discussed and agreed at the 8 January meeting and that the time frame referred to in the situation report might have been ‘a little ambitious’.<sup>362</sup>

Mr Cheney also considered the time frame described in the situation report to be unrealistic—‘because of the area of the planned containment, the time required to construct fire lines and the time required to burn out the fuel inside the containment lines’.<sup>363</sup> He was not critical of the tactic of remote indirect firefighting of itself, but he considered ‘it had to be formulated within the framework of the time and space that you have to do it in’.<sup>364</sup>

In his report, Mr Roche discussed at some length the importance of setting a time frame for completing a strategy.<sup>365</sup> He said all objectives must have some time frame associated with them because, in effect, if firefighters can’t achieve an objective within the time available, the objective will fail. He concluded, ‘You cannot have an objective without an associated time frame, because otherwise you are not going to be able to monitor your performance and gains towards achieving that objective’.<sup>366</sup> If firefighters do not achieve an objective within the required time frame, he said, the time frame should then be re-evaluated.<sup>367</sup>

In evidence, Mr Roche was asked what difference it would have made if the eastern containment line had been the Baldy Range trail and the western containment line Lowells trail. In relation to the Baldy Range trail, Mr Roche said, ‘Had the Baldy Range trail been adopted as the eastern containment line, it would have significantly reduced the area that had to be burnt out and therefore should have contributed to an earlier establishment of containment lines around the eastern side of the fire’. Dealing with both the eastern and the western containment lines, he said, ‘If those containment lines had been established early enough and the burning out and consolidation of the containment lines occurred 2 or 3 days before the 17th and 18th, then the chances of that fire escaping the containment lines would have been significantly reduced’.<sup>368</sup>

When cross-examined about his critique of the NSW approach, Mr Roche explained why he did not himself undertake a detailed assessment of how long the entire control strategy would take: ‘I just didn’t think it was even necessary to try and work that out. It was so out of what I considered to be the ball park’.<sup>369</sup>

## 5.3 9 January 2003

### 5.3.1 ESB assessment and strategy

#### *Initial assessment*

At 6.37 am, while the day shift crews were en route to the fires, Mr Ingram commenced a reconnaissance flight over all three ACT fires in *Firebird 7*.<sup>370</sup> Mr Ingram first visited the site of the Bendora fire and provided his report to ComCen commencing at 6.52 am. He provided a grid reference for each corner of the fire and then reported:

Southern end of the fire is burning very, very slowly. The most active points are on the north-west and north-east corner where the flame height is about one and a half to two metres in places ... the size of the fire approximately 750 square metres at this stage over ... the two most active parts of the fire on the north-west and north-east corners. If the wind continues the way it is the fire will continue to burn towards the north-west, over.<sup>371</sup>

Mr Ingram then flew south to the Stockyard Spur fire, reaching the area of that fire at 7.05 am. He again provided grid references for the corners of the fire and reported, ‘Area burnt approximately 500 square metres most active part is on the north-western corner. If it continues to burn like this it will continue to burn around the ridge line, over’.<sup>372</sup>

Finally, Mr Ingram reported on the fire at Mount Gingera at 7.13 am. After providing a grid reference for each corner of the fire, Mr Ingram continued, ‘Area burnt is approximately 300 square metres and the fire is working its way very very slowly up the ridge line. The fire is burnt in a horseshoe shape due to the rocks in the area over’.<sup>373</sup>

Once again it appears that some uncertainty regarding the sizes of the fires arose from the reports of Mr Ingram. Mr Ingram gave evidence that his estimate of the size of the Bendora fire at 7.31 pm the previous evening of 500 square metres was a mistake, and that his clear recollection of what he could see was a fire of 5000 square metres, ‘the size of a football field which is 100 by 50’.<sup>374</sup> It was put to him that, based on what he had seen the previous evening, his estimate at 6.52 am on the morning of 9 January that the fire was now ‘750 square metres’ could not be right. Mr Ingram’s evidence was that the smoke produced by the fire made aerial observation very difficult and that, although he could report only on the fire that was actually visible to him, he provided grid references to assist ESB in assessing the true size of the fires: ‘That’s all the fire I could see at the time ... so that’s all I could call it. That’s why I provided the grid references. Obviously the fire was a lot larger. If you can’t see where the fire is, you can only call what you can see’. Mr Ingram agreed that he did not qualify the information he was giving to ComCen about his estimate of the size of the fire.

Similarly, in connection with the Stockyard Spur fire, it was put to Mr Ingram that if he reported the Stockyard Spur fire on the evening of 8 January 2003 as 7500 square metres, his report on the morning of 9 January of the fire being 500 square metres was wrong. Mr Ingram again referred to poor visibility caused by the smoke and cloud and said: ‘That’s all I could see’.<sup>375</sup>

It seems clear that the estimates of fire size provided by Mr Ingram on the morning of 9 January significantly understated the sizes of at least the Bendora and Stockyard Spur fires. However, it is unclear whether the ESB was able to use the grid references provided by Ingram to arrive at a more accurate understanding of the size of the Bendora fire at that time, namely that rather than

the reported ‘750 square metres’, the Bendora fire was in fact in the ‘ballpark’ of 70 000 to 100 000 square metres, as Mr Hayes’s estimated on his arrival at the fire, growing to 150 000 to 200 000 square metres by around 10.00 am.<sup>376</sup> Similarly, it is unclear whether ESB realised that Mr Ingram was reporting only what he could see of the Stockyard Spur fire, and that the fire may have in fact been far larger. According to Mr McNamara’s ‘best guess’ following his initial reconnaissance of the Stockyard Spur fire shortly after 9.00 am, that fire was approximately 30 000 square metres,<sup>377</sup> considerably larger than Mr Ingram’s estimate of ‘500 square metres’ as provided to ESB two hours earlier.

The mistakes made by Mr Ingram in reporting fire sizes throughout 8 and 9 of January suggest that despite being a qualified aerial observer, Mr Ingram was at times inadvertently using the term ‘square metres’ in place of the term ‘metres square’. This resulted in very significant underestimations of the sizes of the ACT fires being communicated to ESB and, in some cases, to field incident controllers during this critical period. In some instances these errors may have been corrected by subsequent observations and estimates provided to ESB by field incident controllers, however, given the close relationship between fire size and the appropriate allocation of firefighting resources, it is concerning that mistakes of this kind were made repeatedly.

#### ***Mr Lucas-Smith’s morning radio interview***

Shortly before 9.00 am on 9 January 2003, Mr Lucas-Smith was interviewed on ABC Radio 666. In response to a question as to the current fire situation, Mr Lucas-Smith responded, ‘We’ve still got two fires in the ACT in Namadgi National Park which are uncontained but small, and we’ve got crews going there now, helicopters already in the air and working over those fires, as we speak, and we expect to have them rounded up fairly early this morning’.

Mr Lucas-Smith went on to explain to the interviewer that with the mild conditions he didn’t expect the ACT fires to grow much, but that his biggest concern was the McIntyres Hut fire. He was asked by the interviewer whether any ACT crews were likely to attend that fire to which he responded: ‘We’ll certainly assist them once we’ve got our fires got out of the way, as best we possibly can, because it is a large fire which is threatening the ACT’.<sup>378</sup>

In his evidence, Mr Lucas-Smith agreed that anyone hearing that interview would understand his comments to mean that the ACT fires were unlikely to pose a problem after a few more hours. He said that this reflected his state of mind at the time, which was that any problem that these fires might have posed was just about solved.<sup>379</sup> However, Mr Lucas-Smith emphasised that at that time the ‘McIntyres Hut fire was certainly posing a threat to the ACT. That was in the forefront of my mind. That was my highest priority’.<sup>380</sup>

#### ***Aerial reconnaissance by Mr McRae and Mr Castle***

A little after 9.00 am on 9 January, Mr Castle told Mr McRae that Mr Lucas-Smith needed to attend a meeting in Queanbeyan, and that Mr McRae was to take the place of Mr Lucas-Smith on a reconnaissance flight over the fires that was soon to depart.<sup>381</sup> Mr Castle said that although he was ‘not directly involved in the management of the fire-fighting effort’ he was invited to accompany Mr McRae on the reconnaissance flight that morning for the purpose of getting an overview of the fire situation.<sup>382</sup> According to Mr McRae:

Mike Castle and I therefore immediately left for the Weston Police Services Complex at Weston Creek where we met up with the pilot, Mr Matt O’Brien and boarded the Bushfire Service helicopter, Firebird 7. We conducted a one and a half hour reconnaissance flight over all the fires, and I took the role of the aerial observer in the

front seat of the helicopter beside the pilot, Mike Castle travelled in the back. The helicopter was fitted with a GPS receiver that enabled me to plot the coordinates of the fires on laminated maps in the air observer kit that I took with me. I also made notes about the fires, the nature of the terrain, the size of the fires at the time, access routes to the fires, fire behaviour and any assets that might come under threat.<sup>383</sup>

According to Mr McRae's statement, on return to the ESB his first priority

...was to make available the notes of my observations during the helicopter flight. I therefore made multiple copies of my notes and provided them to Peter Lucas-Smith, Tony Graham and Dave Ingram. I then typed up my notes, downloaded the photographs from the digital camera, printed the photographs and placed the notes on the ESB website.<sup>384</sup>

Mr McRae's notes posted on the ESB website at 11.00 am described the Bendorra fire as 20 hectares and 'growing', and noted that the fire behaviour as, 'Backing with 1.5m flames to NW, NE; Hot with 2m flames on SW; Out on SE along road'. In his evidence to this inquiry Mr McRae said that the rapid growth of the Bendorra fire surprised him, as he had not expected the fire to be much bigger than two hectares at that time.<sup>385</sup> Mr McRae suggested that the rapid fire growth may have occurred because of the unanticipated effects of an inversion layer, which meant that it got warmer and less humid at higher altitude, and so promoted a faster rate of overnight fire spread.<sup>386</sup> It is not clear whether Mr McRae's surprise regarding the apparently rapid growth of the fire arose because he understood, incorrectly, that the fire was 500 square metres (a twentieth of a hectare) the previous evening, as reported by Mr Ingram to the SMT, rather than its actual size of at least several hectares, as estimated by Ms Arman and *Southcare 1*.

Mr McRae's notes of the Gingera fire stated that the fire was 2 hectares and growing, and described its behaviour as '0.5m backing on flanks & heel; 1m spreading around rocks on head to N'. He also noted that access to the fire was possible via a 4WD trail 200 metres down slope to the east.

Mr McRae estimated that the Stockyard Spur fire was 8 hectares, and described its behaviour as 'Backing, 0.5m flames, 1m on W flank, Escalating'. He also noted that it was accessible via a 'Dormant trail by foot' and, that there were 'Lots of large fallen timber'. In his hand-written notes during the flight, this last statement appears as 'lots of large logs—difficult for rake hoe'.<sup>387</sup>

Mr McRae also made notes about the McIntyres Hut fire, indicating that the main fire was 300 hectares, that the three related spot fires were each 15–20 hectares, and that the fire threatened 'ACT, especially pines; private property, powerlines'. Mr McRae said that his observations that morning confirmed his understanding of the threats posed by that fire gleaned from the meeting at Queanbeyan the night before. Mr McRae also gave evidence that he was only seeking to identify the 'immediate threats' posed by the fire, by which he meant threats applicable to 'the current shift and the next couple of shifts for which we needed to make sure that whatever the objectives and strategies were, were set appropriately'. In this regard, Mr McRae said that his reference to 'private property' was primarily a reference to private property under threat in NSW, and that he did not then consider that the fire threatened urban Canberra.<sup>388</sup>

### **SMT decision to move from direct to indirect attack**

Mr Lucas-Smith gave evidence that the information provided to the SMT by Mr McRae late that morning indicating the rapid growth of the ACT fires ‘immediately changed our focus’ and that in response the SMT ‘started very rapidly to accelerate and expand our activities in ESB to accommodate these fires’.<sup>389</sup> Mr Lucas-Smith recorded in his statement the substance of Mr McRae’s aerial observations, and noted that ‘by 10:30 hrs reports from the incident controllers and from the SMT Planning Officer, Rick McRae, who had also returned from a detailed reconnaissance flight in Firebird 7, suggested substantial fire growth was occurring already’.<sup>390</sup>

Mr McRae stated that on returning to ESB following his morning reconnaissance flight and in the light of a number of reports on fire operations coming in from the field,

... it was becoming clear to me and to the rest of the SMT that direct attack was not going to succeed and that we needed to focus on indirect attack. This in turn meant that we needed to address the fire as a ‘campaign’ fire. That in turn requires extensive planning and additional personnel and capability to assist with that function.<sup>391</sup>

Mr McRae gave evidence that by the end of 9 January, the SMT ‘had identified some containment lines for consideration in the field’.<sup>392</sup> The plan was to control the Bendorra fire using existing trails as containment lines, and that direct attack would continue to try to hold the fire while the containment lines were put in place. However, Mr McRae noted ‘that the Stockyard Spur and Gingera fire had no existing containment lines except the Mt Franklin Road’ and that more extensive planning would be required to devise an effective containment strategy for these fires.<sup>393</sup> Mr Lhuade was therefore appointed as a situation officer to developed strategies for the Stockyard Spur and Gingera fires. Mr Lhuade described his role as ‘to gather relevant information as to the location of the fire and fire behaviour and undertake predictive analysis of that fire as to its rate of spread and behaviour and consider containment strategies and a range of options for containment ...’ Considerable information was gathered over a period of days in order to fulfil this function.<sup>394</sup>

Mr McRae defined a ‘campaign fire’ as ‘one where the fire goes for some number of shifts before it’s finally suppressed and requires significant logistic and other support and significant operational commitment’.<sup>395</sup> Similarly, Mr Lucas-Smith described ‘campaign fires’ as those fires that are going to extend well beyond 24–36 hours and that will therefore require multiple shifts and multiple field resourcing.<sup>396</sup> In line with the change to an indirect attack strategy, Mr McRae noted that ‘the planning section within Curtin would have to be ramped up’.<sup>397</sup>

Mr Graham does not refer in his statement to receiving a copy of Mr McRae’s notes of the reconnaissance flight, and said in evidence that although he did not recall being given Mr McRae’s notes, the distribution of notes was certainly the kind of thing that Mr McRae would do, and that if he was given the notes by Mr McRae, he certainly would have read them. Mr Graham also said that although he could not specifically recall Mr McRae reporting to him what he observed, he believed that a discussion would have taken place. Unlike Mr McRae, Mr Graham did not recall being surprised to learn that the Bendorra fire had grown from around 500 square metres the night before to approximately 200 000 square metres 12 hours later, despite the description of the fire as growing ‘only slowly’ the night before.<sup>398</sup>

Although the SMT decided to change from a direct to indirect attack strategy due to the rapidly increasing size and ferocity of the fires and the various difficulties being faced by firefighters in the field, because there were insufficient resources present in the field on 9 January to commence

indirect attack, direct attack continued throughout that day. Mr Graham said that in particular there was a lack of heavy plant available to commence indirect attack on 9 January.<sup>399</sup> Mr Lucas-Smith said that by the afternoon of 9 January, it was evident to him the strategy of direct attack on the Bendora fire was not going to be successful, in large part because the fire edge could not be readily accessed with adequate water resources, and that:

Our strategy ... was to continue with direct attack using the ground based resources and aerial firefighting support to at least suppress the spread of the fire as much as possible, giving us more time to implement indirect attack strategies, which included the use of heavy plant to construct containment lines. As such, on the afternoon of 9 January, we started to organise heavy plant to be brought in for operations commencing the following day on 10 January, primarily to open up access tracks and to start working on building containment lines for indirect attack.<sup>400</sup>

Mr McRae gave evidence that the indirect attack strategy was to commence on the morning of 10 January, but that direct attack was also to continue ‘in order to hold the fire while the containment lines were put in place’.<sup>401</sup>

In recognition of the need for heavy plant to implement the indirect attack strategies, late on the morning of 9 January Mr Graham asked Mr Ingram to source bulldozers.<sup>402</sup> Although this process commenced within ESB on 9 January, it appears that no bulldozer was available for deployment to any of the ACT fires that day, despite a direct request for one from Mr Brett McNamara. Mr Graham said the delay in accessing bulldozers may in part have arisen because floats were not available, and agreed that it would have been advantageous to be able to provide bulldozers more quickly. Mr Beutel, then a Deputy Captain and agency representative in the Forests Brigade, described in his statement how he was asked by Mr Neil Cooper to commence sourcing bulldozers on 8 January, and that he was able to arrange for the services of a D9 and a D6 bulldozer and operators by that evening. However, the D9 bulldozer required track repairs for most of 9 January, and although it was repaired by 6.00 pm, it would have taken considerable time to transport it to any of the ACT fires. The D6 bulldozer did not arrive in Belconnen until 7.00 pm on 9 January.<sup>403</sup> Accordingly, it appears that even if requested by Mr Ingram on the morning of 9 January, neither of the bulldozers sourced by ACT Forests could have commenced work at any of the ACT fires before the evening of 9 January.

It should also be noted that despite the major change in strategy from direct to indirect attack, an acknowledged need for extensive planning for campaign fires and Mr McRae’s evidence that the agreed containment strategy for Bendora ‘was incorporated into the Incident Action Plan (IAP) for the day shift ... commencing at daybreak on 10 January’, no formal IAP appears to have been prepared in relation to any ACT fire for 10 January, or indeed, at any time over the next several days. Rather, the strategy in relation to each fire was left to Mr Graham to communicate to field incident controllers in verbal briefings.<sup>404</sup> Moreover, despite the acknowledged need to ‘ramp up’ planning, no overnight planning was conducted at Curtin in relation to any of the fires prior to 19 January.

#### *ACT views on the McIntyres Hut fire*

On the morning of 9 January Mr Lucas-Smith considered that the McIntyres Hut fire was the ESB’s highest priority, as he believed that it was ‘certainly posing a threat to the ACT’.<sup>405</sup>

In a meeting with Mr Peter Galvin and Mr Brian Murphy at around 11.00 am to decide tasking of senior officers over the next days, Mr Graham discussed the large size of the McIntyres Hut fire, and the likelihood that requests would be received from NSW for ACT resources to assist in

controlling it. Mr Galvin said that in that meeting Mr Graham described the McIntyres Hut fire as posing ‘a significant threat to the ACT pine forests’.<sup>406</sup> Mr Galvin understood from this meeting that the Uriarra plantations could be under threat, although he had a ‘reasonable level of confidence’ that the fire would be controlled, and at this stage he did not perceive a threat to urban Canberra beyond a ‘very remote possibility’.<sup>407</sup> Mr Bartlett was also concerned about the threat that the McIntyres Hut fire posed to ACT assets, and in particular, to the Uriarra pine plantation. Accordingly, he arranged for a D9 bulldozer to widen fire breaks around that plantation.<sup>408</sup>

At 12.48 pm Mr Castle sent an email to Chief Police Officer Murray providing an overview of the fire situation in which he identified the McIntyres Hut fire as a ‘major threat to ACT Pines and ultimately property if the winds turn back to the N/NW (possibly two days time) and present as a very large front heading to our NW border’.<sup>409</sup> However, Mr Castle said in his evidence that at that time he did not perceive the McIntyres Hut fire as presenting a threat to urban Canberra.<sup>410</sup>

The Fire Status Report prepared on the morning of 9 January by Mr Nick Lhuede for the Executive Director of Environment ACT also identified the McIntyres Hut fire as a potential threat to the ACT: ‘Main concern remains NSW fire, with relatively large area burnt yesterday. No significant threat at this stage with prevailing southerlies, however return of N-NW wind patterns may present threat to ACT’.<sup>411</sup>

#### *Mr Bartlett’s offer of resources*

Mr Bartlett returned to the ESB offices at Curtin on the morning of 9 January, probably some time before 9.00 am<sup>412</sup>, to get an update on the fires and to find out what role he would be assigned. He said that he was told by Mr Lucas-Smith that his services were not required.<sup>413</sup> Mr Bartlett explained that ACT Forests had effectively the same crews and equipment available on 9 January that had been available on the afternoon of 8 January. Mr Bartlett was asked to keep these crews and equipment on standby in case there was a need to deploy them. Mr Bartlett said that he advised ESB that he could source bulldozers and crew at the same time that he offered his services, and that he was reasonably certain that the duty coordinator he spoke to about the bulldozers was Mr Graham.<sup>414</sup>

Mr Graham agreed that on the morning of 9 January, no ACT Forest crews had been deployed to any of the fires then burning in the ACT, although he could not recall whether or not any ACT Forests crews had been deployed to the McIntyres Hut fire at that time. Asked whether there was any reason why ACT Forests crews were not being deployed at that time, Mr Graham responded: ‘Well, we had crews deployed to the incidents that we had. There was no indication I don’t believe in the morning that those crews weren’t coping with the situation that they had in hand so there was no requirement’.<sup>415</sup>

Mr Graham thought that he was probably not the person that Mr Bartlett spoke to regarding the availability of dozers, and suggested that this person might have been Mr Ingram. Indeed, Mr Graham did not recall having any dealings with Mr Bartlett on the morning of 9 January, and did not believe that he and Mr Lucas-Smith discussed having someone of Mr Bartlett’s experience involved either at SMT level, or as an incident controller in the field. In Mr Graham’s view, ESB had competent and capable officers managing the fire incidents they had at the time, and he also considered that the SMT was performing well. Accordingly, Mr Graham concluded there was no need for Mr Bartlett’s assistance at that time<sup>416</sup>, although he said that he was aware that ACT Forests crews would have been available had he requested them.<sup>417</sup>

Similarly, Mr Lucas-Smith could not recall telling Mr Bartlett on the morning of 9 January that his services were not required, but acknowledged that this ‘may have occurred’. Mr Lucas-Smith also did not regard ESB as under resourced on the morning of 9 January.<sup>418</sup>

### 5.3.2 Response to the Bendorra fire

#### *Arrival and initial strategy*

Following the decision to withdraw from the Bendorra fire overnight on 8 January, the SMT decided that direct attack on the fire would resume at 6.00 am on 9 January.<sup>419</sup> The ESB radio transcript records crews departing for the Bendorra and Stockyard Spur fires from 4.33 am.<sup>420</sup> The radio transcript also confirms that crews responding to the Bendorra fire arrived at the Bulls Head staging area shortly after 6.00 am, and then headed toward the site of the fire.<sup>421</sup>

Mr Hayes was appointed incident controller, but said that he was given no handover brief from Ms Arman, and only a ‘very sketchy’ briefing by the SMT prior to arriving at the fire. In particular, Mr Hayes said he was told nothing about the objectives he should seek to achieve that day, and was simply instructed to meet his crews ‘and then proceed down Warks Road until you find smoke’.<sup>422</sup> Mr Hayes was given no information about the size of the Bendorra fire, however he has since estimated that in the early morning the fire was between 7 and 10 hectares, and that it grew to between 15 and 20 hectares by around 10.00 am.<sup>423</sup>

Mr Hayes had great difficulty locating the Bendorra Break, which despite being identified on the map as a potential containment line, had been allowed to revegetate and had not been trafficable for at least 12 years.<sup>424</sup> When Mr Hayes did find it, he described it as ‘totally overgrown’ with trees up to 12 inches in diameter on it, and therefore unusable in that condition as a containment line.<sup>425</sup> He was not provided with new or annotated maps by ESB prior to commencing work that morning, and given the state of the Bendorra Break, he concluded that the map he was using was out of date.<sup>426</sup>

Mr Hayes arrived with his crews at the Bendorra fire ground at the same time that Mr Ingram was conducting his morning aerial reconnaissance.<sup>427</sup> On arriving at the fire, Mr Hayes’ determined that his first objective was to ensure that the fire did not cross Wombat Road. He instructed crews accordingly, deploying them along Wombat Road, while he undertook a further investigation of the fire ground: ‘When I drove up Wombat Road a bit I could see that the fire was burning out from its main perimeter in fingers and that the quieter end was the southern end. I therefore decided to work on fire suppression on the southern end of the fire front, to get it right under control’.

The crews commenced work constructing a bare mineral earth break with rake-hoes on the southern side of the fire up from Wombat Road, continuing with this task for 2 to 3 hours.<sup>428</sup>

#### *Allocation of resources to the Bendorra fire*

Despite some initial conflict in the evidence concerning the number of vehicles and crew attending the Bendorra fire on the morning of 9 January<sup>429</sup>, in his evidence Mr Hayes confirmed that his crew comprised the Rivers command unit, which was a twin cab unit that didn’t carry water, with three crew members, the Rivers 21 light unit with two crew members and the Guises Creek 10 tanker with three crew members and Mr Hayes in his own vehicle. In terms of firefighting capacity, this amounted to one tanker, one light unit, eight crew members and Mr Hayes.<sup>430</sup>

Mr Hayes' evidence was that the Guises Creek 10 tanker had three crew members<sup>431</sup> and Mr Graham's evidence was that he knew nothing to the contrary.<sup>432</sup> The ESB radio transcript, on the other hand, suggested that the Guises Creek tanker had a crew of six on board when it set off that morning.<sup>433</sup> Based on the evidence of Mr Hayes and Mr Graham, it would appear that this report was either incorrect or some of the crew members on the Guises Creek 10 tanker left the tanker at some point on the journey, perhaps to join crews attending other fires. The ESB radio transcript indicates that the Guises Creek 10 tanker had difficulty locating the fire and did not arrive at the fire ground until some time after 8.16 am.<sup>434</sup>

Mr Graham intended the previous evening that Mr Hayes would have two teams of six crew members plus a heavy tanker<sup>435</sup>, in accordance with Ms Arman's recommended minimum resource allocation.<sup>436</sup> However, Mr Hayes' evidence was that he did not receive the total of twelve firefighters that were required to make up the two rake-hoe teams, and that in addition to the large single cab tanker carrying a crew of three, would have brought the total number of personnel under his command to fifteen. In his evidence, Mr Graham confirmed that there would usually be between three and seven crew members on a heavy tanker so that, based on Ms Arman's request for at least two rake-hoe teams and at least one heavy tanker, this would indicate a crew totalling 15 to 19 personnel.<sup>437</sup>

With only eight personnel under his command, Mr Hayes was unable to initiate direct fire suppression simultaneously with the construction of rake-hoe containment lines:

The light unit worked as a light unit suppressing any spots on the edge of Wombat Road for me. But then to form a rake hoe crew I had to stand my tanker down and my light unit down. So I had no suppression availability at all while they burnt themselves out doing rake hoe work for me. So it was a matter of jiggling.

Hence although Mr Hayes was able to form a single rake-hoe team by reallocating crews from their tankers, this left the tankers uncrewed, and so precluded any direct fire suppression while the rake-hoe team worked.<sup>438</sup> Moreover, it would appear that, even if there had been an additional three personnel on the Guises Creek 10 tanker, Mr Hayes would still have been required to stand down both the tanker and the light unit in order to create two rake-hoe teams comprising six personnel in each team.

At 10.09 am, Mr Hayes contacted ComCen and asked to check with the duty coordinator (Mr Graham) because he was having trouble locating the water supply identified by crews the previous evening. A few minutes later, ComCen contacted Mr Hayes, provided him with a grid reference for the water supply and suggested that if he had further trouble he could liaise with Parks 1 (Ms Arman) about where they had found the water the previous evening.<sup>439</sup> Mr Hayes spoke to Ms Arman at 10.17 am, who asked him whether the resources she had asked for were adequate, to which he responded, 'I could probably do with further water, being so far away now. I might pull in another heavy if I can. I'll think about it'.<sup>440</sup> Apart from this brief conversation with Ms Arman concerning resources, and despite a number of conversations with personnel at ESB headquarters during the day, including Mr Graham,<sup>441</sup> it appears that at no time that day did Mr Hayes make a request by radio for additional resources. Mr Hayes said in his evidence that he did not ask for additional personnel because he assumed that they would not be available due to the 'orange' alert level that day and the number of other fires then burning in the ACT : 'I knew the cupboard was bare. If I asked I wouldn't have got'.<sup>442</sup> However, Mr Hayes agreed that this was not something that Mr Graham actually said to him, and that this was just an assumption that he made.<sup>443</sup>

### ***Difficulties with fire suppression at Bendora***

Shortly before 11.00 am a decision was made by Mr Hayes to abandon the southern side of the Bendora fire and move to the northern side in the area of the Bendora Break. This decision was made following a discussion with Mr McRae who was at the time flying over the fire in *Firebird 7*. This exchange between Mr Hayes and Mr McRae commenced at 10.43 am, with Mr Hayes asking, ‘Rick, is there any chance of a fly around that fire below you at Bendora please? And tell the boys how they’re going up on that southern flank’. A short time later, Mr McRae spoke directly to the crew leader on the Guises Creek 10 tanker (“Guises Creek 5”) and reported, ‘The flank you are on is very hot. The flames are racing up the slope over 2 metres. Flames starting to get up into the trees, over’. Guises Creek 5 asked Mr McRae for a recommendation as to whether it was worth carrying on a rake–hoe trail up over the hill, to which Mr McRae responded, ‘I would say that a direct attack would fail. You’ll need to monitor this one very closely to go off the road and yeah, a rake–hoe line would fail, over’. After a further discussion between Mr McRae and Mr Hayes, Mr Hayes withdrew his crew from the southern side of the fire and decided instead to attempt to construct a rake–hoe line around the northern side.<sup>444</sup>

The evidence of both Mr McRae and Mr Hayes was that while Mr McRae was undertaking the reconnaissance flight and speaking by radio with Mr Hayes he did not mention that the fire had grown enormously since the night before, from an estimated 500 square metres to approximately 20 hectares (that is, 200 000 square metres). Mr McRae agreed that he was in a better position, being in an aircraft, to identify the total dimension of the fire than Mr Hayes, however he did not believe at the time it would assist Mr Hayes to tell him the size of the fire. Mr McRae considered that Mr Hayes ‘knew the salient points’ and had ‘a good handle on where the fire was’, and suggested that ‘a lot of our fire controllers prefer brevity rather than detailed travel log from air observers’.<sup>445</sup> Mr Hayes considered that it would have assisted him ‘greatly’ for Mr McRae to have told him that the fire was 20 hectares, however Mr Hayes’s evidence was that this information would not have changed his tactics that day.<sup>446</sup>

The attack on the northern side of the fire commenced with the crews walking up the Bendora Break, making a rake–hoe line which was sufficiently clear to permit a tanker to back up the break to the fire ground. They then ran a canvass hose from the tanker and commenced direct attack on the fire. Mr Hayes instructed his crews to continue direct attack while he undertook further surveillance.

At 1.29 pm, ComCen requested a situation report. Mr Hayes reported that his crew was working on a rake–hoe trail on the northern flank and it was going along ‘very well’. He further reported that no wind change had yet occurred, and that they were going to try to get around the head of the fire while the fire was ‘doing very little’. ComCen then requested a report on the other flanks of the fire. Mr Hayes responded, ‘Well I haven’t been on the western flank all day Coms. I’ve been working on the southern, the northern and the eastern flanks but the most activity is definitely on the northern flank’. After acknowledging that message, ComCen radioed Mr Hayes: ‘Compliments of Tony Graham. If we brought in a D6 dozer would that be able to help you with the containment lines, over?’ Mr Hayes responded:

That’s very pleasing news. Anything with a D in front would be great ... Fairly good idea because I’ve only got a small crew here today and a fairly long rake hoe trail at the moment and we could run the dozer up and down there and I could call these units in a lot further if they had a dozer here ... further to that Coms, it’s treacherous up here. There’s large very large trees coming across this fire trail and a dozer would probably

be handy in skipping them out of the road because there is going to be dozens more come down, over.<sup>447</sup>

At 3.37 pm, ComCen followed up the transmission concerning the dozer to report to Mr Hayes that at that stage they didn't expect the dozer to be available until first light the following morning.<sup>448</sup>

As the afternoon progressed it became increasingly apparent to Mr Hayes that 'they were fighting a losing battle, as with the number of people available it was impossible to undertake the attack required to suppress the fire at that time'.<sup>449</sup> Mr Hayes described in some detail in his statement the deteriorating weather conditions and the difficulties encountered by his crews in constructing and maintaining control lines as the afternoon progressed.<sup>450</sup>

In his evidence, Mr Hayes agreed that given the deteriorating conditions under which his crews were unable to effectively fight the fire on its northern, western or southern perimeter, it would be fair to say that even with further crews he would not have been able to bring that fire under control that day.<sup>451</sup> In his statement, Mr Hayes commented that more effective firefighting could have been undertaken if a dozer had been available. According to Mr Hayes, if a dozer had been made available early on the morning of 9 January 2003, it would have been able to clear Wombat Road more effectively than the rake-hoe team had, and it might then have been possible for crews to have prevented the fire from crossing that containment line. A dozer could also have cleared the Bendora Break, and may also have been able to established a containment line around the 'fingers' of flame that were running up the hill from the northern end of the fire.

Nevertheless, Mr Hayes concluded that even if a dozer had been available to him early on 9 January, it was very difficult to say what could have been achieved during the day, particularly given the 'quite extraordinary' increase in fire activity between the morning and afternoon of that day.<sup>452</sup>

In his report, Mr Cheney described the ongoing direct attack on 9 January as largely ineffective, as evidenced by the fact that the fire crossed two potential control lines: the Bendora Break to the north and Wombat Road to the east. He suggested that, 'the fire had grown to a size that hand line construction had virtually no chance of success'.<sup>453</sup>

#### ***Was the Bendora fire 'severely under-resourced'?***

Mr Cheney's opinion was that on 9 January 2003, the Bendora fire was 'severely under-resourced'.<sup>454</sup>

Mr Lucas-Smith agreed with Mr Cheney's assessment.<sup>455</sup>

Mr Graham considered that it was Mr Hayes' responsibility to tell him if he needed more resources, as the SMT's role was primarily to 'support Mr Hayes and his crew at the Bendora fire'. As noted above, the previous evening Mr Graham thought that the resources that Ms Arman had requested for Bendora for 9 January were appropriate for a fire of 500 square metres, but said that if he had thought the fire was then *500 metres square* (that is, 250 000 square metres) then 'we would have markedly increased the response to that fire' for the following morning.<sup>456</sup> However, despite being informed in the late morning by Mr McRae that the Bendora fire was in fact closer to 200 000 square metres, because Mr Hayes had not requested additional resources Mr Graham did not think that additional resources were required, 'The resources requested were those that were provided ... On the basis that Mr Hayes didn't

raise any undue concerns with me, I was satisfied that he was coping with the crews that he had'.<sup>457</sup>

When further questioned about this matter, Mr Graham accepted that although Mr Hayes did not request additional resources at any stage on 9 January, it was 'possibly right' that people in the SMT were armed with information about the fire size that would suggest Mr Hayes had underestimated the extent of the job he had in front of him. Hence although under the SMT structure it was arguably Mr Hayes as incident controller who was responsible for planning decisions in relation to the Bendorra fire, including the making of requests for resources, it appears that on 9 January information about the fire size that was critical to effective incident control and resource planning was held by the SMT, and not communicated to Mr Hayes. In his evidence Mr Graham appeared to accept that this created a situation in which the SMT was relying on the incident controller at the fire ground to make important resourcing decisions, notwithstanding that in this instance, Mr Hayes did not have critical information about the fire size that was needed to effectively make those decisions.<sup>458</sup> Mr Graham agreed that this situation could have been avoided if the SMT had been alerting Mr Hayes to the size of the fire and discussing resourcing issues arising from that situation with him.<sup>459</sup>

Ultimately, Mr Graham reiterated that it was the role of the SMT to support those in the field with information and resources as required, and said that, 'It would appear that there wasn't enough resources for a 20 hectare fire. However, I don't know that Mr Hayes raised any concerns. I understand your point that he may not have had a total appreciation of what he was facing; nevertheless, we do rely on information from the ground'.

Mr Graham also emphasised that the SMT did not rely 'exclusively' on information from the fire ground in making resourcing decisions<sup>460</sup>, and that under the ACT's variant of the ICS structure, responsibility for making resourcing decisions is effectively 'shared' between the SMT and those at the fire ground.<sup>461</sup>

Mr McRae said that he was not aware of what resources had been allocated to the Bendorra fire that morning, and so he had not considered whether those resources were sufficient or not.<sup>462</sup> In particular, Mr McRae emphasised that he was not assessing the adequacy of resources during his aerial reconnaissance of the fires, and did not know what resources Mr Hayes had available to him or what resources were en route to him. Mr McRae said that he did not conclude from his conversation with Mr Hayes that Mr Hayes did not have sufficient resources to deal with other than a part of one flank of the fire, but rather, thought that Mr Hayes was seeking advice as to which would be the most appropriate flank of the fire on which to focus suppression efforts. Ultimately, Mr McRae did not agree with Mr Cheney's description of the fire as 'severely' under resourced. However, given the fact that Mr Hayes appeared to be continuing to implement direct attack throughout the day on 9 January, Mr McRae agreed that 'more [resources] would have been better' and that the fire was 'under resourced'.<sup>463</sup>

Mr Roche described the resources allocated to the Bendorra fire on 9 January as 'totally inadequate', and below even the absolute minimum requested by Arman the night before.<sup>464</sup> Under cross examination, Mr Roche said that although the SMT might have been labouring under the misapprehension that the fire was 750 square metres rather than 20 hectares until this was reported to them at approximately 10.30 am on 9 January, this still would not lead him to change his criticism about the inadequate allocation of resources to the Bendorra fire that day.<sup>465</sup>

### ***The decision to withdraw crews overnight***

The deterioration of conditions at Bendorra was also reflected in the exchanges between Mr Hayes and ComCen concerning the question of deploying crews for firefighting overnight on 9 January. At 4.42 pm, ComCen radioed Mr Hayes and informed him, ‘We will support your request for crews for tonight’. Mr Hayes responded, ‘Thank you Coms. Just let me know when they are on their way and I’ll meet them and guide them in’.<sup>466</sup> In evidence, Mr Hayes confirmed that he spoke to Mr Graham on a number of occasions during the day by telephone, and it is likely that he made the request for overnight crews by telephone earlier in the day.<sup>467</sup> However, at 5.54 pm Mr Hayes radioed ComCen to reverse his earlier request for overnight crew deployment: ‘Coms for the duty coordinator but I can’t ring. Those crews that are coming in tonight I would say no to them now. The fire has crossed Warks Road. There’s trees hanging. It is far too dangerous. He can call me by radio if he’d like to talk it over. Parks 6 out’. Coms responded, ‘Received Parks 6. He agrees with your assessment over’.<sup>468</sup>

In evidence, Mr Hayes explained the reasons for his decision to reverse his earlier request for the deployment of overnight crews: ‘Conditions from probably 16:00 on were not pretty in there. It was horrendous. There were numerous trees falling. The fire condition had upped the ante. It had crossed Wombat Road. The fire in there was atrocious. I would not put crews in there overnight’.<sup>469</sup>

Mr Graham said that he did not question Mr Hayes recommendation: ‘I deferred to him being an experienced officer and if that was the view on the ground, where he is obviously a lot closer to what is happening than what we are back in a control centre, I accepted that’.<sup>470</sup>

ESB’s situation report for Bendorra prepared at 6.00 pm that night noted that the fire had increased to 90 hectares, and stated: ‘Crews withdrawing, fire broken containment lines. Active fire. Left unattended’.<sup>471</sup> It seems clear that crews were withdrawn in accordance with Mr Hayes’ instructions and safety concerns, further reinforced by the belief within the SMT that even if crews were deployed overnight, they would be able to achieve little in the context of the new indirect attack strategy that was to be commenced the following day. Mr McRae’s evidence was that withdrawing crews was ‘the safe and prudent thing to do’ given that ‘the agreed containment lines meant that there was no purpose in overnight direct attack because overnight fire behaviour would not jeopardise the proposed lines. That proved to be correct’.<sup>472</sup> Similarly, Mr Lucas-Smith said that because the SMT had already made a decision to move to indirect attack the following day, crews would be falling back from the fire front to establish containment lines ‘so putting firefighters directly on the fire overnight was of little value’. Moreover, there would be little that the limited resources then available could do overnight to suppress a fire the size of Bendorra—which by the evening had a perimeter of approximately 4 kilometres—particularly in the absence of aerial support.<sup>473</sup>

### **5.3.3 Response to the Stockyard Spur Fire**

#### ***Arrival at the Stockyard Spur fire and initial assessment***

Mr Brett McNamara (‘Parks 5’) was assigned as incident controller for the Stockyard Spur fire on 9 January. Mr McNamara’s evidence was that he was not given a detailed briefing or any kind of written IAP to assist him prior to arriving at the fire. He arrived at the Bulls Head staging area at 5.58 am, at approximately the same time as crews responding to the Stockyard Spur fire arrived.<sup>474</sup> After assembling his crew, at 6.23 am Mr McNamara and his crew headed towards Mt Ginini car park.<sup>475</sup> On arrival at the car park, at 6.59 am Mr McNamara reported to ComCen

that he had with him Gungahlin 20, Gungahlin Command, and the Parks & Conservation RAFT team. This remote area firefighting team consisted of about 12 people.<sup>476</sup> However, it appeared to Mr McNamara that his crews had not been adequately briefed on their roles for the day prior to being deployed, as evidenced by the fact that some were not properly provisioned with adequate food, water and equipment for a full shift of remote area firefighting.<sup>477</sup>

At 7.05 am, a short time after arriving at the Mt Ginini car park, Mr McNamara received via ComCen the substance of the situation report from Mr Ingram in *Firebird 7*, which had earlier been transmitted by Mr Ingram to ComCen. After being given a series of grid references identifying the location and shape of the fire, Mr McNamara was told: ‘area burnt approximately 500 square metres … most active part is on the north western corner … if it continues to burn like this it will burn around the ridge line’.<sup>478</sup>

At 7.41 am, Mr McNamara reported that he and his crew had reached the turnoff to the Stockyard Spur fire trail, and he estimated that it would probably be another half an hour before they got to the fire ground.<sup>479</sup> At 7.58 am, Mr McNamara updated his report, telling ComCen that the Stockyard Spur trail was heavily overgrown and that they would leave their vehicles and walk the remaining distance to the fire ground, which he estimated to be 2 kilometres.<sup>480</sup> Mr McNamara reported reaching the fire an hour later at 8.59 am, and told ComCen, ‘I think it is pretty right to report we’re going to get around it with our equipment, over’.<sup>481</sup>

Mr McNamara asked his crew to rest while he undertook a reconnaissance of the fire:

I recall that upon arrival I observed the fire as being low in general intensity, as it was just trickling along with what I later determined to be a size of approximately 3 hectares, (best estimate and recollection) with a flame height of approximately 0.5 to 1 metres. The fire was burning in a heavily forested snow and mountain gum woodland on a saddle between two knolls. Fuel loads in the area were quite variable. There was a gully with heavy tea tree and ribbon gum to the south with fuel loads around 30–40 tonnes per hectare. Some of the other more open areas would probably have been around 20–30 tonnes per hectare. The fuel was also extraordinarily dry and had what I call the “cornflake crunch” factor.<sup>482</sup>

Mr McNamara estimated his reconnaissance of the fire would have taken about 20 minutes to half an hour. In fact, the terrain was so difficult that he was unable to walk around the entire fire perimeter. This made it extremely difficult to accurately estimate fire size beyond providing a ‘best guess’ of approximately 3 hectares.<sup>483</sup> The fact that it took Mr McNamara 20–30 minutes to walk around a fire that he estimated to be in the vicinity of 30 000 square metres reinforces the inaccuracy of Mr Ingram’s earlier estimate noted above—namely, that the fire was only 500 square metres (suggesting as it does, an area equivalent to a square approximately 25 metres along each side.)

Based on his initial reconnaissance and assessment of the fire behaviour and prevailing conditions, Mr McNamara determined that his best course of action was to establish an anchor point at the back of the north-west flank, and then to commence the construction of a bare earth mineral containment line with rake-hoes, approximately 50–75 metres to the north-west flank of the fire. Once this line was established, the plan was to start ‘pinching’ the fire by building rake-hoe lines around its other flanks. The objective was to prevent the fire from burning down to Gingera Creek, from where it could threaten the Ginini Flats wetlands some 4 kilometres away.<sup>484</sup> Mr McNamara said that the construction of this containment line was made difficult by the ‘extraordinarily rough terrain’, the thick understorey vegetation, and the need to bypass

rocky outcrops and trees or to cut them down.<sup>485</sup> As incident controller, Mr McNamara said that he was also very concerned to ensure that the crew always had an escape route, and to this end they clearly marked and established the Stockyard trail as their exit route. Mr McNamara did not attempt containment on the eastern perimeter of the fire because this could have left the crews cut off from their escape route.<sup>486</sup>

#### *Adequacy of firefighting resources at the Stockyard Spur fire*

Mr McNamara provided a further situation report commencing at 10.05 am. He described the fire as ‘currently burning in a mountain gum and gum woodland in a scrubby understorey’. He then provided grid references for various points around the fire and described the wind direction. He concluded his situation report, ‘Just the crew with me at the moment—we haven’t got enough crew to get the whole way … on the western and north-western point of the fire over … I’ve got a satellite phone here. I’ll try and get it up and running and give you a call.<sup>487</sup>

At a little after 11.00 am, Mr McNamara had a satellite phone conversation with Mr Graham in which he said he:

indicated to Tony Graham that we would have major difficulty in establishing a containment line around the entire perimeter of the Stockyard fire and requested additional crews and helicopter support. In my opinion we required additional RAFT crews with remote area firefighting resources. I recall Tony indicating that they had multiple fires in the area and that he would get back to me with the response. He instructed me to do our best. During the various conversations I had with Tony Graham I remember discussing with him the use of heavy plant. I recall that Tony asked me what the access availability was for having a dozer get to the fire, perhaps along the Stockyard fire trail. I remember indicating to him that I thought the access would be very good and that a dozer would be able to make progress along the Stockyard fire trail and get right to the fire. The fire was actually right on the Stockyard fire trail. Had a dozer been able to get up along that road and clear it, there would have been fire tanker access right to the seat of the fire.<sup>488</sup>

In his conversation with Mr Graham, Mr McNamara believed that he estimated that it would take around two or three hours to get a dozer from Canberra to the intersection of Mt Franklin Road and the Stockyard fire trail, and then an hour or two to doze the Stockyard fire trail to the seat of the fire.<sup>489</sup> Mr Graham did not have a recollection of the discussion with Mr McNamara concerning the need for additional RAFT crews with remote area firefighting resources, or of his response to the effect that they had multiple fires in the area and that he would get back to Mr McNamara. However, Mr Graham agreed that Mr McNamara discussed with him the need for heavy plant, and that Mr McNamara had told him that there would be good access to the fire for heavy plant along the Stockyard Spur fire trail.<sup>490</sup>

Mr McNamara had a brief exchange with Mr McRae at 10.35 am while Mr McRae was conducting aerial reconnaissance in *Firebird 7*. Mr McNamara asked how the Stockyard Spur fire was looking from Mr McRae’s point of view, to which Mr McRae responded, ‘… It’s looking to be about 8 hectares. It looks like it’s a backing fire … outside perimeter with the western part just south of where you’re standing is most likely to make a run to the south-west ridge line. Is that like what you’re seeing, over?’

Mr McNamara indicated he was a bit concerned about the northern flank. Mr McRae continued, ‘Yeah, it’s a backing fire just where we’re at now. It’s fairly, it’s fairly hot and it’s early in the

day, probably not going to self extinguish, I think you've got an awful lot of work to wrap this one up, over'.

Mr McNamara responded, 'Affirmative ... especially with the crews we have on deck at the moment'. Mr McNamara then raised the possibility of water bombing and Mr McRae agreed that aerial water bombing would be essential to slow the fire down.<sup>491</sup>

Mr McNamara confirmed in his evidence that he thought he indicated to ESB that, given the size of the crew he had with him, it was going to be very, very difficult to construct containment lines all the way around the fire. He also confirmed in his evidence that he had requested additional crews, and that he had discussed with Mr Graham opening up the Stockyard Spur track with a dozer.<sup>492</sup>

### ***Attempts to control the Stockyard Spur fire***

Mr McNamara estimated that by early afternoon his crews had constructed approximately 400 metres of containment line. He noted that early in the afternoon, helicopters *Southcare 1* and *Firebird 7* were providing valuable assistance by water bombing the fire, but that both helicopters were withdrawn at 2.30 pm. It appears that one helicopter was forced to withdraw due to mechanical problems, and that the other needed to refuel. In the mid-afternoon the wind picked up and Mr McNamara began to become concerned about the safety of his crews. He spoke to Mr Graham and, in general terms, said that he had a couple of crew members who were suffering fatigue and that the fire was jumping the containment line that they had constructed. As the wind speed and temperature increased and humidity dropped, there was a significant change in the fire behaviour, and flame height increased to over two metres.<sup>493</sup> With increased fire activity and no helicopter support, at 4.10 pm Mr McNamara reported to ComCen that the fire 'has now jumped the containment line that we had in place'.<sup>494</sup> Mr McNamara summarised his actions in response to his concerns as follows:

I therefore brought the entire RAFT crew together and had discussions with the more senior fire fighters. I also conferred with Tony Graham back at ESB. I expressed concern as to the safety of my crew who had been working in extremely difficult circumstances, with at least two crew members showing signs of fatigue and exhaustion. Without air support and additional resources we would have extreme difficulty in containing the fire in that sector. I therefore indicated to Tony that we would fall back to a role of observing the fire due to the safety and welfare of my crew. It was agreed that my crew would drop back to a safe distance from the fire and observe for a period. We dropped back to about 1km from the fire front to a rocky knoll.<sup>495</sup>

Mr Ben Dearsley, one of the RAFT crew members working on the fire that day, gave evidence that as the fire intensity increased that afternoon, the crew were increasingly surrounded by flame and were in danger or being cut off from the anchor point:

We were slowing its growth but towards the end of that stint we were being outflanked by the fire. I think there was about four or five of us at the head there that were being sort of surrounded by fire ... The fire was getting out of our control ... [control of the fire] was just not achievable. The entire crew—Parks and ourselves—were fatigued and there wasn't enough manpower to stop it.<sup>496</sup>

Mr McNamara described that some water bombing operations occurred while they were observing the fire but that by this time the fire, 'had increased markedly in its intensity with a very large column of smoke now evident. The water bombing by this stage was unfortunately of

limited effect. We pulled out and hiked back to the vehicles'.<sup>497</sup> The ESB radio transcript confirms that Mr McNamara reported to ComCen at 5.53 am that 'We're leaving our current location and heading back to the visual [sic vehicles] on the intersection of the Mt Franklin Road and the Stockyard Spur'.<sup>498</sup>

Mr Graham summarised his view of firefighting operations at the Stockyard fire on 9 January as follows:

Without any vehicle access to the Stockyard Spur fire there was little that could be done in terms of direct firefighting. Other than water bombing, crews could establish containment lines, however without any means of applying water to the fire they could not be actively engaged in direct fire suppression. Following discussions between the SMT and Parks and Conservations Service who are the land managers responsible for this area, it was agreed to use heavy machinery to open up the Stockyard Spur track as this would then allow vehicle access to the fire. To establish this track required some considerable effort so that it could carry the weight of a heavy tanker. Without appropriate machinery being readily available, this work could not commence until 11th January 2003.<sup>499</sup>

In his report, Mr Roche was highly critical of the lack of effective resource planning and deployment in relation to the Stockyard Spur fire on 9 January, and suggested that with adequate resources, and in particular a bulldozer, the fire could have been contained:

The lack of useful intelligence conveyed to the Planning Unit on the evening of 8 January and, in particular, the absence of an experienced overnight planning capability located at the ESB Headquarters, are in my opinion the primary reasons for a failure to adequately resource the fire and achieve containment during this operational period.<sup>500</sup>

#### ***Withdrawal of crews overnight and planning considerations***

The situation report prepared by Mr Graham at 5.45 pm noted in relation to the Stockyard Spur fire: 'Crews withdrawing, too fatigued to continue. Water bombing continued. Active fire left unattended'.<sup>501</sup> Mr Ingram gave evidence that additional RAFT crews could have been resourced to replace Mr McNamara's crews if requested, but that heavy plant would not be available until the following day.<sup>502</sup> Mr Lucas-Smith was asked whether there was any reason why the crew that was too fatigued and had withdrawn from the Stockyard Spur fire could not be replaced. He said there was no reason, but that:

It was a decision that was made earlier in that day to move from direct attack to indirect attack for all of our fires. It was the realisation that these fires were a much larger size than was originally thought at Curtin and also the fact that an 80 hectare fire—putting two tankers and thirteen personnel on a 80 hectare fire was not a real reasonable strategy.

Mr Lucas-Smith agreed that the crews were withdrawn and the fire was left overnight, because:

We now have an 80-hectare fire. And the people resources for a direct attack on 80-hectare fire whether daytime or night-time was far in excess of what I could have marshalled for that night. So we really had no choice but to move to indirect attack, and there was no established control lines around Stockyard Spur.<sup>503</sup>

Following his withdrawal from the fire, Mr McNamara recommended to the SMT that at least 3 to 4 RAFT crews with helicopter support would be required for the following day.<sup>504</sup> Mr McNamara was asked during his evidence whether he agreed with Mr McRae's view that the

incident controller at the fire is largely responsible, with assistance from the service management team, for forward planning for subsequent shifts for that fire. Mr McNamara responded:

My understanding was that I provided the information back into COMCEN in terms of what we had or hadn't achieved that day, what sort of problems and difficulties that we faced and an indication of what may be required. As far as I was aware, that information was in the system and it would be considered in light of the other fires that were burning in the Brindabellas ... I wasn't aware obviously of the other significant fires ... Obviously ESB had a view which was much more holistic than my view in terms of what was required and how resources should be deployed.<sup>505</sup>

As noted above, the SMT recognised on the morning of 9 January that with the Stockyard Spur fire burning across the only road into the area, and no obvious alternative containment lines, 'more thought' would need to formulate an effective containment strategy. To this end, Mr Lhuede was appointed as Situation Officer to develop, in consultation with Mr Sayer as incident controller, a containment strategy for both the Stockyard Spur and Gingera fires.<sup>506</sup> Mr Lhuede did not have adequate information as at 9 January to determine whether RAFT crews could be used to suppress either fire. However, because he was aware of the difficulties experienced by crews seeking to directly attack those increasingly large fires in the remote and steep terrain in which they were burning, he focused on planning for indirect suppression strategies by identifying potential containment lines.<sup>507</sup>

At 9.00 pm an Incident Objective and Strategies AIIMS form was prepared for the Stockyard Spur fire for 6 am to 6 pm on 10 January.<sup>508</sup> The stated strategy was to leave the fire unattended until resources could be freed from the Bendorra fire. Mr Lucas-Smith said that this was necessary because ESB did not have sufficient resources to effectively fight both the Bendorra and Stockyard at the same time, particularly given that the Stockyard fire required substantial heavy plant which ESB did not have access to at that time.<sup>509</sup>

### 5.3.4 Response to the Mount Gingera fire

As noted above, during his morning observation flight, at 7.13 am Mr Ingram estimated that the Gingera fire was 300 square metres, although as for the other fires he observed that morning, smoke made it difficult to see, and Mr Ingram agreed that he did not know the fire size.<sup>510</sup> During the subsequent observation flight shortly after 10.00 am, Mr McRae estimated that the fire had grown to two hectares, and was still growing.<sup>511</sup> Once again, it appears that Mr Ingram significantly underestimated the fire size (or fire behaviour) that morning, which could not have grown from around 300 square metres to around 20 000 square metres in approximately three hours if the fire was only 'working its way very very slowly up the ridge line' as Mr Ingram reported earlier.<sup>512</sup>

Crews were first responded to the Mount Gingera fire at a little after midday on 9 January. The crews dispatched were 2 light units (Parks 20 and Parks 23) under the command of Mr Peter Callan (Parks 7).<sup>513</sup> At 2.32 pm, ComCen radioed Mr Callan and asked for a situation report. Mr Callan responded that they had not reached the fire line at that time and were trying to find better access. The crews reached the point on the Mt Franklin Road adjacent to the Mount Gingera fire at approximately 3.00 pm and Mr Callan reported that he and another crew member were walking through to the fire line to make an assessment of what they might need.<sup>514</sup> They walked to the fire line along a walking track, which led to another old track that could be

followed. They reached the fire at about 3.25 pm and then proceeded to different parts of the fire to assess the fire behaviour and terrain.<sup>515</sup>

Mr Callan provided his situation report to ComCen commencing at 5.20 pm. Although that report is interspersed with other messages, it appears that Mr Callan first provided the grid reference and then estimated the size of the fire as 5 hectares with flame size about half a metre and ‘fuel on the ground medium to light, heavy in places also’. With not enough crew present to attempt to construct hand lines through the thick vegetation, Mr Callan continued: ‘We have two options. One is bulldozer as soon as possible over’. ComCen asked ‘what’s the other option?’

Mr Callan responded: ‘Other is helicopter bombing, probably … bombing at this stage’.

Mr Callan reported a short time later that ‘the units are Parks 23 and Parks 20. I might have to keep them to keep it from crossing the road into … creek. If it crosses there, there is no way we can stop it over’. ComCen said they would get back to Mr Callan. At 5.28 pm, Mr Callan reported that there was an old NSW/ACT boundary break running directly beside the fire. Mr Callan later provided a grid reference for that boundary break.<sup>516</sup> The water bombing requested by Mr Callan commenced at approximately 6.00 pm.<sup>517</sup>

At about 6.45 pm an exchange between Mr Callan and ComCen occurred during which ComCen was seeking to ascertain whether Mr Callan and his crew were serving any purpose in remaining at the fire, or whether ComCen could remove them. Mr Callan asked whether there would be anyone taking over from them and ComCen responded, ‘That’s a negative, there will be no relief crews’. Mr Callan suggested, in substance, that they let the fire burn down to the road to create a break off the road, with the light units patrolling that break: ‘If it crosses that road tonight, the border to the coast is the next one, over’. ComCen asked how long it would take to trickle down to the road and Mr Callan responded that it could be well into the night before it got there. ComCen responded: ‘Yeah Roger, given that and our thoughts are still to pull you out and wait and see what happens overnight with the trickling down to the road, over’. There was then some further discussion about continuing water bombing.<sup>518</sup>

At 7.45 pm, ComCen notified Mr Callan that they had reassessed their intention and that they would like Mr Callan and his crews to remain overnight and prevent the fire from crossing Mt Franklin Road.<sup>519</sup> In his statement Mr Callan confirmed that he and his crews remained at the site of the Mount Gingera fire as it came gently down the hill and worked its way down to the road. Although he was not sure, he thought that they put out some fire along the edge of Mt Franklin Road. They were relieved the following morning and Mr Callan finished his shift at 10.00 am on 10 January 2003.<sup>520</sup>

In his report, Mr Cheney considered that if the crew that attended the Mount Gingera fire on the afternoon of 9 January:

were properly equipped with rake-hoes and chain saw and a slasher, I believe they could have done some useful hand-line construction from the Mt Franklin Road to the southern edge of the fire where it was burning downhill in the 6 or 7 hours of daylight available to them. This could have been held overnight and would have provided a useful start for the RAFT team that arrived the following day.<sup>521</sup>

Similarly, Mr Roche in his report expressed the view that ‘the lack of detailed assessment of the fire and seriously deficient planning on the part of the SMT Planning Unit contributed to the late response and inadequate resourcing of this fire’. Mr Roche was critical of the use of helicopters to water bomb the fire in the absence of firefighting on the ground, noting that at 7.02 pm *Firebird 7* reported that water bombing alone would not control the fire and that ground support

was needed, and that at 8.03 pm *Southcare 1* reported that the water bombing had been ineffective on the north west corner of the fire.<sup>522</sup> Mr Roche continued:

Although in my opinion the fire was significantly under-resourced throughout the day on 9 January, and notwithstanding that the terrain and vegetation may have presented some difficulties to the crew, I do not understand why they did not undertake some hand trail work off the Mt Franklin Road. I believe they could have achieved some useful progress before being relieved the following morning. In my opinion, the resources committed to the fire on 9 January should have comprised at least two RAF teams, a medium dozer supported by 2 or 3 tankers and a similar number of light units. These resources should have been despatched to the fire at first light, not 12.00 hours as occurred. Had these resources been in place, coupled with the deployment of the helicopters for water bombing supported by the ground crews, in my view, the fire could have been contained within the operational period (day shift on 9 January) and secured before the onset of adverse fire weather conditions.<sup>523</sup>

Again, Mr Roche and Mr Cheney's evidence on these matters was unchallenged.

As noted above, with no obvious containment lines available, on 9 January Mr Lhuede commenced work on developing containment strategies for both the Stockyard Spur and Gingera fires, and was later assisted in this task by Mr Sayer. Mr Lhuede gave evidence that on 9 January he did not yet have sufficient information about the Gingera fire to identify potential control lines.<sup>524</sup>

### 5.3.5 The 8.30 pm planning meeting

The members of the SMT met at 8.30 pm to plan strategies for the following day, in particular 'the indirect attack strategies and what trails were going to be used and what were going to be the resources requirements to actually start to put these things in place'.<sup>525</sup> Mr Lucas-Smith gave evidence that events at the Bendorra and Stockyard Spur fires that day had made it clear to him that these fires would not be quickly 'rounded up' as he had suggested that morning, and that accordingly his focus began to shift to these fires as presenting a more immediate threat to the ACT than the McIntyres Hut fire.<sup>526</sup> At the time of the 8.30 pm planning meeting, Mr Lucas-Smith felt that they had enough firefighting personnel and appliances, but not enough heavy plant and aircraft.<sup>527</sup>

As noted above, once the decision had been made to move from direct to indirect attack in accordance with information received that day on the rapidly increasing size of the ACT fires, the SMT concluded that there was little point in continuing with direct attack, as the crews would be falling back to containment lines to effect indirect attack strategies the following day.<sup>528</sup> Accordingly, the SMT felt that little would be achieved by overnight firefighting that night at Bendorra and Stockyard Spur, and so no crews were deployed to those fires, while only a small crew was left to patrol the Gingera fire overnight.

### 5.3.6 Response to the McIntyres Hut fire

#### *Objectives and operations*

The IAP prepared for the McIntyres Hut fire for 9 January stated that the objective for the day shift was to prepare containment lines with a view to commencing back-burning that evening to secure those lines.<sup>529</sup> This IAP was signed off by Mr Arthur at 6.00 am. Mr Arthur said that at

the time he signed the IAP, he thought they ‘had a good chance of doing it … the indicators were that we could achieve that’. Crews were deployed at 6.00 am and commenced work on the containment lines. However problems arose during that day which significantly slowed the construction of those lines, so that stated objective in the IAP was not completed that day, or indeed, for several days.<sup>530</sup>

During the morning, members of the NSW incident management team gathered in the nominated control centre at the NSW Parks & Wildlife Service Queanbeyan area depot. At about the same time, a NSW Parks & Wildlife Service crew leader was dispatched to reconnoitre the area from the power line trail down to the Goodradigbee River in the south-west corner of the McIntyres Hut burn-out area (known as the ‘Charlie Sector’) for hand line construction. The crew leader later reported back to the IMT that he had insufficient resources to construct a rake–hoe line and recommended the use of a dozer to push the line in. The crew leader was accompanied by crew from the Michelago Rural Fire Brigade giving him a total of three Rural Fire Service category 7 vehicles (light units).<sup>531</sup>

At 1.00 pm a declaration was made under s. 44 of the *Rural Fires Act 1997* (NSW), which had the effect of transferring responsibility for the fire from the land manager—the NSW National Parks and Wildlife Service—to the NSW Rural Fire Service. The s. 44 declaration also resulted in Bruce Arthur, a superintendent in the Rural Fire Service, being appointed incident controller, and Ms Crawford became deputy incident controller.

### ***The Baldy Range spot fire***

According to Ms Crawford, having initially decided against using the Baldy Range fire trail as an eastern containment line on the evening of 8 January<sup>532</sup>, ‘We decided on the 9th to give it a go. We thought it was certainly worth a try. We were quite confident we would be able to hold it to Baldy’.<sup>533</sup> Ms Crawford’s recollection was that Mr Arthur organised some group officers from the NSW Rural Fire Service to attend the Baldy fire first thing in the morning. Ms Crawford thought they were probably dispatched from Queanbeyan at about 6.00 am.<sup>534</sup> The NSW submission to the NSW Coroner gives the time of the departure of the two group officers as ‘early am’.<sup>535</sup> The two group officers that were checking the Baldy fire reported that they considered it was worth attempting to construct a control line around that part of the fire on the eastern side of the Baldy Range fire trail. Arrangements were then made for the three Rural Fire Service category 7 vehicles to be diverted to the Baldy Range fire.<sup>536</sup>

However, at approximately 11.45 am, a reconnaissance flight over the NSW fires flew over the Baldy Range fire. Mr Hunt was on that flight, and gave evidence to the NSW Coroner that ‘The Baldy Range fire to the east of the trail was far bigger than could be seen from the ground. This information was conveyed to the RFS Group Captains at the Baldy fire. The three cat 7 vehicles were withdrawn’.<sup>537</sup>

Although the ground crews were diverted from the fire, two aircraft continued water bombing the Baldy Range fire on the afternoon of 9 January. According to Ms Crawford, the purpose of the water bombing was to dampen the area in front of the fire to stop the easterly spread until a sufficiently large crew to effect suppression could be sent to the fire.<sup>538</sup> Ms Crawford said that sufficient personnel were not available to fight the Baldy Range fire on 9 January.<sup>539</sup>

Mr Arthur did not have a recollection as to whether it was thought necessary to deploy crews to attack the Baldy Range fire on the night of 9 January. He could not think of a reason why the IMT would not have put crews on that fire that night, and was unsure why this wasn’t done.<sup>540</sup>

Mr Hunt was not a party to the decision concerning deployment of crews to the Baldy Range fire overnight, but suggested in his evidence that crews might not have been deployed that night because ‘It was quite steep country. I presume it may have been a safety consideration’.<sup>541</sup>

Mr Cheney considered that some advantage would have been lost by delaying work on the Baldy fire, and suggested that if crews had commenced attacking the fire at first light on 9 January, the fire edge would have been somewhat broken up and would have gone out in parts. He further suggested that by the time the crews were fighting the fire on 10 January, the fire had grown in size and moved further away from the access trail and into steeper terrain<sup>542</sup> and that this made the task of holding the fire much more difficult.<sup>543</sup>

In his report, Mr Roche expressed the opinion that the failure to deploy adequate resources to the task of containing the Baldy Range fire during the afternoon and overnight on 9 January when it was determined that the Baldy Range trail should be substituted as the eastern containment line was ‘a significant strategic error’.<sup>544</sup> Mr Roche conceded in cross-examination that there was nothing in his report comparing what he considered to be preferable resourcing of the Baldy Range spot fire on 9 January to what actually occurred on that day. He agreed that he did not do a comparison.<sup>545</sup> Mr Roche also conceded that his discussion of events on 9 January was not a fair picture of what was done both by way of planning and execution on 9 January in relation to the Baldy Range spot fire.<sup>546</sup>

As detailed below, on the morning of 10 January, a crew of approximately 30 commenced attacking the fire, initially working to put a rake-hoe line around the eastern edge of the fire. Crews continued to work on the Baldy Range fire on 11 and 12 January. However, considerable difficulty was experienced with continued fire escape over the perimeter edge, so that by mid-afternoon on 13 January ‘it was decided that the Baldy Range fire trail fire could not be contained by direct attack and it was agreed by the IMT that eastern containment line would now become the Firebreak trail further to the east, which runs north through Dingo Dell’.<sup>547</sup>

### ***Beginning the power line trail burning-out operation***

Regarding the power line trail burning out operation, Mr Cooper noted that although on the morning of 9 January the forecast was for reasonably benign weather over the next few days, the IMT was reluctant to commence the burning out operation prior to the completion of all containment lines:

... cooler conditions with predominantly E to SE winds with high humidity—conducive to achieving good results from backburning. However the NSW authorities were concerned about the southerly winds pushing the fire north towards Yass before northerly containment lines were established. Therefore burning-out operations were not commenced while the trails were upgraded. In my role as Liaison Officer I vigorously voiced my concerns and strongly opposed the decision to not commence this backburning.<sup>548</sup>

Mr Cooper said that he argued that burning out operations needed to commence two to three days before the main fire front approached the containment line, because it was necessary to have time to ‘mop up’ and remove any problem trees or other objects that could cause the fire to jump containment under adverse weather conditions. For this reason, he advocated commencing burning out operations along those parts of the containment lines that were complete, rather than waiting until lines had been completed around the entire fire perimeter.<sup>549</sup>

The debate concerning the commencement of the burning-out operation along the power line trail continued during 9 January and into 10 January. Mr Lucas-Smith knew that the burning out on the McIntyres fire appeared to be a bit slower than Mr Cooper would have liked. He recalled speaking to Mr Cooper about this apparent delay on 9 and 10 January. Mr Lucas-Smith emphasised to Mr Cooper that it was the southern boundary and eastern boundary which were the most crucial as far as Mr Lucas-Smith was concerned. Mr Lucas-Smith gave evidence that the fact that NSW were ‘dragging the chain a bit’ in getting on with the burning-out operation was a matter of concern to him at that time because the McIntyres Hut fire was the fire about which he was most concerned.<sup>550</sup>

Mr Bartlett said that he received a telephone call from Mr Cooper in the mid-afternoon on 9 January, advising him that Mr Cooper had been informed by the NSW IMT that they were not going to conduct any back-burning that night. Mr Bartlett said:

I was a bit perturbed by that because it seemed that they were wasting a good opportunity when the wind was blowing in the right direction and there was little danger of fire escaping outside any control lines. I suggested to Neil that he continue to offer suggestions to the NSW team about strategies and the potential to use ACT resources to assist with the operations.<sup>551</sup>

The NSW Submission to the NSW Coroner refers to a meeting at approximately 3.00 pm on 9 January attended by (among others) Mr Arthur, Mr Cooper, Ms Crawford and Mr Hunt:

The meeting discussed inter alia, the timing of burning off containment lines. There was a suggestion for immediate ignition of the south-east parts of the containment line. This was not supported. It was noted that the fire behaviour experienced both that season and the previous season, made it necessary to consolidate containment lines before lighting back burns and also to light small sections of containment lines at a time and contain that prior to further ignition, in order to control the fire. Observation of the active fire edge during the reconnaissance flight had indicated that no proposed control line was under imminent pressure from the active fire edge and thus there was sufficient time to complete the containment lines and back burn before the fire approached. The IMT confirmed that all containment lines should be completed before lighting of the back burns.<sup>552</sup>

In evidence before this inquiry, Ms Crawford agreed that the weather on 9 January was conducive to back-burning, and that the IAP called for burning out to occur ‘as soon as possible’. However, she emphasised that burning out could not safely commence until the containment lines were ready.<sup>553</sup> According to Ms Crawford, the IMT was not overly concerned about completion of the northern containment line, because there was little chance of the fire pressuring that containment line under the prevailing winds. Rather, the IMT’s concern was to complete the southern containment line prior to commencing burning operations, and this could not be done until a dozer could be brought to the area to push a control line down to the river in Charlie Sector. Ms Crawford was of the opinion that there were considerable dangers associated with commencing burning out operations prior to the completion of the southern containment line, particular as the IMT was still trying to obtain additional resources at that time, including additional aircraft to support ground crews.<sup>554</sup> In fact, a dozer was only brought in on 10 January,<sup>555</sup> completing the southern containment line in Charlie Sector on the morning of 11 January.

Similarly, during his evidence Mr Arthur argued that while the weather may have been conducive to back-burning, ‘the ground situation wasn’t ready … in the sense that the trails weren’t ready for that’. According to Mr Arthur, there were significant safety risks associated

with burning-out along the power line trail, because ‘it is a serpentine trail on an extremely steep set of hills. Any fire above them or below them could be tantamount to a death sentence’. Accordingly, Mr Arthur had made it clear that he was not prepared to start any back-burning along the trail unless he had adequate resources, particularly aerial support, available to ensure the safety of his crews.<sup>556</sup>

Mr Cheney was critical of the IMT’s failure to commence burning out operations on the McIntyres Hut fire on 9 January, particularly during the evening when conditions were most favourable. He suggested that there were opportunities for effective burning out that night that were lost as the fire slowly spread into more steep and difficult terrain overnight.<sup>557</sup> Mr Cheney also disagreed with Mr Arthur’s evidence concerning the danger of burning out along the power line trail without helicopter support, suggesting that, although that trail was winding, it was also very accessible and had ample places for refuge along the power line break.<sup>558</sup> Mr Roche also believed that burning out operations could have been commenced safely on 9 January, even along the north-westerly points of the more serpentine sections of the power line trail.<sup>559</sup>

## 5.4 Fire development and suppression activities, 10–14 January 2003

From 10 to 14 January 2003 a period that may loosely be designated as ‘mid-fire operations’, ACT and NSW authorities sought to contain their respective fires during several days of relatively benign conditions. Although firefighting efforts continued throughout this period, no attempt is made in this report to provide a detailed account of every aspect of fire suppression operations during the period. Rather, an attempt is made to summarise the strategies employed and operations undertaken during this period, and to highlight particular issues of relevance to the findings and recommendations in this report. For example, a number of witnesses raised in statements or during their evidence matters concerning command and control, particularly with respect to planning and the availability of incident action plans and maps.<sup>560</sup> These are matters of particular relevance to my findings and recommendations and so receive specific attention in this chronology.

A more detailed account of the fire developments and specific suppression activities undertaken during this period in respect of the Bendorra, Stockyard Spur, Gingera and McIntyres Hut fires is provided in Mr Cheney’s report.<sup>561</sup>

## 5.5 10 January 2003

### 5.5.1 ESB assessment and strategy

There is some conflict in the evidence as to precisely when a formal decision was made to move from direct attack to indirect attack in respect of the three ACT fires at Bendorra, Stockyard Spur and Mount Gingera. However, it is clear that by the end of 10 January 2003 at the latest, a broad shift in strategy from direct to indirect attack had been made by the SMT in relation to the three ACT fires. In accordance with this new strategic orientation, firefighting efforts from this time on focused on containment of the fires, primarily by identifying and constructing containment lines, and then as soon as practicable after these lines were established, on consolidating or

‘deepening’ these lines by carrying out burning-out and back-burning operations.<sup>562</sup> Although direct attack continued on some parts of the fires on and after 10 January 2003, particularly by helicopter water bombing, the purpose of these direct attacks was generally to suppress the growth of the fires so as to give crews as much time as possible to complete construction of containment lines, or to put out break-outs from these fires that had ignited across containment lines.<sup>563</sup>

During the morning of 10 January, it appears that the members of the SMT were relatively confident of containing the fires within the following several days. Mr Lucas-Smith said that because of the ACT summer weather cycle, the SMT was working to contain the fires within approximately 4 days, being his estimate of the period they had before conditions were likely to deteriorate again.<sup>564</sup> However, although the SMT had made the decision to change to an indirect attack strategy, Mr Lucas-Smith stated that because of problems in sourcing and then transporting adequate heavy plant to the fires to build the required containment lines, ‘there was a certain degree of comprise required’ in putting these indirect strategies in place, so that ‘during the early days of 10th, 11th and 12th, there was very little that our firefighting resources could do except continue with direct attack where possible, until our containment lines were in place’.<sup>565</sup> Mr Lucas-Smith said that notwithstanding these difficulties, the priority on 10 January was to control the Bendorra fire.<sup>566</sup>

In contrast to Mr Lucas-Smith, Mr Graham’s evidence was that he was unaware of the ACT summer weather cycle, and accordingly, believed there was no distinct time frame that he was working to other than ‘to contain the fires as soon as we possibly could’.<sup>567</sup> He said that he did not recall any mention of the four-day time frame that Mr Lucas-Smith said that he was working to.<sup>568</sup> At one point in Mr Graham’s evidence he said that on the morning of 10 January he was ‘fairly confident that they [the ACT fires] could be controlled that morning’.<sup>569</sup> However, Mr Graham later gave evidence that a decision was made to focus available resources on the Bendorra fire, leaving only limited resources at Gingera and none at Stockyard Spur.<sup>570</sup> He said that pursuant to this strategy, he expected that the Bendorra fire would be contained by 14 or 15 January. Once Bendorra was contained, Mr Graham said that crews would be able to concentrate on containing and suppressing the Stockyard Spur and Gingera fires.<sup>571</sup>

Mr McRae’s evidence was that on 10 January the three ACT fires had increased in size ‘approximately as we had anticipated’ and that this meant that the containment strategy developed the day before could continue to be implemented in relation to the Bendorra fire, while the Gingera fire could be held along Mt Franklin Road and suitable containment lines could be identified for the Stockyard Spur fire.<sup>572</sup>

As on previous days, Mr Bartlett reported to ESB for duty on the morning of 10 January, but was once again told that there was no specific role for him there, and that the ACT Forests fire crews and plant that he had available on stand-by were still not required for deployment to any of the ACT fires, or to the McIntyres Hut fire. Mr Bartlett said he felt that given that the ACT fires were not under control it would make sense to appoint senior officers such as himself to manage those fires. Moreover, Mr Bartlett was concerned about the level of resources that had been allocated to the ACT fires, and at the SMT’s decision not to deploy available additional resources, particularly the ACT Forests crews that Mr Bartlett had made it clear were available.<sup>573</sup> However, ACT Forests did supply a D6 bulldozer for use at the Bendorra fire, and continued to provide three staff to support planning and logistics functions at Curtin. Mr Lucas-Smith gave evidence that at this time the SMT was ‘absolutely’ aware that the McIntyres Hut fire could affect the ACT pine plantations, and that for this reason the SMT supported Mr Bartlett’s

initiatives to protect those plantations, and in particular, the use of an ACT Forests D9 bulldozer to build mineral earth breaks around the north-west of Uriarra Road.<sup>574</sup>

### 5.5.2 ESB media

Shortly before 9.00 am on 10 January 2003, Mr Castle was interviewed by ABC Radio. He provided some information about the ACT fires, and also described the McIntyres Hut fire as ‘of some significance to us’ because of the concern that it could cross the border into the ACT if the wind changed direction.<sup>575</sup> At 5.00 pm Mr Castle was again interviewed on ABC Radio. In this interview he said that ESB was changing to an indirect attack strategy, and acknowledged that the ACT would face ‘bigger threats’ if the wind shifted back to a north-westerly direction, as this could push the fires out of the hills.<sup>576</sup>

In addition to giving radio interviews, ESB issued media releases throughout the course of the fires. These media releases were prepared by the media cell, which under the ICS structure was within the Planning Unit and therefore at least nominally under the direction of Mr McRae as Planning Officer. However, Mr McRae made it clear that despite the formal position of the media unit within the ICS structure, he had no involvement in the drafting of media releases.<sup>577</sup> Rather, it appears that the usual procedure was that a media officer would draft a release based on information obtained from officers within Operations and Planning, and then have that release reviewed and cleared for distribution by either Mr Lucas-Smith, or if he was not available, by Mr Castle. Mr Castle made it clear that the process of approving media releases was not simply a ‘rubber stamping’ exercise, in that he would read the release and seek further information or clarification if he thought that was necessary. Sometimes information was conveyed in the form of quotes attributed to persons of authority within ESB, and if this was done the attributed quote was generally cleared with the person to whom it was attributed.<sup>578</sup>

Ms Amy Lowe, Community Education and Public Relations Coordinator, acted as a media officer for ESB from 13 January 2003.<sup>579</sup> On 10 January, Ms Marika Harvey arrived to assist in media functions within the Planning Unit, having been sent to ESB from the Chief Minister’s Department, where she served as Public Relations Manager. Although nominally reporting to Mr McRae as head of the Planning Unit, it appears that in practice Ms Harvey worked most closely with Mr Lucas-Smith and Mr Castle regarding the issuing of media releases and other communications.<sup>580</sup>

### 5.5.3 The role of the ACT Fire Brigade

At around 7.30 pm on 10 January, Mr Lucas-Smith discussed with Mr Bennett, Commissioner of the ACT Fire Brigade, crewing arrangements for the brigade over the following days. Mr Bennett agreed to increase stand-by crews at Fire Brigade stations during ‘stand-up hours’ from 9.00 am to 7.00 pm, so that the Fire Brigade could respond to any bushfires that might break out close to the urban edge of Canberra, and that would usually have been the responsibility of the Bushfire Service. The purpose of this arrangement was to lessen the need for the Bushfire Service to hold resources back from fighting the remote fires then burning in the Brindabellas. This arrangement required Mr Bennett to stand up an additional 20 personnel each day.<sup>581</sup>

At his own initiative, from 10 January Mr Bennett commenced attending the SMT planning meetings. Mr Bennett attended in part out of professional interest and in part as a ‘learning

exercise' to become familiar with the operations then being undertaken by the Bushfire Service, and that had resulted in the increased crewing demands being placed on the Fire Brigade.<sup>582</sup>

#### 5.5.4 Response to the Bendora fire

##### *Strategy*

In line with the SMT's decision to adopt indirect attack strategies, the Fire Situation Analysis form for the Bendora fire prepared for 10 January proposed indirect attack by containment as the most viable strategy to respond to fire. That document identified the resources required to effect this strategy as '2 choppers, 3 dozers, 4 tankers, 4 light units, 3 RAFT teams', and estimated that the probability of successfully achieving the strategy with these resources was 50 per cent. The analysis document also estimated that if the strategy was successful, containment would be achieved by 13 January 2003.<sup>583</sup> Mr Lucas-Smith gave evidence that increasing the resources committed to fight the fire would be likely to increase the probability of success.<sup>584</sup>

Ms Arman was appointed incident controller for the Bendora fire for 10 January. To assist in her planning, on the morning of 10 January Ms Arman was given a weather report, an estimate of the fire size (suggesting the fire was 80 to 90 hectares) and an update on fire conditions by *Firebird 7*.<sup>585</sup> No formal IAP was prepared for 10 January, and although Mr McRae wasn't involved in briefing Ms Arman, he believed that she would have been verbally briefed on the containment lines she should establish to effect the indirect attack strategy.<sup>586</sup> In fact, Ms Arman was instructed by Mr Graham to contain the fire but was not told what tactics to employ and assumed that she was to control the fire by *direct* attack: 'While my instructions were to contain the fire, they were not specific in terms of the strategies to be employed or the objective to be achieved for that particular morning'.<sup>587</sup> It was not until a call to ComCen at approximately 1.30 pm that Ms Arman was explicitly told by Mr Graham that the general strategy had been changed from one of direct to indirect attack.<sup>588</sup>

Another difficulty encountered by Ms Arman was that she was not provided by ESB with adequate maps for effective incident control or on-ground fire suppression. Maps are generally an important component of a written IAP, and Ms Arman said in her evidence that 'at that stage it was really quite critical that crews had detailed maps of the area'. Although she photocopied her own maps for her crews to use before heading to the fire ground, she said that these 1:100 000 maps were too large in scale to be effectively used for fire ground operations.<sup>589</sup>

##### *Operations*

Ms Arman arrived at the Bendora fire at approximately 7.00 am, accompanied by three heavy tankers and a RAF team.<sup>590</sup> A bulldozer was also available and waiting at Bulls Head, but Ms Arman was not told it was at her disposal until 8.00 am, at which point she immediately directed it to open up the Bendora Break, a task it commenced shortly before 10.00 am.<sup>591</sup> Ms Arman deployed one tanker to protect the Bendora Arboretum and Hut, a task that they successfully carried out. She deployed the other two tankers and RAF team to Warks Road and Wombat Road. The RAF team tried to construct a rake-hoe line around the fire that had crossed Wombat Road, but were unsuccessful.

Although the fire had grown to approximately 90 hectares by the morning of 10 January, Mr Graham initially believed that Ms Arman had been allocated sufficient resources to control the fire.<sup>592</sup> However, at 10.14 am Ms Arman provided a situation report to ESB, during which she requested additional resources. In keeping with the SMT's strategy to prioritise control of the

Bendora fire, additional resources were provided to Ms Arman by redeploying crews from the Mount Gingera fire. These additional resources arrived at Bendora in the early afternoon, accompanied by Mr Brian Murphy, who had been sent from ESB by Mr Lucas-Smith to replace—or perhaps to assist—Ms Arman as incident controller. Ms Arman had been told, and accepted as correct, that the fire had grown too large for her to manage on her own.<sup>593</sup> She gave evidence that ‘once Brian Murphy came on board and we had a lot more resources at our disposal, we sectorised the fire and allocated resources to each of the sectors’.<sup>594</sup> Mr Murphy gave evidence that on arriving at the fire that afternoon, it was clear to him that insufficient resources were present to control that fire.<sup>595</sup>

### ***Overnight firefighting***

Crews were deployed to the Bendora fire overnight for the first time on 10 January. The fire had doubled in size over the past 24 hours, and Mr Cheney estimated that it was by this stage approximately 220 hectares, with a perimeter of 6 kilometres. Mr Robert Flint was appointed overnight incident controller, and was allocated a crew comprising 3 light units and a tanker.<sup>596</sup> Mr Flint gave evidence that he was not provided with an IAP or briefed on objectives or control strategies before being sent to the fire, but that once he arrived he was provided with ‘a minor briefing’ by Mr Murphy, who showed him the location of the fire and containment lines, and instructed him to ‘monitor the whole perimeter of the fire and protect the Bendora Arboretum and not to do any back burning’.<sup>597</sup> This last instruction to Mr Flint appears to directly contradict the understanding of Mr Lucas-Smith, which was that:

We had moved to indirect attack and the heavy plant had started constructing our containment line. We were clearing the containment line. As those lines were cleared we wanted to make sure we deepened those lines, as best we possibly could, and as I understand it back-burning from those control lines started almost immediately on that night.<sup>598</sup>

Mr Lucas-Smith said that it was far safer to deploy crews overnight on 10 January than it had been on previous nights because vehicular access to the fire had been opened by the bulldozer, ensuring that the crews had ready access to water from the tankers, while also providing those crews with the mobility to withdraw rapidly if under threat. Moreover, because the strategy had changed from direct to indirect attack, crews were working to secure containment lines some distance from the actual fire front. Mr Lucas-Smith acknowledged that falling branches would still pose some danger to firefighters, but said that this danger would be less than would have been the case on previous evenings when crews would have been engaged in direct attack, and so working very close to the fire front. Mr Lucas-Smith also noted that despite the change to indirect attack with respect to the main fire, overnight crews would still be expected to engage in direct attack to suppress any spot fires that ignited across containment lines.<sup>599</sup>

Mr Roche was highly critical of the level of overnight resources allocated to a fire the size of Bendora at that time, although his criticism appears to be based on the fact that these resources were inadequate to effect *direct* attack on the fire that night, under what Mr Roche described as ‘ideal conditions’.<sup>600</sup>

## **5.5.5 Response to the Stockyard Spur fire**

### ***Strategy***

With respect to the Stockyard Spur fire, Mr McRae gave evidence that on 10 January, ‘the objective was to monitor the situation while planning containment’. Mr McRae conceded that in terms of practical fire suppression, this amounted to ‘doing nothing’. However, he said that because the fire had started on the only access road to the area, thus ruling out the use of that road as a containment line, there were no obvious containment lines to use for the fire.<sup>601</sup> Accordingly, no ground crews were deployed to the fire on 10 January, although occasional aerial water bombing was carried out in an attempt to limit the fire’s growth.

Throughout the morning of 10 January, Mr Lhueude carried out preliminary work on an IAP that would identify and describe an effective containment strategy for the fire.<sup>602</sup> The SMT also tasked Mr Sayer to assist Mr Lhueude, and Mr McRae provided what assistance he could. Mr Lhueude and Mr Sayer conducted a reconnaissance of the Stockyard (and Gingera) fire that afternoon. My Sayer observed that the fire was burning so quietly then that he could step over the flames, but believed that the fire had grown too large for containment by rake-hoe teams, necessitating the use of heavy machinery.<sup>603</sup> Mr Lhueude was concerned to undertake further on-ground observations to assess what resources would be required to effect the preliminary containment strategy,<sup>604</sup> and no containment strategy was finalised on 10 January. Indeed, an operational IAP was only completed several days later. Moreover, despite the lengthy period taken to formulate a containment strategy for the Stockyard Spur fire, no overnight planning was carried out with respect to that fire.

## **5.5.6 Response to the Gingera fire**

### ***Strategy***

The incident controller, Mr Tony Greep, arrived at Piccadilly Circus at approximately 6.00 am. He received a briefing by radio from Mr Graham, who instructed him to keep the fire from crossing Mt Franklin Road and to put a rake-hoe line around as much of the fire perimeter as possible.<sup>605</sup> Mr Greep received no written IAP or maps of the area, and had no input in deciding what resources he would be allocated for the day.<sup>606</sup> From Piccadilly Circus he proceeded to the fire ground where he met most of his crew, comprising three tankers, two light units and three RAF teams.<sup>607</sup> At the fire ground Mr Greep said that he also received a short but adequate briefing from the outgoing incident controller, Mr Callan.

During the morning, Mr Cooper flew over the Bendorra, Mount Gingera and Stockyard Spur fires with Mr Ingram to map the fire boundaries and report on fire behaviour. At approximately 7.30 am, the helicopter flew up to the Mount Gingera fire and landed so that Mr Cooper could liaise with Mr Greep and with Mr Callan. Mr Cooper recalled it being very cold, and that the fire behaviour was more inactive than at Bendorra. He made a number of other observations:

In some places the fire had actually burnt itself out. The vegetation cover was a thick alpine shrub, heath and poa type grasses that became extremely difficult to get through with hand tools. This was further shown to be true when we tried to land the helicopter; it actually sank about half a metre into the heath until the tail rotor was almost touching the vegetation. We were expecting the hand crews could cut tracks into this area but seeing as the heath was probably half a metre deep, I radioed to Comcen (at 7.46 am) that a small dozer would be best to cut a trail directly alongside the fire edge (direct attack), right in around the top of the spur, causing minimal damage and therefore

contain the fire. I received an immediate reply from Tony Graham at Comcen that this would not be an option. In later discussions with Tony Graham I believe the reason that this was not an option is that it was a national park and it was deemed inappropriate to have heavy machinery in this particular environment. However, I remained very confident that we could have contained the Gingera fire at that time with the use of a small dozer.<sup>608</sup>

Mr Greep and Mr Dennis Gray who was assisting Mr Greep, were taken on a reconnaissance flight in *Firebird* 7, and Mr Greep estimated that the Gingera fire was approximately 200 by 300 metres, and that it was burning slowly.<sup>609</sup>

The ESB radio transcript confirms that at 7.46 am, Mr Cooper spoke by radio with Mr Graham and that, among other things, Mr Cooper informed Mr Graham during that radio transmission that

the terrain is fairly suitable for a dozer. And there is a track on the eastern side ... which is a good containment line ... the vegetation up here should be conducive to the dozer doing virtually a direct attack line. It shouldn't have to work very far off the fire edge.

Mr Graham responded, ‘Yeah, roger. Our preference was that we did not put a bulldozer into that area. Over’. Mr Cooper responded, ‘Bummer. Yeah received that’.<sup>610</sup>

In evidence, Mr Graham recalled having a discussion with Mr Cooper on the morning of 10 January about using the bulldozer at Gingera. He agreed that he raised environmental concerns,<sup>611</sup> and said that he was concerned that any fire suppression tactics adopted take into account environmental considerations relevant to that part of the park. For this reason he said that he wanted to discuss the use of a bulldozer at Mount Gingera with the SMT following a meeting with Environment ACT that was scheduled for 9.00 am that morning. However, following the meeting with Environment ACT, nothing was done to respond to Mr Cooper’s request for a bulldozer. Mr Graham said that this was because the SMT had decided to focus efforts on Bendorra ‘and we didn’t want to put plant down at Gingera when we needed everything we could get at Bendorra’.<sup>612</sup>

Mr Lucas-Smith was not aware of the environmental concerns regarding the use of bulldozers at Mount Gingera, and did not discuss this matter with Mr Graham. He said that he was aware generally of an issue about the use of heavy machinery in that area, but agreed in his evidence with Mr Cooper’s views regarding the benefit of using a bulldozer to contain the fire as quickly as possible. Mr Lucas-Smith explained that as CFCO he had the authority to place heavy plant wherever he felt necessary, taking into account the environmental impact of any such decision, and that the meeting he had with representatives of Environment ACT that morning was to tell them what he was planning to do, and to get information from them so he could minimise environmental damage where possible.<sup>613</sup> Mr Lucas-Smith thought that the refusal by Mr Graham to provide the dozer was probably more to do with the fact that there were not any machines available to do the work, a belief that appears to accord with Mr Graham’s evidence about prioritising the Bendorra fire.<sup>614</sup> Mr Lucas-Smith also agreed that on the morning of 10 January the Gingera fire was certainly the smallest fire, but said that ‘it was probably going to be a difficult fire to suppress purely and simply because it did require plant and we didn’t have it and it was a long haul to get it there’.<sup>615</sup>

### ***Operations***

Mr Greep said that up until around 11.30 am, his crews were able to construct mineral earth containment lines with rake-hoes, constructing around 150 metres on the southern side, but only around 50 metres on the heavily timbered northern side of the fire. He said that the topography and vegetation did make this rake-hoe line construction difficult, but that the crews were making some progress.<sup>616</sup>

At 11.28 am, Mr Greep was informed by ComCen that the three RAF teams, a tanker and a light unit were to be redeployed to the Bendora fire. Lucas-Smith gave evidence that this redeployment was appropriate, because the Gingera fire was small, the crews would not have been able to complete the containment lines by hand, and those same crews were needed urgently at Bendora.<sup>617</sup> Mr Greep gave evidence that even if the crews had not been redeployed to Bendora, they would still have been unable to complete containment lines around all of the Gingera fire perimeter during the day shift on 10 January.<sup>618</sup> Mr Richard Gore, another firefighter tasked to Gingera fire agreed with Mr Greep's assessment,<sup>619</sup> although Jeremy Watson, an officer in charge of one of the RAF teams disagreed, and believed that the rake-hoe line could have been completed with another two hours work.<sup>620</sup>

Mr Cheney gave evidence that if Mr Watson's assessment was correct, then the decision to redeploy the crews was 'barely believable' given the substantial delay in getting those crews to Bendora and briefing them (around 2 hours in total), before they could commence suppression work for the brief period remaining before their shift ended at 5.30 pm.<sup>621</sup> Mr Roche was also critical of the redeployment decision, particularly given that substantial uncommitted resources were still available to ESB on 10 January, including the ACT Forests crews offered by Mr Bartlett that morning. In light of this, Mr Roche argued that 'with adequate planning and analysis, additional resources could have been allocated to the Bendora fire, thereby negating the requirement to remove personnel and equipment from the Mount Gingera fire where achievement of the containment objectives was well advanced'.<sup>622</sup>

### ***Strategy following redeployment of crews***

After being advised of the re-deployment of his RAF teams to the Bendora fire, Mr Greep was instructed to change tactics from active firefighting to patrolling, with the primary objective of ensuring that the fire did not cross Mt Franklin Road. Mr McRae gave evidence that the objective was to hold the fire at Mt Franklin Road, and to defer further action until a viable indirect attack strategy could be formulated, and until resources could be freed up to effect this strategy following the containment of the other ACT fires.<sup>623</sup> Mr Greep deployed his remaining resources—two tankers and a light unit—to suppress any fire on Mt Franklin Road, and then to patrol the road.<sup>624</sup> Mr Greep successfully carried out ESB's directive until the day shift finished at 6.30 pm.

No crews were deployed to the Gingera fire overnight on 10 January.

### **5.5.7 Response to the McIntyres Hut fire**

#### ***Strategy and operations***

Throughout 10 January, NSW crews under the direction of Mr Arthur continued to establish and consolidate containment lines in preparation for burning out operations.<sup>625</sup> The IAP for the day shift on 10 January also stated that the Baldy Spot Fire was to be suppressed so that the Baldy Range Trail could be used as the eastern containment line. Mr Lucas-Smith attended the morning

planning meeting at Queanbeyan, in part for the purpose of continuing to impress on the NSW IMT the need to establish as a matter of priority containment on the southern and eastern boundaries of the McIntyres Hut fire—being the containment lines closest to the ACT border.<sup>626</sup>

At 9.30 am, the IMT requested that the ACT provide a substantial taskforce comprising approximately 10 tankers and 15 light units to assist with burning out operations planned to commence that day following the completing of containment lines. However, Mr Lucas-Smith declined to provide such a large taskforce because he believed that these resources were needed to combat the ACT fires.<sup>627</sup> Instead, Mr Lucas-Smith provided to NSW a taskforce under the command of Mr Andrew Winter comprising four tankers and four light units.<sup>628</sup>

In fact, the burning out operations did not commence on 10 January as planned. Changes to the planned southern containment line had to be made when it was realised that the Powerline Break could not be used because of steep ravines and dense vegetation along its length. This necessitated the use of the adjacent Powerline Fire Trail instead.<sup>629</sup> More significantly, at 3.00 pm the IMT was advised that the bulldozer was having trouble completing the western corner of the southern containment line. The delays caused by the change to the southern containment line and the inability of a bulldozer to complete the last section of that line led the IMT to cancel the burning-out operations planned for 10 January.

#### ***Mr Bartlett raises his concerns with Mr Thompson***

On the morning of 10 January 2003, Mr Bartlett had dual concerns in his capacity as a Deputy Chief Fire Control Officer for the ACT:

that my expertise and experience were not being utilised in assisting with the ACT firefighting effort and that not enough effort was being undertaken by the NSW Fire Agencies to implement the indirect suppression strategies that they had agreed on the McIntyre fire, which then compromised my ability to protect our own pine plantation assets.<sup>630</sup>

In relation to the second concern, Mr Bartlett requested an urgent appointment with his superior, Mr Alan Thompson, Chief Executive of Department of Urban Services. This meeting occurred at 2.00 pm that day.<sup>631</sup> At that meeting, Mr Bartlett outlined his primary concern that the indirect attack strategy for the McIntyres Hut fire was not being implemented as quickly it needed to be, and particularly, that burning out operations had not been commenced along completed sections of the containment lines, despite very favourable conditions to do so.<sup>632</sup> Mr Bartlett showed Mr Thompson his map and report on the Byadbo fires in 1998, which clearly showed that that fire had moved 15 kilometres in one day under the influence of strong north-westerly winds. Mr Bartlett then produced another map showing Mr Thompson how close the McIntyres Hut fire was to Canberra, and expressed his concern that the fire could cross that distance and threaten the ACT pine plantations and western suburbs of Canberra when the wind shifted back to a north-westerly direction. According to Mr Bartlett, Mr Thompson was ‘immediately concerned’. Mr Bartlett also suggested to Mr Thompson they consider asking the ACT Chief Minister to contact the NSW Premier ‘to express concern about the potential for the McIntyre fire to impact on ACT assets if more was not done to suppress it’.<sup>633</sup>

Mr Thompson agreed in evidence that Mr Bartlett outlined his concerns regarding the potential for the McIntyres Hut fire to affect the ACT pine plantations, and his belief that not enough was being done by NSW to suppress the fire as a matter of urgency.<sup>634</sup> Mr Thompson could not specifically recall whether a threat to the Canberra suburbs was raised by Mr Bartlett, but he

definitely recalled Mr Bartlett's concern that the fire could burn through the Uriarra pine plantations and beyond 'with very bad consequences'.<sup>635</sup> Mr Thompson's evidence was that he was:

... extremely aware that once any fire had ... come from New South Wales and was of sufficient magnitude to affect, say, the Uriarra Forest, then it would have a very wide fire front ... and I was aware at that stage that it could be a very, very serious fire for the ACT and possibly for the urban edge of Canberra, like the 2001 fire was.<sup>636</sup>

Mr Thompson knew that the ACT Chief Minister was away on holidays at that time, and so he decided to contact Mr Castle to ask him to raise Mr Bartlett's concerns directly with Mr Koperberg.<sup>637</sup> The call to Mr Castle was made immediately on the speaker phone in Mr Thompson's office, and Mr Bartlett was able to hear both sides of the conversation. Mr Bartlett recalled that Mr Thompson informed Mr Castle that:

... it appeared that not enough action was being taken to implement the agreed strategies in New South Wales, and that it was ACT assets which were ultimately under threat if those strategies weren't implemented, and therefore perhaps we needed to try and raise the issue at a higher political level, you know political in the broad sense, to try and bring some pressure to bear to get the required resources and the right sense of urgency.<sup>638</sup>

Mr Thompson does not remember whether or not he discussed with Mr Castle a threat to urban Canberra from the McIntyres Hut fire, but noted 'that is not to say it wasn't mentioned'. Mr Castle told Mr Thompson that he was going to be attending the NSW RFS meeting in Queanbeyan later that afternoon, and suggested that Mr Bartlett also attend to raise his concerns directly.<sup>639</sup> It is not clear exactly when it was decided that Mr Castle would attend the Queanbeyan meeting, however Mr Bartlett considered that the purpose of the telephone call between Mr Thompson and Mr Castle was to make sure that a senior person from the ACT went to Queanbeyan to raise the ACT's concerns.<sup>640</sup>

After his telephone conversation with Mr Castle, Mr Thompson outlined the situation as communicated to him by Mr Bartlett to Dr Maxine Cooper, the Executive Director of Environment ACT, and then called Mr Tim Keady to relay the same information. Mr Thompson said that Mr Keady agreed with him about the seriousness of the threat, and so arranged for a Cabinet briefing on the fires to be held on Monday 13 January.<sup>641</sup>

### ***Meeting of NSW incident management team at Queanbeyan***

Both Mr Bartlett and Mr Castle attended the Queanbeyan meeting of the incident management team at about 6.30 pm on 10 January. Mr Bartlett said he told the team:

It appeared to me, at least, that in their decisions about what was under threat they were considering what was under threat in New South Wales. And I was making the strong point that there was significant assets, both plantations, urban and rural lands, that were directly down wind of the fire they didn't seem to be factoring high in any of the discussions that were being held.<sup>642</sup>

Both Mr Bartlett and Mr Castle said in evidence that they were satisfied that Mr Arthur and the NSW officers accepted that the McIntyres Hut fire posed a threat to ACT assets, and no one at that meeting accused Mr Bartlett of exaggerating the threat.<sup>643</sup> However Mr Bartlett recalls 'some vigorous debate during that meeting about the implementation of the previously agreed control strategy and in particular the commencement of the back burning operations'.<sup>644</sup> Mr Bartlett

argued that there were places along the power line trail (the southern containment line) which went for a distance of eight or ten kilometres where there was already sufficient work done that a fire could have been lit under the influence of a south-easterly wind with very little danger of that fire escaping because it would be burning back into the wildfire. Initially, the response to Mr Bartlett's arguments were negative. In particular, Mr Arthur was clear that he did not want to commence burning out operations until the control lines were complete, primarily because of concerns for the safety of crews working in very steep terrain on that serpentine southern containment line.<sup>645</sup>

However, during the meeting Mr Arthur had a telephone discussion with Assistant Commissioner Shane Fitzsimmons, who confirmed that a request for additional resources made earlier that day by Mr Arthur would be granted, including the use of the Ericsson sky crane.<sup>646</sup> With the IMT assured of additional resources, particularly aircraft, Mr Arthur told the meeting that the burning out operations would commence along the southern control lines the following day.<sup>647</sup> Mr Bartlett offered to provide resources to assist with the back-burning operations, including a D8 bulldozer that was floated in that evening.<sup>648</sup>

## 5.6 11 January 2003

### 5.6.1 ESB assessment and strategy

Immediately upon commencing work on the morning of 11 January, Mr McRae assessed the overnight fire activity, and concluded that there was 'nothing remarkable or unanticipated about the development of the fires'.<sup>649</sup> However, during that morning it became clear to Mr McRae that the combination of temperature, fuel loads, high combustibility of fuels and prolonged easterly air flows meant that the multiple fires then burning in the ACT would not be 'readily extinguished' but, rather, would evolve into 'landscape fires'. This led Mr McRae to conclude that predictive modelling would need to be commenced for the purpose of managing those fires. According to Mr McRae, 'predictive modelling' meant 'modelling or making predictions of where each of the fires was likely to run, in order for the operations personnel then to apply that information to decide where best to place containment lines'. To assist with this modelling, Mr McRae consulted with two fire scientists: Mr Malcolm Gill from the Bushfire Council and Mr Jeff Carey from the Australian National University. These scientists concurred with Mr McRae's view that the fires would develop into 'landscape fires'. To further assist him with predictive modelling, Mr McRae requested linescan data for the ACT fires from NSW Rural Fire Service, in accordance with arrangements that had been put in place for the provision of such data prior to the bushfire season. This data was collected by an aircraft with appropriate instruments, and effectively combined an aerial photograph with a digital image taken with an infra-red camera. This imagery provided Mr McRae with information as to the size, location and perimeter of the various ACT fires, and was provided to ESB by NSW on most days from 11 January onward.<sup>650</sup>

Mr Lucas-Smith and Mr Taylor met with Mr Bartlett, Mr Murphy and other senior ESB operational personnel at Bulls Head at approximately 1.30 pm, marking the first time that Mr Lucas-Smith had attended the fire ground during the incident. Mr Graham said that this meeting was held to assess strategies and objectives and to consider the long-term outlook, and that the SMT took the information gleaned on this field trip into account in formulating strategies and objectives at its afternoon planning meeting.<sup>651</sup> Mr Lucas-Smith said that no significant

changes were made to the SMT's firefighting strategies or objectives on 11 January, and that the SMT agreed 'to continue direct attack to slow the growth of fire as much as possible while we continued construction [of] containment lines'.<sup>652</sup>

### ***Effectiveness of planning***

Mr Graham prepared a strategy outline document for the SMT planning meeting at 10.00 am on 11 January, however this document was a fairly cursory document, most probably prepared only to assist Mr Graham as his speaking notes for the meeting.<sup>653</sup> Mr Lucas-Smith's evidence that this document was clearly not in itself a satisfactory operations briefing, and that 'by this time I certainly would have preferred to have incident actions plans—formal incident action plans in operation'.<sup>654</sup> However, no IAPs were prepared by the SMT for any of the ACT fires on 11 January, or indeed, for several days after. Mr Lucas-Smith's evidence was that the SMT did not have sufficient personnel for the preparation of IAPs, and that this was a deficiency that had been recognised in the December 2001 fires, and in response to which ESB had made a specific request for additional staffing resources in May 2002. However, he also said that operational officers were given adequate verbal briefings, so that the lack of written IAPs did not 'mean there was a deficiency in the planning. It just means there was a deficiency in the documentation of the planning'.<sup>655</sup>

In this context, it is significant that several firefighters at the Bulls Head meeting on the afternoon of 11 January, including Mr Murphy, commented on the excellent quality of the maps that Mr Lucas-Smith had brought with him.<sup>656</sup> Mr Taylor said that field officers told him that that was the first time they had seen maps of sufficient detail for effective planning purposes, and was also the first time that anyone from the SMT's Planning Unit had gone into the field to brief them.<sup>657</sup>

No overnight planning occurred on 11 January despite the fact that the SMT had committed to maintaining 24-hour operations from the time crews were deployed overnight on 10 January<sup>658</sup> and despite the fact that Mr McRae had realised that there was a need for predictive modelling to anticipate fire developments, and to thereby facilitate effective long-term operational planning. It appears that the entire 'SMT' overnight on 11 January was constituted by Mr Dave Jamieson. Mr Lucas-Smith acknowledged in his evidence that no overnight planning occurred that night, and thought that this may have been due to a lack of available resources.<sup>659</sup> However, Mr Castle gave evidence that with respect to the SMT at least, 'resources utilised in the early stages were sufficient to support operations'.<sup>660</sup>

### **5.6.2 Response to the Bendorra fire**

#### ***Strategy***

The decision taken by the SMT on 10 January to shift to an indirect attack strategy began to be implemented from the morning of 11 January, with crews attempting to establish and upgrade containment lines in preparation for burning out operations scheduled to commence that afternoon. Mr Murphy commenced the day shift as incident controller for the Bendorra fire, but at the request of Mr Lucas-Smith Mr Bartlett took over as incident controller during the afternoon. Mr Lucas-Smith described this as an 'upgrading' of field incident control to the level of Deputy CFCO<sup>661</sup>, at which point Mr Murphy became the field operations officer.

It appears that Mr Bartlett was given little information by the SMT to assist him in his role as incident controller, and he gave evidence that lack of planning documents impeded the effective implementation of the indirect control strategy:

When I was deployed to the Bendorra fire on 11th and 12th of January there was no incident action plan or strategic plan regarding the implementation of the indirect suppression strategy. In particular there was no assessment of whether the control lines could be established before they were threatened by the wildfire or of what level of resources would be needed to implement the establishment and consolidation of approximately 22 kilometres of control lines. The operational staff were preoccupied with dealing with the pressing problems of fire threatening the proposed western control lines on both days.<sup>662</sup>

### ***Operations***

Attempts were made throughout the day to establish and consolidate containment lines around the Bendorra fire, with varying degrees of success.<sup>663</sup> Some burning out operations commenced in the late afternoon along completed sections of the containment lines. Mr Murphy said that the resources that he had discussed with Mr Graham the previous day were provided, but that conditions had changed such that he found that he needed more water-carrying appliances and less rake-hoe teams.<sup>664</sup>

On the basis of the linescan data provided by NSW Rural Fire Service, Mr McRae estimated that at 6.00 pm the Bendorra fire was approximately 518 hectares, with a perimeter of 11.5 kilometres.<sup>665</sup>

### ***Overnight operations***

Firefighting was again conducted overnight at Bendorra on 11 January under the direction of Mr Neil Cooper. Mr Cooper was critical of the fact that as incident controller he received no IAP or other written material before or on his arrival at the fire, such as detailed maps and resource lists, and that he was given only a verbal briefing by Mr Bartlett.<sup>666</sup> Mr Lucas-Smith acknowledged in his evidence that an IAP would clearly have been helpful, but was of the view that the verbal briefing by Mr Bartlett should have been sufficient.<sup>667</sup> Mr Cooper stated that in the absence of an IAP:

I independently developed the strategies for overall control of the fire and the tactics that were to be implemented overnight to achieve those strategies in consultation with the previous IC (Tony Bartlett). I was operating as Incident Controller however I had no support in the form of an IMT—I appointed several of the senior Parks officers to sectors, however in reality I also filled the role of the Operations Officer for that evening. I had no idea where the Bendorra fire fitted in relation to all the other fires and whether any actions that I may have implemented would affect those other fires.<sup>668</sup>

Mr Cooper's evidence was that his crews struggled to contain the fire overnight, and he noted that 'it was obvious to Blind Freddy at that stage that we were in some pretty great bother'. He said that although there was a chance of holding the fire within containment lines overnight, the lines established during the day were 'pretty marginal at best and as they proved they just couldn't hold'. Mr Cooper said that he was concerned that they were working against time to complete burning out and blacking out operations on 'a very large fire with a huge perimeter' before the next bad weather arrived.<sup>669</sup> Accordingly, he said that his crews 'were actively undertaking burning operations at the Bendorra fire and were desperate for extra resources to be able to get more of the containment line secure before the following day'.<sup>670</sup>

Aware that the ACT taskforce sent to assist NSW was being withdrawn from the McIntyres Hut fire (see below), and concerned with the lack of resources available to him at Bendorra, at 1.33 am Mr Cooper made a ‘very urgent’ request to ComCen that that ACT taskforce to be re-tasked to assist at Bendorra. Mr Jamieson, who alone constituted the IMT at Curtin overnight, denied this request, explaining to Mr Cooper that those units were required for deployment at 6.00 am that morning. Mr Cooper pointed out that that still left three hours for those units to assist him prior to shift changeover, however Mr Jamieson denied the request.<sup>671</sup>

Mr Cooper was also critical of the lack of overnight planning at Curtin, which meant that no IAP was prepared for Bendorra for the following day shift. Mr Cooper said this lack of planning contributed to the insufficient allocation of resources to that fire for the shift changeover on the morning of 12 January:

My message radioed into ComCen that morning at about 5.30 clearly stated that I felt that they would have difficulty in holding the fire that day and would require a lot of resources. So I was very surprised when I found out that very few resources had been allocated—a good example of the implications of not having a well thought-out and planned Incident Action Plan. Again, no overnight incident management team to prepare this document.<sup>672</sup>

### **5.6.3 Response to the Stockyard Spur fire**

The lack of obvious containment lines for the Stockyard Spur fire and the decision by the SMT to focus resources on the Bendorra fire meant that no active firefighting took place on the Stockyard Spur fire on 11 January. According to Mr Graham, ‘Planning for the controlled suppression of the Stockyard Spur fire continued throughout the day, although no ground crews were assigned to combat that fire’.<sup>673</sup> Some reconnaissance and aerial water bombing of the fire occurred, however the primary focus was on planning a containment strategy, and throughout the day Mr Lhuade and Mr Sayer continued to work on an IAP, in consultation with Mr Taylor and Mr McRae.<sup>674</sup>

On the basis of linescan data provided by NSW RFS, Mr McRae estimated that by 6.00 pm the Stockyard Spur fire was approximately 336 hectares, with a perimeter of 7.7 kilometres.<sup>675</sup>

### **5.6.4 Response to the Gingera fire**

As for the Stockyard Spur fire, the primary objective for the Gingera fire on 11 January appears to have been the development of an effective containment strategy. However, in addition to developing this strategy, on 11 January crews worked to prevent the Gingera fire from crossing Mt Franklin Road, with two tankers deployed to the fire under the command of Mr Steve Angus. Beyond this work to prevent the fire crossing Mt Franklin Road, no direct suppression action was attempted, and crews were withdrawn at 6 pm.<sup>676</sup>

On the basis of linescan data provided by NSW RFS, Mr McRae estimated that by 6.00 pm the Gingera fire was approximately 209 hectares, with a perimeter of 7.6 kilometres.<sup>677</sup>

### **5.6.5 Response to the McIntyres Hut fire**

Work continued on establishing containment lines throughout 11 January, and in accordance with the decision reached by the IMT the previous evening, from late morning some burning out

operations commenced along completed sections of the containment lines.<sup>678</sup> An ACT taskforce under the command of Mr Winter arrived at the fire at approximately 11.30 am, and was tasked to assist with burning out operations along the southern containment line. However, despite being advised that the taskforce would be deployed overnight, at approximately 10.00 pm Mr Winter was advised by ComCen to withdraw by midnight. Mr Graham said that this decision was made because the appliances were needed to be deployed to Bendora the following morning at 6.00 am, and this was also the reason why Mr Cooper's request to re-deploy those crews to Bendora was refused (as noted above). Mr Winter believed that the early withdrawal of the ACT taskforce may well have led to a halt in back-burning operations that night<sup>679</sup> and recalled that 'we were pretty frustrated we were being withdraw as conditions were perfect for a back burn'.<sup>680</sup> Mr Cheney agreed that the withdrawal of ACT crews may have led to the postponement of the burning operations scheduled for that night, and said that the unilateral change of tactics by the ACT in this context 'reflects a poor understanding of fire ground management'.<sup>681</sup> However, Ms Crawford said that while the withdrawal of the ACT crews at midnight reduced the amount of back-burning that could be undertaken, some burning operations were nevertheless able to continue overnight on 11 January.<sup>682</sup>

## 5.7 12 January 2003

### 5.7.1 ESB assessment and strategy

Throughout 12 January, the SMT continued to implement an indirect attack strategy. However, by the afternoon, Mr Lucas-Smith was aware that the fires were 'continually breaking our containment lines' and that the containment strategies then in place would require additional resources to successfully implement.<sup>683</sup> In his statement, Mr Lucas-Smith described the fire developments during the afternoon of 12 January 2003 as follows:

During the afternoon, the Bendora fire crossed the main containment lines to the west and later that day crossed the border into NSW. With the fire now on both sides of Mt Franklin Road, being the only north-south access road, significant safety concerns were now evident. Later at about 16:00 hrs, the Stockyard Spur fire also crossed Mt Franklin Road north of the Pryor's Hut area. This posed additional safety concerns for crews working south of Pryor's Hut on the Mt Gingera fire as their escape route was now compromised.<sup>684</sup>

A planning meeting was held at Curtin at 4.00 pm. The meeting discussed reports that the Bendora fire had broken containment lines at approximately 3.00 pm, that the Stockyard Spur fire had made runs to the north and west, and that the Gingera fire was spreading with 'few containment options'.<sup>685</sup> Mr McRae said that at the meeting there was general discussion about the significant escalation of the fires, and the large burn-out areas that were involved by reason of the limited containment options. The meeting also recognised that resources were required beyond what the ACT could provide, and that accordingly no further ACT resources could be provided to NSW.<sup>686</sup> Mr Lucas-Smith gave evidence that by late on 12 January, he considered that the chance of successfully containing the fires with the resources then allocated was probably less than 50 per cent. Moreover, ACT crews been unable to stop any of the fires from growing, although the rate of spread of some backing fires had been slowed to some extent, so as to facilitate the construction of containment lines.<sup>687</sup> In Mr Lucas-Smith's view, the fire situation by late on 12 January necessitated a shift to alternative arrangements.<sup>688</sup>

### **5.7.2 ESB media**

In his evidence, Mr Lucas-Smith agreed that his assessment of the fires (and similar information in Mr Graham's statement<sup>689</sup>) was at odds with a media release issued by the ESB at 6.30 pm on 12 January 2003, which referred to firefighters managing to 'reduce the rate of spread' and being 'successful in reducing the growth rate' of the three ACT fires.<sup>690</sup> The release accurately noted ESB's expectation that all three fires 'would continue to burn for at least some time to come'.

Mr Castle agreed that the media update issued by ESB at 6.30 pm on 12 January reflected an overly optimistic view of the state of the fires that afternoon.<sup>691</sup> He also conceded that the opening paragraph in an earlier draft of the media release provided a more accurate assessment of the fire situation, stating that 'the three fires in the Namadgi National Park have continued to grow during the day today'.<sup>692</sup> Mr Castle acknowledged that this original text differed from the final version of the media release, that referred to firefighters being successful in reducing the growth of the fires, and he believed that the changes might have been made by the media unit. However, Mr Castle did not think there was a conscious policy to present an optimistic outlook, except to recognise the individual efforts of firefighters.<sup>693</sup> Mr McRae, on the other hand, maintained that the *rate* of growth of the fires had in fact been reduced, although this did not mean that growth of the fires had been slowed or stopped.<sup>694</sup>

Mr Castle was asked about the reference in the media release to the ESB 'keeping informed about two New South Wales fires that are close to the ACT borders, one at McIntyres Hut to the north and the other at Mt Morgan to the south-west of the ACT'. Mr Castle agreed that anyone reading the media release would form a view or have an expectation that if there was something about one of those fires that the community needed to know, the ESB would let them know about it.<sup>695</sup>

### **5.7.3 ESB seeks additional resources**

Recognising that the ACT did not have sufficient resources to effectively contain the three fires within its jurisdiction, Mr Lucas-Smith instructed Mr Castle to request additional resources from Emergency Management Australia, a Commonwealth agency.<sup>696</sup> At 8.30 pm Mr Castle made a verbal request to EMA for four helicopters and four bulldozers, to arrive the following day for a period of seven to 14 days. He was subsequently advised by EMA that it would provide two Seahawk helicopters with water buckets and two Squirrel helicopters for reconnaissance/observation, and that the dozers were also likely to be provided. In accordance with standard practice, a written document formalising the above request was sent the following morning.<sup>697</sup>

### **5.7.4 Response to the Bendorra fire**

#### ***Strategy***

When Mr Bartlett arrived at Bulls Head early on 12 January 2003 for the morning briefing on the Bendorra fire, he was given no briefing material, such as forecasts, updated fire maps or an incident action plan, and there was no input from the planning section of the SMT regarding the strategies to be employed on the Bendorra fire that day. In this regard, Mr Bartlett's evidence was that:

Normally under the incident control system, the planning unit, wherever it is located, is responsible for two key things: broad long-term strategic planning and also detailed planning developing incident action plans for the following shift. Now in my view it doesn't matter where that is done, whether it is done in a headquarters or close to the fire—it would depend on the circumstance of the fire—but it has to be done.<sup>698</sup>

As noted above, Mr Cooper completed the night shift by advising ComCen that considerable additional resources would be required to effectively fight the fire during the day shift on 12 January. Mr Cooper described the handover, carried out in the absence of a written IAP: ‘Again the handover was based on overnight observations and recommendations from the overnight IC (me) as to what should be done during the day. I recall commenting to Tony Bartlett that he may as well “... piss on it ...” as come up with the small number of resources that had been allocated’.<sup>699</sup>

According to Mr Bartlett, the failure to establish an adequately resourced forward control point close to the fire ground led to numerous delays and inefficiencies, with almost 90 minutes lost before crews deployed to the Bendora fire could be identified by him and then moved into their allocated sectors. In Mr Bartlett’s view, if the changeover had been well planned before crews arrived, it could have been completed within 30 minutes. Mr Bartlett raised his concerns about the lack of operational planning with Mr Graham, arguing that they needed a forward control point with some planning and logistical capability in order to record and manage resource movements. Mr Graham later allocated some support staff to go to Bulls Head, but indicated that they would only be there to assist with crew changeovers, and that the main planning function would remain at Curtin.<sup>700</sup>

Some planning for the Bendora fire did occur at Curtin on 12 January. At 9.30 am a Situation Analysis Form was prepared by Mr Hilton Taylor, outlining three alternative containment strategies for the Bendora fire.<sup>701</sup> Mr McRae reviewed the three strategies at around midday. The first proposed strategy identified containment lines that would create a relatively small containment area, but this strategy was estimated to have only a 15 per cent chance of success. Accordingly, Mr McRae recommended the second alternative, which was based on a larger containment area than the first alternative, but which had an estimated 50 per cent chance of success. (The third alternative proposed an even larger containment area than the second, but with no greater chance of success.) Mr Graham and Mr Lucas-Smith also reviewed this strategy document at around 12.15 pm, agreeing on a strategy of continued indirect attack within the parameters established by the second alternative.

### ***Operations***

Despite ongoing attempts by crews to establish and maintain containment lines, the Bendora fire grew considerably during 12 January.<sup>702</sup> At approximately 3.00 pm the fire broke containment lines along Mt Franklin Road, and at approximately 3.40 pm the fire crossed Moonlight Hollow Road in several places. This forced crews to abandon the original containment strategy, and to fall back to the Honeysuckle Track and Brindabella Valley Road. In Mr Graham’s view, these break-outs also raised ‘considerable safety concerns ... with access and egress routes now compromised’.<sup>703</sup>

Mr Cheney estimated that by the end of Sunday 12 January 2003 the area burned by the Bendora fire was 878 hectares.<sup>704</sup>

### **5.7.5 Response to the Stockyard Spur fire**

Apart from some aerial water bombing of hot spots, and possibly some limited dozer work along the Stockyard Spur trail, no other suppression action was undertaken on 12 January, and the fire continued to grow.<sup>705</sup> Mr Lhuede and Mr Sayer continued to work at Curtin on preparing a containment strategy for the fire, however by this time Mr Lhuede believed that it was inevitable that the Stockyard Spur and Gingera fires would join.<sup>706</sup>

Mr Cheney estimated that by the end of Sunday, 12 January, the area burned by the Stockyard Spur fire was 979 hectares.<sup>707</sup>

### **5.7.6 Response to the Gingera fire**

Mr Lhuede and Mr Sayer continue to work on a combined containment strategy for the Gingera and Stockyard Spur fires. No suppression action was undertaken at the Gingera fire on 12 January.<sup>708</sup>

Mr Cheney estimated that by the end of 12 January the area burned by the Mount Gingera fire was 346 hectares.<sup>709</sup>

### **5.7.7 Response to the McIntyres Hut fire**

#### *Strategy*

It appears that the potential for the McIntyres Hut fire to impact on the ACT if it escaped containment—a threat acknowledged as far back as the initial planning meeting on 8 January—continued to be a factor under consideration by the NSW IMT on 12 January. A situation report prepared by Ms Amanda Sullivan at Queanbeyan at 4.00 pm stated that the McIntyres Hut ‘fire still poses a threat to the ACT, if it escaped from the current containment lines’.<sup>710</sup> Mr Arthur gave evidence that situation reports such as that prepared by Ms Sullivan were completed every 12 hours based on a precis of what has occurred in the last 12 hours, and were circulated through the IMT, and would also have been available to the liaison officers from the ACT.<sup>711</sup>

Mr Phil Koperberg said that on 12 January he had a ‘brief discussion’ with Mr Arthur about the possible scenarios that might arise if the McIntyres Hut fire breached containment lines under the adverse conditions then being forecast for 18 January, and that one of the scenarios discussed was that the Canberra suburbs could be affected by the fire. However, Mr Koperberg said that this was raised as a ‘worst case scenario for Canberra’ based on his ‘characteristically pessimistic’ approach, and on a very long range weather forecast for 18 January that would be likely to change. Hence Mr Koperberg’s evidence was that, ‘in the absence of confirmation about the weather, there was no reason to suppose that any particular fears were going to be realised’.<sup>712</sup>

Mr Arthur gave evidence that he did not recall discussing a threat to the Canberra suburbs with Mr Koperberg on 12 January, but that the possibility of the containment lines being breached was ‘constantly’ at the back of his mind as a contingency, and that he believed that if that contingency occurred, then the fire would cross the ACT border and get into the Uriarra Pines. Mr Arthur’s evidence was that ‘the very moment you draw a containment line on a map you look at the next step back’. However, he said that if the fire did break containment, then he expected

that crews would fall back to re-establish containment lines to stop the fire in the dry grasslands, and that he did not see Mt Stromlo as at risk.<sup>713</sup>

### ***Operations***

Throughout 12 January crews continued to work under the direction of Mr Arthur to secure and consolidate containment lines, as detailed in Mr Cheney's report.<sup>714</sup>

## **5.8 13 January 2003**

### **5.8.1 ESB assessment and strategy**

When Mr McRae started work on the morning of Monday 13 January he was updated by ComCen about the developments overnight on each of the fires. His evidence was that:

... the detail that struck me as being of most significance was that the fires from Bendorra and Stockyard Spur had become established to the west of the Mt Franklin Road meaning a significant escalation in the probable size and seriousness of these fires to the west and so the possibility of the fires looping round to re-enter the ACT outside established or proposed containment lines.

Hence Mr McRae was aware of the risk of ‘the fires looping round to re-enter the ACT’ if there was a wind change to the north north-westerly direction, and was aware that a wind change of this kind was expected as part of the ACT’s summer weather cycle, and had been predicted in the Bureau of Meteorology’s long-range forecasts. However, his evidence was that he only planned for this eventuality ‘in general terms’, and that he could not make specific plans ‘because there were no specifics on the 13th for me to work to’. His evidence was that he could ‘only go out as far as the long range computer weather models will allow me to go ... I had no experience of this sort of weather pattern so I couldn’t go beyond what I had available in the model’. Mr McRae said that at this stage he did not consider that the fires posed a threat to the suburbs of Canberra.<sup>715</sup>

Aware of the growing risk posed by the escalating fires, however, Mr McRae decided ‘that much more technical infrastructure was required particularly in areas of meteorology, geographical information systems and fire behaviour analysis’.<sup>716</sup> Accordingly, he asked Mr Bill Woodruff to take over as Planning Officer for the day so that Mr McRae could concentrate on establishing the required technical infrastructure. Mr McRae arranged for Ms Tina Bell to be transferred from Queanbeyan to ESB as a GIS officer, and then sought to obtain the services of a fire analyst. He had some difficulty in finding a fire analyst able to assist the Planning Unit, but Mr Nick Gellie, a private consultant in ecology and geographic information systems, did agree to provide what fire analysis assistance he could, and commenced work at Curtin the following morning in a volunteer capacity. McRae cannot recall if he tried to contact Mr Phil Cheney to seek his assistance as an expert in fire analysis.<sup>717</sup>

By 10.30 am on 13 January 2003, Mr Lucas-Smith’s evidence was that it had crossed his mind that the ACT fires in combination with the McIntyres fire might reach a point where urban Canberra was at risk. He was not certain whether this possibility had crossed his mind earlier. However, his evidence was that while he had certainly considered whether people on the western edge of Canberra could be affected by the fires, at this time he ‘did not believe it was a realistic

prospect’: ‘It is a matter of trying to work out at the end of the day how far it could actually go without any intervention and with worst case weather and whether or not we are going to get that sustained. The potential exists for it to go all the way through to the Pacific Ocean’.<sup>718</sup>

In this context, Mr Lucas-Smith said that even if conditions continued to deteriorate and the fires crossed existing containment lines, he believed there would be opportunities for firefighters to re-establish containment of the fires utilising the natural barriers between any fire break-outs and Canberra, in particular the Murrumbidgee River and the large expanse of open grasslands to the east of Canberra.<sup>719</sup>

### ***Involvement of other emergency services***

On 13 January, Commissioner Bennett had still received no direct or indirect indication from the SMT that urban Canberra was under threat, or that the Fire Brigade would be called on to assist in any way other than in general support of the Bushfire Service’s operations.<sup>720</sup>

From 13 January, David Dutton of the ACT Ambulance Service also started to attend ESB Planning Meetings. He said that he attended in his capacity as the officer with responsibilities for emergency and non-emergency operations, and with responsibility for emergency management and mass casualty incident planning. Mr Dutton said that he attended in order to keep abreast of developments, so that the Ambulance Service could continue to provide effective support to the Bushfire Service.<sup>721</sup>

### ***A request for Commonwealth assistance***

At 10.55 am, Mr Castle sent the first of what were to become a number of formal requests for Commonwealth physical assistance in the form of resources.<sup>722</sup> This first request was for helicopters and dozers, and followed up a verbal request made at approximately 8.30 pm the evening before (as noted above). Mr Castle explained in his evidence that, in order to justify to the Commonwealth why it should provide assistance, it was necessary to provide a frank assessment of the current state of the emergency, ‘as best it can be put to justify the resources’.<sup>723</sup> Mr Castle explained that he was generally assisted in preparing these written requests for Commonwealth assistance by Ms Kate Keane, but said that because he signed the requests, he would need to be comfortable with their contents.<sup>724</sup> Mr Lucas-Smith had no part in the preparation of these requests.<sup>725</sup>

In this first request for assistance from EMA, Mr Castle described the ‘situation’ as follows:

There are currently three uncontained bushfires within the ACT that are threatening the ACT water catchment areas. Another large fire just outside the ACT border to the north-west is also causing serious concern with a further fire in New South Wales just to the south-west of the ACT. Containment of the fires has been unsuccessful to date due to the remote and difficult terrain. ACT Government resources are severely stretched responding to both the ACT and assisting with the NSW fires.

Later in the document, referring to the McIntyres Hut fire, Mr Castle stated, ‘This fire is very large and with a wind change and no containment poses a substantial threat to the ACT’.<sup>726</sup> However, in evidence Mr Castle said that at this time he believed that the McIntyres Hut fire posed a ‘potential’ threat rather than a ‘genuine’ threat or a ‘substantial’ threat to urban Canberra.<sup>727</sup>

An additional and separate request was also made to EMA on 13 January for a Jet A1 aviation fuel tanker with a 10 000 litre capacity, to reduce refuelling times for aerial resources engaged in the fire suppression effort.<sup>728</sup>

### 5.8.2 An interview on ABC Radio

At 11.55 am on 13 January 2003 Mr Castle was interviewed on ABC Radio 666 having stepped out from a briefing he was giving to the Chief Minister.<sup>729</sup> In introducing the interview, the interviewer said:

Anyone who was driving around Canberra over the weekend would have been shocked and appalled to see the plumes of smoke rising up over the Brindabellas and it apparently is the case that two bushfires in the Namadgi National Park have spread across the border into New South Wales and fires, at least, some of these fires are burning out of control at the moment.

The interviewer asked whether that means there are larger catastrophes ahead, to which Mr Castle responded, ‘Well, not to be too alarmed Kerry, but they are serious. They’re uncontained, so “out of control” sounds a little bit more dramatic perhaps than the terminology we use’.

Later Mr Castle referred to the fires being susceptible to wind changes and continued, ‘But our most prevailing winds is from north-north-westerly and that gives us 180 degrees, and would bring the fires back into us and back onto us in a much wider front. So, that’s the concern we actually have’.

Mr Castle conceded in the interview that the ACT Emergency Services did not have enough resources to handle the fires, and that additional resources had been requested from the Commonwealth. He then explained that the very large fire that was responsible for a lot of the smoke that people were concerned about in the Belconnen area was actually burning north-west of the ACT border, and that ‘with prevailing winds from that direction, [that fire] would come back on a very large front’. In evidence, Mr Castle confirmed that in making these comments, he was talking about the McIntyres Hut fire and that he was not having any difficulty providing information about the McIntyres Hut fire based on what information he had.<sup>730</sup>

Mr Castle was then asked directly by the interviewer, ‘If that wind does swing around to the north-west, could it come as far as Canberra? Could it threaten Canberra?’ Mr Castle responded:

I wouldn’t want to be that dramatic. What we actually try to do is establish a series of containment lines between that, but you are talking about fairly significant fires, and at the moment, of course, whilst people can see them as smoke, smoke is, as you indicated, going away from us, so they don’t look particularly large from down in the urban area, but they could present—quite a significant impact, but there’s a lot between where they currently are and the urban edge.

In evidence, Mr Castle did not agree that the answer he gave was down playing the threat. He thought he was trying to give a realistic and balanced assessment.<sup>731</sup>

### **5.8.3 The briefing to Chief Minister Stanhope**

The briefing to Mr Stanhope referred to by the ABC Radio interviewer was a briefing being given by Mr Castle and Mr Lucas-Smith shortly before Mr Lucas-Smith and Mr Stanhope left on a helicopter flight to view the fires.<sup>732</sup> Also present at the briefing were Bill Wood (Police and Emergency Services Minister), Mr Tim Keady, Mr Robert Tonkin and Mr Alan Thompson (Chief Executive of Department of Urban Services).

During that briefing, Mr Lucas-Smith told Mr Stanhope where the fires were burning at that particular time and what the ESB was doing to contain them. He did not remember Mr Stanhope asking about the prospects of successfully controlling the fires, or recall Mr Stanhope raising with him any prospect of Canberra itself being affected by the fires. Mr Lucas-Smith agreed that he was certainly thinking about the fire event continuing to escalate, and a whole range of different fall back options, but maintained that he was not thinking at this time that the fires posed a threat to urban Canberra.<sup>733</sup>

Mr Stanhope said that briefing was conducted primarily by Mr Lucas-Smith, and that in response to what he was told he felt satisfied with the appropriateness and professionalism of ESB's response to the fires. He did not recall any discussion of a threat to urban Canberra being raised at the meeting.<sup>734</sup> Mr Thompson's notes of the meeting refer to the steps being taken by ESB to combat the ACT fires, to the discussions with NSW about resourcing the McIntyres Hut fire, and to forecast conditions. His notes contain no reference to the fires posing a threat to urban Canberra.<sup>735</sup> Mr Tonkin's notes also contain no reference to a threat to urban Canberra. However, at that meeting Mr Tonkin suggested that the Ministers get a 'below the line' discussion at Cabinet on Thursday on options and priorities if the situation deteriorates'.<sup>736</sup>

During the reconnaissance flight by Mr Lucas-Smith and Mr Stanhope, a locally contracted firefighting helicopter ditched in the Bendora Dam, and Mr Lucas-Smith and Mr Stanhope assisted with the rescue of the helicopter pilot. Mr Castle asked Commissioner Bennett to establish a separate Fire Brigade IMT to deal with the crash, so that the Bushfire Service SMT could continue to focus on the bushfires. Once the pilot had been rescued, Mr Bennett said that Fire Brigade's 'predominant concern was the potential for contamination of the dam through a fuel leakage that could have resulted from the incident'. The salvage operation was a coordinated effort between a contracted aircraft salvager, the Australian Federal Police, ACTEW and the Fire Brigade.<sup>737</sup> (The Fire Brigade successful recovered the helicopter without any substantial contamination of the dam occurring.)

### **5.8.4 A telephone call from Mr Cheney to Mr Lucas-Smith**

On Sunday 12 January 2003, Mr Cheney conducted his own reconnaissance of the three ACT fires and of the McIntyres Hut fire, and concluded that it would not be possible to get the fires under control within the next five to six days. He was contacted by the CSIRO press liaison officer on Monday 13 January, who was handling enquiries from the media, and who had arranged for Mr Cheney to talk to WIN Television. Mr Cheney said that in response to this call:

I then rang Mr Lucas-Smith on the Monday afternoon, towards the evening, and advised him that I was going to be asked questions by WIN Television and I expressed my opinion to Peter that, if they asked me, I would have to tell them that in my opinion it was a very dangerous situation and that these fires were likely to burn into Canberra.

According to Mr Cheney, it was clear that a wind change to the west was going to happen and it was just a matter of when, and he believed that it was unlikely that the fires would be brought under control before that change arrived. Mr Cheney thought his words to Mr Lucas-Smith were expressed ‘as an unqualified statement that if we got strong westerly winds we would get the fire into Canberra’.<sup>738</sup>

Mr Cheney believed that Mr Lucas-Smith’s response to his prediction was, ‘That’s fine, Phil. That’s our opinion too’. Accordingly, Mr Cheney concluded that the ESB was fully aware of the threat the fires posed to urban Canberra.<sup>739</sup> Mr Cheney said that his conversation with Mr Lucas-Smith was a serious conversation ‘because I had been approached by the press and I wanted Mr Lucas-Smith to know what my opinion was’.<sup>740</sup>

When the matter of Mr Cheney’s telephone call was first raised with Mr Lucas-Smith during his evidence, he agreed that he had had the conversation with Mr Cheney and that Mr Cheney said that he would say to WIN Television that the situation was very dangerous. He did not agree that Mr Cheney said that it was likely that the fires would burn into Canberra.<sup>741</sup> However, after Mr Lucas-Smith was referred to a document detailing what was said at the planning meeting<sup>742</sup>, he agreed he conceded that he was ‘told by Mr Cheney that he [Mr Cheney] held the view that, given the particular weather conditions, north-westerly wind, that the fire could burn into Canberra’.<sup>743</sup> Earlier in his evidence, Mr Lucas-Smith had said that he had the utmost respect for Mr Cheney as a fire behaviour expert and that the expression of an opinion by Mr Cheney on this subject was not something that he would do lightly.<sup>744</sup>

### 5.8.5 Response to the Bendorra fire

According to Mr Graham’s briefing notes from 9.40 am that morning, the objective for the Bendorra fire for 13 January was ‘to continue to secure the [western] and [southern] flanks, and to slow the spread on the [northern] flank’.<sup>745</sup> Mr Galvin served as incident controller during the day shift at Bendorra on 13 January 2003. He said that in the absence of a written IAP, he had to source his own maps and other materials from planning officers at Curtin, and that he had to rely on the verbal briefing from the outgoing incident controller, Mr Murphy, when he arrived at the fire.<sup>746</sup>

During the morning and early afternoon, crews attempted to hold the Bendorra fire on Parrot Road by back-burning and trying to stay ahead of the flank of the fire as it spread south of Little Collins Creek. Parrot Road was overgrown and crews experienced considerable difficulty with smoke and heat blowing across the area where they were working. At approximately 3.00 pm a head fire burned up the spur between Little Collins Creek and Collins Creek and spotted across Parrot Road, forcing the firefighters to withdraw. From around 3.00 pm, back-burning was commenced along the Bendorra Break east from Warks Road down towards the Bendorra Dam. Mr Galvin described the situation at Bendorra on 13 January as follows:

Trying to contain this fire was proving difficult. Over the following days we just had to keep pulling back from line to line. The fire trail network, with its numerous twists and turns and inconsistent width ... combined with dry conditions, hindered most back-burning operations. It was very easy for fires to spot over and turn into another fire ... As each containment line didn’t work we had to then pull back to the next lot of containment lines.<sup>747</sup>

Later in the evening, back-burning was carried out along Mt Franklin Road from the southern intersection with Chalet Road north towards Bulls Head.

By the end of 13 January, the area burned by the Bendora fire was estimated by Mr Cheney to be 1212 hectares.<sup>748</sup>

### **5.8.6 Response to the Stockyard Spur and Gingera fires**

Throughout 13 January Mr Lhuede and Mr Sayer continued to work on an IAP for both of these fires, and preparations were made for containment operations to commence the following day. Mr Graham stated that ‘planning for the management of this fire continued throughout the day during which time I had a number of discussions about possible objectives and strategies for the containment of this fire’.<sup>749</sup>

There was effectively no suppression action on either of the Stockyard Spur or Mount Gingera fires on 13 January. The Stockyard Spur fire continued to expand on all perimeters, but primarily to the west, while the eastern flank burnt slowly down the steep slopes above the Corin dam. Meanwhile, the Gingera fire spread slowly down the western side of Mount Gingera, but remained to the west of the Mt Franklin Road.<sup>750</sup>

### **5.8.7 Response to the McIntyres Hut fire**

Crews continued to work to consolidate control lines in the face of increased fire activity. The attempt to control the Baldy Range spot fire was finally abandoned on 13 January, with the effect that the Firebreak trail was adopted as the new eastern containment line, running along the eastern perimeter of Brindabella National Park.

## **5.9 14 January 2003**

### **5.9.1 Interview with Mike Castle**

Mr Castle was again interviewed during the morning by ABC Radio 666 concerning the status of the fires in the ACT and NSW. The interviewer referred to Mr Castle having said that: ‘there’s a concern the wind change could see new outbreaks from fires burning over the border in New South Wales’. This was followed by a ‘grab’ of Mr Castle’s comment in response:

Unfortunately, it could. And we are meeting again this morning—our planning teams are meeting, to work out the joint strategy particularly for the fire northwest of us in the Brindabella National Park, and that was the largest fire in the particular region, and growing at the same relative rates that our fires have grown.<sup>751</sup>

Mr Castle confirmed in evidence that his reference to the fire in Brindabella National Park was to the McIntyres Hut fire, and that he was not having any difficulty providing information about the McIntyres Hut fire, ‘within the information we have’.<sup>752</sup>

Mr Castle also gave evidence that a permanently rostered media cell was established at ESB from 14 January onward, and that he had the overnight Duty Manager at Curtin contact him

every morning at 6.00 am with a briefing on significant developments so that he could provide up to date information to the media.<sup>753</sup>

## 5.9.2 ESB assessment and strategy

### *Commencement of formal planning meetings*

The planning meeting held at Curtin at 09.30 am on 14 January 2003 was the first during the January 2003 fires at which formal minutes were taken.<sup>754</sup> From this point on planning meetings were held at approximately 9.30 am and 4.00 pm each day and were chaired by Mr Lucas-Smith as the Chief Fire Control Officer. Minutes were taken at all of these meetings. The purpose of the planning meetings was to enable the SMT to formulate objectives and strategies, and to ensure that information was shared between agencies, cells within agencies, liaison officers and other relevant personnel. Accordingly, the meetings were held as ‘an open forum and anyone could come along and participate and contribute’.<sup>755</sup> Members of the SMT and Mr Castle were usually present, but not always. Mr Keady attended ‘a large number’ of these meetings, too.<sup>756</sup> As the fire progressed, planning meetings increased in size, with forty or more people attending the meetings held later that week. With the large number of people in attendance, no list of attendees was kept.

Ms Kate Keane and Ms Jillian Ferry both attended the planning meetings and made notes of what was discussed at the meetings. In taking the notes, Ms Keane and Ms Ferry’s approach was to attempt to write down what was said at the meeting, sometimes using their own abbreviations or shorthand.<sup>757</sup> Once the meetings had finished, they went to Ms Ferry’s workstation, consulted their notes and prepared typed minutes of the meeting. When they had formulated a draft that they felt most closely reflected what was said at the planning meeting, they provided that draft to the senior officers in the operations and planning cells for comment. The final draft then went to Mr Lucas-Smith for authorisation.<sup>758</sup>

### 5.9.3 The morning planning meeting

During the morning planning meeting on 14 January, Mr Graham provided an overview of the current fire situation, indicating that all of the ACT fires were continuing to expand, particularly to the west, but that crews were holding the Bendora and Gingera fires along their eastern containment lines.<sup>759</sup>

Mr McRae relayed a weather forecast, indicating that the winds that day would flow in a north-west direction, changing to an easterly direction in the evening. He said that this wind change would require careful planning between 1.00 pm and 7.00 pm and that incident controllers should be briefed on this forecast.<sup>760</sup> He also stated that the Planning cell needed the assistance of a Bureau of Meteorology liaison officer on a full time basis. Later that day Mr McRae contacted Mr Mason, the Acting Officer in charge of the Bureau of Meteorology office at Canberra, and requested that he attend the ESB the following morning to provide a face to face briefing on weather conditions.<sup>761</sup> Mr McRae was particularly interested in the extended outlook to seven days or so in advance.<sup>762</sup> Mr Mason agreed to this and attended the morning planning meetings on 15, 16 and 17 January. Clem Davis of the Bureau of Meteorology attended the meeting on the morning of 18 January.<sup>763</sup>

Consistent with the forecast discussed at the morning planning meeting, Mr Castle noted in his statement that it was the first time since 8 January that the ACT had experienced a north westerly

or westerly in the afternoon, and that Belconnen was engulfed in smoke: ‘It blanketed Belconnen and there were reports of burnt ash in yards etc. That heightened the media interest in the fires because it brought the smoke much more into Canberra’.<sup>764</sup>

No change was made at this meeting to the indirect fire suppression strategy that had been in decided on and put into effect over the previous days.<sup>765</sup>

#### 5.9.4 The afternoon planning meeting

The planning meeting at 4.00 pm on 14 January 2003 was the meeting at which Mr Lucas-Smith referred to his telephone conversation the previous evening with Mr Cheney, as discussed above. However, before that matter was raised, there were reports to the meeting on fire operations and planning. Mr Graham reported in relation to Bendorra, ‘Fire breaks cover 50–60% of the total fire ... the current area of concern is the north-western part of the fire ... Operations are unsure of the western edge of area of the fire, as aircraft have been unable to undertake reconnaissance due to weather conditions’.<sup>766</sup>

This is somewhat at odds with Mr Lucas-Smith’s statement, which referred to being ‘pretty close to having our containment lines established around the Bendorra Fire’ by late afternoon on 14 January. In evidence, Mr Lucas-Smith was more precise:

Certainly the eastern and southern edges of the Bendorra fires were contained, yes, or getting close to being contained. If I remember correctly, there were some areas that our back-burning had not been deep enough, and that needed more work, but as far as the plant operations were concerned, it was primarily complete.<sup>767</sup>

Mr Graham’s evidence was that at this time he was ‘hopeful’ that Bendorra would be contained by 15 January, so that crews could concentrate on containing the Stockyard Spur and Gingera fires on 16 January before the onset of the adverse weather conditions that were predicted to arrive on Friday 17 January.<sup>768</sup> Mr Graham also reported to the meeting on the progress with the Stockyard Spur and Mount Gingera fires.

In his statement Mr McRae referred to having concerns about holding containment lines around the Stockyard Spur fire. In particular, he warned the meeting that the Stockyard Spur fire had crossed its initial containment lines, necessitating a fall-back to a line that would need to be constructed through over 8 kilometres of bush between Mt Franklin and the Corin Dam wall—a ‘massive undertaking’ that Mr McRae considered had only ‘a low chance’ of holding the fire, even if it could be established in time.<sup>769</sup> If this proposed containment line was crossed, then the next fall-back line was the Cotter River, but this was a poor containment line due to low water levels and an abundance of dry fuel along its bank, so that it was likely the fire would cross the river, after which the fire would have a clear uphill run across to the Tidbinbilla Ranges.<sup>770</sup> Although not referred to in the minutes of the planning meeting, Mr McRae described in his statement drawing the attention of those present at the meeting to a wall map and discussing various alternatives as to where the fire might run in the event that it crossed the Cotter River:

At the planning meeting, I also spoke about possible expansion of the Mt Gingera and Stockyard Spur fires. Everybody including me thought that the Mt Gingera and Stockyard Spur fires would join later that day or overnight because both fires were burning towards each other on the western side of the Mount Franklin Road. There were general discussions about fallback containment lines to the south of the Mt Gingera fire.<sup>771</sup>

Mr McRae's prediction concerning the joining of the Stockyard and Gingera fires proved correct: the fires joined at approximately 2.00 am on 15 January 2003.<sup>772</sup>

The minutes record Mr McRae's report to the meeting on forecast weather conditions, which was for extreme temperatures for Saturday, Sunday and Monday and stronger north-westerly winds, in consequence of which he indicated to those at the meeting that Friday was the effective operational deadline for securing control of the fires.<sup>773</sup>

***Mr Lucas-Smith's report of his telephone conversation with Mr Cheney***

The report of Mr Lucas-Smith's telephone discussion with Mr Cheney is detailed in the minutes of the planning meeting under the heading 'Media' and was complied from the notes made by Ms Ferry and Ms Keane<sup>774</sup>:

Peter Lucas-Smith stated that Phil Cheney (fire behaviour expert) has conducted an interview with WIN TV. Mr Cheney stated that any strong westerly gusts of wind could turn the fire towards urban areas. There are currently no westerly winds forecast. There was discussion regarding appropriate media response. Tim Keady suggested that while the westerly wind direction would make operations difficult, we are currently implementing measures to control this possibility.<sup>775</sup>

The recollection of those present at the meeting about the detail of the discussion reflected in the handwritten notes was generally very poor. In particular, despite being referred to in the minutes and notes as participating in the discussion about the response to Mr Cheney, Mr Keady had no memory of the discussion. But Mr Keady was nevertheless prepared to question the accuracy of the minutes that recorded him suggesting an operational response.<sup>776</sup>

Ms Harvey had no recollection of whether she attended the meeting.<sup>777</sup> Mr Graham also had no recollection of the part of the planning meeting when the conversation was discussed and believed that he may have left the meeting before that discussion to attend to other things.<sup>778</sup> Mr Ingram could recall mention that Mr Cheney was going to do a media release, but did not recall what anyone said about Mr Cheney's prediction.<sup>779</sup> Mr Bennett remembered the discussion of Mr Cheney's views but said that he did not remember those views being a major item of discussion at the meeting.<sup>780</sup>

Mr Lucas-Smith said in his evidence that he did not regard Mr Cheney's views as alarmist, but as a reasoned opinion, and agreed that it would have been a fair comment for Mr Cheney to say that if the wind changed to the west or north-west, the fires were of a sufficient size and danger that there was a significant risk at least to the western side of the metropolitan area of Canberra. Mr Lucas-Smith said that if he had been asked a question along those lines, he might have responded, 'Well, if those things happen, we agree that is a risk'.<sup>781</sup>

In relation to the impact of Mr Cheney's comments on planning, it was suggested to Mr Lucas-Smith that the reference in the minutes in the context of the Cheney conversation to there being 'no westerly winds forecast' was at odds with the long-term weather outlook provided earlier to that meeting, which included a forecast for stronger north-westerly winds from Saturday 18 January. In response, Mr Lucas-Smith sought to draw a distinction between the long-range forecast for Friday and Saturday on one hand and the 'forecast for our immediate planning responses' on the other, asserting that the planning meetings were primarily focused on the next 24 hours. Although Mr Lucas-Smith agreed that the planning process was not so inflexible that the meeting could not consider strategy beyond the next 24 hours<sup>782</sup>, he said that the meeting was not planning for the possibility that containment would completely fail at both current and

fall-back containment lines in three or four days time, and hence for contingencies should the fire then burn into the Canberra suburban area. Rather, he said that the SMT was focused on planning strategies:

... to contain the fire, as to smaller areas of growth as we possibly could, to stop the other fire from breaking out. There was no doubt whatsoever that west or north-west winds were going to put pressure on our eastern and southern boundaries, and particularly the south-east corner of our containment line. And they were always our priority ... certainly the whole of the planning process includes fall-back options. What happens if the lines you are working on fail?<sup>783</sup>

Mr Castle had remembered in general terms a discussion about Mr Cheney's proposed media comments, but did not have a strong recollection of that discussion. He 'supposed' that it concerned him that Mr Cheney was saying that if winds came from the west the fire was going to turn around and come into Canberra City, but he did not directly remember the matter being discussed.<sup>784</sup>

Mr McRae also had difficulty recalling the detail of the discussion regarding Mr Cheney's warning at the meeting.<sup>785</sup> However, he did recall that the gist of Mr Cheney's comment to Mr Lucas-Smith was that he would say in the interview with WIN TV that any strong gusts of wind from the west would bring the fire into Canberra city.<sup>786</sup> Nevertheless, Mr McRae dismissed Mr Cheney's opinion that strong gusts of wind from the west would bring the fire into the city as unhelpful because he said that strong westerly winds were not forecast.<sup>787</sup>

Mr McRae acknowledged in his evidence that his assessment of the long-range forecast provided on 14 January to the afternoon planning meeting was that the strong north-westerly winds 'indicated that strategies will be harder to complete and hold after Friday evening'. However, he said that he 'did not see a risk of westerly winds driving the fires anywhere at that point in time'. In his opinion, westerly winds arose from a totally different pressure system from the forecast weather of 'something in the area from north to north-west which may or may not lead to escalating fire behaviour'.<sup>788</sup> Hence Mr McRae said that he did not identify the forecast hot conditions and north-westerly winds as indicating a threat to urban Canberra, because fire behaviour could not be predicted without further information: 'Without knowing the moisture content of the air mass, you can't calculate the fire danger. Therefore, you can't calculate the fire behaviour and you can't work out where the fire is going to go and cause trouble'.<sup>789</sup>

Mr McRae was clear in his evidence that by the afternoon of 14 January he had not identified the possibility that under a north-westerly wind and hot conditions, the McIntyres fire could burn over the border and reach Canberra<sup>790</sup>, notwithstanding the concerns raised by Mr Cheney and the long-range forecasts provided by the Bureau of Meteorology. In his evidence before this inquiry Mr McRae accepted that it was possible that the predicted north-westerly winds would carry with them a dry air mass with a low dew point. However, he said, 'If that eventuated, as I have said before, that would have been the cause of the fire entering the ACT. That was as far as I felt it was prudent to take the planning at that point in time. There was no basis for expecting the fire to make a run of that magnitude'.

Mr McRae said that, while he was not trying to be critical of Mr Cheney, 'I wouldn't recommend the way he did it. From the shoes I was in at the time, I was the manager trying to run a capability and I made a decision at the time based on the information I had at hand'. The decision he was referring to was the decision not to take any further action at that time in response to Mr Cheney's prediction of how the fire might evolve and ultimately threaten the

Canberra suburbs. Moreover, Mr McRae felt that there was ‘every chance’ that the NSW Rural Fire Service would be able to hold the McIntyres Hut fire within established containment lines.<sup>791</sup>

Mr McRae concluded that, as at 14 January, ‘there wasn’t a risk to the city of Canberra’.<sup>792</sup> He said, ‘All I’m saying is I made the management call I had to make at the time. I will stand by that call’.<sup>793</sup>

### **5.9.5 Response to the Bendora fire**

Ms Vivian Raffaele attended the Bendora fire on the morning of 14 January. When she arrived she discovered that she would be the incident controller, and received a briefing from the outgoing incident controller, Mr Graham Blinksell. She said that this late notification of her role adversely affected her ability to manage the fire, particularly as she had no opportunity to ensure that she had available the necessary resources for the task.<sup>794</sup> Despite an initial delay in getting access to a bulldozer<sup>795</sup>, and further delays caused when a D9 bulldozer slipped from its tracks<sup>796</sup>, work continued on consolidating containment lines around the fire throughout the day and during the following overnight shift under the command of Mr Winter.<sup>797</sup>

### **5.9.6 Response to the Stockyard Spur and Gingera fires**

Crews worked to establish containment lines throughout 14 January, while Mr Sayer and Mr Lhuede continued to develop an IAP outlining a comprehensive containment strategy and alternatives. Although some containment lines were established on 14 January<sup>798</sup> and water-bombing operations were conducted throughout the day to suppress hot spots, Mr Sayer said he was concerned that there were not enough bulldozers available to construct the required containment lines with sufficient speed.<sup>799</sup> During the evening a bulldozer was used to provide protection to Pryors Hut and arboretum, which were being threatened by the approaching fronts of both the Stockyard Spur fire and the Gingera fire.<sup>800</sup>

No suppression action was taken against the Gingera fire on 14 January.

As noted, at approximately 2.00 am on the morning of 15 January the Stockyard Spur and Gingera fires merged, forming a single fire—referred to from this point as the ‘Stockyard Spur fire’.<sup>801</sup>

### **5.9.7 Response to the McIntyres Hut fire**

As detailed in Mr Cheney’s report, on 14 January the McIntyres Hut fire continued to burn within control lines as burning out and back-burning operations continued under the command of Mr Arthur.<sup>802</sup>

On 14 January, the NSW Rural Fire Service also established a base camp at Mt Stromlo in the ACT, so that the Fire Service could provide rapid assistance to the ACT should the McIntyres Hut fire cross the border. It seems clear from this decision that at this time the service assessed Mt Stromlo as a safe place to establish this base.<sup>803</sup>

## 5.10 15 January 2003

### 5.10.1 The morning planning meeting

Mr Graham reported to the meeting on the progress of construction of containment lines around the Bendora fire. He also confirmed that the Stockyard Spur and Mount Gingera fires had joined overnight, and were thereafter to be managed as a single fire.

Mr Mason from the Bureau of Meteorology was present to provide a briefing on the weather conditions. Mr Mason's forecast for Friday 17 January to Monday 20 January was as follows:

**Friday.** A cold front from Melbourne is expected late Friday afternoon. Stronger winds from the north, north-west are expected with mid afternoon winds reaching 30–40 kms, gusting to 50 kms. Humidity is expected to drop with the dew point 2° possibly lower. A Fire Weather Warning is expected.

**Saturday.** The front is expected to continue. Winds will be from the north, north-west freshening to 30–40 kms per hour, with hot dry air coming from NSW and QLD. Temperature expected to be 35° plus. A change will potentially move through late Friday/Saturday, which will weaken as it moves east.

**Sunday.** Based on a computer simulation, the forecast will not offer much respite from current weather conditions.

**Monday.** A front is expected to arrive from Victoria bringing hot dry north-west winds late Monday evening. The front could possibly hold off until Tuesday. Low humidity and dew point of 0°. Temperature is expected to be in the high 30's with wind speeds 35–45 kms per hour, gusting to 60 kms plus.

Under the heading 'Planning issues' the minutes record, 'The weather briefing would indicate that Monday is the operational deadline to secure operational strategies'.<sup>804</sup>

Mr Lucas-Smith agreed that the forecast for Saturday of 35°-plus with 30- to 40-kilometre winds from the north-west was 'absolutely' for a bad day and that the SMT was still working to secure operational strategies by Friday evening. He suggested that the minute simply reflected the SMT's recognition that 'at this particular stage that Monday was looking like it was going to be the worst day'.<sup>805</sup>

Mr Lucas-Smith also gave evidence that by 15 January there was general awareness that the Bendora and Stockyard fires could threaten ACT rural properties and that the ACT Fire Brigade was briefed on this possibility.<sup>806</sup> He summarised the fire control objectives set down by the SMT on 15 January as follows:

- Keep the fire west of the Cotter River
- Protect environmentally sensitive areas, essentially the Ginini swamp areas
- Work in a unified way with NSW Section 44 coordinator
- Ensure safety and welfare of all personnel involved

According to Mr Lucas-Smith, the primary strategy adopted to achieve the above objectives was to continue to work to establish containment lines while utilising direct attack to slow the fires

wherever possible, primarily with water-bombing aircraft. Particular priority was to be given to the southern and eastern containment lines so as ‘to reduce the impact of any forecast north or northwest winds’.<sup>807</sup>

Mr McRae summarised Mr Mason’s forecast in his statement: ‘He forecast that sometime after that Friday morning, conditions would change. He forecast much higher temperatures into the high 30’s, winds instead coming from the northwest and very low humidity. These features combined to create a forecast of extreme fire danger’.<sup>808</sup> Mr McRae agreed in evidence that Mr Mason’s forecast provided a critical piece of information that had been missing from the weather information available to him the day before—namely, that the weather conditions for Friday afternoon and beyond involved very low humidity.<sup>809</sup> It was still his view on the morning of 15 January that strategies would be harder to hold after Friday and that he was not revising what he had said the previous day, which was to aim to complete operational strategies by Friday afternoon.<sup>810</sup>

Similarly, Mr Graham recognised that that the forecast weather conditions on Friday and Saturday would put pressure on containment lines. He did not recall a shift in emphasis from the Friday to the Monday as the operational deadline and believed that the SMT continued to work to the Friday as the imperative date by which to have containment lines established.<sup>811</sup>

Mr Castle noted in his statement that the weather briefing at the morning planning meeting indicated that Saturday would be a bad bushfire day, but that Monday 20 January would be even more extreme.<sup>812</sup>

#### *Positive aspects of firefighting to be made public*

The minutes of the morning planning meeting under the ‘Media’ heading refer to Mr Castle stating that ‘some positive aspects should now be made public’.<sup>813</sup> In this context, the handwritten notes of the meeting written by Ms Ferry attribute to Mr Castle the remark ‘positive spin’.<sup>814</sup> Mr Castle explained in evidence that that he was concerned to make public positive aspects of the firefighting effort, ‘to give some indication of some of some of the successes we’d had’. He said that this was important for morale, particularly for firefighting volunteers: ‘There is value in people being recognised for the efforts that they’ve actually done in a positive sense’. However, he agreed that the potential bad news about the threat to the ACT and in particular to the Canberra urban area had not been receiving a great deal of attention. Mr Castle did not recall using the expression ‘positive spin’ but suggested that ‘the context in which it was actually said is to try and put, as I understand, the corroboree frogs and all those sorts of positive aspects in there’.<sup>815</sup> Ms Ferry recalled Mr Castle using the expression ‘positive spin’, and believed it may have related to the successful efforts of fire crews in saving Pryors Hut and the arboretum.<sup>816</sup>

#### **5.10.2 Meetings at Queanbeyan**

Mr Koperberg travelled to Queanbeyan on 15 January 2003 to be briefed by his officers there on the fires burning in the Yarrowlumla Shire.<sup>817</sup> At about 11.30 am, Mr Tony Corrigan, who was the ACT’s liaison officer at Queanbeyan, telephoned Mr Lucas-Smith and informed him that Mr Koperberg and Mr Brian Gilligan, the Director General of the NSW National Parks and Wildlife Service, were at Queanbeyan to meet with Mr Arthur. Mr Lucas-Smith arranged to travel to Queanbeyan to meet with Mr Koperberg.

The meeting occurred in Mr Arthur's office. In addition to Mr Lucas-Smith and Mr Koperberg, the meeting was also attended by Mr Gilligan, Mr Arthur, Ms Crawford, and Assistant Commissioner Shane Fitzsimmons.<sup>818</sup>

### ***Discussions about containment of the McIntyres Hut fire***

Mr Lucas-Smith described the meeting as follows:

I drove over there immediately and provided a briefing on the situation in the ACT. I then asked him [Mr Koperberg] what his level of confidence was in relation to the McIntyre's Hut fire, and he, Mr Gilligan and Mr Arthur expressed great confidence they had the fire contained, and that it was not going to be an issue for the ACT.<sup>819</sup>

Mr Lucas-Smith said that although he concluded from this briefing that the McIntyres Hut fire was not 'totally' contained, he understood that the fire was 'contained on the eastern and southern boundaries. They were the areas of concern to me'.<sup>820</sup> On the basis of this information from the Rural Fire Service, Mr Lucas-Smith felt that, while he certainly would not dismiss the McIntyres Hut fire as a potential threat to the ACT, he felt that he did not need to allocate resource in anticipation of possible break-outs from that fire.<sup>821</sup> Mr Koperberg's account of the conversation makes no reference to a statement by him that the McIntyres Hut was contained, or at least contained on the eastern and southern boundaries. Mr Lucas-Smith conceded that it might have been Mr Arthur who made this statement, but Mr Lucas-Smith was absolutely confident that the statement was made, and made while all persons were present at the meeting.<sup>822</sup>

Mr Koperberg agreed with aspects of Mr Lucas-Smith evidence in this context, in so far as during their meeting, Mr Koperberg agreed that confidence was expressed that the McIntyres Hut fire was contained. However, Mr Koperberg emphasised that just because the fire was burning within containment lines, and could therefore be said to be 'contained' at that point in time, this did *not* mean that the fire was suppressed or controlled. In this regard, Mr Koperberg did not accept that a statement that the McIntyres Hut fire 'was not going to be an issue for the ACT' represented the kind of language that was used at the meeting. To the contrary, Mr Koperberg said, 'We consistently stated that, whilst the McIntyre's Hut fire was contained, we also harboured the view that it would only remain contained if the forecast conditions did not prevail'.<sup>823</sup> In relation to Mr Lucas-Smith's evidence that 'he [Mr Koperberg], Mr Gilligan and Mr Arthur expressed great confidence they had the fire contained and that it was not going to be an issue for the ACT', Mr Koperberg said:

I don't accept that, in as much as we did express concern for Canberra. That was evidenced by my more public statement shortly thereafter, and our offer of resources to the ACT was predicated upon our concern not so much for the fires as they then were but rather based on concern being expressed by the Bureau of Meteorology for the coming days.

### ***Discussion of a threat to Canberra***

In his statement, Mr Koperberg described the meeting with Mr Lucas-Smith and said, 'I expressed concern during this briefing about potentially serious implications for the western suburbs of Canberra were the fires not to be contained before the onset of predicted weather'.<sup>824</sup>

Mr Lucas-Smith said in his evidence that he had a reasonably clear recollection of his discussion with Mr Koperberg and that he did not recall Mr Koperberg expressing concerns for the western suburbs of Canberra at their meeting on 15 January. In response to the above passage from

Mr Koperberg's statement being put to Mr Lucas-Smith during this inquiry, the following exchange occurred:

Q. What do you say about that? Do you say that was said or not?

A. It could very well have been said, and I would have expressed the same concern if they were not to be contained.

Q. As at 15 January, it was no sure thing that the fires were going to be contained, was it?

A. The very reason I was requesting additional resources.

Q. So are you saying this: that if Mr Koperberg expressed concerns about the implications for the western suburbs of Canberra if the fires were not contained, they were concerns you would have agreed with?

A. If the fires were not contained.

Q. Yes. That is what he is saying.

A. Yes. If the fires were not contained, definitely that is the direction the fires would run in.

...

Q. It seems to me he is saying, and you can take issue with this if you wish, that he has told you, "If by Saturday you have not got complete containment of these fires, there will be serious implications for the western suburbs of Canberra"?

A. He didn't say that.

Q. Did he refer to the western suburbs of Canberra?

A. I don't recall any reference to the western suburbs of Canberra.

Q. Do you accept that he may well have said, "Uncontained these fires carry serious implications for the western suburbs of Canberra"?

A. I believe that that is what he said to the media later in the day, and that is why I said, that was why I was surprised.

Q. You are saying he did not say that to you in the meeting?

A. I certainly do not recall that being discussed in the meeting.<sup>825</sup>

Later in his evidence, Mr Lucas-Smith reiterated that he could not recall any discussion of a threat to the Canberra suburbs at the 15 January meeting: 'We certainly talked about if the fires escaped and impacted into the ACT, the pine plantation area was an area of discussion, but we did not get outside of that area'.<sup>826</sup> Asked if Mr Lucas-Smith allowed for the possibility that Mr Koperberg expressed a concern that the fire might impact on urban Canberra at their meeting, Mr Lucas-Smith indicated that he thought that this was unlikely, because 'when he made that statement to the media in the afternoon, I was surprised ... I don't think he said it'.<sup>827</sup>

Mr Koperberg made a statement to the media that afternoon, in which he said he told the ABC:

"This is probably the worst threat to this part of the State in many, many decades. The Brindabella Complex of fires are certainly a potential threat to some very valuable

assets, not the least being some mature pine forest on the border of Canberra, and indeed, the ACT itself". I went on to tell the journalist "Given the fact that the weather is going to deteriorate at the weekend, and possibly quite severely, the job is still ahead of them".<sup>828</sup>

Mr Lucas-Smith appeared to interpret Mr Koperberg's 15 January 2003 media statement as referring to a threat to the Canberra suburbs. Mr Lucas-Smith's evidence was that he learnt of Mr Koperberg's media statement later in the afternoon on 15 January from someone in his media team and that, while he did not ring Mr Koperberg himself, he believed that Mr Keady spoke to Mr Koperberg concerning that statement.<sup>829</sup> Mr Koperberg did not think that Mr Keady called him as a result of the ABC interview<sup>830</sup>, and Mr Keady could not recall anyone taking up with him the purported problem that it appeared that Mr Koperberg may have said one thing to Mr Lucas-Smith and something different to the media.<sup>831</sup>

Mr Koperberg said that he certainly expressed this view in:

... emotive terms on the morning or early afternoon of Wednesday, the 15 January at a meeting held in the OEC Queanbeyan at which Mr Peter Lucas-Smith was present. It could not otherwise have been so, because if it had not been so then the offer of assistance to protect Canberra on Saturday the 18th would not have been made—or for that matter accepted ... I said to the media on the 15th inter-alia that the weather was likely to deteriorate and deteriorate severely, and that would constitute a threat or a risk to a number of areas. I referred to pine forests, I referred to border issues and I referred to Canberra. It was certainly not competent for me to start speculating on degrees of risk to the interface at that particular point—or for that matter at any other point—because I did not have the jurisdiction to do so. Because I was not cognisant with measures that may or may not have been able to be taken by the ACT authorities in terms of communicating the risk to the community or dealing with the threat mitigation.<sup>832</sup>

In May 2003, Mr Koperberg gave an interview to *Stateline* for a story concerning the January 2003 fires, in which he said that 'colourful language' was used during his meeting with Mr Lucas-Smith on 15 January 2003. Mr Koperberg explained in his evidence:

There was during the course of the meeting a lot of discussion about worst case scenarios, hypotheticals—what ifs, in other words. I certainly did pose the question: what if the fires are not suppressed? What if the forecast weather materialises? What will happen then? Someone in the room said, 'Canberra is going to get hammered'.

Mr Koperberg said that as a matter of course he tended to approach potential fire impacts bearing in mind a worst-case scenario rather than a best-case scenario: 'I am required to do that and that is what the New South Wales community expects of me, as does the government'.<sup>833</sup>

Mr Koperberg gathered from Mr Lucas-Smith's response to his concerns that the sense of pessimism harboured by Mr Koperberg was not shared by Mr Lucas-Smith: 'At no stage did he reject the contention outright, but nor did he accept it as a distinct possibility'.<sup>834</sup> Mr Koperberg believed from Mr Lucas-Smith's response to this discussion and the statement that 'Canberra is going to get hammered' that Mr Lucas-Smith was 'a little offended' by the fact that his NSW counterparts were painting such a picture: 'I formed the opinion that Peter did not share our belief or my belief, if you like, about the potential seriousness'.<sup>835</sup>

In cross-examination of Mr Koperberg by counsel for Mr Lucas-Smith, the following exchange occurred:

Q. Can you tell us what caused you to—to use your words—glean from your conversation that Mr Lucas-Smith was not as pessimistic as you were?

A. Yes, I can with some reluctance. However, since you draw me to this matter, I was told that Peter Lucas-Smith didn't need me to come from Sydney to tell him what the threat to Canberra was.

Q. Who said that?

A. Peter Lucas-Smith.

Q. It is not something that you have put in any statement?

A. No, why should I? I am not here to be critical of my colleague.

Q. Did you attempt to tell him how to do his job?

A. No, I did not.

Q. Then why would such a statement be made, to your knowledge?

A. You must ask Peter Lucas-Smith.<sup>836</sup>

Mr Koperberg said that he took Mr Lucas-Smith's statement to mean one of two things: 'Either it was simply a statement of fact, that he had already acknowledged what I was telling him and didn't require my telling him that; or that he didn't accept or that perhaps I was out of my territory in suggesting such a thing'. Mr Koperberg did not establish which of those alternatives were the reason for Mr Lucas-Smith's statement.<sup>837</sup> He went on to explain that Mr Lucas-Smith had never suggested that offers of assistance were not welcome and agreed that Mr Lucas-Smith had travelled on his own volition from Canberra to Queanbeyan to see Mr Koperberg and to indicate that the ACT's resources would be insufficient in the event fire impacted on Canberra and its suburbs. Mr Koperberg also gave evidence that he was not 'second guessing' what Mr Lucas-Smith did in relation to the disposition of resources on 16 and 17 September, but he reiterated his opinion that, 'If the Bureau of Meteorology was correct in its prediction, then no matter what was done between Wednesday the 15th and Saturday the 18th it was inevitable that containment lines would be breached and that the fires would end in Canberra—and they did'.

Parts of Mr Koperberg's *Stateline* interview were read to Mr Lucas-Smith and Mr Lucas-Smith again took issue with whether on 15 January 2003 there was concern expressed about a threat to Canberra, as opposed to a threat to the ACT. He said he certainly did not recall someone saying 'Canberra is going to get hammered' and said that he would have recalled a statement like that if it had been made.<sup>838</sup>

Finally, when Mr Lucas-Smith was being examined on his report to the planning meeting that afternoon about his discussions with Mr Koperberg, he (incorrectly) thought he had been asked again by counsel whether a threat to the urban areas of the ACT was discussed at the meeting with Mr Koperberg. He answered: 'I didn't convey to the planning meeting my full discussions or anything with Mr Koperberg and the fact that I don't know that that was actually even mentioned at the meeting, so I was not going to repeat it'. The 'that' that he did not know was mentioned was a threat to the urban areas of the ACT.<sup>839</sup>

Mr Lucas-Smith's final position on whether Mr Koperberg referred to a threat to the suburbs of Canberra during their 15 January meeting appears to be that, while he could not recall the threat being discussed and believed he first heard reference to that threat in Mr Koperberg's media interview that afternoon, he accepted that the threat might have been discussed at their meeting. In any event, Mr Lucas-Smith indicated that he himself would have expressed the same concern as that referred to in Mr Koperberg's statement—namely, about the potentially serious implications for the western suburbs of Canberra if the fires were not contained before the onset of the predicted adverse weather.

### ***Mr Koperberg's evidence about the threat to Canberra***

According to Mr Koperberg, a number of hypotheses were discussed at the January 15 meeting with Mr Lucas Smith, including a range of worst-case scenarios:

... given the fact that I am characteristically pessimistic when it comes to matters of this nature, I have some difficulty understanding why Mr Lucas Smith would ascribe to us a higher level of confidence about the McIntyre's Hut fire in a worst case scenario than we had, because most of our considerations were predicated not on the present, that is Wednesday the 15th, but rather on the forecast of the Bureau of Meteorology for Saturday the 18th. We during the course of that meeting discussed a number of potential scenarios, amongst them a worst case scenario for Canberra ...

As I said, we painted a number of scenarios, one of them being the eventuality of the forecast for Saturday the 18th, which included very high temperatures, very strong winds and very low humidities, and the probability of the McIntyre's Hut fire particularly breaching its containment lines. It was conceded that not only was that possible but it was more than likely. In fact, as far as back as Sunday the 12th or thereabouts in a brief discussion with Superintendent Bruce Arthur I raised the prospect of what might occur were the weather in a week's time to so materialise and the fires not be suppressed. It was generally conceded that the fire would reach the suburbs of Canberra.<sup>840</sup>

At one point in his evidence Mr Koperberg appeared to withdraw slightly from the assertion in his statement that he 'expressed concern during this briefing about potentially serious implications for the western suburbs of Canberra'. Asked whether there was a discussion about a possible impact on the suburbs, he said:

Well, on Canberra, not on any particular side of it. The fact remained that there were a number of fires lying to the west and north-west of Canberra city. It is obvious that if there were to be strong prevailing winds from the north-west, high temperatures and low humidities, those fires would move in a south-easterly direction and as a consequence, would have the potential to impact upon Canberra ... The suburbs were not specifically mentioned. Canberra was mentioned in a generic sense, and it did not descend, as you said, to the level of detail which embraced nominating time, geography, or date.<sup>841</sup>

However, when the passage from his statement referring to the western suburbs of Canberra was read to Mr Koperberg, he confirmed that what appeared in his statement was an accurate description of what he said 'in as much as understanding the physics of fire and their potential under a range of circumstances to spot, for argument's sake, many kilometres, to travel vast distances in relatively short time, that possibility ought not to have been precluded'.<sup>842</sup>

In subsequent evidence, Mr Koperberg again confirmed that the discussion with Mr Lucas-Smith did include reference to a real possibility that, if the McIntyres Hut fire broke containment lines under the predicted adverse conditions, it would make a major run into Canberra: ‘I expressed my concern about the very real threat that these fires could impact upon Canberra, and it was that concern which led me to make the offer of resources. Were I not so concerned, I would not have made the offer’.<sup>843</sup>

Mr Koperberg conceded, however, that he may have spoken of a threat to Canberra and the ACT but not to the western suburbs of Canberra. He accepted that he had used the terms ‘Canberra’ and ‘the ACT’ interchangeably in his interview with the ABC, but suspected that he was more specific in his discussion with Mr Lucas-Smith on 15 January.<sup>844</sup> He expressed his views as follows:

I formed the opinion that if the forecast weather conditions were to materialise then the fires, not any specific fires, would have the potential for moving in such a way and over such a distance as to constitute a threat to the suburbs of Canberra. But that was an opinion, and an opinion may not necessarily be shared by other quarters.<sup>845</sup>

Asked whether the opinions he had expressed in his evidence were coloured to some significant degree by hindsight, Mr Koperberg responded:

Well, we know that what I feared occurred. My assumptions were not based on any magical formula or particular technical or scientific data. If you like, it was a gut feeling. I knew the weather was going to be bad or at least the MET Bureau thought the weather was going to be bad. I knew there was a lot of fire to the west of Canberra. I knew if you put two and two together you got four, and that meant that the tenuous containment lines—which incidentally only surrounded the McIntyre’s Hut fire, a number of other fires were not so contained—that there was nothing impeding the eastward spread of those fires. Since the ACT and Canberra lay to east, I could draw no other conclusion.<sup>846</sup>

#### ***Mr Lucas-Smith’s request for further resources***

Mr Lucas-Smith said that in response to his understanding that the NSW Rural Fire Service was confident that the McIntyres Hut fire was contained, he requested additional resources from Mr Koperberg. He said that Mr Koperberg ‘very willingly provided those in a very co-operative sort of way, but he did not express any opinion as to whether or not he thought it was adequate or inadequate’. According to Mr Lucas-Smith, if Mr Koperberg had been of the view that what Mr Lucas-Smith had requested was not sufficient, Mr Lucas-Smith would have liked Mr Koperberg to say so and he was not aware of any impediment to Mr Koperberg expressing that view.<sup>847</sup>

Mr Koperberg’s recollection of this request for resources differs from that of Mr Lucas-Smith:

Given the scope and nature of the fires burning to the west of Canberra I considered it unlikely that despite the best efforts of firefighters, the fires would be suppressed prior to the onset of extremely adverse weather. In discussion with Peter Lucas-Smith he said that the ACT’s resources would be insufficient in the event of the fire impacting upon Canberra and its suburbs. As a result I offered, during the meeting, NSW resources for deployment within the ACT, to the ACT Chief Fire Control Officer. The ACT Chief Fire Control Officer stated he would consider the offer and would contact NSW State Operations Centre specifying the extent of firefighting support considered necessary.<sup>848</sup>

Mr Koperberg allowed for the possibility that there was some confusion between those present at the meeting about the topics that were discussed. Significantly, Mr Koperberg felt that Mr Lucas-Smith may have considered that the resources he was requesting were for the purpose of dealing with the fires then burning in the ACT, rather than for an anticipated impact on Canberra from a break-out of the McIntyres Hut fire if conditions worsened as predicted.<sup>849</sup>

#### *Mr Arthur's recollection of the meeting*

Mr Arthur generally agreed with Mr Koperberg's description of what happened at that meeting: 'Mr Lucas-Smith came in. It was predominantly a meeting between Mr Lucas-Smith and Mr Koperberg. It was conducted in my office, and I was present. I would point out that I was also the incident controller so I was dealing with issues at the same time'.<sup>850</sup> However, Mr Arthur did not consider it inevitable that, if conditions worsened as predicted, the fires would break their containment lines and make a major run into Canberra, and he did not recall Mr Koperberg using that language:

I considered it possible. I made a statement earlier and I will stand by it that I didn't go into this to lose, and therefore we had a plan in place and it was coming the way we wanted. I believed on the 15th that we would achieve containment and we were going to work very hard to try and contain it. It was possible that it could come out.<sup>851</sup>

Mr Arthur's recollection was of general discussions of what the possible outcomes could be, including consideration of what could happen if the McIntyres Hut fire breached containment lines. He did not have a specific recollection of what possible outcomes were identified, 'other than we knew that, if it did breach, it would be into the pine forests and a threat would step up from there'. Mr Arthur had discussed the pine forests with Mr Lucas-Smith a number of times and said that he may well have discussed them that day. However, Mr Arthur did not agree with Mr Lucas-Smith's account of being told that the McIntyres Hut fire was contained and that it 'was not going to be an issue for the ACT'.<sup>852</sup>

Mr Arthur was present when Mr Koperberg was interviewed by the ABC and said that Mr Koperberg 'expressed a view that there was a potential for Canberra, yes. Did I agree with that? There was a potential, yes'.<sup>853</sup> However, he had no recollection of someone saying 'Canberra is going to get hammered'.<sup>854</sup>

#### *Ms Crawford's recollection of the meeting*

Ms Crawford was present during the process of briefing Mr Koperberg on 15 January 2003. She could not remember a discussion about whether the fire would be contained and controlled, and thought that the discussion at the meeting pertained to 'what the current situation was and what we were doing'. She said that by late morning of 15 January, the IMT 'were still working hard and were optimistic that, if we could get those containment lines deep enough ... that we would be able to hold it'.<sup>855</sup> Ms Crawford's recollection was that concern for the western suburbs of Canberra was not a subject of discussion in the briefing session Mr Koperberg had at Queanbeyan, 'but he may have had that with other people ...'.<sup>856</sup>

Ms Crawford did not recall anyone present saying that they were confident that the McIntyres Hut fire had been contained and that it would not be an issue for the ACT and said that she herself never had that confidence.<sup>857</sup> She agreed that the fire was within containment lines, 'but I don't agree that it was not going to be an issue, because it always depended on the weather and whether it broke containment lines'. Ms Crawford did not remember that particularly point being made to Mr Lucas-Smith.<sup>858</sup>

In the course of the conference that followed Ms Crawford could not remember a reference being made to the western suburbs of Canberra:

There was general discussion, the meeting started off and it got straight to the point where Peter had come to ask for resources ... then it got down to very much a conversation between the Commissioner and the Chief Fire Control Officer about the actual nitty-gritty details. I suppose for part of it I wasn't listening all that closely as to what was being said.

Ms Crawford did not recall hearing at any stage Mr Koperberg expressing a view to Mr Lucas-Smith that there was a very real threat to the Canberra suburbs: 'I do remember the threat if the fire left its containment lines of burning into the ACT, and I think Canberra is often used. But what I understood "Canberra" to be was the pine plantations and the rural assets'.<sup>859</sup>

Ms Crawford did not remember anyone saying that escape from containment lines was inevitable but said 'that doesn't mean it wasn't said'.<sup>860</sup> However, Ms Crawford had a very clear recollection of someone from the NSW Rural Fire Service saying that 'Canberra is going to get hammered':

I do definitely remember that comment because it was said very forcefully. It was very different to any of the normal language used in any of the fire control rooms that I have been in. I remember the way it was said it sort of gave me a shudder ... I do remember the comment being said but I cannot where it was said ... it was said very forcefully and very seriously.<sup>861</sup>

#### ***Mr Corrigan's recollection of the meeting***

Mr Corrigan was involved with the briefing of Mr Koperberg by Mr Arthur, before Mr Lucas-Smith arrived. Mr Koperberg spent some time alone with Mr Arthur, but Mr Corrigan was with him in a group when they were in the operations room discussing strategies. Mr Corrigan said people were reasonably positive and confident about the progress of back-burning operations:

I think the IMT was quite confident of containing the fire within the containment lines, especially if they could get some depth to burnings before the bad weather which was forecast on the weekend ... There was two niggling issues in relation to containing the fire ... There was an area that was proving hard to contain to the south of the fire, and there had been a spot over containment lines which had burnt a number of hectares to the east of the eastern containment lines, and was continuing to not be completely contained.

The area to the south that Mr Corrigan was referring to was in the south-west, known as the Charlie sector.<sup>862</sup>

Mr Corrigan did not participate in or overhear the meeting between Mr Lucas-Smith, Mr Koperberg and others, but he spoke to Mr Lucas-Smith after the meeting. It appeared to Mr Corrigan that Mr Lucas-Smith was quite positive about the meeting and, specifically, about the increased availability of NSW resources. He did not recall Mr Lucas-Smith being positive about the McIntyres Hut fire. He asked Mr Lucas-Smith when he thought the state of emergency was going to be invoked and said that Mr Lucas-Smith's response was something like 'Maybe the weekend ... but he also said there were a lot of issues that had to be worked through in relation to a state of emergency'. He did not recall any reference to a threat to the urban area of Canberra being part of his discussion with Mr Lucas-Smith.<sup>863</sup>

Mr Corrigan first heard reference to threats to Canberra, as distinct from the ACT, discussed at Queanbeyan when he raised it on about 12 January 2003. He was concerned that the ACT fires were going to break containment lines and burn out a lot of the ACT and through to NSW again. His concern included the possibility of damage to the urban area and his evidence was that probably the only person he spoke to about it at Curtin was Mr Peter Galvin.<sup>864</sup> In informal discussions during the period Mr Corrigan was at Queanbeyan, he said that it was generally assumed that ‘If we had a decent north-westerly influence which hadn’t had for some days, then the threat [to Canberra as distinct from the ACT] was clear and present’. Mr Corrigan recalled a planning meeting led by Mr Arthur around 15 or 16 January, in which the most likely suburbs to be impacted by the McIntyres Hut fire were discussed. Mr Corrigan recalled Mr Arthur mentioning West Belconnen, although he could not clearly recall any other suburbs mentioned.<sup>865</sup>

### 5.10.3 Further ACT requests for Commonwealth assistance

On 15 January 2003, Mr Castle sent two further Requests for Commonwealth Physical Assistance, both timed at 1.00 pm.<sup>866</sup> The first of the two requests was for a 30 000-litre or larger water tanker required to fill portable water reservoirs. The second request was to extend the Defence Force resources already assisting the fire operations—helicopters, bulldozers and an aviation fuel tanker—from 20 January 2003 until 27 January 2003. Both requests outlined a description of the ‘Situation’ that included reference to the adverse weather forecasts for the weekend and following days ‘causing concern for the ACT urban environment’, noted that the ‘current inversion layer has reduced visibility preventing aerial water bombing operations’ and the accident with the helicopter, and referred to the impact of the NSW fires upon ACT operations.

Mr Castle accepted in evidence that, with the potential for the wind change referred to in the documents, his degree of concern for the ACT urban environment was increasing: ‘I think it has probably increased with a prospect of winds coming’. Mr Castle agreed that the statement that ‘the current inversion layer has reduced visibility’ was not the sort of language he would normally use and that the request was drafted for him, most probably by Ms Keane. Mr Castle presumed Ms Keane obtained information about the adverse weather forecast ‘causing concern for the ACT urban environment’ from the briefings at the planning meetings. Mr Castle could not recall himself inserting those words but he agreed that, since he signed the document, he must have been comfortable that the situation report reflected his concerns at the time.<sup>867</sup> According to Mr Castle, Mr Lucas-Smith was not giving him the impression that he was less concerned than Mr Castle about the urban environment.<sup>868</sup>

Ms Keane confirmed that Mr Castle would read the requests that she drafted, make any changes he thought appropriate, and then sign the request.<sup>869</sup> Ms Keane did not remember where she obtained an understanding that there was a threat to the urban environment, and accepted that it was possible that those were words that Mr Castle added.<sup>870</sup>

Mr Lucas-Smith was asked whether the description in the ‘Situation’ report appearing in the Requests for Commonwealth Physical Assistance was one that he agreed with. He responded:

That was his description that he chose to use for that request ... They are not the words that I would have used ... I would not have used the words ‘causing concern to the ACT urban environment’ ... at that particular time, I felt that we still had potential for intervention if we got the resources that we needed.<sup>871</sup>

However, Mr Lucas-Smith agreed that a risk to the Canberra urban area was not simply theoretical on Wednesday 15 January but was ‘a distinct possibility if certain things happened’:

In relation to the Bendorra and Stockyard fires, if they were under a north-west wind influence, they were going to be pushed further to the south and south-west; if they went due west the Bendorra fire certainly had the potential to impact upon the southern suburbs of Canberra and rural properties, which is our first concern.<sup>872</sup>

#### 5.10.4 The afternoon planning meeting

The minutes of the planning meeting at 4.00 pm on 15 January 2003 commence with a reference to Mr Lucas-Smith reporting that the request for NSW Rural Fire Service assistance had been accepted. There is no reference in the minutes to Mr Lucas-Smith reporting that he was told by Mr Koperberg that the McIntyres Hut fire would ‘not be an issue for the ACT’.<sup>873</sup> Equally, the minutes do not record Mr Lucas-Smith reporting that he was told by Mr Koperberg that, if the forecast weather eventuated, it was inevitable that the McIntyres Hut fire would break containment lines and impact upon Canberra or its suburbs.

Mr Graham then provided a situation report on operations. The briefing paper attached to the minutes noted that burning-out was continuing on the Bendorra fire and the depth of the burn from the containment lines around the south and east was between 30 and 50 metres. It also noted the advice from Mr Sayer that there was about 48 hours of work to do before any back-burning operations could commence on the Stockyard fire.<sup>874</sup> Mr Graham reported ‘in addition to the briefing paper’ that there was a need to construct a link from Leura Gap to the Goodradigbee River. ‘This is potentially two days of new work’. The minutes also record:

Mr Lucas-Smith stated that fire growth to the west will be limited, however the fires may grow rapidly to the east over the next few days ... Mr Lucas-Smith stated that crews should be mindful of dangerous fire behaviour as the fire had the potential to accelerate tomorrow. He stressed the need for reinforcing safety messages and measures in the field.<sup>875</sup>

Under the heading ‘Planning’ Mr McRae’s report on the weather conditions is minuted as follows: ‘Mr McRae stated that Monday will potentially present the worst fire weather forecasts seen in a long time. The Fire Danger Index is forecast to be within the range of 110–140. Mr McRae stated we need to be as ready as possible for these extraordinary conditions’.<sup>876</sup> The handwritten notes of the planning meeting provide further detail of Mr McRae’s weather report. In substance, they record that Mr McRae informed the meeting that they were facing the ‘worst fires of careers’. He identified that Monday had the worst weather potential, with a one-in-20-year fire and a one-in-40-year fire weather forecast occurring in conjunction. A fire danger index of 110 to 140 was ‘not good’, particularly when considered in light of the fire danger index on Ash Wednesday, 103.<sup>877</sup>

In his statement, although incorrectly identifying that he had made these remarks at the morning planning meeting<sup>878</sup>, Mr McRae described his report to the meeting:

After Mr Mason had presented his forecast, I commented on what should be understood by it. In particular I said words to the effect of:

Gentlemen, we currently have the worst fire situation you will see in your careers. And you have just heard a forecast for the worst fire weather you will experience in your careers. Do the maths.

I then elaborated on this broad statement by explaining that we could expect large fire runs from any of the fires in a south-east direction. However this was a comment about possibilities commencing at the earliest on Saturday and I therefore did not speculate on where these fire runs might occur pending developments over that day and the following two days. I said that the big question was when over the 4-day period 18–21 January 2003 these adverse weather conditions would occur.<sup>879</sup>

The minutes also record under the heading ‘Planning issues’ that Mr McRae ‘warned that if the fire reached any of the worst case containment lines, then there are potentially public land, infrastructure, property and assets impacted upon. The main focus is where we are currently working, and to keep in mind future impacts if conditions worsen’.<sup>880</sup> In evidence, Mr McRae said that his direction to ‘do the maths’ was a somewhat rhetorical point: ‘Having talked about the 1:20-year fire and the 1:40-year fire weather forecast, I wanted to bring home to those at the meeting that the combination of the two was a fairly rare event and that we should be doing everything we could to be ready for it’.

Mr McRae’s evidence was that, in referring to ‘large fire runs from any of the fires’, he was talking about the fires then burning in the ACT and that he was not thinking about the McIntyres Hut fire. Mr McRae said he did not focus on the McIntyres Hut fire because the NSW Rural Fire Service appeared to be confident that they had contained that fire: ‘I wasn’t thinking about McIntyre’s. We had enough on our plate with our fires, and at that stage I was relying on our colleagues in New South Wales to be looking after that fire’.<sup>881</sup> However, Mr McRae agreed that if there was a large run from the McIntyres Hut fire in a south-easterly direction under the predicted conditions he was referring to, the fire might be in the ACT in less than an hour. He also agreed that, at least in theory, that fire would then become a real concern for the ACT and those involved in managing the fires in the ACT.<sup>882</sup>

However, Mr McRae also gave evidence that, while the planning meeting was focused on matters pertaining directly to the ACT fires, outside of planning meetings he and his planning team were considering the possible effect on the McIntyres Hut fire of the conditions he had described at the meeting.<sup>883</sup> Although Mr McRae had confidence that the NSW crews would keep the fire contained, he said that it was his role as Planning Officer to plan for what might happen if the McIntyres Hut fire did break containment lines because ‘it was prudent for us to be taking for next step in terms of looking at what was needed to protect the ACT should they lose containment’. Mr McRae described this as an ‘ongoing consideration’ from 15 January.<sup>884</sup>

In particular, Mr McRae said the Planning Section was considering a break-out of the McIntyres Hut fire where ‘the primary problem is going to be with the ACT pine plantations, and steps were being taken to stop the fire getting into those pine plantations’. Mr McRae said that he was aware that ACT Forests were putting considerable work into protecting the pine plantations, that he was happy they were doing this work, and that he also expected that ‘ACT Forests were taking that next step in consideration of what would happen if the fire got into their plantation ... I knew ACT Forests were doing a lot detailed work on it, so I didn’t do too much myself’.<sup>885</sup>

Mr McRae said that he was factoring into his planning the work being done by ACT Forests to prevent the McIntyres Hut fire travelling into the pine plantation. However, he also agreed that under the extreme fire weather conditions predicted, with a strong north-westerly wind gusting to 60 kilometres an hour, it would have been difficult to stop the run of the fire, regardless of the work that ACT Forests was doing in endeavouring to strengthen containment lines between the forests and the pine plantations, and that he was also factoring this reality into his planning.<sup>886</sup>

Asked whether he was identifying at that time the possibility of the McIntyres Hut fire reaching the containment lines, running through the ACT pine plantations and ultimately threatening the urban area of Canberra, Mr McRae answered:

My projections didn't go that far ... my expectation, and I would expect others would have similar expectations, was that at some point in the sequence of forecast "bad weather" that we had in front of us that one or more of the fires in the area would break containment. And breaking containment, that weather would lead to fires making runs. Now, those runs would run across the landscape. They would cause some damage. The day would end. You would have milder conditions overnight and then that would be the starting point for assessing where problems would arise the next day. In an unstable dynamic situation like that, you really can't predict what your starting point will be beyond the first day that you are analysing for because it literally is too dynamic. I would not have expected a run when it was first made to reach anywhere near the city.<sup>887</sup>

Mr McRae also gave evidence that by the afternoon or evening of 15 January he thought that on Monday there was 'a likelihood' that one or more of the fires, including the McIntyres Hut fire, would reach the urban area. Asked if he expressed that view to anyone in those terms, Mr McRae said he believed that he did not use those explicit words, but that 'the general terms I was using in the planning meeting were telling people that Monday was when things would be most dangerous'. Mr McRae believed that he did have discussions with people along the lines that he thought it was likely that the fires would impact on the urban area by Monday, but he could not recall exactly when they occurred.<sup>888</sup>

The minutes record that the advice that Mr Graham had in relation to the McIntyres Hut fire was that the south and eastern flanks of the fire had been contained but that NSW were having some trouble holding the fire on the north-eastern side of Doctors Flat Road. Mr Graham could not recall Mr McRae saying at the afternoon planning meeting words to the effect that this was the worst fire situation they would see in their careers, although he did recall references to a one-in-20-year fire and a one-in-40-years fire weather forecast. Mr Graham agreed that the prediction at the time of the afternoon planning meeting was one of dire conditions approaching. However, at that point, he was still satisfied that the fires would be contained within the following days before Monday<sup>889</sup>, in large part because he knew that NSW had significant resources working on the fire and because it was being managed by an IMT in which he had confidence. Mr Graham said that no one from NSW ever suggested to him on 15 January that 'it was inevitable that the McIntyres Hut fire would break containment lines and make a run towards Canberra' or that it was inevitable that the fires would reach the urban area. Nor did he believe that the ACT liaison officer at the NSW IMT, who generally provided information to him regarding the McIntyres Hut fire, ever communicated to him information to that effect.<sup>890</sup>

### 5.10.5 NSW media release

During the afternoon of 15 January 2003, the NSW Rural Fire Service issued a media release headlined 'RFS crews sent to assist with A.C.T. fires'.<sup>891</sup> The media release incorporated statements attributed to Mr Koperberg, including: 'The current weather forecast, and the fact that vegetation in the southern part of NSW and the ACT is extremely dry, means the potential for fire to impact on increasingly more populated areas is very high'.

Mr Castle did not see that media release on the evening of 15 January. However, he agreed that the statements attributed to Mr Koperberg in the press release did not sit comfortably with the

suggestion that Mr Lucas-Smith had been told earlier in the day that the McIntyres Hut fire would not be an issue for the ACT.<sup>892</sup> Mr Graham also did not recall seeing the media release on 15 January but considered that it would have been useful.<sup>893</sup>

Mr McRae did not recall seeing the media release by the NSW Rural Fire Service on the afternoon of 15 January, or indeed, any RFS media releases during that period, and said that he did not monitor the media releases issued by the RFS. He said that he received information about the status of the efforts to contain the McIntyres Hut fire during this period through operations,<sup>894</sup> largely at planning meetings, supplemented by other meetings.

#### ***Lack of monitoring of NSW Rural Fire Service media releases by the Emergency Services Bureau***

It appears from the evidence of several ESB witnesses that there was no system within ESB for monitoring press releases coming out of the NSW Rural Fire Service. Mr Castle said that he ‘would presume’ that it would be important to keep track of what the RFS was saying about the fires, particularly the fires close to the ACT border, and that he believed Ms Lowe ‘at stages would talk to Cameron Wade’.<sup>895</sup> For her part, Ms Lowe said that she assumed that the Rural Fire Service would be issuing media releases, but that she was not aware of or involved in a process under which those releases were collected and monitored by anyone at ESB:

When I spoke to Cameron Wade on the telephone about NSW Rural Fire Service personnel coming to Canberra, I asked him if they were going to do a media release about it and naturally they were. I think I requested a copy of that at the time for them to fax it through to us so we could have a record of what they were saying about the ACT at that time. But there was no process established at that time to receive all releases that New South Wales was releasing.<sup>896</sup>

Ms Harvey explained:

We had a process in place to be receiving, you know, media statements that a number of other organisations put out, including ACT police statements and ActewAGL ... I am afraid I don't recall whether we got the NSW Rural Fire Service ones, but it certainly would have made a lot of sense to. I guess I would be surprised if we didn't.

However, Ms Harvey was not aware of any formal process ‘at that stage’ by which all NSW media releases would be collected by someone and distributed to people in planning or elsewhere. She thought that a process was set up at some stage where media releases that came in on the media fax were copied to give to her and to Mike Castle but she was not sure when that process was put in place.<sup>897</sup>

Mr Corrigan’s evidence was that he was receiving media releases issued by the NSW Rural Fire Service and ‘was ensuring that they were either faxed or I was personally faxing them to planning ... at Curtin’. Mr Corrigan’s memory was that about once a day he would forward an RFS media release to ESB.<sup>898</sup>

#### **5.10.6 Mr Val Jeffery’s situation update and warning**

During the afternoon of 15 January 2003, Mr Val Jeffery, Captain of the Southern Districts Bushfire Brigade, on his own initiative mailed a letter to residents in his local area, including the Naas, Tharwa, Tidbinbilla, Lanyon, and the Smith’s Road area.<sup>899</sup> Mr Jeffery explained that he

sent that letter because he had been concerned about the progress of the fires and believed he had an obligation to warn his community.<sup>900</sup> The text of Mr Jeffery's letter included the following:

Out of control wildfires are burning in the ranges west of us. These fires stretch from Weejasper to the north of us through to the Victorian border. Even if these fires are brought under control before the inevitable windy west to north-west change arrives it will be almost impossible to hold them within containment lines. The only thing that can prevent this occurring is good rain. I must say that there is no indication that this rainfall may arrive.

In short, I am writing to warn you that there is a very real possibility that these fires will break out of the mountains. At this stage it is looking like this could happen about Monday or Tuesday. Be aware that we have sitting to our west ready to hit us, a combination of the disastrous 1939 Brindabella fires PLUS the 1983 Gudgenby scenario.

When these fires break out of the mountains they will burn virtually all our country. Suppression forces will be overwhelmed so you will need to ensure that you are well prepared to protect your own property and this can be very successful with a few simple precautions and preparations. Here are a few suggestions;

- Ensure your buildings are well clear of flammable material.
- Be prepare[d] to stay at home on the expected bad fire days.
- Do not evacuate unless you are scared or invalidated. If you do leave, leave well ahead of the fire.
- If you have a few able bodied friends who can be with you, invite them along.
- Make sure that you have any weed spray units or pumps etc., set up and filled with water ready to go.
- Do not rely on electric pressure pumps as you can expect to lose power.
- Keep filled buckets around your buildings, complete with a mop if possible.
- Muster stock into bare paddocks or yards well ahead of the fire.
- DON'T PANIC this is not the Blue Mountains, with a bit of common sense everyone should be safe and no property should be lost.

I don't want to alarm people, just to forewarn you.<sup>901</sup>

Mr Graham saw the letter from Mr Jeffery after the fires, and he agreed that at some point a windy west to north-west change was expected. However, Mr Graham said that, as at 15 January, 'I was still fairly confident that we would be able to contain or hold these fires within our containment line', and he felt that even if the fires did escape the mountains and start moving toward the city his expectation was that the fires would be stopped in the grasslands by breaks created by plant and machinery. The possibility that the fires would move into the city at that point was out of Mr Graham's reckoning.<sup>902</sup>

### **5.10.7 A telephone conversation between Mr Graham and Sergeant Byrnes**

At 5.34 pm on 15 January 2003, Mr Graham received a telephone call from Sergeant Jason Byrnes of the Australian Federal Police.<sup>903</sup> The purpose of the telephone call appears to have been for Mr Byrnes to ascertain whether the ESB needed the AFP to be involved in any traffic operations because of a back-burn being planned on the Brindabella Road. Late in the discussion, Mr Byrnes said to Mr Graham, ‘Obviously our bosses are a little bit concerned now. They’re sort of worried that Canberra is gonna burn’. Mr Graham responded, ‘Yeah, well it’s not beyond possibility on Saturday or Monday’.

In his evidence, Mr Graham was asked whether, in his answer to Sergeant Byrnes, he was referring to the possibility of Canberra city burning. His response was:

No, I don’t believe I was … I think I was referring to the fact that the fire is expected to have a run towards Canberra city and that areas up to Canberra city may well be under some threat. But as I described earlier, my feeling at that time was once the fires had reached the river and had crossed into the grasslands that they would contain it all.<sup>904</sup>

Mr Graham also denied that he understood Sergeant Byrnes to be referring to Canberra city: ‘No, I don’t believe so. I believe, as I earlier described, that I was talking to the east certainly of where the fires were, but not Canberra city. Mr Byrnes, he didn’t question me any further on it. He just let the issue go. So I don’t think that he took it either to be a reference to Canberra city’.<sup>905</sup>

Mr Graham was aware that there were two substantial fires burning in the ACT and that the fire he had earlier been talking about with Sergeant Byrnes was the Bendorra fire. It therefore seems unlikely that Mr Graham was referring to ‘the ACT’ in responding to Mr Byrnes’ reference to ‘Canberra’, because according to this terminology the ACT was already burning. However, Mr Graham was clear that he did not understand Sergeant Byrnes to be suggesting that there was a possibility of Canberra City burning on the following Saturday or Monday.<sup>906</sup> Mr Graham further suggested that, if Sergeant Byrne’s view had been that the Canberra suburbs were under threat as at 15 January, he would have expected that there would have been an immediate AFP presence at Curtin for the ensuing days until that threat was dealt with, and that the Emergency Management Committee would have been called together to do some planning on that potential impact.<sup>907</sup> Mr Graham also said that had he understood that the AFP thought that there was a possibility of Canberra city burning, he would have immediately brought that to the attention of the other members of the SMT, in particular Mr Lucas-Smith and Mr McRae.<sup>908</sup>

Sergeant Byrnes accepted that he mentioned to Mr Graham the possibility that ‘Canberra was going to burn on Saturday or Monday’. However, he said:

That’s one of the statements I don’t recall exactly saying but obviously I did say it. All I can say is that if I thought it was going to mean the actual City of Canberra in the statement, I would have stated so and continued to push on that issue. The difference is Canberra means the areas around Canberra City as well.

According to Sergeant Byrnes, if he had believed that Mr Graham was indicating to him on 15 January that the urban area of Canberra was under threat, he would have briefed straight up the line through his chain of command to the Winchester Centre<sup>909</sup>: ‘Again, I can only say I came away from that and the other conversation satisfied that the situation was in hand and that if it was going to be a critical incident the fire brigade would come back to the AFP and seek—formally advise and then seek our involvement’.<sup>910</sup>

Sergeant Byrnes gave evidence that the telephone conversation he had with Mr Graham was preceded by a discussion he had with a New South Wales inspector of police from Tumut or Cooma to the effect that a series of bushfires to the west of the ACT may pose a threat in coming days. At the time, Sergeant Byrnes was the acting officer in charge of the Tuggeranong patrol. The officer seemed to indicate to Sergeant Byrnes that the fires were serious fires and there was a strong potential they would reach the city. As a result of that information, Sergeant Byrnes briefed Detective Superintendent Quade who instructed him to ‘continue to run with it and … then get back to me’. He then contacted the NSW Rural Fire Service at Queanbeyan and then Mr Graham from ESB. The person he spoke to at the NSW Rural Fire Service was somebody who played a relatively senior coordinating role. He sought some advice about the fires and was told that they were large and serious fires and that he should contact the ACT Bushfire Brigade. He then contacted Mr Graham.<sup>911</sup>

### 5.10.8 Preparation of the Cabinet briefing paper

At a time probably in the late afternoon or early evening on 15 January 2003, Mr Castle spoke with Mr Keady in connection with preparing a briefing paper to be given to the ACT Cabinet the following morning.<sup>912</sup> Mr Keady’s best recollection was that he asked for the Cabinet briefing paper to be prepared, and that he would have left Mr Castle to prepare it.<sup>913</sup> Mr Keady did not think the Cabinet briefing paper had been provided to him in draft form for comment. He said the purpose of the briefing paper and the discussion that followed was to provide Cabinet with an assessment not only of what was occurring, but of a range of possibilities beyond that, including the possibility of a serious impact on the ACT suburban area. According to Mr Keady, the potential serious possibility that the ACT forest pines and the urban area might affected did not misstate Mr Keady’s state of mind, and he recognised these outcomes as a serious possibility.<sup>914</sup>

Ms Keane recalled that the briefing paper was prepared ‘in the evening before Mr Castle did the Cabinet briefing, and I sat in his office and he pretty much dictated what he would like to put into the Cabinet brief and I typed it up for him’. Her memory was that it was just Mr Castle and herself in the office. She thought that ‘it’s possible that the document was then forwarded to Mr Keady but I don’t remember Mr Keady being in the office that night’. Ms Keane did not remember Mr Castle asking her to source information from anywhere else. ‘We just sat in the office and I typed it up, and then the next morning Mr Castle did the briefing’.<sup>915</sup>

The Cabinet briefing paper is headed ‘Cabinet Briefing—January 2003 bushfires’ and is four pages long. It has attached to it a map of each of the fires, including the McIntyres Hut fire and a depiction of containment lines around each of the Bendorra and Stockyard Spur fires. It also has attached to it a page headed ‘Bushfire estimated costs as at 15 January 2003’.<sup>916</sup> After a brief summary of the history of the fires, the briefing paper continues:

The general wind direction since the start of the fires has had easterly components each day except for some afternoon slight north-westerlies over the last two days. The prevailing winds are from north through to westerlies and these are generally hot, dry and can be very strong. A weather summary is attached.

The Bendorra fire is described as being 2100 hectares in size with ‘21km of control lines in place. Backburning has been successful around three sides’. The Stockyard fire is said to be approximately 3500 hectares in size with ‘15km of control lines in place. Anticipate backburning

operations to commence today'. Under the heading 'NSW fires', the McIntyres Hut fire is described as follows:

McIntyre's fire to the north-west has secure containment lines to the south and east following backburning operations. However, with stronger winds from the north-west there is always the potential for spotting over the containment lines which has potential serious impact to ACT Forest pines and subsequently the urban area.

Under 'Planning contingencies', the briefing paper notes, 'The weather summary would indicate that Friday is the first operational deadline to secure operational strategies due to the likely wind change. A series of contingent control lines are being planned to the east'.

The next section of the briefing paper lists 'Assets under potential threat'. These include, as the seventh bullet point: 'urban edge', and eighth bullet point:

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- protection of Pryor's Hut and a number of arborets
- protection of Corroboree Frogs at Ginini and Snowy Flats
- protection of civil aviation communications equipment at Mt Ginini.

The weather summary constituting page 4 of the briefing paper includes the following:

**Friday.** A cold front through Melbourne is expected late Friday afternoon which has an influence on the wind directions in our region. Stronger winds from the north, north-west are expected with mid afternoon winds reaching 30–40kms, gusting to 50kms per hour. Humidity is expected to drop. A Fire Weather Warning is expected, which automatically results in a Total Fire Ban declaration by the Chief Fire Control Officer.

**Saturday.** Winds will be from the north, north-west freshening to 30–40kms per hour, with hot dry air coming from NSW and Qld. Temperature expected to be 35° plus. The change will potentially move through late Friday/Saturday, which will weaken as it moves east.

**Sunday.** Normal type cooler easterlies ranging from south-east to north-east.

**Monday.** Hot dry north-west winds ahead of a change late Monday evening. The front could possibly hold off until Tuesday. Low humidity. Temperature is expected to be in the high 30's, with wind speeds 30–45kms per hour, gusting 60kms plus. This is very unusual and severe hot dry weather currently being described as a 1 in 40 year event.

The map attached to the briefing paper gives a clear indication of the location of the McIntyres Hut fire relative to Canberra. It also shows that there are very large areas of unburned country between the containment lines around the Bendora and Stockyard Spur fires and the fires themselves, particularly in relation to the Stockyard Spur fire.

Mr Castle thought that the Cabinet briefing paper may have been started before the afternoon planning meeting and was probably finished some time later. Mr Castle presumed he was conscious of Mr McRae's words during the planning meeting when the briefing paper was being prepared.<sup>917</sup> Ms Keane's evidence was that, as best she could recall, the words in the briefing paper referring to 'potential serious impact to ACT forest pines and subsequently to the ACT urban area' were dictated to her by Mr Castle. Likewise, as best she could recall, the reference to the urban edge in the list of assets under potential threat was dictated to her by Mr Castle.

She could not recall having any discussion with Mr Castle at that time about the document or about the references in it to threats to the urban edge.<sup>918</sup>

### 5.10.9 Response to the Bendorra fire

Peter Galvin was incident controller on the Bendorra fire for the day shift on 15 January. Once again, he was given only limited information by the SMT and no written IAP, and he obtained most of the information he needed by speaking to people in planning at Curtin. However, he did say that support had improved significantly since his shift on 13 January, in that on 15 January he had a tent to operate out of at Bulls Head and that operations were generally more efficient.<sup>919</sup>

As on previous days, work continued throughout 15 January to consolidate containment lines. An overview of these fire operations is provided in Mr Cheney's report.<sup>920</sup> Although containment lines around the fire perimeter had been established by 15 January, Mr Galvin said that these lines were breached at times during the day<sup>921</sup> and that:

On the evening of the 15th of January 2003 ... we had several lines that were holding. There was still a lot of active fire in the perimeter and it was clearly acknowledged and recognised that changes in wind speed and direction could cause this fire to break its containment lines easily ... I was very conscious of the fact that we had winds that were unusual from the south-easterly direction. And I was conscious that again the winds would change back to the north-west at some point.<sup>922</sup>

Mr Galvin's assessment accords with the views of Mr Roche, who concluded that the containment lines around the Bendorra fire were still not secure by the afternoon of 15 January:

... despite considerable activity including the construction of additional containment lines, substantial backburning and burning-out and many instances of direct attack on fire edges and spot fires, sections of the fire remained outside of secure containment lines ... In my opinion, it should have been clearly evident by 15 January that the ACT agencies were facing the real likelihood that the Bendorra fire would not be behind secure containment lines and remaining vegetation burnt out, prior to the arrival of adverse fire weather conditions.<sup>923</sup>

Mr Roche's evidence was that by 4.00 pm on 15 January, the Bendorra fire had a perimeter of approximately 30 kilometres and had burnt some 2165 hectares.<sup>924</sup>

During the night shift of 15–16 January burning operations continued under the direction of Mr Neil Cooper, with burns conducted along approximately 7 kilometres of containment lines. Mr Cooper's evidence was that the burning out operation was slowed because the crews were inexperienced, which he said reflected 'a general inexperience in the ACT' arising in part from the lack of hazard reduction burning over the preceding years.<sup>925</sup>

### 5.10.10 Response to the Stockyard Spur fire

By 2.30 pm on 15 January, Mr Lheude and Mr Sayer had partially completed the IAP for the now-combined Stockyard Spur and Gingera fires. They had been working on this IAP since 12 January, with some assistance from Mr Hilton Taylor, Mr Simon Tozer, Ms Felicity Grant and Mr Graham Hirth.<sup>926</sup> The IAP outlined three alternative control strategies for the combined fire. The SMT selected Alternative 1, which proposed containment lines delineating an area of 1500 hectares and estimated a control date of 17 January. However, the probability of

successfully completing this control strategy was estimated at 50 per cent, and the IAP contained no estimate of the resources required to achieve this strategy. Alternative 2 was also estimated to have only a 50 per cent probability of success, but it proposed a larger containment area of 2000 hectares, and the IAP provided no estimated date of control for this strategy. It appears from the IAP that Alternative 3 had not been fully formulated as at 2.30 pm on 15 January.<sup>927</sup>

Work continued to establish containment lines throughout 15 January. An overview of fire operations on the Stockyard Spur fire throughout 15 January is provided in Mr Cheney's report.<sup>928</sup>

#### 5.10.11 Response to the McIntyres Hut fire

The McIntyres Hut fire continued to burn within containment lines throughout 15 January and, with approximately 100 personnel and 30 tankers working through the day under the direction of Mr Arthur, the last sections of the containment lines were completed at approximately 8.00 pm.<sup>929</sup> However, while containment lines were complete around the entire perimeter of the fire, there were still very large areas of vegetation within that perimeter that needed to be burnt out prior to the onset of the adverse conditions that were forecast to arrive within days. As noted above, Mr Koperberg was emphatic that just because the fire was within containment lines, this did not mean that it was controlled or suppressed, and he did not think that it would be able to be suppressed within the few days prior to the predicted onset of adverse conditions.<sup>930</sup> Similarly, Ms Crawford said that, although she had some confidence that the fire would be contained, there was always a possibility that it would break containment, particularly given the huge size of the containment area and the time it would take to complete burning-out operations:

There was no way we were going to have the fire out by the 18th ... it was a big area we were burning. No matter what the weather was going to do, the attempt was to contain it within control line[s] and then either burn it out or like normally happens after a few weeks you actually get some rain. But there was no rain. The only thing we could do was keep it within containment lines, keep deepening those containment lines and it burns itself out. So it wasn't going to be out on the 18th.<sup>931</sup>

The IAP prepared at 3.45 am for the day shift on 15 January stated, 'Consideration will be given to aerial incendiary work to the east of the Baldy Range and eastern division once back-burn is firmly established to limit fire intensity and reduce risk of spotovers'.<sup>932</sup> In fact the use of aerial incendiaries to burn out any vegetation remaining within established containment lines had been discussed as early as 8 or 9 of January. However, as noted in the IAP, aerial incendiaries could only be used once containment lines were deepened sufficiently to reduce the possibility of spotovers, and so with containment lines only completed at 8.00 pm, and aircraft unable to safely drop aerial incendiaries at night, the planned use of these incendiaries was delayed until 16 January.<sup>933</sup>

## 5.11 16 January 2003

### 5.11.1 ESB assessment and strategy

#### *The morning planning meeting*

The planning meeting minutes for the morning of 16 January 2003 confirm that Mr Graham opened the meeting on behalf of Mr Lucas-Smith, who was at the Cabinet briefing with Mr Castle (as discussed below).<sup>934</sup> Mr Graham provided a report on fire operations and confirmed that the weather reports of the morning planning meeting did not indicate any significant change in the outlook for the weekend and the following week. Mr Graham's view was that Saturday was still going to be a bad day and, accordingly, that Friday was probably the deadline for completing containment strategies. At this time he felt that completing the containment strategies for Bendora by Friday 'was a very real possibility. With Stockyard, I felt that that was achievable too as long as we moved quickly ... it was certainly I think for Stockyard becoming a little tight'.<sup>935</sup>

Mr Graham was asked about references in the Cabinet briefing paper to a potential serious impact to the ACT forests pines and subsequently to the urban area, and to the urban edge being identified as an asset at risk. He did not believe that anyone spoke to him about a potential serious impact to the urban area late on Wednesday or on Thursday morning, and he reiterated his earlier evidence that it wasn't a potential that he had identified at that time.

Under the heading 'ACT Fire Brigade operations', the minutes of the planning meeting record, 'The ACT Fire Brigade is focusing on outlying structures and there will be a planning meeting this afternoon to discuss the potential for a Structural Rural Task Force. ACT Fire Brigade and the ACT Ambulance Service are to meet to discuss urban contingencies'.<sup>936</sup>

Commissioner Bennett explained that the extent of his 'verbal input at the meeting' was limited to his report on the intended activities of the ACT Fire Brigade in the near future and that he had told the meeting that, following the briefing of Fire Brigade officers by Mr Lucas-Smith scheduled for that afternoon, the Fire Brigade would commence planning for a potential increase in its role outside the urban area:

I had approached Mr Lucas-Smith on the Wednesday in order to establish an appropriate time to provide an overview and briefing to additional fire service officers. In fact, what I was reporting to ... that planning meeting was that this meeting was to occur that afternoon and that following on from that meeting we would be looking at what plans we needed to put in place, subject to requests for further involvement.

According to Commissioner Bennett, the information he had on 16 January that led him to believe that the ACT Fire Brigade would have an increased role in the rural areas outside of Canberra was essentially '... the weather that had been predicted, and the fact that it was evident that the bulk of the resources of the ACT Bushfire Service were engaged, and that collectively we would need to be able to cope with any further escalation'.<sup>937</sup>

Hence Commissioner Bennett's reading of the minute referring to discussing 'urban contingencies' was that he had told the meeting that representatives of the ACT Fire Brigade (and Ambulance Service) would be meeting that afternoon, essentially to consider 'the possibility of establishing strike teams that were going to respond outside our primary jurisdiction, and whether or not we had the appropriate resources in order to do that'.

Commissioner Bennett could not recall any discussion at the planning meeting about contingencies needing to be looked at in the context of a threat to the urban environment itself.<sup>938</sup> He said that nobody indicated to him before or during that meeting that there was any threat to the urban environment of Canberra from the fires that were burning in the mountains, and his understanding when he left the meeting was

Essentially that the work that was currently being conducted in those western areas in and around the ACT would be of particular importance over the next couple of days; that the window for continued containment or successful containment had somehow narrowed; and, as I mentioned before, it was probably the time at which we looked—or I was considering that we would go from an essentially passive role outside these fires to needing to be in some way, shape or form prepared should we be called upon.<sup>939</sup>

Mr Graham remembered the discussion regarding the formation of the Structural Rural Task Force but could not remember a discussion concerning ‘urban contingencies’. Moreover, although Mr Graham said that he did not know why the ACT Fire Brigade and ACT Ambulance Service would be planning to discuss urban contingencies on the morning of 16 January, he agreed that the reference in the minute would indicate that a potential threat to the urban area of Canberra was recognised at this time.<sup>940</sup>

Mr McRae’s evidence was that the reference to those agencies discussing ‘urban contingencies’ related to the fact that ‘Both of those agencies conduct most of their business in the urban setting. It was considered most important for them to put together planning for impacts on the urban environment which, although arising from the bushfire, were not associated with the management of the bushfire’.

Mr McRae did not have a recollection whether there was any discussion as to when those impacts were anticipated to occur, suggesting that ‘my expectation would be we were still telling them Monday was a likely day for the impact’.<sup>941</sup> (Mr McRae’s evidence in relation to warnings in this context is dealt with below under the heading ‘Mr McRae’s view of the threat and the need for a “trigger”’ and in more detail in Chapter 7.)

### **5.11.2 The Cabinet briefing**

At 9.00 am on the morning of 16 January 2003, Mr Castle and Mr Lucas-Smith briefed the ACT Cabinet. Present at the briefing were Mr John Stanhope, the ACT Chief Minister, Mr Ted Quinlan, Treasurer and a number of other portfolios, Mr Simon Corbell, Minister for Health, Mr Bill Wood, Minister for Police and Emergency Services, Mr Robert Tonkin, Chief Executive of the Chief Minister’s Department, Mr Tim Keady, Chief Executive of the Department of Justice and Community Safety, Mr Mark Kwiatkowski, the Cabinet Secretary, and Ms Claire Wall from the Cabinet Secretariat.<sup>942</sup> The Cabinet briefing paper, prepared the night before, was distributed to those present at the outset of the briefing.

During the course of this inquiry, Messrs Lucas-Smith, Castle, Keady, Stanhope and Tonkin were questioned about the Cabinet briefing. In addition to the evidence provided by these witnesses regarding the briefing, there are six other sources of information detailing what was discussed:

- the Cabinet briefing paper prepared by Mr Castle the previous evening<sup>943</sup>
- notes of the briefing taken by Mr Kwiatkowski<sup>944</sup>

- notes of the briefing taken by Ms Wall<sup>945</sup>
- brief notes typed by Mr Tonkin during the Cabinet briefing<sup>946</sup>
- the formal ACT Government Cabinet Minute: Decision No. 0516—‘Brief on Fire Situation’<sup>947</sup>
- ABC news footage and audio of parts of the briefing.<sup>948</sup>

The Cabinet briefing went for 45 minutes to an hour.<sup>949</sup> According to Mr Castle:

This briefing comprised information about the fires, what assistance had been sought from the Commonwealth and mechanisms of that process, and the continuing liaison with New South Wales. Potential vulnerable areas were identified in broad terms. There was discussion as to the process of declaring a State of Emergency. I went on to advise the Cabinet of the process involved in that eventuality. We offered advice on the potential risk to urban areas due to the extent of the fire front.<sup>950</sup>

Following a very brief introduction by Mr Keady, the briefing commenced with Mr Castle providing an overview of how the fires had started and of the forecast weather conditions. In particular, Mr Castle outlined the forecast for Monday 20 January, which was for extreme fire conditions, and he restated to the Cabinet Mr McRae’s warning about Monday involving a conjunction of a one-in-40-year weather event with a one-in-20-year fire event.<sup>951</sup> Mr Castle also discussed when a declaration of a state of emergency might be made and about the mechanism for this, and some of the direct consequences of such a declaration.

Mr Lucas-Smith then took over the briefing, giving an overview of the spread of the fires since 8 January, the methods of containment being attempted by ESB, and the arrangements made the previous day for the NSW Rural Fire Service to provide a substantial firefighting taskforce to assist the ACT.

The three most important issues for the purposes of this inquiry that were canvassed to at least some extent at the briefing were:

- the potential threat the fires posed to Canberra
- in what circumstances a state of emergency might be declared for the ACT
- whether and in what circumstances warnings to the public should be issued.

Each of these topics is discussed below.

A number of additional issues were also canvassed at the meeting, including the potential for the fires to affect the ACT’s infrastructure assets (particularly power) the costs incurred to date in fighting the fire, and matters relating to the provision of Commonwealth assistance.

The briefing concluded with the Cabinet members noting that Cabinet might need to be recalled if it became necessary ‘to provide quick advice on priorities for which assets to save’.<sup>952</sup> Immediately following the briefing, those present began to formulate the content of the Cabinet minute in response to the briefing.<sup>953</sup>

### ***Discussion of a threat to Canberra***

As noted, the Cabinet briefing paper included on page 2 the subheading ‘Assets under potential threat’. These were said ‘to include’:

- Cotter catchment area.
- ACT pine forest plantations.
- Isolated communications infrastructure.
- Tidbinbilla Nature Reserve.
- Tidbinbilla Tracking Station.
- Rural Leases.
- Urban edge
- Saved
  - protection of Pryor’s Hut and a number of arboreta
  - protection of Corroboree Frogs at Ginini and Snowy Flats
  - protection of civil aviation communications equipment at Mt Ginini

With respect to the McIntyres Hut fire, the briefing paper stated:

McIntyre’s Fire to the northwest has secure containment lines to the south and east following back burning operations. However, with stronger winds from the north-west there is always the potential for spotting over the containment lines which has potential serious impact to ACT forest pines and subsequently the urban area.<sup>954</sup>

Mr Lucas-Smith saw the briefing paper before it was distributed and accepted that it was an appropriate briefing paper.<sup>955</sup> Mr Lucas-Smith also agreed that it was apparent from the briefing paper that by the morning of 16 January or, indeed, when the briefing paper was finalised, it was recognised that there was the potential that the fires would seriously impact on the urban area of the ACT if the forecast adverse conditions arrived, the fire broke containment, and containment could not be re-established. Mr Lucas-Smith agreed that anyone reading the briefing paper would understand that ESB were of the view that there was a potential serious impact, among other things, not only to the ACT forest pines but also, if conditions deteriorated and interventions failed, to the urban area. He further agreed with the suggestion by counsel assisting that the briefing paper put the ACT government on notice that people within the ESB and the ESB as a corporate group thought that the ‘potential existed’ for the fires to impact on the urban area, among other things.<sup>956</sup>

However, Mr Lucas-Smith emphasised that in raising this threat to urban Canberra, he was ‘painting a worst case scenario to the best of my ability’,<sup>957</sup> and that briefing paper raised the threat:

... in the context of, ‘This is a potential. This is a worst case area. This is where the fire has the potential to extend to’ — and I am primarily talking about the Bendorra and Stockyard fires and the southern suburbs of Canberra ... it was not something that was prominent in our thinking at that particular time, but it was there. The potential existed ...

I would have thought that if I was making a statement to Cabinet, and I thought that the most serious potential for impact on urban edge existed, I would have made it far more prominent than make it the second last dot point. What I was saying there quite clearly, in my view, is that there are all these other areas of potential threat, which primarily included rural assets of some sort. However, we can't deny the fact that it could reach the urban edge.<sup>958</sup>

In this context it is relevant that prior to the list of 'Assets under potential threat' in the Cabinet briefing paper is a section outlining the incident management objectives and strategies being undertaken to contain the fires, followed by the heading 'Planning contingencies', under which it is stated:

- The weather summary would indicate that Friday is the first operational deadline to secure operational strategies due to the likely wind change.
- A series of contingent control lines are planned to the east.
- If the fires are contained within current control lines there will be approximately 10,445 hectares burnt in the ACT. Or 96% of the ACT saved.

Although Mr Lucas-Smith said that the members of the ACT Cabinet were 'very interested' in the threat the fires posed, he did not recall a great deal of questioning during the briefing, and he could not recall any discussion of the paragraph of the briefing paper that referred to the potential for the McIntyres Hut fire to spot over containment lines under stronger north-westerly winds, with the potential to seriously affect the ACT Forest pines and subsequently the urban area.<sup>959</sup> However, he did recall:

There was certainly questions asked and things were pursued as the presentation was being given. From what I can recall, the majority of them were around whether we had adequate resources, how we were going with resources and things like that, and whether or not there was more that could be done from a government perspective.<sup>960</sup>

Mr Castle agreed that the risk to the urban area was discussed in general terms. His evidence was that during the general discussion of the potential of serious impact to the ACT pines, and subsequently to the urban area, he was not aware of any qualifications being made, or of the threat being down-played.<sup>961</sup> Although Mr Castle acknowledged reiterating at the briefing Mr McRae's warning about one-in-40-year weather and a one-in-20-year fire event potentially occurring on Monday 20 January, he said that he was 'not too sure' whether he left everyone present with the impression that what was being faced now was a worse fire event than the year before: 'All I said was, yes, it was a bad day last year. I didn't say that this was worse ... but I had actually already referred to, as you pointed out, Mr McRae's phraseology'. Ultimately, Mr Castle agreed that the phraseology he relayed to Cabinet would suggest that the ACT faced a potentially worse fire situation than it had faced in December 2001.<sup>962</sup>

Mr Kwiatkowski's notes of the briefing included a reference that the 'principal threat for major infrastructure and urban is McIntyre'.<sup>963</sup> Mr Castle said that this note confirmed his recollection that the possibility and effect of a fire impact on the urban area of Canberra was part of the discussion at the briefing, rather than merely a point in the briefing paper.<sup>964</sup> Mr Castle thought the reference in Mr Kwiatkowski's notes to 'MFP—question re SES capacity; could seek assistance if necessary around urban areas' may have been a reference to the fact that there had been assistance by the SES during the 2001 fires and that SES personnel had been trained to

assist with road blocks. Mr Castle agreed that assistance around the urban area would only be required if there was some effect on the urban area.<sup>965</sup>

Mr Castle was also asked about the reference in Ms Wall's notes to 'suburbs of greatest risk being Dunlop, Weston Creek'. Mr Castle did not recall that being said, but he accepted that 'it was said because somebody has written it down'. He did not know who said it and he did not recall saying it himself.<sup>966</sup>

Under his notes on Mr Lucas-Smith's 'overview of containment approach', Mr Kwiatkowski's notes state, 'Discussing with New South Wales yesterday—now 200 NSW firefighters have been provided under cross jurisdictional arrangements'. Mr Castle said he could not recall what Mr Lucas-Smith said to Cabinet about his meeting with Mr Koperberg, but Mr Castle agreed that records of the Cabinet briefing did not make any reference to Mr Lucas-Smith being told that the New South Wales fires would not be an issue for the ACT, and he had no recollection of Mr Lucas-Smith saying something to that effect.<sup>967</sup>

#### ***Discussion of the declaration of a state of emergency***

The Cabinet minute titled 'Brief on fire situation' says that the Cabinet:

... noted that if the situation deteriorates:

- (i) under the Emergency Management Act, the Chief Minister can declare a "State of Emergency", at which time:
  - (A) The Chief Police Officer is transferred into the position of Controller; and
  - (B) The Chief Executive of the Department of Justice and Community Safety becomes responsible for coordinating support with the administration; and
- (ii) that it may be necessary for Cabinet to be recalled to decide, or if necessary the Chief Minister may decide alone, whether to withdraw, abandon or protect specific property or assets.

In regard to point (ii), Ms Wall's notes of the briefing state 'that if necessary Cabinet may need to be recalled to make quick advice on priorities for which assets to save'.<sup>968</sup>

Mr Kwiatkowski notes also indicate that Mr Castle provided an overview of the Emergency Management Act and state that Mr Castle then suggested to Cabinet that a state of emergency 'would be called when getting major infrastructure loss'.<sup>969</sup>

According to Mr Castle, he briefed the Cabinet on the process for the declaration of a state of emergency in the context of 'what ifs' and 'gave a truthful indication that it was always a possibility in an emergency'. Although Mr Castle agreed in his evidence that 'major infrastructure loss' could be another way of referring to an effect on the urban area, he pointed out that it could also be a reference to other threatened infrastructure that had been identified in the briefing paper and discussed earlier during the briefing. In this regard, in identifying the McIntyres Hut fire as the 'principal threat', Mr Kwiatkowski's notes do appear to distinguish between 'major infrastructure' and 'urban' assets. In his evidence, Mr Castle agreed that a declaration of a state of emergency would not be required if there was a problem with

infrastructure such as the Tidbinbilla Tracking Station but suggested that such a declaration might be required if there was a problem with the MacGregor power station.<sup>970</sup>

However, later in his evidence Mr Castle indicated that at the time of the Cabinet briefing on 16 January, he believed that the circumstances that would have given rise to the need to declare a state of emergency were ‘widespread impact, widespread disruption on a very large scale’. Mr Castle indicated that when he said ‘widespread’, he was referring predominantly to an impact on the urban edge or the urban community of Canberra. Mr Castle went on to say that he didn’t think he could have envisaged a circumstance in which a declaration of a state of emergency might be necessary if there was not an impact on the urban area, and agreed that, as a general proposition, in his mind at least, at this time he was ‘predominantly’ equating a declaration of a state of emergency with a fire impact on the urban area of Canberra.<sup>971</sup>

Ms Wall’s notes of the meeting include: ‘now significant—the chance that as SOE [state of emergency] will have to be declared 40–60%’. When questioned about this note, Mr Castle said, ‘I think that may have been my estimate. I don’t recall using 60. I think I said 40. It could have then been a range. I think I looked at Mr Lucas-Smith at that stage to try and get some indication’. Mr Castle then indicated that Mr Lucas-Smith’s expression suggested, ‘I don’t know’. Although Mr Castle said that he remembered suggesting a 40 per cent chance of having to declare a state of emergency, but did not recall suggesting as high as a 60 per cent chance, he accepted that it was a contemporaneous note and that Ms Wall was not likely to have written down something he did not say.<sup>972</sup>

### ***Discussion of warnings to the public***

The Cabinet minute noted ‘that a public information system had been put in place and will be activated as required by ESB in consultation with the Department of Urban Services’.<sup>973</sup>

Mr Lucas-Smith could not recall any questions during the briefing about the issuing of warnings to the community regarding the potential for a serious fire impact on assets identified in the Cabinet briefing paper as being ‘under potential threat’, including the ‘urban edge’.

Mr Lucas-Smith was unsure about the reference in the Cabinet minute to the ‘public information system’, but said that he assumed that this was a reference ‘... to the fact that the media liaison person from the Chief Minister’s Department had moved in there to assist and also arrangements had been finalised and established and put in place in relation to being able to put information on the Canberra Connect Government website’.<sup>974</sup>

Mr Lucas-Smith did not recall the circumstances in which that public information might be activated by the ESB being a topic of discussion at the briefing, and said that he was not asked about it.<sup>975</sup>

Mr Castle also gave evidence that the above statement in the Cabinet minute was a reference to the Canberra Connect arrangements that he had put in place, and that there was no discussion as to when that system would be activated: ‘I think we were more talking about the system and how it would actually work’. Mr Castle did not think there was any discussion regarding the need to issue warnings to the public, apart from the brief discussion about Canberra Connect. Mr Castle said that he was not given any advice or instructions during the meeting about the process of alerting the public to the potential danger.<sup>976</sup>

### ***Mr Stanhope's evidence about the Cabinet briefing***

The Chief Minister of the ACT, Mr Jon Stanhope, was first asked about the circumstances in which the Cabinet briefing was arranged and whether the fact of the briefing indicated that Mr Stanhope and members of his Government were beginning to recognise that the situation was getting very serious. Mr Stanhope said he 'did not believe that the state of my concern and the concern of any of his colleagues on Thursday was materially different than the level of concern or alarm that we would have felt or held on Monday'. Further, Mr Stanhope said that his awareness of the risk of the fires was not changed by the briefing.<sup>977</sup>

According to his statement, Mr Stanhope had no specific recollection of particular words used and only a general recollection of the briefing. He summarised the substance of what the briefing comprised as follows:

Mr Lucas-Smith made it clear to us that the fires presented a serious situation. He explained what was being done to contain the fires, and that fire fighting operations were occurring on a 24 hour basis. He presented a range of theoretical possibilities about development of the fires but I do not recall details. He explained that the fires were, at that time, west of constructed and proposed containment lines and that fire fighters were hoping to keep the fires within those lines ... We were informed that Monday was seen to be a "bad day" in terms of fire danger ... My memory is that the issue of a state of emergency arose out of a discussion about the possibility of damage to the electricity infrastructure, more notably the implications for power supply to Canberra if the fire caused "arcing" to the power lines crossing the mountains.<sup>978</sup>

Mr Stanhope referred in his statement to everyone being provided with a four-page briefing paper including a map identifying the fire area, and said that matters listed on the briefing paper were referred to from time to time in the course of the briefing. His statement continued:

There was general comment about the possibility of the fires reaching urban Canberra. In this context, it was mentioned that Weston Creek and Dunlop would as a result of their location be the suburbs towards which the fires might travel in the event that they did spread.

The possibility of the fires reaching urban Canberra was not discussed in a manner that conveyed to Cabinet any understanding that the fires were a direct threat or that it was envisaged or anticipated that houses within the urban area were at risk. Comments were more to inform us of current firefighting efforts, and that if the fire conditions deteriorated and the fires were not contained, Government might need to be involved in consequential decisions.

It was apparent from the briefing that the fires presented a serious situation but I did not gain any sense of anxiety that the fires presented any immediate threat to Canberra or that there was a considered view within the Emergency Services Bureau that the fires would not be contained.<sup>979</sup>

Mr Stanhope gave evidence that he did not specifically remember reading the sentence in the briefing paper that referred to the potential for the McIntyres Hut fire spotting over containment lines, with 'potential serious impact to the ACT forests pines and subsequently the urban area', but he assumed that he did read it. It was put to him that the description of a potential serious impact to the Uriarra pine forest and subsequently the urban area would have concerned him. Mr Stanhope responded:

Certainly it was a concerning fire. It was a serious fire and it was being treated seriously by the Emergency Services Bureau. I had a level of concern in relation to the fire from my initial briefing on Monday the 13th. At no stage did I regard the fire as anything other than serious.<sup>980</sup>

Mr Stanhope then referred to the statement in the dot point being consistent with advice available to him and the Minister for Emergency Services and generally available to the community that a fire was not particularly distant from the Uriarra forest, that it was a serious fire, that there was a potential for the fire to impact on ACT forest pines:

And, as a theoretical possibility were it not contained in the Goodradigbee valley, were it not contained by the subsequent or the fallback containment lines that existed or were being prepared, if the backburning were not successful, if the fire wasn't subsequently halted on the large area of urban-rural grassland west of the Murrumbidgee that yes, there was a theoretical possibility that the fire would advance to the urban edge.<sup>981</sup>

Mr Stanhope agreed that the word ‘theoretical’ was not a word used in the briefing paper, but maintained that the potential threat from the McIntyres Hut fire had to read in the context of the preceding sentence in the briefing paper, noting that the fire ‘has secure containment lines to the south and east following back burning operations’, and had to be understood in the broader context that

had been set by previous briefings on Monday, a context reinforced by discussions with Mr Lucas-Smith on Wednesday, and a briefing on Thursday that was essentially consistent with the nature of the conversations that I had—that yes, the fire is serious, there are some potentially serious impacts from this fire if a range of circumstances result.<sup>982</sup>

It was suggested to Mr Stanhope that the briefing paper was the first time that anyone had raised with him that there was a potential serious impact on the ACT forest pines and subsequently the urban area. Mr Stanhope believed the possibility of the McIntyres Hut fire reaching the Uriarra forest under certain circumstances had been raised with him on Monday 13 January by Mr Lucas-Smith, but he had no memory of anyone raising with him specifically the prospect of the fire reaching the suburbs of Canberra:

I do believe, however, that it is important that when we talk about the urban area [there] is a distinction drawn in the language used between the suburbs and that area of land immediately before the start of the suburbs ...

I think there is a distinction in language that is used between houses and the urban edge ... There are a range of assets at the urban edge that one might refer to as assets that aren't part of suburban Canberra—or that there were at least preceding the fire. There were assets such as Mt Stromlo forest; there were assets such as the Stromlo Observatory that are not part of the suburbs.<sup>983</sup>

Mt Stanhope was asked whether he recalled being told by Mr Castle that Monday would be a one-in-40-year weather event and that the fire was already a one-in-20-year event. Mr Stanhope answered: ‘Yes, I do recall a discussion about the weather conditions’. He was then asked whether he recalled being told that the circumstances were equalling or surpassing the conditions that prevailed in 1983 and he answered: ‘I remember the broad discussion in relation to the weather conditions and the fact that the weather conditions were extreme’.<sup>984</sup> Although Mr Stanhope remembered a discussion concerning the MacGregor substation and the potential

for powerlines to leak, he did not recall discussions relating to the urban periphery and urban firefighters, as reflected in the notes.<sup>985</sup>

In relation to Mr Kwiatkowski's note 'principal threat to major infrastructure and urban is McIntyre's. Bendora—Tidbinbilla tracking station threats',<sup>986</sup> Mr Stanhope said he did remember Mr Lucas-Smith giving an explanation of his understanding of the anticipated behaviour of certain fires;

I do recall Mr Lucas-Smith explaining that the Bendora and Stockyard fires were potentially of significant threat to the catchment and to the southern area of Namadgi; and that under some scenarios it would be the McIntyre's Hut fire being, as it was, the northern-most fire, that would potentially impact on Uriarra forest; and if it were to fulfil some of the scenarios or some of the potentials that have been expressed, it was the fire that was in direct line with the city of Canberra.

Mr Stanhope said that he did not ask what the chances were of the fire actually burning into the Canberra suburbs because:

I had a certain mindset which had developed as a result of the briefing that I received on the Monday, conversations I had on the Wednesday, and the nature and tone of the briefing that Cabinet was receiving that this was not at that time a real live possibility, that it was not a possibility of any high expectation ... I had not at the stage developed, if I might call it, a mindset or an understanding of the nature of the fire that left me with any serious sense of alarm ... I don't think that it had occurred to me at that stage that there was any possibility that the fire would cause damage within the suburbs of Canberra. I simply had not reached that state of understanding. I did not have that mindset. I had not received advice that led me to believe that this fire would destroy property within the suburbs of Canberra.<sup>987</sup>

Later in his evidence Mr Stanhope reiterated that he did not ask Mr Lucas-Smith or Mr Castle what the prospects were of the fires burning into the Canberra suburbs because 'on the basis of all the advice that I had received, I had no reason to believe or assume or imagine that the fire would burn into the suburbs of Canberra'.<sup>988</sup>

Although Mr Stanhope remembered a reference during the Cabinet briefing to Uriarra forest as an asset under threat, he could not remember the threat being quantified as 70 per cent, as recorded in the Tonkin note, and had no memory of numbers such as percentage of assessment of risk being used at all during the briefing.<sup>989</sup>

In connection with Ms Wall's note 'suburbs of greatest risk—Dunlop, Weston Creek',<sup>990</sup> Mr Stanhope did not remember a specific discussion around suburbs being at particular risk and said that, when there was discussion about the possible threat to urban Canberra, it was not being suggested that such a threat as there was was imminent: 'It wasn't discussed as a real possibility'. According to Mr Stanhope, a risk to Dunlop and Weston Creek was raised at the briefing only as a theoretical possibility:

The briefing was that if the McIntyre's Hut fire broke out of the Goodradigbee Valley, which at that stage it hadn't done—cabinet had just been briefed that the fire was still within the Goodradigbee Valley, that it was still behind securely containment lines, that it hadn't broken out of the valley. Then of course a scenario was painted that if it did breach its initial containment line, if it breached subsequent or fallback containment lines, if it then crossed the rural grassland, if it then crossed the Murrumbidgee River, the suburbs or the urban edge most directly in line of any fire that approached Canberra

at any time are the western-most suburbs of Dunlop and Weston Creek. It is not correct to say that at that briefing a suggestion was made that the suburbs of Canberra were at threat. That was not a position that was put to the Cabinet.<sup>991</sup>

As noted above, in Mr Stanhope's statement he made reference to the discussion at the briefing of a threat to Weston Creek and Dunlop in terms that did not suggest any kind of imminent threat: 'It was mentioned that the western most suburbs of Weston Creek and Dunlop would as a result of their location be the suburbs towards which the fires might travel in the event that they did spread'.<sup>992</sup> In this context, Mr Stanhope said that no one at the briefing asked what the chances were of those suburbs being affected by the fires.<sup>993</sup>

Mr Stanhope was asked whether it was a significant concern to him that one of the things that he was being briefed about was the possibility of a declaration of a state of emergency. His evidence was that it wasn't a particular concern to him, even though he was unaware of any prior declaration of a state of emergency in the ACT. He repeated that the context of the discussions around the state of emergency, as he recalled it, was the 'real possibility' of the ACT losing most of its power supply:

The context of a discussion around a state of emergency, as I recall it, was the possibility of the ACT losing all of its power ... because almost all of the ACT's power is provided to the ACT by the TransGrid line which crosses Namadgi, we potentially faced a circumstance in which we would lose I believe somewhere between 80 and 90 per cent of our total power supply.

Mr Stanhope said that his belief and recollection was that the discussion about the declaration of a state of emergency had nothing to do with the prospect of the fires hitting the suburban area of Canberra.<sup>994</sup>

In relation to Ms Wall's note to the effect that Cabinet might need to be recalled to provide quick advice on priorities for which assets to save, Mr Stanhope did remember a discussion about the need to keep Cabinet involved and the need for Cabinet to be recalled if the circumstances changed to a degree where it was felt to be appropriate. He did not remember the subsequent discussion about the need for decisions to be made around the protection of particular infrastructure, nor did he recall the chances of a state of emergency being discussed in terms of percentages.<sup>995</sup>

In terms of warnings to the community, Mr Stanhope agreed that there was a discussion, which is reflected in the Cabinet minute, in relation to enhancing avenues of providing information to the public through the engagement of Canberra Connect. According to Mr Stanhope, no one asked a question along the lines 'given that the suburbs of Dunlop and Weston Creek by virtue of their position were the most vulnerable to any potential threat, what arrangements were in place to inform or warn occupants of those areas of the potential danger?'.<sup>996</sup> Further, Mr Stanhope did not believe it was raised by anyone at that time that there was a need to advise the community about potential interruption of the power supply, because 'the view of those advising the government, as expressed to the government, was that the danger to a range of assets was not at that point imminent or necessarily a real possibility'.<sup>997</sup>

#### ***Mr Keady's evidence about the Cabinet briefing***

Mr Keady thought that the Cabinet briefing had probably taken place in response to his suggesting to the then head of the Chief Minister's Department, Mr Tonkin, that it would be appropriate for Cabinet to be directly briefed regarding the fire event.<sup>998</sup> This accords with

Mr Castle's evidence that the briefing was initiated at Mr Keady's request.<sup>999</sup> Mr Keady thought the briefing was necessary because of: 'the nature of the event, the magnitude of it and the expenditure that we were investing in the event ... a very significant bushfire. At that stage it had been going for well over a week. It was a source of speculation, concern'.<sup>1000</sup>

In the context of being asked about his lack of recollection of the remarks by Mr McRae at the planning meeting on the evening of 15 February 2003 about the potential for a one-in-20-year fire event and a one-in-40-year weather event on 20 January, Mr Keady gave evidence that:

The reason the Cabinet briefing was occurring was because we were already aware that we had a very serious fire situation on our hands. It was certainly the worst that had occurred in my time in Canberra and it seemed as bad or worse than anyone else could recall. To the extent that the suggestion has been made here that the situation is very serious and likely to get worse, I think we were already aware of that.<sup>1001</sup>

Mr Keady could not recall many details of the discussion at the briefing of the threat the fires posed to urban Canberra. For example, he did not recall the comment by Mr Castle recorded in the ABC news footage of the briefing, that 'We are describing this fire event as 1:20 years because it's probably equalling or surpassing 1983' and Mr Wood's response: '... better than the fires a year ago. That was a pretty bad day'.<sup>1002</sup> Mr Keady could recall a discussion about the potential for the fires to impact on transmission lines and the MacGregor power station, but he could not recall what he was referring to where the Kwiatkowski notes record him discussing the urban periphery and urban firefighting, 'other than what they apparently mean'.<sup>1003</sup> Mr Keady also could not recall the reference in the Tonkin note to the Uriarra forest being 70 per cent at risk; nor could he remember a discussion indicating that the suburbs at greatest risk were Dunlop and Weston Creek, as recorded in Ms Wall's notes.<sup>1004</sup>

Mr Keady agreed that the question of when a state of emergency would be declared was discussed, but he did not remember the detail. He did, however, recall that 'part of that discussion included the possibility of the ACT's power supply being lost as well'. This appears to be broadly consistent with both Mr Castle's and Mr Stanhope's recollection of that part of the discussion. When asked about Mr Castle's evidence equating the declaration of a state of emergency with an impact by the fires on the suburban area, Mr Keady remembered that there was a discussion about the possibility of fires reaching the urban area<sup>1005</sup>, although he could not recall any discussion about a percentage chance of the need for a declaration of a state of emergency.<sup>1006</sup>

Mr Keady's recollection of the Cabinet briefing and, in particular, the context of the discussion of the declaration of a state of emergency were revisited in cross-examination. He described a technical discussion about the problem of thick smoke and what can do to cause power arcs: 'I think what was speculated about as something which might cause interruption or cessation of power supply, and of course there was the MacGregor power station itself. That was part of the infrastructure issues that was raised in the course of the meeting'. He was then asked if it was his recollection that it would be in the context of such power disruption that the need for a state of emergency might arise. He answered, 'Yes. Had a significant power outage occurred or some damage caused to either the lines or the power station, that would have had a very severe and immediate community impact'. The question was then raised by counsel assisting, having regard to Mr Keady's earlier lack of recall, whether this evidence by Mr Keady in response to questions on cross-examination was based on reconstruction or recollection, and Mr Keady said:

Well, it is perhaps a bit eccentric but a couple of things that stand out from that meeting—they are the islands [in a sea of lack of recollection] that counsel assisting has mentioned—is I remember some discussion about corroboree frogs as one of those things that stuck in my mind when it was mentioned. The other thing I recall about the power lines was the discussion—prompted by somebody about the possibility of thick smoke causing power arcs or something of the kind. It was just one of those things that stuck in my mind. I can't take it beyond that.<sup>1007</sup>

With respect to warnings to the community, Mr Keady was asked if he agreed that apart from item (c) in the Cabinet minute noting the Canberra Connect arrangements, there was no evidence to indicate that warnings to the Canberra public were discussed. Mr Keady responded, ‘Well, given the state of my recollection, I’m not going to contest the comment, but the reference to Canberra Connect I think was in the context of a discussion about how to keep the community informed’.

Mr Keady could not recall any details of that discussion and did not remember any Minister or the Chief Minister asking for information about the probability of the fires reaching the suburbs or for an assessment of what the nature of the impact on the suburbs might entail.<sup>1008</sup>

Mr Keady was asked whether there was any reason why on 16 January, after the Cabinet briefing, the people in the suburbs of Canberra could not have been told that there was potential for serious impacts on the urban area as a result of the NSW fire. He replied, ‘There is no reason why not. I guess the more relevant issue is any reason why. I think at that stage the level of risk didn’t appear sufficiently high enough’. Mr Keady accepted there was no disadvantage in giving people on the western edge of Canberra the same information about the potential serious impact that was given to the ACT Cabinet but added, ‘The question might arise about what it was we could say to them. Particularly given that the inevitable demand would be for more specific information, times, likely impact and that kind of thing, which I don’t think anybody at that stage would have been in a position to provide’.

Mr Keady accepted that it possibly would have enabled people to begin preparations but:

I think the kind of impact Cabinet was being told of was a worse case scenario. It wasn’t really at that stage within the realm of the immediate expectations. It was a discussion which was intended to canvass it widely, the possibility. There is a difference in terms of people’s mindset at the time between possibilities and probabilities. It wasn’t at that stage a probability.<sup>1009</sup>

#### ***Mr Tonkin’s evidence about the Cabinet briefing***

Mr Tonkin recalled being provided with the briefing paper and remembered reading the reference to ‘potential serious impact to ACT forests pines and subsequently the urban area’ if the McIntyres Hut fire spotted over containment lines under the influence of stronger north-westerly winds. However, he did not recall being particularly concerned about this information ‘because of the overall context in which it was presented. It wasn’t stressed as … an issue of significant concern in the presentation’. Mr Tonkin was also unconcerned by the inclusion of the ‘urban edge’ in the assets listed in the briefing paper as being ‘under potential threat’: ‘I was concerned in a sense about all those areas but, if you go to the particular aspect of the urban—the urban edge is in my definition the area from the back fence to the open area rather than the built environment. So that’s an occurrence which occurs, and occurred in 2001’.

Mr Tonkin agreed that the reference earlier in the briefing paper to the ‘urban area’ went beyond the back fence, but he said that ‘within the context of the overall briefing’ that did not raise in his mind whether or not there was a need at least to warn people in the relevant urban areas that this was a potential threat.<sup>1010</sup>

Mr Tonkin recalled the reference to the following Monday being a one-in-40-year weather event in the context of a one-in-20-year fire event and included this in his notes. He did not recall the reference to conditions being worse than or equal to the 1983 fires.<sup>1011</sup> Mr Tonkin recalled making the note that the Uriarra forest was at 70 per cent risk but did not remember who told him that. Mr Tonkin said that although he was concerned that the forest was at risk, he did not recognise at the time that if the Uriarra forest was at 70 per cent risk there was a risk to areas much closer to the suburban area, including the Stromlo forest.<sup>1012</sup> Mr Tonkin recalled a discussion of a threat to the MacGregor substation and to the powerlines. However, he had no recollection of a discussion noted by Mr Kwiatkowski, suggesting that Mr Keady raised other important potential affects, including references to the urban periphery and urban firefighters.<sup>1013</sup>

In relation to the discussion concerning the declaration of a state of emergency, Mr Tonkin’s general recollection was that Mr Castle said he was raising the question of a declaration of a state of emergency ‘just in the general run of contingencies that the most extreme contingency could occur that you would require a state of emergency. It is as simple as that: a description of process’. According to Mr Tonkin, the relevant extreme situation was not defined, and he did not recall anyone asking why they would need a state of emergency. Mr Tonkin agreed that there probably had never been a state of emergency declared in the ACT, and that it would be a dramatic response, but his recollection was that nobody asked Mr Castle why the situation might get to a point where such a declaration might be required.<sup>1014</sup> In particular, Mr Tonkin did not recall Mr Castle saying that there was a realistic chance that the fires would hit the suburbs and that this would require a declaration.

Although Mr Tonkin said ‘the potential impact of the fire coming closer to the city certainly was discussed’, he did not recall anyone raising the issue as to whether or not it was appropriate to warn people who lived in affected areas about that potential. He did recall discussion about public information systems, but said that this discussion was ‘simply about having in place a system whereby you can provide more information to the public should the need arise’. Mr Tonkin did not recall anyone asking about the circumstances in which that public information system might be activated.<sup>1015</sup>

In relation to Ms Wall’s note referring to Dunlop and Weston Creek as the suburbs of greatest risk, Mr Tonkin’s evidence was, ‘I recall a general discussion about the whole western extremity of the territory which runs from Dunlop to Southern Tuggeranong … what I am suggesting to you is whether that is a complete list of what was discussed—it was more a western extremity of the city’. He did not recall a specific reference to Dunlop or Weston Creek, nor any discussion about the potential need to warn people in Dunlop or Weston Creek or the areas in between. There was no discussion that Mr Tonkin could recall about the circumstances in which a warning could or should be issued to the suburban residents of the western edge of Canberra. According to Mr Tonkin, the discussion was to the fact that a mechanism would be put in place to enable such warning to be given, but there was no discussion about the circumstances in which they would occur.<sup>1016</sup>

### 5.11.3 The midday press conference

At approximately noon on 16 January 2003 Mr Lucas-Smith and Mr Castle gave the first of a series of daily press conferences concerning the progress of the fires. A transcript of the press conference discloses that Mr Castle commenced the press conference by discussing the assistance to the ACT to be provided by the NSW Rural Fire Service and resources already made available by the Commonwealth. Mr Castle then handed over to Mr Lucas-Smith ‘to talk about developments and issues and our strategies on the fire and anything you want to ask’.<sup>1017</sup> Mr Lucas-Smith commenced his part of the press conference by describing the progress of containment of each of the Bendora and Stockyard fires, before referring to the anticipated deteriorating weather conditions:

The Bureau of Meteorology are indicating to us very clearly that Friday and Saturday are going to be difficult fire management days and certainly Monday and possibly Tuesday could also be days that will be worse than Friday and Saturday. So we are gearing up for some very difficult times in front of us for the next 5 days. Whether we can hold our fires on the lines that we prepared will be an interesting thing to watch but we’re very hopeful that the work that we’ve put in will be sufficient to hold those fires and also to ensure that we don’t get too much long distance spotting out of the fires by stuff that will still be burning inside when the strong winds and very hot temperatures start to come forward.<sup>1018</sup>

Later in the press conference Mr Lucas-Smith was asked about evacuation of residents in the Brindabella region, to which he answered:

I can’t answer that question you need to ask NSW that, we do have jurisdiction line between the ACT and NSW, we’re cooperating very very closely in our, all our efforts and we are operating to similar objectives and we are operating on a basis of coordination and resource deployment. The NSW, what happens in NSW as far as evacuations and those other things you need to be talking to the Queanbeyan Fire Management Centre.<sup>1019</sup>

Discussion then returned to the Bendora and Stockyard fires, before Mr Lucas-Smith was asked a question regarding how far the fires were from Canberra. Mr Lucas-Smith answered:

There is still a long way, over 20 kilometres away if you talk about Canberra it’s the urban development areas, they’re over 20 kilometres away from the urban areas. At the moment I don’t think there’s any threat to the urban areas, certainly see a lot more smoke than what they’ve seen in the last few days and even the smoke haze that we’ve had for the last two days, they’ll see a lot more thicker smoke over the next few days but the fire’s got a long way before it starts to threatening the ACT community.<sup>1020</sup>

Mr Lucas-Smith was then asked about ‘concerns about the McIntyre’s Hut fire could come down and threaten the ACT pine plantation. What’s the latest development?’ He replied:

Certainly, that’s always been a concern to us. That was [the] very reason why the ACT insisted that Yarrawumla Shire in the first instance wanted resources to McIntyre because we had fires of our own, it had potential to significantly impact on Uriarra pine plantation, and so we wanted to protect that. Their eastern and southern boundaries of the McIntyre’s fires have been backburned and appear to be holding well and they’re feeling very confident about those. There was some spectacular fire on the hills last night if anybody went out in the dark and had a look they would’ve seen quite a number of major runs running up in the Brindabella areas, but they were well inside the control lines and that the McIntyre fire, inside the McIntyre fire burning out.<sup>1021</sup>

Mr Lucas-Smith was asked whether there were any houses under threat at that time, to which he answered, ‘No, there’s no houses under threat. The closest property that I am aware of that’s under threat is more in the Brindabella Valley than it is here, you need to talk NSW about that’.<sup>1022</sup>

Although the next questions were not fully recorded, it appears that Mr Lucas-Smith was asked how the fires compared with previous fires in the ACT and whether the fires were the worst experienced by the ACT. In response, Mr Lucas-Smith described the 1928 fires in the Brindabella Valley burning into the ACT and across to Woden:

It burnt right in, actually burnt the Woden homestead down in those fires in 1952, that’s how far they came across, that’s where the Woden township is now ...

In 1983 there was the Gudgenby fire in the ACT which burned about 33 000 hectares.  
That didn’t threaten any community.<sup>1023</sup>

It is not clear whether any of this press conference was broadcast in news bulletins later that day. However, in an article appearing in the *Canberra Times* the following morning, there were a number of statements attributed to Mr Lucas-Smith which appeared to be those made during the press conference.<sup>1024</sup> In particular, reporter Megan Doherty began the article by identifying that the weather conditions facing firefighters in the ACT and surrounding area of NSW were worse than those that preceded the 1983 Ash Wednesday disaster in South Australia and Victoria. She referred to the arrival of volunteer firefighters from New South Wales and a comment by Mr Lucas-Smith concerning the ‘desperate need’ for the New South Wales resources in terms identical to his remarks during the press conference. Ms Doherty then paraphrased Mr Lucas-Smith’s comments during the press conference, to the effect that while the Bendorra and Stockyard Spur fires were running uncontrolled towards containment lines in the Namadgi, the nearest flames were still more than 20 kilometres from the outskirts of Canberra. The next paragraph of the article made reference to firefighting on the Bendorra and Stockyard fires and concluded, ‘The fires have destroyed 6920ha of the Namadgi. The McIntyre’s Hut fire in New South Wales has burnt out 6650ha’. This reference is immediately followed by a quote from Mr Lucas-Smith drawn from the press conference: “At the moment I don’t think there is any threat to the urban edge [of Canberra]”. Mr Lucas-Smith said. “We’ll certainly see a lot more smoke than what we’ve seen in the last few days”.

Mr Lucas-Smith was asked about the comments attributed to him by Ms Doherty in the *Canberra Times* article, in particular the reference to the absence of any threat to the urban edge. He was asked, in substance, whether the quotes in the article came from a discussion between him and Ms Doherty the night before, and he answered, ‘I believe it is reasonably correct, yes’. Mr Lucas-Smith was asked whether it was genuinely his state of mind on the night of 16 January that ‘at the moment I don’t think there is any threat to the urban edge of Canberra’. He answered, ‘Yes, because I am still concerned about the rural areas. I am talking about the urban edge there. I am not referring to rural areas of the ACT. What I am saying is that I don’t, at that stage—it says “at the moment”, I think, whatever the words are ... at the moment I don’t think there is’.<sup>1025</sup>

Mr Castle was first asked about the references in the *Canberra Times* article on 17 January before the transcript of the press conference became available. It was put to Mr Castle that what Mr Lucas-Smith had said apparently at some time on 16 January regarding there being no threat to the urban edge of Canberra at that time, as reported in the *Canberra Times*, was wrong. Mr Castle answered, ‘On the face of the words that are written, it appears so’.<sup>1026</sup> Later in his

evidence, Mr Castle was referred to the transcript of the press conference, and it was again suggested to him that Mr Lucas-Smith's statement that 'at the moment I don't think there's any threat to the urban areas' appeared to be wrong. Mr Castle answered, 'That is what he is thinking'. Mr Castle was then asked whether he could explain why Mr Lucas-Smith would be saying something to the Canberra public in a media conference that was different from what, on Mr Castle's evidence, was said two hours later to representatives of the ACT Fire Brigade and again later that day to the Australian Federal Police. Mr Castle answered, 'No, I can't, other than he may have been thinking starts to threaten the community. He may have been thinking about immediate; in other words, the time frame. But that's—I don't know'.<sup>1027</sup>

Mr McRae was also asked whether he could explain the apparent inconsistency between his view that as at 16 January there was a threat to the urban edge of Canberra (discussed below), while at the same time Mr Lucas-Smith was saying at the midday press conference that he did not believe that there was any such threat. Mr McRae responded:

If you want to compare the words used by Mr Lucas-Smith and myself, it would be my feeling that the discrepancy, at least in part, arises from your requiring us to use a simplistic definition of 'threat'. If you looked at a more detailed and complex definition of it, then perhaps the differences can be explained.

A lot of concepts to do with describing a fire and a fire's behaviour have what we call scaled dependent properties. When you start thinking about things on different scales, it is not just spatial scales across the landscape but also in time-frames ...

So if you take a broader scale, which includes a broader time frame, then you are recognising perhaps the threat of something on a big scale occurring. But if you change your scale to a narrower one, then it is quite valid to say there is no threat. So if Mr Lucas-Smith was talking on a narrower time frame than I, we can say different words about the same thing and yet still not be in conflict. I don't know if that's assisted you or not, but it's the way I view things.<sup>1028</sup>

#### 5.11.4 Mr Jeffery's email

At about the time Mr Lucas-Smith and Mr Castle were conducting the press conference, Mr Val Jeffery, Captain of the Southern Districts Volunteer Bushfire Brigade based at Tharwa, sent an email as a consequence of a conversation he had had with Mr Lucas-Smith.<sup>1029</sup> In his statement, Mr Jeffery said that on either 15 or 16 January 2003, Mr Lucas-Smith contacted him by telephone:

He rang to ask me to pass on his thanks to our members for their efforts over the past week's efforts. I told Peter I would pass on his thanks and in conversation I suggested that even if they got the containment lines in, that they wouldn't be deep enough to hold the fires when the bad weather came. Peter replied saying, "I agree with you 100%". That ended the conversation.<sup>1030</sup>

The email was sent to all of the operational members of Mr Jeffery's brigade.<sup>1031</sup> The text of the email was as follows:

The Chief Fire Control Officer Peter Lucas-Smith has asked me to pass on to all involved his thanks for all your work on these fires. The facts of the situation is that despite a massive effort now, even if the fires are controlled before the bad weather that is forecast for Monday, Tuesday arrives, containment lines will not be deep enough for

the fires to be held. I believe, (and the CFCO also), that the fires will escape from the mountains. The only question is really, when and where and how big the fronts are. I have advised all the residents of the district of this and warned them. Please look closely at your availability over the next few days. At this stage I expect that I will need some bodies on standby over the weekend and if the weather comes as forecast, every available body on Monday ...<sup>1032</sup>

It was put to Mr Jeffery in cross-examination by counsel on behalf of Mr Lucas-Smith that Mr Lucas-Smith did not express agreement with Mr Jeffery's proposition that the fires would definitely breach their containment lines, but that what Mr Lucas-Smith might have said was that there would be difficulty in keeping fires behind the containment lines if the weather turned bad. In response Mr Jeffery said that his recollection of the conversation was as he set out in his statement.<sup>1033</sup>

Mr Lucas-Smith's evidence was that the email did not entirely reflect the conversation he had with Mr Jeffery. He agreed that he rang each volunteer brigade captain in the ACT and asked them to convey his thanks and appreciation for their continued strong efforts, however he took issue with the suggestion in the email that he agreed with Mr Jeffery's assessment of the likelihood of the fires escaping the mountains. Mr Lucas-Smith said he did not put the position as plainly as suggested by Mr Jeffery: 'I said I would believe that we would have difficult holding our lines. I didn't say it would happen'.<sup>1034</sup>

#### **5.11.5 Mr McRae's view of the threat and the need for a 'trigger'**

In order to attempt to understand what would be required—at least in Mr McRae's mind—before a public warning would be issued, it is necessary to endeavour to understand Mr McRae's evidence about the 'triggers' for such a warning and his concept of 'threat'.

Asked whether he would agree with the view that at midday on 16 January there was not any threat to the urban area of Canberra, Mr McRae said he needed to know what was meant by the word 'threat'. He was offered a working definition—"a risk of some harm at some point in the future; in a broad sense it is something that is in prospect"—to which he responded, 'You use risk in your definition. That doesn't help me, I am afraid ... It is a professional problem we have. We always have to struggle with these words. I am not being difficult'. Mr McRae agreed that a threat is something that may or may not eventuate and it was put to him that the effect of his evidence, when he identified that it was likely that there would be some impact on the urban area of Canberra by Monday, was that there was a 'threat' of the fire impinging on the urban area of Canberra. He said, 'If we use that terminology, I won't disagree with it'.<sup>1035</sup>

Mr McRae was referred to the reference in the minutes of the morning planning meeting on 16 January to the ACT Fire Brigade and ACT Ambulance Service meeting 'to discuss urban contingencies'.<sup>1036</sup> Mr McRae affirmed his earlier evidence that 'we were still telling them Monday was a likely day for the impact'. Asked whether he was aware of what, if anything, was being planned in terms of warning the Canberra community about that impact, Mr McRae's evidence was:

Our priority was the rural part of the ACT community because they were going to be impacted on first. If you are asking about the urban community, it was my understanding that the media people were looking at arrangements. We had brought Canberra Connect in to be a key stake holder in the liaison between emergency managers and the community because they have quite considerable capability for

disseminating messages and taking phone calls from the community. They were seen as a key part of any strategy for dealing with the community in the city, should the city come under threat. There were also people planning the likely wordings for things and how to structure messages, that sort of general content.<sup>1037</sup>

Mr McRae did not recall any discussions at any time on 16 January about getting a message to the Canberra community in words or in substance to the effect that it was likely that the fire would impact on the Canberra urban community on Monday. Asked if any work was being done at all to deliver that message at about this time Mr McRae responded:

My understanding is that there was work going on behind the scenes. All the people involved in doing that had been briefed in planning meetings and were aware of the schedule that we were working to and that there was an expectation that *the planning unit's work would provide a trigger for when they would need to start producing such messages*<sup>1038</sup> [emphasis added].

Mr McRae explained that the media people or others who may have been involved in that work were waiting to be told by him or his unit that it was time to get the message out. He did not tell them that the time had come on 16 January because he did not believe that it had.<sup>1039</sup> Given the importance of Mr McRae's evidence to the effect that the media people or others who may have been involved in the work of producing warning messages were waiting for Mr McRae or his Planning Section to 'activate the trigger' to start getting that message out, it is appropriate to set out in full the exchange between counsel assisting and Mr McRae that followed that evidence:

Q. You've already agreed, I think, that you thought it was likely that there would be an impact on the urban area on Monday. Why wouldn't, you having identified that, it be appropriate to take steps to alert the urban community to that likelihood?

A. There wasn't a need to alert the entire urban community. As I said before, my expectation was at some stage during the phase of forecast dire weather or nasty weather or bad weather—whatever you want to call it—there would be breakouts, and analysis of those would provide the starting point for the final run that, should it eventuate, would take the fire toward the city and that would allow us to pin down the subset of the urban community that needed to be alerted

Q. Why wouldn't, Mr McRae, you'd be at least identifying to the community even generally—or more specifically on the western side of Canberra—that it was likely that on Monday the fire would impact on them or may impact on them? Why wouldn't you give them as much warning as possible?

A. We were telling the community an awful lot of things that we would make them aware that there was a bad fire situation in the ACT and that the community needed to be careful. Now, we were telling people that there were road closures and that certain lands were being closed. We were telling people not to do certain things. We felt that that was an appropriate first level of advice to the community, which would be escalated as the situation evolved.

Q. If you have identified by the 16th, the Thursday, that it was likely that the urban community would be impacted on the Monday, why wasn't the urban community been told that as soon as that was being identified?

A. We didn't know which part of the urban community to work with.

Q. Does it matter, Mr McRae? Why can't you just tell the whole urban community, 'Look, these fires will impact or are likely to impact on urban Canberra on Monday'?

A. My view of the matter was that we shouldn't be giving a specific alert to the whole community. The whole community should be getting general material at this point. The specific stuff should be used when we knew exactly which parts of the community to target.<sup>1040</sup>

Mr McRae agreed that the way the ESB was communicating with the community at that stage about the fires was essentially via media interviews and media releases. Mr McRae said that he was not directly involved in preparing the media releases and that he did not have direct discussions with Mr Lucas-Smith or Mr Castle about what should be said and how the threat should be identified in their media interviews. Hence, although Mr McRae was clearly involved in providing information through briefings during planning meetings and on other occasions, he did not advise on the exact content of the media material being disseminated by the ESB.<sup>1041</sup> In this regard, the following exchange occurred:

Q. ... I understand, Mr McRae, that you weren't involved directly in the interviews or media releases so I will ask you: can you explain why it wasn't thought appropriate for the ESB to take the opportunity to identify to the Canberra community that it's likely that the fires will impact on Canberra by Monday?

A. I don't have an ability to explain why the decision was made the way it was, except to say that there is a fairly complex and detailed area of expertise involved in liaising with the community and there were people involved in doing that job who were aware of those complexities; and I am not.

Q. Do you think, Mr McRae, that someone, whoever was responsible for communicating and had those skills, should have been saying to the Canberra community that the ESB or personnel within the ESB expected that it was—felt—or considered that it was likely that the fires would impact on the Canberra urban area by Monday; do you think that is something that should have been done on the 16th?

A. I am not aware of the complexities of dealing with the community in terms of emergency warnings, so I don't know.

Q. You don't have a view one way or the other as to whether that is something that should have occurred on the 16th?

A. No. I don't.<sup>1042</sup>

The inquest then adjourned for the day, but the theme of triggers for warnings to the community was returned to when Mr McRae recommenced his evidence the following morning. Mr McRae was again asked why was it not appropriate on 15 or 16 January to be telling the media people that 'our planning is suggesting that there is likely to be some impact on the western side of urban Canberra on Monday and people should be told about this so they can begin to prepare'. He responded:

At the time we made certain decisions on the levels of fire activity and the triggers that they cause for activating warnings to the community. And these were based on what was currently going on and what was forecast to go on. The decision that was made was that we hadn't yet reached the point where we needed to do that. What we forecast was the critical thing.<sup>1043</sup>

According to Mr McRae, the ‘certain decisions’ that he was referring to regarding the triggers for the provision of some kind of warning to the urban community were made primarily in the context of discussions at the planning meetings as minuted: ‘My recollection is the discussion that went on in these meetings was aiming to give people a full appraisal of what we thought would be happening’. Mr McRae was reminded that at the planning meeting on the afternoon of 15 January he had given some clear and dire warnings to those present and that at the meeting on the morning of 16 January there was reference to the ACT Fire Brigade and Ambulance Service planning for ‘urban contingencies’. He was asked by counsel assisting whether it was in that sort of context that the question of warnings and messages to the community was being discussed. He gave the following answer:

Well, there are a number of different things which have been confounded in that. When going through those items, the way I viewed it is the way that I am required to view it as a risk management strategy looking at the risk. The professional definition under Australian Standard 4360 that allows you to assess a risk and then to look at the possible risk treatment options. In terms of risk treatment options, there are a number of avenues open to us, and the activation of those risk treatment options weren’t necessarily to happen at the same time.

The first thing that we do in the Emergency Services Bureau, and in fact in emergency management, is to make sure that the emergency response agencies are fully up to speed and that their capability is 100% available.

In a situation like this, the first risk treatment option is to have emergency response crews trying to intervene to reduce the likelihood of an impact. Once the situation escalates beyond that, then you look at other processes that might be required.

Now when it comes to getting the community as another stake holder involved in risk management, there are a number of different levels at which that can be done. A good precedent is the way the Bureau of Meteorology warns the community on severe weather events like thunderstorms. They can issue an advice. The difference between an advice and a warning gets a little problematic, but the general product that is issued is along the lines of ‘we forecast that there could be thunderstorms in this area this afternoon’. The next level of warning is that is issued is ‘we are currently tracking a thunderstorm going through places x, y and z. People in these areas need to take certain steps to reduce the potential impact of these storms’. Now if you take that concept into the bushfire situation, the work that was being done by the media is under that first category. And in the second category, I was looking at being able to tell the media people, ‘We are tracking a fire that is threatening these people’. These are the people that you need to get actively involved in making sure they are safe should the fire actually reach the urban interface. And we were also dealing with the rural community. In fact, the rural community were going through these processes well ahead of the urban community.

So the media unit was putting out the first level of product. You could argue about the content, as you seemed to do yesterday, but in my view the media products that were going out were achieving that first general level of warning to the community.

Where I talk about the trigger that we were waiting for, that would be the trigger along the lines that we are tracking fires heading towards certain suburbs and we will be dealing with people living in those suburbs making sure they take appropriate and timely actions to make sure they are safe should the fire eventually reach those suburbs.

Q. The sort of actions that people would need to take, Mr McRae, time permitting, would include clearing garden areas, cleaning gutters, getting valuables identified and perhaps moved to a safer area. Those are the sorts of actions that people could expect to take if there was a suggestion of a threat from fire. That is the sort of thing, isn't it?

A. Sorry, 'a suggestion of threat' which of the two levels do you mean by that phrase?

Q. Any suggestion. Once there is a risk identified, the sorts of actions that people would be taking would include those sorts of steps wouldn't they?

A. If there is a general threat or a risk, call it what you want, identified then the goal is to have the community at a generally heightened state of awareness that they may need to take some steps. Some people may see that as a need to gather belongings and put them in the boot of the car, for instance.

Q. What about clearing gardens, as people were doing this, I think you would be aware, in other parts of urban Canberra after Saturday the 18th. There were certain people in areas of Canberra spending quite a bit of time clearing out their gardens and taking trailer loads of material to the tip; that kind of thing was going on?

A. Indeed, that did take quite a bit of time. Our preferred strategy is and always was to take the opportunity at the beginning of the fire season to tell people that they would need to make their house and property safe from bushfire. A lot of those actions, it's really too late to consider doing at this stage.

Q. Mr McRae, that's the very point, isn't it? You indicated earlier in your evidence that although you had made certain assumptions about the level of understanding of the urban Canberra community of the risk of fire, no surveys or detailed analysis have been done to indicate to you how well that understanding had penetrated into the urban community. You just didn't know, did you?

A. No, we didn't know but ...

Q. In those circumstances, Mr McRae, what I don't understand is why, when the risk was identified, albeit four or five days off, that wasn't seen as an opportunity to go out to the community at that stage and even in a general sense say to the urban community, 'Look, we think it's likely that there will be some impact on the western side of Canberra from these fires by next Monday and you should start preparing', why wasn't that done on the 15th or 16th of January?

A. It's a very long question. I am just trying to work out all the bits in it. Please bear with me. As I have said, in terms of the media products, I wasn't involved in the final product that went out to the community nor was I actually monitoring. It was my belief that the products that were going out to the community were sufficient to achieve the goal, if put in combination with the pre fire season warning.

Q. That doesn't quite answer the question Mr McRae. Is that answer indicating that, at least as you understood it, because you weren't involved in the detail of what was going on, you were assuming that kind of message was being delivered?

A. I was assuming that the people doing the message were professionals and doing their job to the best of their ability. Yes, I was.

Q. On your evidence yesterday, it was the planning unit's responsibility, as I understand it, to provide the trigger for those messages. Is it your evidence that you had provided

sufficient information to identify that there was a trigger for at least that kind of general message?

A. There are a number of triggers, as I have said already. Some of those triggers, as I have said already, had been activated. The final trigger that you seem to be referring to we never saw the need to activate. Yes, that's true. We didn't see a need to activate it.<sup>1044</sup>

There was then a discussion about whether the questions Mr McRae had just been asked were referring to the 'final trigger' for the issuing of *specific warnings* to parts of the community telling them that they needed to take active steps to ensure their safety, or whether the questions related to the trigger for *general warnings* to the wider community. Mr McRae was asked why a warning to the general community could not have been issued at this time to the effect that 'our planning is showing that there may be an impact on Monday and people should begin to prepare'. Mr McRae responded that he had no expectation that what happened on Saturday 18 January would happen: 'It was totally unexpected that the fires would all evolve into plume driven fires and be driven by totally different drivers than those we anticipated'. He explained that his expectation was that the emergency services would have to deal with a number of separate, independent runs by fires that would make approaches towards the urban interface at different times and at different places, and that the response crews would have varying levels of success in stopping those discreet runs.<sup>1045</sup> He then gave evidence that:

Traditional damage to the urban interface in Canberra, as I said before, indicates the first row of houses and maybe another two rows of houses back. There was nothing at all on my radar screen, to use a figurative term, to indicate the impacts that did occur. In terms of the impacts that we expected to occur, my belief is that my decision and the information given to me by people for me led to *appropriate levels of trigger setting for what we anticipated*.<sup>1046</sup> [emphasis added]

Mr McRae was referred to earlier evidence he had given concerning his expectation of how a very large fire would be likely to impact on the urban area of Canberra—an expectation that he had propounded to firefighters during training sessions over the preceding years. Mr McRae was clear that although he had often explained that he would expect such a large fire to impact on houses two to three rows into the suburbs, he did not expect the actual head of such a fire to enter the suburbs:

We would probably pull up the head fire right on the urban interface. But what a lot of people call the momentum of the fire in terms of embers and fire brands would be likely to cause some damage up to three rows of houses in.<sup>1047</sup>

The following exchange then occurred between counsel assisting and Mr McRae:

Q. Adopting the concept you just articulated, was that an impact that you were contemplating as a level of impact that might occur by Monday?

A. You previously used the word 'precisely'. I can't support the use of the word 'precisely' but in general terms that's what I was anticipating.

Q. Given that, Mr McRae, I am probably repeating myself but I will ask one more time: Why wasn't it thought appropriate to provide a general warning to those who might suffer that kind of impact of that possibility?

A. Well, two parts to that. Firstly, I felt that the warning that was provided was sufficient. But basically I made a professional call on the level of trigger for warnings that was appropriate at that time. When you are working in an emergency management situation, you make a call. That's what I did.

Q. I know this may involve jumping ahead of ourselves a bit, but when did you believe the trigger or when did you activate the trigger, to use your terminology, for that kind of warning?

A. Well, it's a complex answer. Do you want a complex answer right now?

Q. No. What I want to know is, you've used the expression it was a matter for your unit, the planning unit, to tell the media people and I think your terminology was to activate ...

A. If you don't want the complex answer, the answer is the way the fires evolved, I didn't get the opportunity to do that. We were overrun by circumstances.<sup>1048</sup>

In summary, Mr McRae's evidence was that he believed that as at January 16 sufficient warnings of a general nature were being conveyed to the ACT community by interviews and media releases. He said that he had no direct role in formulating those general warnings, as he did not have expertise in the complexities of dealing with the media and public in this context. In addition to the general warnings then being issued to raise the level of alert of all ACT residents, Mr McRae said that on 17 January the 'trigger' was pulled to issue specific warnings to rural ACT residents threatened by the fires, as discussed below.<sup>1049</sup> However, Mr McRae said that on 16 January the necessary circumstances had still not arisen for him to trigger the issuing of specific warnings to the residents of the Canberra community who might be affected by the fires.

### **5.11.6 A briefing of the ACT Fire Brigade and ACT Ambulance Service**

In response to the request for a briefing made the previous day by Commissioner Bennett, at 2.00 pm on 16 January 2003, Mr Lucas-Smith conducted a briefing of representatives of the ACT Fire Brigade and the ACT Ambulance Service. The general purpose of the briefing was to engage those officers by informing them of the status of the fires, the forecast conditions for the following days, and of the potential risks the fires posed of direct relevance to those emergency services. According to Mr Lucas-Smith, 'We needed to engage the ... ACT Fire Brigade, into the arrangements because the potential existed for impact on rural ACT ... If rural property was to be threatened, it was a fire brigade issue and responsibility'.<sup>1050</sup>

The briefing was attended primarily by the senior officers of the ACT Fire Brigade and ACT Ambulance Service, including Fire Commissioner Ian Bennett, Superintendent (Operations) Peter Newham; Superintendent David Prince, Acting District Officer Peter Cartwright, and several other District Officers including Ian McLeary, Tony Ross, Conrad Barr, Michael Collins, Jeff Dau and Phil Canham. Mr David Dutton from the ACT Ambulance Service was also present, as well as several other Fire Brigade and Ambulance Service personnel.<sup>1051</sup> No representative of ESB was present at the briefing apart from Mr Lucas-Smith.<sup>1052</sup> It appears that the briefing went for approximately 40 minutes<sup>1053</sup>, although Mr Lucas-Smith thought that it was shorter, and said that he was trying to keep it brief.

The only contemporaneous notes of the meeting were made by Officer Cartwright, who then transcribed those notes into his diary.<sup>1054</sup>

Mr Lucas-Smith began the briefing by outlining the weather, including the forecast for the following day (Friday), which included temperatures in the mid 30s and winds from the west to north-west of 25–40 kilometres an hour. He remembered saying, ‘Wind speed and temperature would both increase over the coming days until it peaked on Monday with temperatures around 39°. Monday was predicted as the worst fire danger day in Canberra’s history’.

Mr Lucas-Smith then provided an overview of what was being done to combat the fires. After providing this overview, Mr Lucas-Smith used a simple map of the ACT to show to those present where the current fires were burning. He then gave a brief overview of the history of major fires impacting on the ACT, drawing on the map with a texta to outline the direction of fire travel and the extent that those historical fires burned into the Canberra area.<sup>1055</sup> According to Mr Cartwright, Mr Lucas-Smith described in some detail what was being done to contain the Bendarra and combined Stockyard/Gingera fires, and then:

... I think he may have described the location of some of the containment lines and the advance of the fires to the west.

He then drew on a map on the wall. He drew the extent of the fires that had come into the ACT or were in the ACT and that came into Canberra in 1939, I think, in 1952 and in 1985. From memory, he showed on the map where Woden Hospital is now and one of those fires at least had certainly impacted right through to there. Of course the Woden Hospital wasn’t there in 1952. And I think he drew arrows indicating the direction of fire travel and the extent that they reached into the Canberra area.<sup>1056</sup>

Mr Cartwright said that after making the point that each of the fires in the years 1939, 1952 and 1985 started in the Brindabella Ranges, and then expanded so as to have a major effect on the ACT, Mr Lucas-Smith indicated his view that if the wind changed direction as predicted, then there was a ‘real possibility that those fires could head east and impact on [the] urban/rural interface’. Mr Cartwright’s evidence, as supported by his diary notes, was that Mr Lucas-Smith said that there was a 50/50 chance that the fires would break their containment lines if the forecast conditions arrived. In this context, Mr Cartwright said that although Mr Lucas-Smith did not expand on or discuss how likely it was that the current fires would replicate the growth of the historical fires, Mr Lucas-Smith ‘was informing us that that was a real possibility’.<sup>1057</sup>

Mr Cartwright had no doubt at all that what was being raised by Mr Lucas-Smith as a possible consequence of the fires was a risk to urban dwellings in Canberra.<sup>1058</sup> In relation to the reference in Mr Cartwright’s notes to ‘suburbs of possible risk from Namadgi fires were west suburbs of Tuggeranong and Weston Creek’, Mr Cartwright was unable to add much from his recollection: ‘I can’t give you much more information on that. As I said, Mr Lucas-Smith drew the lines on the map and I think he indicated briefly at one time that this is the area that could be impacted by the fires’.<sup>1059</sup> Later in his evidence, Mr Cartwright conceded that Mr Lucas-Smith did not say that the fires in the Namadgi would directly affect Weston Creek.<sup>1060</sup>

According to Mr Cartwright, Mr Lucas-Smith spoke predominantly about the ACT fires, but there was reference made to the McIntyres Hut fire that he had not recorded in his notes: ‘Mr Lucas-Smith indicated that there was a threat from four fires, including the McIntyre’s Hut fire’.<sup>1061</sup>

In his evidence, Mr Lucas-Smith said that he did not remember saying there was a 50–50 chance that the fires would break their containment lines, as recorded in Mr Cartwright’s statement<sup>1062</sup>, but accepted that he would have said something to the effect that ‘there was certainly going to be

pressure on our containment lines as a result of these north-westerly winds. Whether I would have put some sort of probability percentage on it, I would think it is unlikely'.<sup>1063</sup>

Mr Lucas-Smith accepted that he might have said that the current fires were doing the same kind of thing as the historical fires (as suggested in Mr Cartwright's notes<sup>1064</sup>) and agreed that in giving a potted history of the earlier fires, he would have referred to the 1952 fire coming through to where the Woden Hospital now is.<sup>1065</sup> In this context, Commissioner Bennett said that he remembered 'Mr Lucas-Smith telling us that that fire had reached what today would be the Canberra Hospital'.<sup>1066</sup> However, Mr Lucas-Smith said that he did not recall saying: 'These fires will do the same as the fires in 1939, 1952 and 1985, that the western suburbs of Weston Creek and Tuggeranong were at risk'. His evidence was: 'I certainly recall talking about areas at risk, but being that specific I certainly don't recall and I think it is doubtful that I would have said such a thing ... I cannot be definitive. I cannot remember what I said, but I certainly find it doubtful that I would have included Weston Creek in any such statement'.<sup>1067</sup>

Mr Lucas-Smith later reinforced this suggesting by arguing that he would be unlikely to have mentioned Weston Creek, because the purpose of the briefing was to engage the Fire Brigade in the protection of rural properties in the ACT, and not urban Canberra:

The briefing that I was giving to the ACT Fire Brigade and what I was trying to do is engage the ACT Fire Brigade in the protection of rural properties. I was not talking about urban edge of Canberra. I was talking about rural properties, and I was talking about structure protection in the rural environments of the ACT.<sup>1068</sup>

#### ***Evidence of others who attended the briefing***

In his evidence, Commissioner Bennett said that although he understood Mr Lucas-Smith to be saying that the weather that was expected over the weekend would put some strain or pressure on containment lines, he could not recall Mr Lucas-Smith giving a percentage or probability of containment lines successfully holding the fires.<sup>1069</sup> However, according to Commissioner Bennett, Mr Lucas-Smith did indicate during the briefing that 'the overall success of various containment lines would be contingent on what the weather conditions would be'. Commissioner Bennett also said that he could not recall any words used by Mr Lucas-Smith identifying specific areas of risk, but said that he would have no reason to doubt what was in the contemporaneous notes that Mr Cartwright took.<sup>1070</sup>

Commissioner Bennett explained that the information provided at the briefing put the ACT Fire Brigade on alert regarding the need to 'respond outside the interface area ... but also in preparation for any potential involvement closer to the city'. He said that he 'left the meeting quite clearly believing that Monday the 20th was going to be, at that point in time, a potential day of probably the worst conditions that we'd experienced to date'.<sup>1071</sup> Commissioner Bennett also said that he understood that there was a suggestion that improved technology in the fire management strategies that were available in 2003 would make a significant difference in comparison to the outcomes in 1939 and 1952.<sup>1072</sup> In this regard, Mr Collins also gave evidence that Mr Lucas-Smith provided some degree of comfort concerning the movement of large fires into the urban infrastructure because 'today's technology, our awareness of the fires, our planning and the resources we had available [meant] that that was less likely to occur in today's environment as it did back then'.<sup>1073</sup>

In evidence, Mr Prince also said that he could recall Mr Lucas-Smith demonstrating on a map where a number of fires had burned in the past, and had shown that the 1939 fire had actually

come into the area which was now urban Canberra. According to Mr Prince, Mr Lucas-Smith was concerned specifically about conditions forecast for Monday 20 January, and suggested that with strong westerly winds and the possibility of the fires spotting up to 15 kilometres, there was ‘the possibility of a fire coming from the west into the ACT urban area’.<sup>1074</sup> Mr Prince was asked during his taped record of conversation with investigators whether he could recall anything said about the likelihood of the fires escaping containment lines, to which Mr Prince answered:

Obviously with fire weather conditions being predicted as extreme for both Saturday and Monday, the concern was that the containment lines that had been made in inaccessible country, in other words firefighting wasn’t being conducted as normal, that there was likelihood with high winds that those fires may escape those containment lines.<sup>1075</sup>

On the question whether anything was said about impact on the ACT urban infrastructure, Mr Prince referred to Mr Lucas-Smith commenting on comments made by Mr Cheney: ‘I think that was on the Wednesday there had been a comment by him to say that if we do get a westerly, it was going to impact on the city’.<sup>1076</sup> In evidence, Mr Prince recalled Mr Lucas-Smith telling the meeting about an article from the previous day and that

Mr Lucas-Smith was concerned that Mr Cheney was advising the public that, as soon as the wind had turned west, it was going to impact on the city. Obviously there was going to be some time before that would occur, and again the fire behaviour conditions would have to be assessed in a routine manner before you could make that statement ... To say that the fires were going to impact would depend on how firefighting is going to occur and whether or not we could actually keep it within containment lines.<sup>1077</sup>

In his evidence, Mr Dutton said that he understood from the briefing that the Territory was facing a bushfire that ‘represented a serious threat to the Territory’ and that ‘the fire didn’t respect any particular boundaries and could be widespread at times’.<sup>1078</sup> Mr Dutton explained that he had the impression that there was a potential for the fires to enter pine forests and rapidly progress towards Canberra, and in particular the urban fringe, and that he also understood that there was a concern for rural communities to the south of Canberra.<sup>1079</sup> In his taped record of conversation, Mr Dutton stated that he thought it would be ‘unfair’ to say that at the briefing by Mr Lucas-Smith it was predicted that the fire would impact on Canberra. But he thought ‘it would be fair to say that that was one of the scenarios that was presented at that time’.<sup>1080</sup>

Mr Collins in his taped record of conversation described the briefing by Mr Lucas-Smith as a ‘situation report’:

He was able to tell us that ... the fires had started on January the 8th, just to the west of the ACT border and within the ACT border there were three fires that were largely out of control and uncontained at that time. And on the day he spoke to us they were still uncontrolled and burning freely. Despite this his resources were providing some type of an indirect fire attack on the fires and they were trying to put containment lines through but it didn’t feel as though [they] would be able to provide some type of full frontal fire suppression on it or a direct attack. He was able to impart to us a warning that there was a possibility that these fires could impact on the urban infrastructure. He gave us examples of previous fires that had done so.

After referring to what Mr Lucas-Smith said about the weather, Mr Collins continued, ‘He also went on to say that he didn’t mean to alarm us in any way or be alarmist but he provided us with

quite a good warning that on Monday due to the weather these fires may impinge on the urban infrastructure'.<sup>1081</sup>

In his evidence, Mr Collins said he was not able to recall which fires Mr Lucas-Smith was referring to in his reference to the fires being 'largely out of control and uncontained', nor did he recall Mr Lucas-Smith referring to any particular location when discussing impact on the urban infrastructure: 'It was more, we refer to the urban/rural interface and that's where, you know, our jurisdictions sort of like meet. He wasn't referring to any particular suburb, no'.<sup>1082</sup> Mr Collins left the briefing with the impression that there was a low probability of the fires breaking containment lines and making the runs that Mr Lucas-Smith had described.<sup>1083</sup> Mr Collins said that he had a good recollection of what Mr Lucas-Smith said because 'he was very clear, very precise and ... I thought that I really needed to listen to what he had to say and as such I can still recall what he said today'.<sup>1084</sup>

Mr Newham also understood from Mr Lucas-Smith's remarks that the prospects of the fire breaking containment lines was a genuine possibility, and thought Mr Lucas-Smith 'was indicating that intervention by the firefighters wasn't going to have any real significant impact on the fires'. Mr Newham took that to mean that the fires would continue to burn until something in the elements changed, such as the advent of rain.<sup>1085</sup> Mr Newham had some recollection of Mr Lucas-Smith referring to an approximately 50/50 chance that fires would break containment lines if strong westerly winds occurred.<sup>1086</sup>

Mr Newham was initially clear that one of the things that was discussed by Mr Lucas-Smith and others who participated in the discussion was the risk that there would be some impact on the Canberra suburbs, although he could not recall who raised it,<sup>1087</sup> and nor could he recall the suburbs from Tuggeranong to Weston Creek being described as being at risk.<sup>1088</sup> Later in his evidence he was more qualified in relation to the question of whether an impact on the Canberra suburban area was discussed at the meeting: 'It may have come up in the meeting. My recollection and how I saw it was that there was a possibility—a strong possibility that the fire would break out of the Namadgi'.<sup>1089</sup> Ultimately, Mr Newham agreed that the prospects of these fires having an effect or impact on the Canberra suburbs was topic that was raised at the briefing, but said that he could not recall that discussion 'in specific terms. I can recall it as a topic. I can't recall a specific person saying that information and how it was raised'.<sup>1090</sup>

A number of other officers who were present at the briefing were asked about what occurred during that briefing in taped records of interview with investigators. Although these officers were not called as witnesses before this inquiry, aspects of their interviews were put to Mr Lucas-Smith during his evidence. Mr Ian McLeary said in his record of interview that Mr Lucas-Smith made reference to the historical fires that had 'decimated' area that were now part of suburban Canberra, and indicated 'that the real potential existed for that sort of fire activity to occur again', with the effect that 'the western suburbs of the ACT were at risk'. In response to this evidence, Mr Lucas-Smith once again said that 'I was trying to convey a need for the fire brigade to become engaged in the firefighting event'.<sup>1091</sup>

In his record of interview with the police, Mr Peter Hobbs said that after discussing historical fire impacts in the ACT, Mr Lucas-Smith indicated that if the current fires broke containment there would be a high probability of them getting into the pine plantations, and that if the fires got into the Stromlo plantation they would affect the Stromlo Observatory and settlement, and almost certainly get into the Duffy pines, 'and that if that were the case we could expect fires to get into the suburbs'. Mr Hobbs also said that Mr Lucas-Smith said that if the fires got into the

pines then fire crews would be withdrawn from fire suppression to focus on property protection. Mr Lucas-Smith agreed that he ‘could very well have said’ the above things, and in particular, that if the fire reached the base of Mt Stromlo, he was going to withdraw the fire suppression crews because Mt Stromlo was an undefendable position and there would be loss of life if people were left on the mountain. Mr Lucas-Smith also agreed that he ‘may have extended the conversation’ to the extent of saying that if the fires did reach the Mt Stromlo pine plantation that they would almost certainly get into the Duffy pines and that if that were the case they could expect fires to get into the suburbs, but he did not recall saying that. Asked if he would allow for the possibility that he did say that, Mr Lucas-Smith responded: ‘Oh, well, as I have said, our planning is already indicating to us that this is the case’. Mr Lucas-Smith also agreed that Mr Hobbs was correct in his taped record of conversation when he said, ‘It was absolutely clear to everybody in the room at the time that the weather was going to deteriorate across the weekend, but everybody expected Monday to be the very worst day, and I believe that the people in the room were then thinking we had until Monday to prepare for the onslaught’.<sup>1092</sup>

Mr Lucas-Smith was also asked about the taped record of conversation of Mr Ross, including Mr Ross’s reference to Mr Lucas-Smith ‘raising the concern that if the weather conditions did come that they predicted and if the fires jumped their containment lines that they would get into the pine forests around the ACT, and with the strength of winds he sort of mentioned to the effect that Weston Creek area was the area of most vulnerability if it did happen’. It was put to Mr Lucas-Smith that, to that point, Mr Ross’s comments were not in contention except perhaps his reference to the area of Weston Creek. Mr Lucas-Smith responded, ‘It’s a statement that I have made for quite a number of years that in the event that a fire was to get into the Stromlo pine plantations, particularly the Narrabundah Hill area, the potential impact on Duffy would be quite high. I’ve been saying that for a decade or more’.<sup>1093</sup>

Much later in his evidence when Mr Lucas-Smith was being asked questions about the nature of the impact he envisaged at noon on 18 January 2003, an extract was read to him from the statement of Mr Prince, Acting Superintendent of the ACT Fire Brigade.<sup>1094</sup> In that paragraph, Mr Prince referred to a discussion with AFP Superintendent Mr Chris Lines, in which Mr Prince had referred to flame heights double the height of the material that was burning. ‘Because 30-foot pine trees were in that area then 60-foot flames could be expected. Chris Lines then asked me if the residents of Duffy should be evacuated’. Mr Lucas-Smith was asked, ‘In your mind’s eye, so far as the impact upon Duffy was concerned, when you were thinking about it in the time leading up to that press conference at 12 o’clock, is that what you had in your mind, so far as the description of what the fire was going to look like?’

Mr Lucas-Smith responded, ‘Certainly the fire was going to come through when and if it got into the Stromlo pine plantations, it was going to burn no different than the Uriarra and Pierce’s Creek pine plantations. And they had burned very fiercely. Whether it had flame heights of 60-foot, I have got no idea’. After a brief comment about measuring flame heights, Mr Lucas-Smith continued:

As far as I am aware, and as far as the residents and so forth were concerned, that was the very reason on 16 January I had the meeting with the ACT Fire Brigade and they continued on with their planning meeting to start to put in place their incident management requirements to deal with structure and residential fire. So I would expect that Mr Prince would have a better picture of potential effects in the residential area than I would have had.<sup>1095</sup>

Thus, according to this evidence of Mr Lucas-Smith, the ‘very reason’ for the meeting with the ACT Fire Brigade involved preparations for an impact on residential structures in the urban area of Duffy and other urban areas abutting pine plantations.

#### ***The way the information from the briefing was to be treated***

Mr Cartwright’s notes of the meeting state that toward the end of the briefing Mr Lucas-Smith ‘Advised didn’t want alarm public & media. This info not to leave room. Said he would deny it if it got to media’.<sup>1096</sup> In his evidence Mr Cartwright confirmed that his notes reproduced, as best he could recall, the words Mr Lucas-Smith used in the briefing, and reiterated that in the course of the briefing Mr Lucas-Smith said words to the effect that he did not want the public alarmed, that the information he was imparting at the briefing was not to leave the room, and that he would deny it if it got to the media. Mr Cartwright agreed that he used the information from the briefing when he spoke to officers in Kambah, Greenway and Phillip later in the day, and asked them to check hydrants: ‘I think I referred to the fact that we had been briefed that afternoon and there was a chance of fires, or possibility or probability that the fires may impact the urban/rural interface and that we needed to do something to try and prepare. I asked them to check access points’. But he explained that, in the light of Mr Lucas-Smith’s directive, he contacted those officers ‘with some ambivalence’.<sup>1097</sup>

Mr Lucas-Smith said that he certainly did not recall making the sort of statements attributed to him by Mr Cartwright about the information not leaving the room, and that he would deny that information if it got into the media. Asked if he denied making those statements, Mr Lucas-Smith responded:

I don’t know. I might have been—there might have even been some friendly discussion or even banter about it. But we were talking fairly frankly. I find it interesting, because the whole reason I called this meeting was to actually engage the fire brigade into the process and to try and bring them on board. Why would I say it is not to leave the room? I am having difficulty thinking about the logic of that.<sup>1098</sup>

Commissioner Bennett said that he remembered Mr Lucas-Smith making a statement about the information not leaving room, and that he would deny it if it became public. However, Commissioner Bennett believed that the latter comment in particular was made ‘in jest as a bit of a tension breaker and I personally didn’t take that either as a threat or anything else’. He also said that it would have been practically impossible for the Fire Brigade to plan and prepare if the information could not leave the room.<sup>1099</sup> However, Mr Cartwright ‘strongly disagreed’ with Commissioner Bennett’s description of Mr Lucas-Smith’s statement as delivered at least partly in jest as bit of a tension breaker<sup>1100</sup>, instead asserting that ‘this was all very serious, I can assure you’ and that ‘Peter doesn’t normally joke’.<sup>1101</sup>

When again questioned about his alleged statement, Mr Lucas-Smith reiterated that ‘I might have said something [to the effect suggested by Mr Cartwright], but I certainly don’t recall saying that’ and that it did not sound like the sort of thing he would say: ‘I might have said we were having a coordinated media response and that we needed everybody to be coordinated through the same media response arrangements. But that does not sound like me’. Mr Lucas-Smith did not recall being concerned about alarming the public, but could not say categorically that he never thought there was a problem about alarming the public, or that he never made a comment about not alarming the public.<sup>1102</sup>

Mr Prince also said that Mr Lucas-Smith had made it clear that the information was ‘of a sensitive nature’, and that he ‘didn’t want to alarm either the media or the public in relation to those fires’.<sup>1103</sup> When asked whether that was said by Mr Lucas-Smith in the same context as his references to Mr Cheney’s view being an alarmist view, Mr Prince’s evidence was: ‘I think as the incident controller the release of information to the public was that [the responsibility of] of Mr Lucas-Smith. In my view it was true and accurate. At that time he wanted to make sure that he was the only person that was going to be authorising the release of information to the public’.<sup>1104</sup>

Mr Prince was then asked what Mr Lucas-Smith actually said about not alarming the media or the public, and Mr Prince responded: ‘I think something along the lines that he wanted to make sure that the information stayed within the room and that he managed it—I can’t remember the exact words’.<sup>1105</sup> However, Mr Prince also gave evidence that he did not feel under any constraint as to way he could use the information from the briefing, but that normally an attempt would be made to deliver information of that sensitive kind ‘through one channel’ to avoid confusion, and that because Mr Lucas-Smith was the incident controller responsible for the fires he was within his rights to advise those at the briefing how to deal with that sensitive information.<sup>1106</sup>

On the question of the sensitivity of the information provided at the briefing, Mr Collins noted that Mr Lucas-Smith was ‘very careful in not leaving any evidence or anything like that that could fall into inappropriate hands. Very careful not to be an alarmist but careful in passing on the situation to us’. However, Mr Collins could not recall Mr Lucas-Smith advising those present as to how to treat the information he was giving us: ‘I think he felt with the Fire Commissioner in the room and senior officers that … we would be able to process the information he was giving to us in an appropriate way’.<sup>1107</sup>

In contrast, Mr Dutton said that could not recall anything being said in the meeting about restricting the use of the information they were being given,<sup>1108</sup> and that after the briefing he did not feel at all constrained about using the information given to him at the briefing.<sup>1109</sup> Similarly, Mr Newham could not recall specifically being ‘advised didn’t want to alarm public and media’, and did not remember a statement to the effect that ‘this information not to leave room’, as recorded in Mr Cartwright’s notes. However, Mr Newham did not say that these statements were not made, and explained that because of his role at the time, he could not categorically say that he was in the room for the entire briefing.<sup>1110</sup>

In his record of interview with police following the fires, Mr Barr said that:

Also in his discussion Mr Lucas-Smith indicated that the statements he’d been making in the media did not accurately reflect what his assessments of the fires were. He didn’t indicate why his media statements were different to what his beliefs he was sharing with us were. But that’s what he indicated and again that was one of the elements he said he didn’t want to leave the room.<sup>1111</sup>

In response to this statement being put to him in evidence before this inquiry, Mr Lucas-Smith’s said:

I don’t think that is true. I was certainly speaking in a very frank tone to them. They were fellow fire fighters, and we were talking in the context of firefighting and in relation to command and control issues and general firefighting issues, and we really weren’t mincing our words, so to speak. I certainly—I wouldn’t talk like that to the media. Maybe I was talking in the context of a fire spread or something and a comment

could have even been made to me, “Is that what you would tell the media,” and I would have said “No”.

Mr Lucas-Smith said that he was not trying to give the impression in the briefing that he was downplaying in public the prospects of the fires affecting suburban Canberra while he in fact believed it was a strong possibility. He did not agree that there was a conscious distinction between what he said in the media about the risks to the urban area of Canberra and what he really believed.<sup>1112</sup>

In his record of interview with the police, Mr McLeary said that Mr Lucas-Smith ‘certainly indicated that the information he was providing was for in-house dissemination only and not to be released to the media. In fact, he explicitly said if it got to the media he would deny it’. Once again, Mr Lucas-Smith did not accept that this was an accurate account of what was said at the briefing.<sup>1113</sup>

Like Mr Barr and Mr McLeary, Mr Ross in his taped record of interview also referred to Mr Lucas-Smith emphasising that none of what he said at the briefing should leave the room. Once again, Mr Lucas-Smith’s reaction to that evidence was:

No, I don’t recall saying that. But there was a fair bit of—as I said, this was discussion amongst fire fighters, there was a fair bit of free discussion, and there was a fair bit of humour, I suppose, added into the discussions towards the end. There is a whole range of different things that may have been said. But I find it extraordinary and I am having great difficulty understanding the logic of me making such a statement when the whole reason for that meeting was to engage the fire brigade into firefighting process and to alert them to the potential for impact on rural properties.

Mr Lucas-Smith did not agree that it was one thing to brief the fire brigade, because they were going to be involved if and when the fires struck the suburban area, but that he did not want the people of the suburbs to be aware of the risk because they would panic: ‘That certainly hadn’t entered my mind at any time’.<sup>1114</sup>

### **5.11.7 A briefing of the Australian Federal Police**

On the afternoon of 16 January the ESB also held a briefing for the Australian Federal Police, attended by the Chief Police Officer, John Murray, and Commander Mandy Newton. Mr Castle said that he commenced the briefing at approximately 2.30 pm, and was soon joined by Mr Lucas-Smith and Commissioner Bennett, who arrived directly from the completed briefing of the Fire Brigade and Ambulance Service. Ms Kate Keane was also present throughout the AFP briefing.

Mr Castle believed that he based his part of the AFP briefing on the Cabinet briefing paper, ‘and would have followed this through in its broad content’. In particular, although Mr Castle could not recall the exact words that he used during the AFP briefing, he believed that he would have provided information concerning the potential for the fires to seriously impact on the ACT forest pines and subsequently the urban area, as referred to in the Cabinet briefing paper. He said that he ‘may also have given them the feedback that New South Wales were confident in relation to McIntyres’. However, despite basing the AFP briefing on the Cabinet briefing paper, Mr Castle did not think that he gave Chief Police Officer Murray or Commander Newton a copy of that briefing paper.<sup>1115</sup>

According to Chief Police Officer Murray, the briefing took around 30–45 minutes. He said that although it was made clear to him at the briefing that there was a threat to rural properties in the ACT, the fires were described in terms of being rural fires only. He also said that the whole tenor of the briefing suggested that there was no great sense of urgency and that the situation ‘wasn’t an emergency—and far from it’.<sup>1116</sup> In particular, Chief Police Officer Murray was certain that nothing was said to him at the briefing or otherwise on the afternoon of 16 January along the lines of the passage in the Cabinet briefing paper that warned that under the influence of stronger north-westerly winds the McIntyre’s Hut fire could spot over containment lines with ‘potential serious impact to ACT forest pines and subsequently the urban area’.<sup>1117</sup>

Chief Police Officer Murray said that that information would have been useful to him, in so far as it would have been ‘critical to know’ that in the opinion of ESB, an asset under potential threat was the urban edge of Canberra<sup>1118</sup>, in terms of planning for such a contingency. In this regard, he also said that it would have been critical to know that there was apparently a belief that there was a 70 per cent chance that the McIntyres Hut fire would burn into the Uriarra pine forest.<sup>1119</sup> Chief Police Officer Murray also said that he was not informed at the briefing of the discussion in the Cabinet briefing about the suburbs of greatest risk being Dunlop and Weston Creek, or that there had been a discussion regarding the declaration of a state of emergency.<sup>1120</sup> His evidence was that there wasn’t ‘even a suggestion’ of a risk to urban areas of Canberra conveyed at the AFP briefing,<sup>1121</sup> and that the sense he was given was ‘that everything was under control … It was a rural fire some distance away which posed no real threat’.<sup>1122</sup> Chief Police Officer Murray was asked whether he considered that he should have been informed of a threat to the urban area earlier than when he was in fact informed. He responded:

I find it hard to answer the question in those terms that you have asked them. My expectation would have been, having now seen the documents that are currently before this Inquiry, that some of the details in the Cabinet document would have been known to me … Given the tenor of the information we were receiving, which was essentially this is a rural matter under which we currently have under control, no, it was played down—circumstances relayed to us which suggested everything was under control.<sup>1123</sup>

Chief Police Officer Murray accepted that the fact that Cabinet had been briefed that morning may have been mentioned to him, but reiterated that some of the important information apparently provided at that Cabinet briefing, as noted above, was not relayed to him at the AFP briefing.<sup>1124</sup>

Commander Newton’s evidence was that when she was briefed on the afternoon of 16 January, she was not aware that Cabinet had been briefed in relation to the fires. According to her, at no stage during the AFP briefing did anyone refer to the issue of a possible impact of the fires on the suburban area of Canberra. In particular, the information in the Cabinet briefing paper about the potential for a serious impact to ACT forest pines and subsequently the urban area was not conveyed to Commander Newton at the AFP briefing:

I would have taken a completely different course of action had I been told … I would have escalated our activities from a policing perspective far higher than we did at the time. We would have activated the Police Operations Centre much earlier. We would have a planning team preparing plans in consultation with the Emergency Services Bureau personnel.<sup>1125</sup>

Mr Castle thought that Chief Police Officer Murray was wrong in saying in his statement that there was no reference at the briefing to the possibility of urban Canberra being under threat, and

said that it had never been suggested at the briefing that the weather on Saturday was going to create only a moderate risk.<sup>1126</sup> Challenged in cross-examination concerning his recollection of what was said at the briefing, Mr Castle said he thought he had ‘some recollection’ of the briefing, and that he recalled describing the fires at that time as being in the hills. He could not recall the exact words used and there was nothing else he could recall saying.<sup>1127</sup> Moreover, Mr Castle said that he in fact had no recollection of having the Cabinet briefing paper in front of him during the AFP briefing, and that his belief that he made reference to a risk to the urban area of Canberra, as mentioned on page 2 of the Cabinet briefing paper, ‘was probably an assumption’.<sup>1128</sup>

In his evidence, Mr Lucas-Smith said that he did not provide the Cabinet briefing paper to the police officers, and did not know if it had been provided by someone else.<sup>1129</sup> Mr Lucas-Smith broadly agreed with Chief Police Officer Murray’s statement regarding the content of the briefing, and in particular, that during the briefing Mr Lucas-Smith advised of the developing fire situation to the west and said there was a possibility of high fire risk in the coming week, describing how on 18 and 19 January weather patterns were expected to produce high winds and temperatures. Mr Lucas-Smith agreed that he said that this would create a moderate risk which would escalate to severe on Monday 20 January, and that because of the weather being unpredictable there was a chance conditions might become severe on Sunday.

Mr Lucas-Smith said that Chief Police Officer Murray ‘could very well’ be right in making the point in his statement that no reference was made during the AFP briefing to the possibility of urban Canberra being under threat.<sup>1130</sup> Mr Lucas-Smith said that this might have occurred because he would have focused the briefing on the existing threat to rural properties, and so may not have mentioned the threat to urban Canberra. He reiterated his earlier evidence that although a threat to urban Canberra was included in the Cabinet briefing paper, ‘it was not something that was prominent in our thinking at that particular time, but it was there. The potential existed’.<sup>1131</sup> Mr Lucas-Smith also agreed that the police would certainly have a role to play if the fires reached the Canberra suburban area. Mr Lucas-Smith was then asked, ‘if there was a genuine risk to the urban area, didn’t [the AFP] need to be informed that they should be preparing for it?’ He responded: ‘That’s Chief Police Officer Murray’s recollection as to what was said. I am not saying he is wrong, but I find it interesting that they went away and did such planning’.<sup>1132</sup>

Commissioner Bennett could not recall if there was any discussion at the briefing about the probability of the fire coming into the urban environment of Canberra, and could not recall any mention of a state of emergency.<sup>1133</sup> Ms Keane thought that Mr Castle used the Cabinet briefing paper to brief Chief Police Officer Murray and Commander Newton. She also remembered a map on the wall and discussions around the map. She did not recall specifically any reference to a threat to the urban edge of Canberra, but believed that if it was in the Cabinet briefing paper ‘I am sure it would have been discussed’.<sup>1134</sup>

In the context of her evidence concerning the AFP briefing, Ms Keane was asked about a hard copy draft of an email, the final version of which was sent by her to members of the Emergency Management Committee at approximately 6.26 pm on 16 January 2003.<sup>1135</sup> Ms Keane confirmed that, apart from an email address written on the draft, all of the handwriting on the draft email was Mr Castle’s. Ms Keane confirmed that Mr Castle had deleted from her draft of the email the statement that ‘there’s currently a low possibility that a state of emergency may need to be declared due to the significant coordination aspects and potential risks posed by Monday’s weather’ and substituted ‘depending on the outcomes of the next 24 hours and the severity of the weather, there may be need for increased coordination into next week’. Ms Keane did not recall

Mr Castle saying anything to her about these amendments. She thought it was possible that the reference to a state of emergency that she included in the first draft of the email was derived from the briefing with Chief Police Officer Murray and Commander Newton: ‘It is possible that that was discussed and I put it in that paragraph after I discussed that brief—that’s potentially where I got that information from’.<sup>1136</sup> Chief Police Officer Murray said categorically that Ms Keane did not get information about a state of emergency from the AFP briefing. Ms Keane later conceded that it was possible that the discussion of the state of emergency did not take place at the meeting with the police.<sup>1137</sup>

### **5.11.8 ACT Fire Brigade and ACT Ambulance Service planning meetings**

Immediately following the briefing from Mr Lucas-Smith, representatives of the ACT Fire Brigade and the ACT Ambulance Service each met separately to discuss what arrangements should be made by each of their respective organisations in response to the briefing from Mr Lucas-Smith.

#### ***The meeting of ACT Fire Brigade***

Senior officers of the ACT Fire Brigade met to commence planning the Brigade’s response to any urban fires that might occur as a consequence of the bushfires impacting on the urban/rural interface, and to define specific roles and functions for Fire Brigade officers.<sup>1138</sup> Although Commissioner Bennett was aware that this meeting was taking place, he did not attend because immediately after the briefing of the Fire Brigade he accompanied Mr Lucas-Smith into Mr Castle’s office for the briefing of the AFP, and he did not have an opportunity to speak to his senior officers before they met.<sup>1139</sup> According to Mr Collins:

... immediately after the meeting with Mr Peter-Lucas-Smith, the senior officers of the ACT FB remained in the executive conference room to plan an ACT FB response to any urban fires that may occur as a result of fires spread from the national parks. Based on the information received from Mr Peter Lucas-Smith, it was felt by the senior officers that there was a possibility of an urban/rural interface fire occurring. Also based on the information received from Mr Peter Lucas-Smith, it was felt that the likely time any wildfire would reach the suburbs would be on Monday 20 January 2003.<sup>1140</sup>

Mr Prince said that at that meeting there were differing views expressed as to how the Fire Brigade should respond to the information provided by Mr Lucas-Smith in the briefing. This debate was essentially between those who wanted the Fire Brigade to participate within the existing SMT structure, and others, such as Mr Collins, who wanted the Fire Brigade to set up its own IMT and to prepare independently. It was decided to do the latter, but to ensure close and effective cooperation with the SMT by placing a Fire Brigade officer in the SMT and another in the Planning Unit.<sup>1141</sup> Although not present at the meeting that afternoon, Commissioner Bennett said that despite the Fire Brigade setting up its own IMT, he was:

keen to ensure that anything we did would complement the overall objectives and strategies of the Bushfire Service. I understand that liaison was occurring between our shadow IMT and the Service Management Team that existed within the Bushfire Service to avoid several things—a duplication of effort or an inconsistent message being passed out.<sup>1142</sup>

Hence this new Fire Brigade IMT was formed in large part to enable the ACT Fire Brigade to specifically prepare its own resources for any potential fire impacts.<sup>1143</sup> By default, Commissioner Bennett was appointed incident controller of the IMT<sup>1144</sup>, while Mr Newham was

appointed Operations Officer, Mr Cannon the Logistics Officer, and Mr Collins the Planning Officer.<sup>1145</sup> Numerous other roles were allocated to Fire Brigade personnel by the IMT, including liaison officers for the AFP and BOM.<sup>1146</sup> According to Mr Prince, the ACT Fire Brigade IMT was essentially a ‘planning IMT’ at this time, set up ‘to make people aware and to manage the incident if and when that fire in the west came into the urban interface’.<sup>1147</sup> Commissioner Bennett also gave evidence to this effect, stating, ‘We did not, in effect, conduct, certainly before the 18th, any formal IMT meetings where the key representatives all attended. Essentially at this point in time and certainly up to the 18th, it was very much in a planning phase’.<sup>1148</sup>

Commissioner Bennett said that in response to the information provided by Mr Lucas-Smith at the briefing, it was clear that the Fire Brigade would have to develop the capability to escalate its response over the following days in order to be able to provide direct support to Bushfire Service operations at fires occurring outside the urban area, ‘but also in preparation for any potential involvement closer to the urban edge’.<sup>1149</sup>

After the meeting of senior ACT Fire Brigade officers, Mr Collins arranged a meeting of his planning staff. At that planning meeting Mr Collins ‘provided a brief as to what was expected of the planning section prior to and in preparation for a possible bushfires impingement on the urban built-up area’.<sup>1150</sup> Mr Collins described the nature of the planning being undertaken at that stage as follows:

We were planning for some type of fire that might have come from up the Murrumbidgee headed in toward the urban rural interface. We had no idea what shape or size or the nature of the severity [of] that fire was. We felt we should do some planning, just in case that fire occurred. We had no idea of the fire, of what it was going to look like.

I looked from where we were down to the Murrumbidgee River and all I could basically see was drought-ridden pastures. I felt that was some type of containment line there in itself. I felt that this perhaps could have slowed the fires right down, and that the chance of them ever coming up anywhere near the urban area was very remote.<sup>1151</sup>

Mr Collins gave evidence that by 16 January, cross-crewing arrangements ensured that there were full crews available for all Fire Brigade urban appliances on a 24 hour basis, with the effect that the Fire Brigade was in a full state of operational readiness and at maximum response capacity.<sup>1152</sup> He also gave evidence regarding a list of some 15 planning activities that were commenced by the Fire Brigade IMT on 16 January, and continued over the following days. These preparatory actions included, amongst other things, a cursory risk assessment of ‘vulnerable areas on the western rural/urban interface’, liaison with ACTEW AGL regarding the efficacy of fire hydrants and water supplies in the vulnerable areas of the western urban/rural interface, and liaison with numerous other entities.<sup>1153</sup>

In his statement, Mr Prince describes how at about 4.30 pm on 16 January 2003 he and District Officer Hobbs had a brief discussion with Mr Newham in his capacity as Operations Officer, ‘advising him of our concerns surrounding the fires and that there was a need to be fully prepared for the possible impact’, and emphasising that ‘the brigade needed to have a strategic position in relation to both staff and equipment to ensure that we had our full capability available’.<sup>1154</sup> According to Mr Prince, in response to these concerns Mr Newham stated that in his opinion the fires were the responsibility of the ACT Bushfire Service, and that the fire was not impacting on the city and that at this time it was ‘business as usual’.<sup>1155</sup> In his evidence,

Mr Prince described his concerns in more detail and what preparation he considered was required, including in respect of staffing arrangements and equipment. According to Mr Prince, Mr Newham indicated that he ‘was very comfortable with the situation and felt that at the moment the fire was 25km away and the Bushfire Service were dealing with it appropriately and, with the extra tankers that we have stood up, he believed that we were prepared’.<sup>1156</sup>

It was submitted on Mr Newham’s behalf that in suggesting on the afternoon of 16 January that it was ‘business as usual’ for the Fire Brigade, he was indicating that despite the bushfire threat, the Fire Brigade had to continue to attend to its usual statutory functions within the urban area, and that the Bushfire Service would continue to be the lead agency combating the bushfires where they were then burning in rural areas.<sup>1157</sup> This submission is supported by Mr Newham’s evidence, during which he was asked whether he took away from the briefing a sense that the Fire Brigade should start to plan for a possible effect on suburbs of Canberra, to which he responded:

I took away from the meeting the feeling that we needed to plan for greater escalation, that the fires still being where they were and still of the magnitude they were, we would need to resource ourselves just to maintain our capability … Our commitment to that fire campaign was that we would look after an extended interface area. I was expecting that we may have to have a greater involvement if the fires did break out of the area of containment in Namadgi, that it was likely that we would have to send some of our resources further out and subsequently have to backfill them to maintain our station coverage.<sup>1158</sup>

The fact that the Fire Brigade commenced preparing for a potential impact on the urban area from the afternoon of 16 January indicates that Mr Newham was not suggesting by his ‘business as usual’ comment that the Fire Brigade did not need to plan and prepare in response to the bushfire threat.

### ***Meeting of ACT Ambulance Service officers***

Following the briefing by Mr Lucas-Smith, at approximately 3.00 pm senior officers of the ACT Ambulance Service held a ‘strategy meeting’ at which Mr Dutton briefed the ‘AS Management Team’ on the current fire situation and forecasts.<sup>1159</sup> Mr Dutton had attended both the ESB planning meeting at 09.30 am that morning and the briefing by Mr Lucas-Smith at 2.00 pm.<sup>1160</sup> He said the briefing he gave was based on the information provided at these two meetings and on what he had learned from conversations with a number of people at Curtin: ‘What I reflected to the Ambulance Management Team would not be exclusively from the two meetings referred to earlier but a synopsis or a summary of all the information I had to hand at the time I briefed them’.<sup>1161</sup>

There are two sets of notes or minutes of the ACT Ambulance Service meeting that afternoon<sup>1162</sup> and, although Mr Dutton was unable to identify which of the two sets of minutes were the official minutes, they were similar in many respects.<sup>1163</sup> Mr Dutton was asked, in particular, about the following passage in one of the sets of minutes:

At 14:00 today Peter Lucas-Smith briefed exec and Cabinet on the outlook for the next 5 days. He indicated extremely poor outcomes for the fire. Weather conditions will be worse than for Ash Wednesday fires, with Monday showing potential that the Stockyard and Bendorra fires will join. Spot fires will present a huge danger, even for urban areas, and these areas could be under significant threat from spot fires from the

pine forests. Peter Lucas-Smith will not deploy fire fighters into the pine forest due to the extreme danger for the fire fighters.<sup>1164</sup>

Mr Dutton agreed that ‘in generality’ that information came from Mr Lucas-Smith’s briefing at 2.00 pm that day, ‘noting the discrepancy between [Ambulance Service] documents and that I am not confident in either of these documents being an exact record of what was said’.<sup>1165</sup>

Mr Dutton could not specifically recall where he gained the information about spot fires presenting a ‘huge danger, even for urban areas,’ and thought that that information might have come from someone else that he had spoken to at Curtin during the day.<sup>1166</sup>

According to the other set of minutes, Mr Dutton told the Ambulance Service officers:

The ACT is facing a very real threat to property ... Peter Lucas-Smith has indicated that we are expecting extremely poor outcomes from these fires. The conditions will potentially be worse than the Ash Wednesday fires and there is the potential for the Stockyard and Gingera fires to join. Spot fires will present a huge danger in the forests and potentially in the urban areas of the ACT ...<sup>1167</sup>

Ultimately, Mr Dutton said that as a consequence of the information he had received that day ‘I considered that there was always the potential for a threat of fire to the urban areas of Canberra’, and that in response to this potential threat, the Ambulance Service commenced planning for escalating operations in support of fire services, if this became necessary.<sup>1168</sup>

In his evidence, Mr Lucas-Smith agreed that the second minute reproduced above represented a correct summary of the content of the briefings given by him that day.<sup>1169</sup>

### **5.11.9 The afternoon planning meeting**

The minutes of the SMT planning meeting at 4.00 pm on 16 January 2003 record that Mr Graham provided a report on the progress of operations that day, and on planned operations for the evening. Mr Graham’s briefing paper (which was attached to the minutes) records progress on completing containment lines around the Bendora and Stockyard fires. In relation to the McIntyres fire, the briefing paper states: ‘There are no real concerns with this fire, NSW RFS is considering using aerial incendiaries on the fire’.<sup>1170</sup> Mr Graham indicated that his briefing concerning the McIntyres Hut fire was based on discussions with the ACT Liaison Officer at Yarrawonga fire control.<sup>1171</sup> Mr Graham could not remember who provided him with that information, but agreed that it could have been Mr Jeremy Watson. According to Mr Graham, the use of aerial incendiaries concerned him ‘a little’, because he understood that using aerial incendiaries was an inherently risky operation to be undertaking, particularly with severe weather.<sup>1172</sup> However, Mr Graham said that notwithstanding his note that there were ‘no real concerns’ with the McIntyres Hut fire, he felt that ‘there was still some concern with it. The fact that we had been advised it was being contained was heartening’.<sup>1173</sup>

#### **Total fire ban declared for 17 to 21 January**

The minutes of the planning meeting record that the Bureau of Meteorology had issued a fire weather warning for the following day and that, ‘due to the weather forecast, there will be a total fire ban tomorrow, extending through until midnight Tuesday, 21 January 2003. It was reported that the Fire Danger Rating for tomorrow is expected to be within the range of 46–50 and worse on Saturday’.<sup>1174</sup>

In his statement, Mr Lucas-Smith described the circumstances in which he declared that total fire ban as follows:

On the morning of the 16th, I started at 07:30 at ESB. The Bureau of Meteorology had issued a severe fire weather warning. On that basis and after further discussion with the Met Bureau, I declared a total fire ban for 5 days through to the 21st. We were now starting to focus our attention on what was going to happen over the next few days as far as bushfire behaviour and weather conditions were concerned. At that stage there was still no direct threat to the city, however, we were concerned that 100% of the ACT Bushfire Service resources were committed and therefore any other fire that we may have in the ACT would cause a significant concern because we would not have the capability to be able to respond to it.<sup>1175</sup>

Although Mr Lucas-Smith's statement gives the impression that the total fire ban was declared early on the morning of 16 January, it appears that the further discussion that Mr Lucas-Smith had with the Bureau of Meteorology on 16 January in fact took place at about 3.30 pm that day and it was as a consequence of that conversation that Mr Lucas-Smith decided to impose a total fire ban for the following 5 days.<sup>1176</sup>

Mr Castle suggested in his statement that 'this was the first time such a continuous total fire ban had been declared and the gravity of the situation leading to this ban was provided to the media'.<sup>1177</sup> However, Mr Castle was not certain what information was used to convey the gravity of the situation to the media.<sup>1178</sup>

#### **5.11.10 Mr Lucas-Smith's 5.00 pm radio interview**

Shortly before 5.00 pm on 16 January 2003, Mr Lucas-Smith was again interviewed by ABC Radio 666. The interviewer commenced the interview by asking 'What's the situation with the bushfires in Namadgi now?' Mr Lucas-Smith responded 'We've got our containment lines in, and the major task of back burning from these containment lines is commencing at 18:00 hours tonight'. The interviewer then remarked that that allowed 12 hours before 'those north-westerlies kick in, which are expected tomorrow afternoon', to which Mr Lucas-Smith responded, 'That's exactly right, we're—we critically need to get this back burning operation in tonight, to protect the south-east corner of the fire, so, when the north-westerlies do come, it will hopefully prevent the spotting across into unburned areas outside our containment line'.

The interviewer asked whether Mr Lucas-Smith's reference to spotting would be spotting close to the ACT. After Mr Lucas-Smith corrected the interviewer by confirming that the fire was in the ACT already, the interviewer continued: 'Oh, I'm sorry, yes, but closer to the suburbs?' Mr Lucas-Smith responded, 'Close to the suburbs, no, that's not right ... it will go further to the south in Namadgi, so, it will go to the south-east part of Namadgi, more into the—back into the western side of the Cotter River, and towards Mt Gudgenby'.<sup>1179</sup> In his evidence, Mr Lucas-Smith confirmed that what he had said in the interview was true.<sup>1180</sup>

#### **5.11.11 The NSW Rural Fire Service media release**

In the afternoon or evening of 16 January 2003, the NSW Rural Fire Service issued a media release.<sup>1181</sup> In relation to the McIntyres Hut fire the media release states:

Containment was achieved with the completion of back burning yesterday and aggressive mop up and patrol of these lines today. Intensive ground and air patrols will continue to be conducted as active fire remains along the Goodradigbee River.

Aerial incendiary drops on the north-eastern area of the fire, east of Baldy Range, has been planned for this afternoon, if weather conditions permit.

West north-west winds expected Saturday and Sunday will pressure lines to the east and south-east and force the fire to the ACT border.

When Mr Graham was asked about this media release during his evidence, he agreed that if the McIntyres fire reached the ACT border, it would necessarily have crossed the containment line to the east of that fire. Mr Graham also agreed that the NSW media release was not speculating about the matter, but appeared to be saying that this *would* happen. He also agreed that the media release did not seem entirely consistent with the information that he had received from the ACT Liaison Officer at Queanbeyan as reported to the planning meeting, to the effect that there were ‘no real concerns’ about the McIntyres Hut fire. However, Mr Graham said that he had not seen the NSW media release and had not been informed on the evening of 16 January that the NSW Rural Fire Service were expecting the McIntyres Hut fire to run to the ACT border.<sup>1182</sup>

#### **5.11.12 NSW taskforces arrive in the ACT**

At approximately 5.30 pm, Mr Kevin Cooper from the NSW RFS arrived in Canberra with the first two of the four NSW taskforces that had been requested by Mr Lucas-Smith on 15 January. The other two taskforces arrived later that night. Each taskforce was constituted by five firefighting appliances and the necessary crews and commanders to provide 24-hour capability over 2 shifts. In total, the fours taskforces comprised 20 tankers and approximately 132 personnel.<sup>1183</sup> Some of these units had been travelling for 17 hours, from as far away as Kyogle.<sup>1184</sup> Mr Cooper was the coordinator of these taskforces (and of the four more taskforces that arrived from NSW over the following days), and was accompanied by operational commanders to manage each taskforce, as well as two divisional commanders: Mr Dennis McTaggart and Mr Guy Duckworth.

The NSW taskforces were met by Mr Castle at the Federal Highway junction, accompanied by Ms Lowe to coordinate the media. Mr Castle gave evidence that this meeting was ‘purely a PR stop’ and that no briefing was provided at that time to the arriving firefighters.<sup>1185</sup> After the media interviews the arriving crews were escorted by police to Narrabundah area motels where they were accommodated.<sup>1186</sup> Some of these crews were deployed to the Stockyard Spur fire that evening, leaving Narrabundah at 6.30 pm.

#### **5.11.13 Response to the Bendora fire**

Mr Bartlett conducted an early morning aerial reconnaissance of the Bendora fire, and concluded that the containment lines looked ‘quite strong’, with ‘virtually no smoking trees within about half a kilometre of the actual physical control line ... However, there were bits inside the control line that had not burnt in various places’.<sup>1187</sup> Mr Lucas-Smith described the strategy in relation to the Bendora fire by the morning of 16 January as follows:

It was now even more vital for us to ensure that our perimeter on the eastern side of the Bendora fire was secure and so we deployed our resources to continue to deepen up that

backburn as much as possible. The practise is that we establish containment lines and then put in a backburn. When there is sufficient depth we can then burn out the area between the backburn and the approaching fire, selecting the appropriate time for this sort of operation and not waiting for the fire to approach when fire behaviour may not be controllable. Unfortunately, our backburns were not deep enough and we were only 30–50 metres deep in some places meaning we needed to deepen our backburning line to between 100 and 200 metres on that southern side, conscious of the fact that when the wind swung around to the north or north-west or the west as they were predicted, that would put the wind directly onto our containment line. So once again we were finding ourselves in a situation where time had the potential to beat us. The construction of our existing lines had been achieved quicker than expected, which was a major credit to the crews working those operations. However, we didn't have any other strategy because we had no fall back from Bendora Road being our eastern boundary, and we had nowhere else to go as we couldn't cross the Cotter River at that location.<sup>1188</sup>

Mr Murphy was the incident controller for the day shift on 16 January, taking over from Mr Cooper, whose crews had been working overnight to burn along the southern end of Moonlight Hollow and Gravel roads. Burning operations continued between Warks Road and Bushrangers Creek that morning, and were completed at around 11.30 am. Although at around 10.00 am Mr Winter raised with Mr Murphy his concern ‘that it was getting a bit too hot and windy to continue back burning’, they were then forced to back-burn to protect the Bulls Head staging area, at which were located resources such as catering facilities, vehicles and aviation fuel.<sup>1189</sup> During the day, the fire continued to expand within containment lines, advancing about a kilometre to the north, and linking up with burnt out areas along containment lines in the south.

At approximately 2.30 pm the fire broke through control lines on Moonlight Hollow road and burned up a steep slope to Bendora Road. Mr Murphy described this as ‘heartbreaking’.<sup>1190</sup> A major effort to control this break-out occurred, with numerous helicopters from NSW RFS water bombing in support of back-burning and direct attacks by ground crews. Although day shift crews worked ‘incredibly hard’ through to as late as 10.00 pm to control this break-out<sup>1191</sup>, these attempts were ultimately unsuccessful, and so new containment lines had to be established from Bulls Head down Bendora Road, Warks Road and Gravel Road. Burning out from these new containment lines commencing that night under the direction of Mr Dave Wassall.<sup>1192</sup>

Mr Murphy noted that as a consequence of the break-out, his crews did not do any further burning from the staging area, and so were unable to complete the original tasking for the day.<sup>1193</sup>

By 16 January, Mr Cheney estimated that the Bendora fire had burnt approximately 3088 hectares.<sup>1194</sup>

#### **5.11.14 Response to the Stockyard Spur fire**

According to Mr Cheney, during 16 January:

The fire continued to expand around the entire perimeter with the only controlled section being around 2 km on the Mount Franklin Road. The most rapid spread was on the northern and southern sections of the perimeter with the slowest spread on the steep easterly slopes above Corin dam.<sup>1195</sup>

Mr Arthur Sayer was again the incident controller. In accordance with the strategy set out in the IAP for the fire, it was necessary to conduct a very large back-burn operation that afternoon,

with the objective of completing some 14 kilometres of back-burning along trails before conditions deteriorated on Saturday. Mr Lhuede thought that it might be possible to complete this back-burn within the time available, but thought ‘it would be fairly risky … it would be close’.<sup>1196</sup> In his evidence, Mr Sayer said that given that ‘the best that people were getting in back-burnings in other areas was something like 3 kilometres’, putting in 14 kilometres would be ‘a major task’.<sup>1197</sup> The Options Analysis form for the Stockyard Spur fire prepared at 4.00 pm on 16 January noted ‘Timing of BB operations pm16/1 critical to maximise depth of containment’ and revised down the probability of successfully implementing the proposed containment strategy from 50 per cent (as stated in the IAP on 15 January) to 30 per cent.<sup>1198</sup>

At approximately 4.00 pm Mr Lucas-Smith advised Mr Sayer that the NSW crews that had been tasked to assist with this back-burn would not be available. This was understood to create a danger for the entire back-burn, because with no personnel available to burn along the Leura Gap Fire Trail there was a risk that the main fire would burn due south and swing around behind the southern and eastern containment lines. Nevertheless, the SMT recommended that the back-burn be commenced. Mr Sayer said that he ‘absolutely’ agreed with this recommendation, because despite a low probability of success there was ‘no practicable alternative’. In Mr Sayer’s view, if the strategy was abandoned, then when the predicted westerly winds arrived they would drive the main fire to break containment lines across a very wide front.<sup>1199</sup> In fact, a newly arrived NSW taskforce was deployed that evening to assist in the back-burning operation at the Stockyard fire, with the NSW crews leaving Narrabundah at approximately 6.30 pm.<sup>1200</sup>

However, the planned back-burning operation was postponed when the Mount Gingera Creek bridge collapsed under a tanker, blocking access by road and therefore blocking an important escape route for firefighters. In this regard, Mr Sayer noted ‘You can plan everything to the hilt, and we ended up with a tanker rolled off an old wooden bridge … There was no way of getting them [crews] out without major work from an earthmoving machine to put a crossing in to them’. Priority was given to getting the road open again, and the tanker back onto its four wheels and operational. Due to a number of further delays, this took until sometime between 4.00 am and 5.00 am on the morning of 17 January, with the result that the planned back-burn did not commence during that overnight shift.<sup>1201</sup>

According to Mr Lucas-Smith:

With the track blocked and the need to bring in a dozer to create a side track around the bridge, it meant that we were 24 hours behind in our burning operations, knowing full well that we were heading into wind shift conditions that were likely to push the fire in a south-easterly direction.<sup>1202</sup>

By 16 January, Mr Cheney estimated that the Stockyard fire had burnt approximately 4482 hectares, and was well established to the east of Mt Franklin Rd.<sup>1203</sup>

Mr Roche suggested that one of the reasons for the failure to control the combined Stockyard/Gingera fire was that an excessive period of time had been taken to develop the IAP for those fires, which was not completed until 4 pm on 16 January. Mr Roche further argued that once prepared, the IAP was deficient because it ‘made no mention of the resources required to implement the strategy and provides no time lines and intermediate objectives against which progressive measurement of the implementation of the plan could be undertaken’. Moreover, with only a 30 per cent chance of successfully achieving the preferred containment option under the IAP, Mr Roche argued that IAP should have included effective contingency plans. Mr Roche concluded:

The failure to explore alternate avenues to obtain resources for the Stockyard fire between the 9 and 15 January indicates to me that the Planning Unit did not conduct an on-going risk assessment of the consequences of maintaining a strategy of not resourcing this fire. This is despite the fact that on 9 January, the CFCO believed the situation with the Bendora and Stockyard fire was becoming serious. It should have been obvious to the SMT that the longer this fire remained unattended, the larger the eventual commitment would need to be in order to effect containment.<sup>1204</sup>

### 5.11.15 Response to the McIntyres Hut fire

With containment lines completed on the evening of 15 January, on 16 January some burning out continued to consolidate those lines, particularly along Doctors Flat road and along the eastern perimeter. However, the primary objective on 16 January was to use aerial incendiaries to burn out the areas of fuel still within containment lines, and to do so as quickly as possible prior to arrival of the forecast adverse weather. Ms Crawford was the incident controller on 16 January. Her evidence was that the aim was to drop the incendiaries on ridge-lines so as to create down-hill burns, and to thereby avoid major uphill runs of high intensity. The plan was to start at approximately 3.00 pm in the afternoon, because this would ensure that most of the burn would occur at night when conditions were milder, but would still allow a sufficient period of daylight for the incendiaries to be safely dropped by aircraft.<sup>1205</sup>

However, on 16 January it was discovered that no aerial incendiaries were in fact available, and accordingly, that the planned burn could not commence that afternoon.<sup>1206</sup> Mr Arthur said that the reason that no aerial incendiaries were available was that they were in high demand throughout southern NSW at that time, and that even though they had been identified as necessary to the strategy for the McIntyres Hut fire from 8 January, they had not yet been obtained. Mr Arthur conceded that losing the opportunity to commence the burn on 16 January because of the unavailability of the aerial incendiaries was unfortunate: ‘Somewhere the system failed on that’.<sup>1207</sup>

Mr Cheney argued in his report that the construction of the containment lines and the burning out operations had occurred too slowly over the preceding days, with the result that by 16 January, large areas of unburned fuel remained within the containment lines that would not be able to be burnt out before the arrival of extreme fire weather. In Mr Cheney’s view:

At this stage, the only option left to the Incident Controller was to undertake judicious aerial ignition late in the evening with the spot fires placed around the westerly aspects so these fires would link up overnight without creating too much convective interaction. I believe that if the agencies had been trained in, and practiced, precision prescribed burning using aerial ignition they could have conducted this operation safely before the containment lines had been back burnt.<sup>1208</sup>

Ms Crawford disagreed with Mr Cheney’s view that they should not have waited until containment lines were complete to commence the aerial incendiary program. Ms Crawford gave evidence that the RFS did have experienced people to conduct the aerial incendiary program, but that the dryness of fuels required them to be sure that they would not lose control of the fire by starting the burn before the containment lines were complete.<sup>1209</sup>

By 16 January, Mr Cheney estimated that the McIntyres Hut fire had burnt approximately 7580 hectares.<sup>1210</sup>

## 5.12 17 January 2003

### 5.12.1 The morning media report

On the morning of 17 January 2003, the *Canberra Times* carried an article under the headline ‘Next five days critical’, quoting extensively from the press conference given by Mr Lucas-Smith at midday on 16 January, as discussed above. The article including the following:

The weather conditions now facing firefighters in the ACT and surrounding NSW were worse than [sic] those that preceded the 1983 Ash Wednesday disaster in South Australia and Victoria, local fire authorities admitted yesterday ...

ACT Bushfire and Emergency Services director Peter Lucas-Smith said the next fire days would be critical, with temperatures today forecast to rise to 36 degrees, humidity falling and winds shifting to the north-west, sweeping flames and smoke towards Canberra. Conditions could worsen even further on Monday and Tuesday.

“We’re right now at the crunch point,” Mr Lucas-Smith said. “We desperately need these additional resources [from NSW] to assist us and get these lines established before the weather turns nasty on us.”

The changing winds today are expected to reduce the immediate fire threat to rural properties in the Brindabella Valley. However, the winds will put pressure on containment lines to the south and east of the massive McIntyre’s Hut fire burning in NSW, lines which are protecting the Uriarra pine plantations in the ACT.

After discussing the various actions being taken by firefighters to respond to the Bendorra, Stockyard and McIntyres Hut fires, and noting that ‘the nearest flames are still more than 20km from the outskirts of Canberra’, the article quoted Mr Lucas-Smith as saying that ‘at the moment I don’t think there is any threat to the urban edge [of Canberra]’. The article did not suggest that the remark attributed to Mr Lucas-Smith related only to the ACT fires, but on the contrary, the comment appeared immediately after a reference to the McIntyres Hut fire.<sup>1211</sup> The effect of this article on Canberra residents’ perception of the threat posed by the fires is discussed in Chapter 7.

### 5.12.2 The morning planning meeting

The minutes of the planning meeting held at 9.30 am on 17 January 2003 indicate that the meeting commenced in the usual manner, with a report by Mr Graham on the progress of fire operations overnight and of planned operations for the day. Mr Graham’s briefing paper attached to the minutes recorded that back-burning for both the Bendorra fire and the Stockyard fire did not take place overnight as planned.<sup>1212</sup> These were the back-burning operations that Mr Lucas-Smith had described as critical in his interview with ABC Radio 666 at 5.00 pm the previous evening.<sup>1213</sup> In relation to the McIntyres Hut fire, the minutes record that ‘NSWRFS will be focussing on commencing incendiary work on the large unburned sector of the north-east section of the fire’.<sup>1214</sup>

At the planning meeting, Mr Mason provided details of the Bureau of Meteorology forecasts, the substance of which is recorded in the minutes under the heading ‘Planning’. The forecast for that day included, ‘variable winds until 1000 hours, followed by north-north-west winds at 20–25kms, swinging north-west after 1300 hours. Winds will be freshening this afternoon to

30–40kms, gusting to 50–60kms. The expected temperature will be 36°<sup>o</sup>. The Saturday forecast was ‘north-west winds are expected 20–25kms, gusting 45kms possibly as high as 60kms, pulling back to a westerly direction. An easterly change is expected after 22.00 hours. Maximum temperature expected is 37°, dew point 0–2°<sup>o</sup>. The forecast for Sunday was for milder conditions, and the forecast for Monday was for a return to extreme conditions: ‘Light winds are expected early in the morning, tending north-west late morning, 20–30kms, gusting 40kms plus. Temperature 37°, dew point 0° or lower’.<sup>1215</sup>

In evidence, Mr McRae noted that the weather information being provided that morning suggested that Saturday and Monday were starting to look as though they would be much the same in terms of bringing extreme fire weather.<sup>1216</sup> In his evidence, Mr Castle said that Mr Mason’s forecast appeared to indicated that Saturday would now be a worse day than Monday,<sup>1217</sup> however Mr Castle did not recall that development being discussed at the planning meeting.

Mr McRae’s report followed the weather forecast, and is recorded in the minutes as follows:

Rick McRae stated that due to the variable winds expected, the fire behaviour may be erratic, with the worst fire runs to the south-east. There is potential for worsening conditions when the north-west winds arrive this afternoon. The containment lines are not strong and people need to be aware today of extreme fire behaviour.

Peter Lucas-Smith requested information on the potential fire growth without intervention. Due to the varying terrain, there is potential for the fire to run uphill, across creeks, rivers and containment lines. There is the potential for a 10km spot over distance. Rick McRae stated due to the dry fuel moisture content, there is significant danger of embers igniting new fires and further analysis needs to be undertaken on fallback positions.

In his statement, Mr McRae described the forecast identifying a switch in wind direction from the east to the north-west that afternoon as ‘a serious development … In summary it amounted to extreme fire danger’.<sup>1218</sup> In his evidence, he said that his comments at the planning meeting were not addressing the McIntyres Hut fire, because he said that he was ‘giving information to the people in ACT operations who are trying to successfully implement objectives and strategies on the fires that the ACT was tackling’.<sup>1219</sup>

Under the heading ‘Safety’, the minutes record that Mr Lucas-Smith discussed various concerns regarding the conducting of back-burning operations on the Stockyard fire, including the following:

Serious consideration needs to be given to conducting a back burn this morning. Planning and Operations are to discuss the associated risks of this back burn …

Mr Lucas-Smith requested all crews, including plant operators, be notified of the conditions expected this afternoon and safety considerations … NSW are responsible for providing advice to the Brindabella Community if there is a need to evacuate.

Peter Lucas-Smith raised concerns regarding the aerial incendiary back burn operations at McIntyre’s fire. There is potential for many uphill runs, with spot overs at potentially 10kms, with a north-west wind impacting on the ACT. Peter Lucas-Smith requested a map detailing potential spot distances today for all fires.<sup>1220</sup>

Mr Castle referred in his statement to concerns being raised at the morning planning meeting with respect to the planned use of aerial incendiaries at the McIntyres Hut fire:

Operations, planning and CFCO objected to the aerial ignition under the forecast worsening weather conditions. I believe Operations indicated that our Liaison Officer at Queanbeyan had disagreed with the proposed aerial ignition. After the conclusion of the 09:30 briefing, I specifically recall reinforcing directly to the NSW RFS Liaison Officer that we had objected to the aerial ignition and he should advise NSW RFS centre of Queanbeyan of ACT objections to the aerial ignition.<sup>1221</sup>

### 5.12.3 Planning during the morning

Mr McRae's view was that due to the predicted extreme weather conditions for that day:

At this stage it was too late to do more than [sic] try and lock in containment lines then constructed or nearing completion, and to try to hold the fires at those lines in the event there were any fire runs. I therefore had little to do that morning. It was essentially an Operations Task. Planning Section thus focussed on the outlook.<sup>1222</sup>

Mr McRae's notes made during or shortly after the morning planning meeting set out three tasks that were to be conducted by the Planning Section that morning.<sup>1223</sup> The first was 'Rapid analysis of 11am OPS'. Mr McRae said in evidence that this referred to the need to the need for the Planning Unit to assess by 11 am 'whether people had achieved what they were aiming to achieve', on the basis that planned operations would need to be completed before the forecast extreme conditions arrived that afternoon. Mr McRae could not remember if this task was completed. The second planning task was identified as 'Spotting footprints', which Mr McRae said involved assessing areas that would be vulnerable to spotting. The third planning task was identified as "'Oh shit' pre-work' which McRae described in evidence as an analysis of what to do if the fires broke containment—summarised as meaning 'where do we go next?' He said that while the incident managers in the field could deal with minor break-outs across containment lines, the pre-work he was referring to was to be conducted by Planning to prepare for a 'significant break'.<sup>1224</sup> Mr McRae noted that planning work undertaken that day included planning for a break-out from the McIntyres Hut fire.<sup>1225</sup>

### 5.12.4 Role of the NSW taskforces

On the morning of the 17 January, Mr Kevin Cooper again sought a briefing from senior personnel in the SMT regarding the firefighting strategies in place for that day, so as to be able to most effectively brief and coordinate the NSW taskforces under his command. Mr Cooper's evidence was that there was 'no process to bring me into the structure and brief and get me up to speed as it were'.<sup>1226</sup> In particular, he noted that no IAP was available. He said that he first sought information from Mr Graham in Operations, but described the information that was provided by Mr Graham as 'inadequate':

... it certainly didn't feel there was confidence in terms of telling me what these [NSW] crews were expected to do, where they were going to be ... where their tactical activities that were going to commence fitted into an overall strategy ... [there was] a general lack of detailed information ... no sense of overall strategy.<sup>1227</sup>

Mr Cooper then approached Mr McRae, who was also unable to provide the information Mr Cooper required. Mr McRae suggested that the IMTs in the field would have the sort of operational and planning detail that Mr Cooper was seeking, however when Mr Cooper sought this information from the field IMTs it became clear to him that they had considerably less

access to planning facilities than did the SMT, and so he did not ultimately receive the strategic information that he was seeking.<sup>1228</sup>

Mr Cooper gave evidence that the NSW taskforces were large groups, and that their commanders needed some strategic plan in order to effectively plan. At around midday he again sought a detailed briefing from Mr Graham and Mr McRae on what the night shift tasks would be. Mr Cooper said that it appeared to him that: ‘They had no plans. There was no task at that time’, and that there was no indication that a plan would be developed that afternoon.<sup>1229</sup>

In his statement Mr Graham said that at around 11.00 am, he immediately deployed the newly arrived NSW taskforces to the Tidbinbilla Nature Reserve and the Naas Valley areas.<sup>1230</sup>

### 5.12.5 Midday media briefings and releases

At around midday on 17 January, information on the status of the fires was provided to the media in a press conference by Mr Castle and Mr Lucas-Smith representing the ESB, followed immediately by a press conference by Mr Cameron Wade from the NSW Rural Fire Service Media Unit. At around the same time, both the ESB and the NSW Rural Fire Service issued written media releases.

#### *The ESB press conference*

The ESB press conference commenced with a brief introduction from Mr Castle, during which he referred to ESB ‘trying to improve our communications information to the public, we are using the Canberra Connect number’. Mr Lucas-Smith then took over, and provided the following overview of the current status of the fires:

The fires in the ACT are still within the containment lines that we established over the last week in our efforts to contain these fires. They’re still in those containment lines. The main fires are still well back from those containment lines but under our current weather conditions the chances of those fires approaching our containment lines in a rapid sort of a way which may cause some spotting and cross over is a concern to us particularly as the wind conditions and temperatures rise this afternoon, later today. At the present time the fires are still within the containment lines.

*Media:* Given the extreme weather conditions that you are expecting over the coming days, what do you think the chances are of those fires reaching the containment lines?

They’re well back from the actual fire front and as long as overnight we can continue our back burning it will be during the day that causes the greatest amount of concern. As long as we can continue back burning operations during the night there’s a good chance that we will be able to still keep those fires well within our containment lines.<sup>1231</sup>

Later in the interview, Mr Lucas-Smith is asked whether there was a need to evacuate property. He responded:

No, at the present time the fire is under the current weather conditions, if the fire does escape our containment lines it will burn in a south-easterly direction further into the Namadgi National Park. However, I think that under the current conditions, the conditions we’re likely to face in the next few days, it’s very prudent to ensure if you live adjacent to Namadgi National Park in any way, you need to be making sure that you have taken precautions around the property to ensure that you have cleared around

your household, you have decided what it is you are going to do should the fire start approaching that way, or if you'll stay or if you'll evacuate. If you are going to evacuate, you need to do that very early.

Mr Lucas-Smith was then asked questions about threats to the Tidbinbilla Tracking Station and historical sites, the ESB's plan of attack for the next 5 days and the conditions for volunteers and departmental firefighters. In response to the latter question, Mr Lucas-Smith referred to the threat from conditions over the next few days as being 'quite significant for our fire fighters on the fire line'. Mr Lucas-Smith was then asked, 'How far are the fires from Canberra and what are the chances it will reach edge?' Mr Lucas-Smith responded, 'Well, the fires are a fair way, I have not measured it in kilometres, and they're a fair way away from the edge of the urban area of the ACT. Under a north-west wind conditions the chances of meeting the urban edge is pretty slim'.<sup>1232</sup>

Asked about his level of anxiety, Mr Lucas-Smith stated, 'I don't think it's that much different than what I've had in the last week and we've been fighting some very difficult fires in difficult terrain and this is just another part of it. We're certainly getting to the point where it's becoming the most critical'.

Questions later returned to the threats to people adjacent to the National Park and how they should prepare. In his response Mr Lucas-Smith indicated that:

People who live in the rural areas understand what the impacts or potential impacts of fire is. Generally most of them will have some sort of preparation, they will have some sort of a plan ... they have probably have already made decisions in relation to who should stay and who should go and I will encourage them, that if there are people that are fit and confident they should stay with their property, to protect their property because structures generally burn down as a result of embers which get caught in crevices and so forth or under areas of buildings and start small fires which then burn the property down. If there is somebody around they can generally put that out and if they, and they have left their evacuation too late then the house is the safest place to be anyway.

In response to questions following these remarks about the number of people affected and whether any accommodation has been set up, Mr Lucas-Smith advised, 'At this stage we're not suggesting that people should be evacuating, all that we are saying is they need to plan and prepare. I don't at this stage think there is no immediate threat to them, it will be another 24 hours will tell us whether that threat exists or not'.<sup>1233</sup>

Mr Lucas-Smith said in his evidence that in commenting during the midday press conference that the chance of the fires reaching the urban edge of Canberra was 'pretty slim', he was talking only about the threat posed by the Bendora and Stockyard fires. He confirmed that his opinion was that there was at that time only a pretty slim chance of those fires affecting the Canberra urban area.<sup>1234</sup> He said that his comments were not made with reference to the McIntyres Hut fire that was within NSW, and so 'at that time was not in the forefront of my mind'.<sup>1235</sup>

In his statement, Mr Castle also indicated that in commenting that the chances of the fires meeting the urban edge was 'pretty slim', Mr Lucas-Smith was referring only to the threat posed by the ACT fires to the suburbs under a north-westerly wind: 'The agreement and the protocols we had in place with NSW was that we would talk about the ACT fires only. If anyone wanted detail on NSW fires they needed to contact the NSW media staff'. Mr Castle later asserted in his statement:

ESB press releases consistently only referred to the Bendorra and Stockyard fires and stated that information on McIntyre's Hut and Mt Morgan fires in NSW could be obtained from the Rural Fire Service (RFS) Media Unit. It gave a phone number and the RFS website. So, right from the early days we agreed with NSW that they would talk about the fires they were managing and we would talk about the fires we were managing. Cameron Wade, media spokesperson for NSW RFS followed our midday press conference with his own press conference where he expressed optimism about containment of the McIntyre's fire. He briefed the media on the fires in NSW.<sup>1236</sup>

Mr Castle confirmed in evidence that it was his belief that Mr Lucas-Smith's assessment of the threat to urban Canberra as being 'pretty slim' was referable only to the ACT fires. Asked whether that was made sufficiently clear to the media personnel present, Mr Castle stated that: 'Only by—well, we didn't draw it to their attention, but only by the introduction and the discussions that preceded that'. Mr Castle was asked why there was no reference during the press conference by himself or Mr Lucas-Smith to a threat to the urban area. He responded: 'I suppose because a degree of focus on the ACT fires and a degree of confidence still by New South Wales about the McIntyre's'.<sup>1237</sup>

Mr Castle later conceded in his evidence that referring to the arrangement as 'agreements and protocols' was an overstatement, and that it was more in the nature of 'an understanding'.<sup>1238</sup> Mr Castle also agreed that the assertion in his statement that 'ESB press releases consistently only referred to the Bendorra and Stockyard fires, and stated that information on McIntyre's Hut and Mt Morgan fires in New South Wales could be obtained from Rural Fire Service (RFS) media unit', was probably not correct, and that the ESB press releases did not consistently accord with that assertion. Mr Castle was also uncertain as to what time and between whom the understanding between the ACT and NSW had been established<sup>1239</sup>, but reiterated that 'we felt that the media and the information should come from the jurisdictions which were managing those particular fires'. Mr Castle considered that the way in which the midday press conferences on 17 January was held contributed to his belief that such an understanding existed.<sup>1240</sup> However, he also agreed that there was nothing formal to prevent either himself or Mr Lucas-Smith, if asked or if it was appropriate to do so, at any time up to 18 January to give their best assessment of the McIntyres Hut fire, and that if a threat to urban Canberra was identified from that fire to alert the Canberra community to that threat.<sup>1241</sup> Mr Castle suggested that the arrangement with NSW reflected 'a courtesy in that they are not under our jurisdiction, those fire fighters, and the management of it was not under our jurisdiction. So it was more a courtesy'.<sup>1242</sup>

When Mr Lucas-Smith was asked about the reference in Mr Castle's statement to the existence of the agreements and protocols with New South Wales, he answered, 'I don't know if there was anything as formal as a protocol ... it was just we were fighting the Bendorra and Stockyard fire and New South Wales were fighting the McIntyre's fire, and it was appropriate for them to answer their own questions in relation to those fires.' According to Mr Lucas-Smith, there was nothing that would have stopped him from passing on any information he had about the McIntyres Hut fire at noon on 17 January.<sup>1243</sup>

When questioned about the presence of the protocol described in Mr Castle's statement, Mr Koperberg suggested that Mr Castle's description was 'an oversimplification':

General convention has it that New South Wales does not talk about fires in Adelaide or Melbourne or Brisbane, and they don't talk about fires bearing down on Sydney. However, it is not at all uncommon for us to talk about a fire crossing the Queensland border and threatening properties in Glen Innes or Tenterfield or any of those places.

So it is only a reflection of a general standard. That does not preclude anyone saying, "The fires burning immediately to the west of our border are likely to impact upon the ACT" ... There is no deal that we don't generically talk about fires which are going to impact upon our jurisdictions. The convention applies to the more detailed operations. For instance, what is being done about the Bendora fires—how many appliances and how people? It is not to the New South Wales [sic] to impart that information; it is for the ACT. Conversely, on the McIntyre's Hut fire, how far the containment line had been constructed, how many appliances, how many personnel was a matter for New South Wales to comment on, not for the ACT.<sup>1244</sup>

#### *A press conference by the NSW Rural Fire Service*

Mr Cameron Wade of the NSW Rural Fire Service Media Unit commenced briefing the press immediately following the conclusion of the briefing by Mr Lucas-Smith and Mr Castle. His opening words were as follows:

The McIntyre's Hut fire burning to the direct west of Canberra in NSW, now burnt out some 8000 hectares is also burning within containment lines although the containment lines on the south-eastern side are only very small really, they're 500 metres or so in depth and we are expecting those to be tested fairly extensively today. Already the wind conditions up in that area have strengthened from the north-west, which means fire crews at the moment on the south-eastern side of the McIntyre's Hut fire are working very hard as we speak at the moment to try and contain those containment lines. The fire is about 2kms from pine plantations in the ACT. We do have resources on the edge of the border there and on the edge of the pine plantations. At this stage also some 13 aircraft are working in the area, keeping a very close eye out for spot fires and so forth. At this stage there is not a threat to any property in the area, it is more those pine plantations we are keeping a close eye on ... The threat is now to the southern and eastern sides and of course that means its more heading back toward the ACT.<sup>1245</sup>

Asked a short time later about the intensity of the fires, Mr Wade responded:

The fire activity is being described to me as fairly intense and fuel loads that they're experiencing there also the wind conditions picking up as we speak are making the situation more desperate as the day goes on. We are expecting this to continue for the next few days. Extra resources have been brought in from all around NSW to those fires. For example, between the ACT and the Hut fire there are at least 200 fire fighters from NSW, other areas of NSW as well as those local crews from Yarrawonga.

The discussion then moved off to other fires in NSW and threats to areas such as Thredbo. Towards the end of the interview, Mr Wade was asked about the level of the threat to the pine plantations that he had earlier referred to. He responded:

Speaking with the incident controllers there is certainly concern for it. It's 2kms or so. We have seen spotting activity up to a kilometre, a kilometre and a half with these fires. So we have staged resources on the border, we certainly are looking at what we can do as a secondary containment should it break the containment there. There is a real threat to that pine forest but at this stage everything is holding at the moment.<sup>1246</sup>

Mr Castle thought that he may have stayed behind and listened to part of Mr Wade's press conference, and that he was probably still present when Mr Wade referred to the threat from the McIntyres Hut fire now being on the southern and eastern sides 'and of course that means it's more heading back toward the ACT'. He thought he was possibly still present when Mr Wade described the wind conditions making the situation 'more desperate as the day goes on', although

he did not recall Mr Wade using the word ‘desperate’. Mr Castle could not recall any specific process for checking to see whether that sort of information was being relayed by the media to the Canberra public, and he did not know on 17 January what part of the media conferences had been broadcast.<sup>1247</sup>

### ***The ESB media update***

At the same time as Mr Lucas-Smith and Mr Castle commenced their press briefing, the ESB issued a media update.<sup>1248</sup> That media update was broadly consistent with the information provided at the press briefing, except that contrary to Mr Lucas-Smith’s repeated assurances during the press conference that the fires were well within containment lines, the media update identified some break-outs from containment to the north and south of the Bendora fire. Under the heading ‘Bendora fire’ the update stated, ‘Due to favourable burning conditions, more than 6kms of back-burning was carried out overnight. There is now a containment line in place around the south-eastern sector of the fire, and the ACT firefighting effort in the area continues. However, some break-outs occurred to the north and the south’. The media update indicated that information on the McIntyres Hut and Mt Morgan fires in NSW could be obtained from the NSW Rural Fire Service Media Unit.

Mr Castle was asked in evidence how a Canberra resident might go about finding out what was occurring in relation to the McIntyres Hut fire. He suggested that, apart from going to the web site or following the suggestion in the ESB media release, they could have telephoned Canberra Connect and he presumed they would then be directed to ESB or to Queanbeyan. Mr Castle agreed that this was not a very direct method for finding out how Canberra may be threatened by that fire. Mr Castle said that he had no way of knowing whether or not the ACT media were getting press releases from the NSW Rural Fire Service, and he was not aware of anything being published to the Canberra community or the ACT community about threats from the McIntyres Hut fire. He thought there may have been a system in place in the media cell to check as to whether that was occurring.<sup>1249</sup>

### ***The NSW Rural Fire Service media update***

The NSW Rural Fire Service also issued a media release at 12.00 noon on 17 January headed ‘Wind Shifts Pressure Containment Lines on ACT/NSW Border Fires’. The release said:

... control lines will be tested today with the weather forecast showing strong north-westerly winds, 37° temperatures and very low humidity. The wind shift will place considerable pressure on the eastern and southern containment lines and could potentially turn fires back towards the east, however, the potential threat to properties in the Brindabella Valley has eased a little for the moment ... There is currently no immediate threat to any property. Firefighters are concerned that strong wind gusts could cause spot overs which could impact major pine plantations in the ACT ... The south-eastern corner of this fire is the main concern. Although the fire is remote it is impacting on the water catchment area. No properties are immediately threatened at this time.<sup>1250</sup>

## 5.13 The response to the fires on 17 January 2003

### 5.13.1 The Bendorra fire

Burning-out operations to consolidate containment lines around the Bendorra fire continued through the night of 16 January and early hours of 17 January, with burning out commencing along the Bendorra Road at midnight, along Warks Road from 5.00 am, and along Mt Franklin Road from 5.30 am. Mr Graham said that during the morning he discussed with Mr Hayes, the incident controller for the Bendorra fire that day, ‘how imperative it was that the back burning operation along Mt Franklin Road be completed as soon as possible’.<sup>1251</sup>

However, at around 6.00 am a gusty, north-westerly wind picked up, and by 10.30 am conditions had deteriorated to the extent that it was too dangerous to continuing burning out along Mt Franklin Road, and the operation ceased. Burning out operations planned along the Brindabella Road in NSW were also cancelled that morning due to the deteriorating conditions.

During the day, the fire continued to expand in the north, and at 12.30 pm it spotted over Mt Franklin Road about 1.5 kilometres north of Bulls Head. Spotting over northern and eastern containment lines continued throughout the afternoon, and at around 3.30 pm there was a major break-out of the fire across containment lines near Warks Road, in the north-eastern corner of the fire. Attempts were made by crews to suppress the various spot fires and to hold containment lines with the assistance of aerial water bombing, however these attempts failed because of continued spotting.<sup>1252</sup>

Shortly after 3.30 pm, Mr Hayes determined that the containment lines could not be held, and withdrew crews to the Bulls Head staging area.<sup>1253</sup>

Late in the afternoon, the Bulls Head staging area itself came under threat as the fire commenced an intense upslope run towards Mt Franklin Road.<sup>1254</sup> At around 6.00 pm, with fire on either side of the Brindabella Road, Mr Graham ordered all firefighting resources withdrawn from the Bulls Head staging area, redirecting them to the Uriarra Homestead.<sup>1255</sup> At 6.46 pm Mr Hayes advised Mr Graham that all units had left Bulls Head staging area.<sup>1256</sup> This marked the end of the attempt to contain the Bendorra fire, and the consequent shift in strategy from fire suppression to property protection.

Mr Hayes’s evidence was that while he had not thought that the Bendorra fire posed a realistic threat to Canberra prior to 17 January, that thought entered his mind ‘severely’ when he was ordered to evacuate the Bulls Head staging area and subsequently considered ‘the big picture’ while at Uriarra that evening.<sup>1257</sup>

### 5.13.2 The Stockyard Spur fire

Continuing with his role in planning a suppression strategy for the Stockyard fire, Mr Lhuede said that he examined the implications arising from the fact that back-burning did not proceed on the night of 16 January as planned, and that ‘the rapid escalation of events meant that no work had been done to construct the identified lines as realistic containment lines on the ground’.<sup>1258</sup> With the Guises Creek tanker recovered from Lick Hole Road, planning continued for back-burning operations while dozer work continued on the southern edge of Mt Franklin Road and

Leura Gap Road. At around 8.00 am, a staging area was established at the Orroral Valley to support operations at the Stockyard fire.<sup>1259</sup>

However, a plan to commence back-burning along Lick Hold Road was called off at around 10.30 am when the incident controller, Mr Galvin, received instructions from Mr Graham to cease all operations due to deteriorating conditions, and to withdraw to the Orroral Valley staging area to await further instructions.<sup>1260</sup>

Conditions continued to deteriorate and the fire continued to expand as winds increased during the day. According to Mr Cheney:

As wind speeds increased during the day and the fire danger rose, the fire behaviour became more active around the perimeter of the Stockyard fire, but particularly on the northern and southern sections of the perimeter. At around 1500 hours the fire spotted across the northern end of Corin dam near the dam wall and burnt intensely on the easterly aspects above the dam. Although there is no record of other spotting it is highly probable that other spot fires occurred on the eastern side of Corin dam and these joined together to produce a wide fire front that burnt 20 km through to Mount Tennant.<sup>1261</sup>

An initial request for Navy helicopters to water bomb the fire on the eastern slopes was withdrawn after *Firebird 7* reported that the fire was ‘massive’, with crowning evident, and that accordingly aircraft would be no use in effecting suppression.<sup>1262</sup> Attempts to re-establish containment lines failed.

As the fires made their easterly runs, safety concerns led the SMT to direct all crews to be withdrawn from the Orroral Valley, and to reassemble at Glendale Depot for redeployment to property protection operations.<sup>1263</sup>

### 5.13.3 The McIntyres Hut fire

#### *The use of aerial incendiaries*

As discussed earlier in this chapter, from as early as the evening of 8 January the NSW IMT had decided that aerial incendiaries would be used to assist in the burning out of vegetation within the extensive containment lines of the McIntyres Hut fire.<sup>1264</sup> The IMT also determined that the aerial incendiaries should not be used until all containment lines were completed and consolidated, and so the planned operation was deferred for several days as a consequence of various factors that delayed the securing of those lines. With containment lines complete and consolidated on 16 January, the IMT was ready to commence the aerial incendiary operation. However, it was then discovered that despite having requested the aerial incendiaries some days earlier, none had yet arrived. Despite attempts by logistics to then urgently obtain the devices on 16 January, due to a state-wide shortage none could be obtained until later that evening.<sup>1265</sup> Consequently Ms Crawford determined that the next and only alternative was to carry out the aerial incendiary operation on 17 January.<sup>1266</sup>

At around 6.30 am on the morning of 17 January, Ms Crawford met with personnel from the Operations and Planning teams to discuss whether to proceed with the aerial incendiary operation that day. She described this as a ‘very serious discussion’:

It was a very hard decision. We knew if we didn’t do it, there was a real chance of the fires running up those steep hills, spotting and we would lose the fire. If we did do it, there was a problem of not being able to get it all burnt in the time frame that we had,

because you have set weather parameters to do it in as well. If we did do it, what if we lost it then? We looked at all the options.

Having carefully considered the alternatives, Ms Crawford concluded that they did not have any option other than to attempt burning out using the aerial incendiaries that they then had available:

It looked like we had sufficient weather to burn it out, a number of incendiaries and so we decided to go ahead ... We had to give a try. It [the McIntyre's Hut fire] was going to take runs and jump if we didn't do it. So by doing it, all we were doing was trying to stop that happening. We weren't going to be any worse off.<sup>1267</sup>

Ms Crawford said that no one at the meeting was opposed to attempting the operation.<sup>1268</sup>

In his evidence, Mr Arthur agreed with Ms Crawford that, on the morning of 17 January, they really only had two alternatives left: 'There was an option to do nothing and know that it [the McIntyre's Hut fire] was going to come out; or try something and hope that was successful. We did a lot of ... agonizing and decided to go ahead. If we did nothing, we would be equally damned'. Mr Arthur was well aware of the risks of the operation, but considered that to do nothing was not a viable alternative.<sup>1269</sup>

The aerial incendiary operation commenced at 11.00 am, and was described in the NSW incident controller's section 44 report as follows:

The IMT again considered aerial incendiary operations and an AI plan was prepared, the aim of the plan being to reduce potential spotting from unburned ridge tops within the containment lines under the extreme fire weather forecast for the 18th of Jan. The AI was commenced at 1100hr in accordance with the AI plan and was restricted to the area between the northern containment line and the northern extent of the fire edge. The operation was ceased at 1345hr due to the prescribed cut off parameters (increasing winds, erratic fire behaviour and deteriorating flying conditions) being reached. On return, the AI navigator advised the IMT that he had observed considerable fire activity with rapid upslope runs, high flame heights and spotting outside the AI area on the northern and middle areas of the eastern containment line where the back burns had been put in place.<sup>1270</sup>

Mr Cheney explained in his report and in his evidence what he considered to be the appropriate strategy for the aerial incendiary operation, including the need to undertake the operation late in the evening on 16 January 2003.<sup>1271</sup> According to Mr Cheney the consequence of not having conducted the aerial ignition operation in the late evening on 16 January was that:

the time is too short and you're still aiming to put sufficient incendiaries in to burn it out. As well as going into the more severe conditions that were forecast for the 17th, if the spacing is too close, then those spot fires will interact with each other and create even under relatively low wind conditions a sufficient convection column to carry fire brands from this area and throw the spot fires down, outside down wind.<sup>1272</sup>

Mr Cheney's opinion on the effect of the decision to proceed with the aerial incendiary operation on 17 January 2003 is set out in his report:

The operation was delayed due to failure to obtain incendiaries in time and the lack of experience meant that the operation was carried out when the weather conditions were unsuitable and guaranteed the break away of the fire. It is possible that the fire would have still broken away on 17 January but all perimeters of the enclosed area had to burn

down slope before making an up slope run and it is also possible that this would have delayed the fire into the evening before it made an up slope run when the spotting would have been less severe ... After 13.45 hours severe fire behaviour resulted from the aerial ignition with rapid up slope spread and crown fires on western aspects. This fire behaviour most likely caused spotting to the east of the containment lines in Dingo Dell Flats and the subsequent breakaway along the eastern containment line ...

In Mr Cheney's opinion, to commence using aerial incendiaries on a day of increasing hazard was 'poor practice', and on a day of forecast very high fire danger (as 17 January was) was 'doomed to failure with spot fires of several km likely to occur'. However, Mr Cheney also acknowledged that if the aerial incendiary program had not been carried out on 17 January, during the extreme fire weather on Saturday 18 January it was 'highly probable' that the McIntyres Hut fire would still have spotted and then burned through the areas that were ignited by the spot fires on 17 January, with comparable effect. Mr Cheney concluded that 'the aerial ignition caused the fire to break away earlier than if it had not been done, but it still would have broken away on Saturday during extreme fire weather'.<sup>1273</sup>

The aerial incendiary operation is also referred to in Mr Roche's report. After describing the decision to undertake the operation and its subsequent termination, Mr Roche commented on the decision to undertake the operation:

Given the deteriorating weather conditions, in my view the generation of spot fires and an inability to maintain the fire within containment lines, was inevitable following the commencement of the AI operation. While a breach of the containment lines was more than likely in any event, I would have been loathe to add more fire into a significant unburnt area on a rapidly rising FDI. In my view, the AI operation exposed the IC to the potential for criticism that might otherwise have been avoided ...

However, Mr Roche also appeared to agree that the NSW IMT were faced with a conundrum that morning:

The aerial ignition strategy was an extremely high risk option with little alternative once the delay in executing the overall containment and burning-out operation continued past 15 January. The decision to commence the program on Friday 17 January with a rapidly increasing FDI, in my view meant that the most likely outcome was the containment lines would be breached.<sup>1274</sup>

### ***Fire developments and suppression activities during the afternoon***

Mr Cheney suggested that after 1.45 pm, severe fire behaviour resulted from the aerial ignition of unburnt vegetation within the containment lines, and that this intense fire behaviour 'most likely caused spotting to the east of the containment lines in Dingo Dell flats and the subsequent breakaway along the eastern containment lines'.<sup>1275</sup>

While some break-outs into the grasslands in the east were contained by ground crews supported by aerial water bombing, new break-outs across the eastern containment lines continued through the afternoon.<sup>1276</sup> In addition to the break-outs to the east, the McIntyres Hut fire also breached its western containment line that afternoon, crossing the Goodradigbee River near Limestone Creek at around midday. The fire burnt upslope, but crews patrolling the river were able to contain the northern spread of the fire with a hand tool line and by burning out along Limestone Creek Trail.<sup>1277</sup>

According to the incident controller's section 44 report:

At approximately 1600hrs the weather became very erratic and numerous spot over fires occurred to the east of the eastern containment line in the grass and timbered areas, and this required continuous redeployment of resources. Due to the deteriorating fire weather conditions strategies were revised to maintain monitoring of the containment lines, extinguish spot overs and undertake property protection as required, and these strategies were maintained throughout the night and into the early morning.<sup>1278</sup>

At some time before 9.30 pm that evening, the fire again crossed the Goodradigbee River near the northern end of Tommy's Flat. This spot fire was not suppressed, and so burned through that night.<sup>1279</sup> Reinforcing a criticism he made with respect to the selection of the Goodradigbee River as the western containment line on 8 January, Mr Cheney said:

... the breakaways across the river were inevitable as soon as the fire danger reached the very high classification. Under strong winds turbulence in the river valley will carry firebrands originating in the valley floor against the direction of the prevailing wind. Spot fires starting on the opposite slope will be difficult to control because they will burn rapidly upslope assisted by the lee-slope eddy wind. The use of an inaccessible river as a containment line is misleading because the firefighters were never able to carry out the necessary tasks of burning-out, mop-up and patrol to secure it as a control line.<sup>1280</sup>

Mr Roche's expressed in his report a similar view to Mr Cheney, stating that because the NSW Rural Fire Service were heavily reliant on aircraft to patrol and suppress spot fires across the Godradigbee River, they were unable to suppress spot fires across that river that occurred during the night when helicopters could not fly.<sup>1281</sup>

#### **5.13.4 The service management team's response to developments**

During the morning of 17 January, several firefighting operations that had been planned for that day had to be modified or aborted entirely.<sup>1282</sup> In his statement, Mr Graham recorded that 'at 10:30 hours I advised the Field Incident Controller at the Stockyard Fire Peter Galvin, that the back burning operations were not to proceed and that all crews were to withdraw to the Orroral Valley and to await further instructions. I also advised that heavy plant was to withdraw from the area by 12.30 hours'.

The developments in relation to the Stockyard fire are confirmed in a message form signed by Mr Graham and sent by him to the Planning Section at 11.12 am.<sup>1283</sup> Later in his statement, Mr Graham noted that he received advice from the Bendora field incident controller at about 11.15 am that all back-burning operations along Mt Franklin Road had ceased and that work was focusing on strengthening containment lines.<sup>1284</sup> In his evidence, Mr Graham confirmed that this did not mean that the work on the Bendora containment lines had been completed: 'There was in fact a little over half of that work that wasn't done'.<sup>1285</sup>

At about the same time, Mr Graham received a message form from Planning that stated: 'Report confirmed from NSW PWS that aerial incendiary operations have just commenced in the McIntyre's Hut fire'. Mr Graham appended to the message the note: 'Noted, prayer mat out, contact currently making contact with Allah'.<sup>1286</sup> Mr Graham acknowledged in evidence that in making that note he was 'recognising that it was a bit of a risky strategy that they were employing', and that there was some potential for a breach of containment lines either by spot

overs or in some other way.<sup>1287</sup> When questioned about the NSW decision to use aerial incendiaries on 17 January, Mr McRae's opinion was also that it was risky operation, but that it was justifiable in the circumstances.<sup>1288</sup>

Mr Graham's statement also referred to the break-out from the Bendora fire, and the withdrawal of crews from that fire and their redeployment to property protection duties:

At 13.00 hours I was advised by the Bendora Field Incident Controller that there had been a break out in the north-eastern corner of the Bendora fire and that it could not be contained. At about this time, I believe I was advised by the ACT Bushfire Service Liaison Officer at Yarrowlumla Fire Control Centre that the McIntyre's Hut fire had jumped containment lines at its south-east boundaries.

At 15:30 hours and following on from the break of the Bendora fire, the Field Incident Controller (Rick Hayes) withdrew all personnel from that fire back to the Bulls Head staging area. At the same time the SMT directed water bombing operations on the head of the Stockyard fire now to the east of Corin Dam.

With the fires now making a run to the east, at about 16:00 hours all crews were directed to leave the Orroral Valley area and to reassemble at the Parks & Conservation Depot at Glendale. From this location they were tasked with property protection duties in the Naas and Tidbinbilla Valleys. At the same time, three spot fires were reported in the Tidbinbilla Nature Reserve and units were deployed to suppress these fires.<sup>1289</sup>

In his statement, Mr Lucas-Smith described fire developments during the afternoon of 17 January as follows:

At about 13.00 hours it was reported from the Bendora fire crews that there was a break out over the containment lines in the north-eastern corner. Despite vigorous water bombing on this break out, the fire could not be contained. Also, by mid afternoon there were various spot overs reported to the east of Corin Dam from the Stockyard fire. Again air operations were used in an attempt to slow the run of the fire, though this proved to be unsuccessful.

Due to the rapidly deteriorating fire conditions, at about 15:30 hours the Incident Controller at the Bendora fire directed that all crews working that fire withdraw to the staging area at Bulls Head. By this time an area had been burnt out around the staging area in an effort to provide some protection to the fire fighters and support crews, who had commenced packing up in readiness for an evacuation as containment compartments had been compromised.<sup>1290</sup>

Mr Lucas-Smith's statement also referred to reports received at 4.00 pm of several spot fires in the Tidbinbilla Nature Reserve, which 'put a high level of uncertainty and risk on the entire Tidbinbilla Nature Reserve area'. He described the deployment of an officer and several crews from the Stockyard fire that had been staged at Orroral Valley to property protection in the Tidbinbilla Valley and Naas Valley areas.<sup>1291</sup>

According to Mr McRae's statement:

At about 2.00 pm that day, I and others at ESB began receiving reports of problems in the McIntyre's Hut burn-out block. We received reports of an aerial ignition of an unburned patch within the burn-out block that was burning too vigorously. We heard that for this reason, the aerial burn out had ceased because of the risk of embers flying from the burn out to spot outside the containment line.

Also at approximately 2.00 pm I and others at ESB received reports of spot overs on the northern sector of the Bendora fire near Bulls Head and crews working to contain those spot overs.

A little later in the afternoon, at 15:00 hrs, we received reports of spot fires on the eastern side of Corin Dam which were quickly establishing and running east into Namadgi National Park.

At about the same time, we received report of crews being pulled off the Bendora fire generally and pulled back to Bulls Head pending reassessment of spot fires and the uncertainty about fires then burning to the west and the possibility of those fires then looping east towards the ACT.<sup>1292</sup>

In his statement, Mr McRae described the actions he took in response to these numerous reports of break-outs and spot fires:

I spent time verifying these various reports and discussing options in conjunction with the Operations and Logistics Sections. I expressed the view that the Stockyard fire would quickly head east towards Smokers Gap; that the Bendora fire would also head east towards the Cotter River and probably cross that river; and that the McIntyre's Hut fire was likely to break containment and run towards the Uriarra pine plantation. I expressed these opinions at a meeting of the SMT involving Peter Lucas-Smith, Tony Graham, Dave Ingram and myself prior to the larger planning meeting that afternoon. I repeated these views during the planning meeting. There was general consensus that this was the likely situation.

The immediate planning task, therefore, was to identify assets at risk. We identified immediate assets at risk to be the rural residences, the pine plantations, Corin Dam Ski Resort and the Tidbinbilla National Park ...

The changed conditions meant an abandonment of any back burning operations to the south of the Stockyard fire and action moved from containment to asset protection.

Mr McRae also referred in his statement to personnel from the ACT Ambulance Service and Fire Brigade coming to him that afternoon and asking for situation reports.<sup>1293</sup>

Mr McRae was asked in evidence about his opinion expressed at the meeting of the SMT that ‘the McIntyre’s Hut fire was likely to break containment and run towards the Uriarra pine plantation’, and said that ‘those words don’t even imply I felt it was likely that the fire would enter Uriarra pine plantation’ [emphasis added]. He explained that he did not think it was likely that the McIntyres Hut fire would enter the Uriarra pine plantation because of ‘the time of day’: ‘We had a situation with a lot of fires breaking their containment in different ways and starting runs. And my view at that time was we didn’t have to fuss too much about McIntyre’s. Our priorities were with the fires to the south of that one’.

Mr McRae went on to explain that it was a ‘matter of priorities’, and that at that point in time the SMT needed to focus on those spot fires that had in fact started earlier in the afternoon and which therefore had a greater potential to make runs across country as the fire danger peaked, rather than to focus on potential spot fires from the McIntyres Hut fire that had not yet occurred, and that he felt that NSW crews would be quite capable of rounding up if they did occur as conditions moderated:

Our understanding was that, having got towards the late afternoon with no reported spotovers from McIntyre's, should one start it's not going to make a significant run and that the New South Wales crews would be capable of containing any break of containment on McIntyre's before it reached the border.<sup>1294</sup>

However, Mr McRae agreed that one of the things the planning officer needs to consider is the possibility that NSW would not succeed in holding the McIntyres Hut fire, and said that in this regard he had considered the fact that there were potential fallback lines available:

It depended on where the break out would occur, whether it was on the Doctor's Flat Road or on the northern edge or the southern edge. Each potential place for a break out to occur led to different risks. I had recognised that there were some places where a break-out would certainly directly threaten the Uriarra pine plantation and I had mentioned that I was aware that ACT Forests staff were actively taking steps within that plantation, including a bulldozer fire break that was eventually 20km long. There are also steps being taken in other places. The rural land holders in adjacent lands, as they always do, were taking steps to protect themselves from fire should it enter their holdings. Now, that was the immediate outcome should the fire break its containment ... we were looking at follow-up steps should those break outs continue in subsequent runs.<sup>1295</sup>

Mr Kevin Cooper was present in the operations room in the early afternoon of Friday 17 January. In his statement, he said that he was concerned that the Stockyard fire was moving very fast, and that 'increasingly my feeling was it was going to reach Canberra'. He said that he discussed with Mr Graham 'the need to plan for a real possibility for the [Bendora] and/or Stockyard fires reaching the urban fringe'.<sup>1296</sup> Mr Cooper described in his evidence the conversation he had with Mr Graham at that time:

This conversation occurred at 14:30. I remember it very clearly. I was in the ops room. And by then I mean, as I'd indicated earlier, our crews had been withdrawn from the field. It was clear that the Stockyard fire was now travelling great distances ... I certainly can't remember the exact words. But my approach was, when there was a quiet moment in the ops room to actually stand beside him, look at the map on the wall in the ops room and what I outlined was from my perspective what happens if this fire reaches Canberra. And subsequently when it reaches Canberra, outlined my finger down the western edge, particularly at the southern end, south-western side of Canberra, what sort of plans were in place or being developed to actually cope with that. And initially Tony said, "Well, the urban fire service will look after that". I said, "Well are they capable of developing an overall plan for staging water supplies, shut off gas, community education those sorts of things?" ... I was reminded again that it was an urban service responsibility when the fire reached the urban interface.

According to Mr Cooper, there was no dissent from Mr Graham about the need to have an overall strategic plan to cope with the possibility of the fires hitting the Canberra suburbs. However, Mr Cooper's sense 'was that operational control wasn't in place'.<sup>1297</sup>

Although he did not recall the conversation described by Mr Cooper, Mr Graham accepted that Mr Cooper may have asked him on Friday what he was going to do if the fires hit Canberra. However, he did not think it was likely that he made the responses suggested by Mr Cooper because he said that 'we work in a cooperative way with everybody that we've got at fires. I would never see it as an urban fire responsibility on their own'.<sup>1298</sup>

About an hour or so after his discussion with Mr Graham, Mr Cooper said that his concerns ‘remained live and valid’ and that he was becoming increasingly concerned for the welfare of the NSW personnel in the field that were under his command. He therefore raised the question of planning for an urban impact with Mr McRae: ‘It was in the middle of the ops room. Basically I just said to him, “In the unravelling of the situation at the moment, do you have a plan for when the fire reaching the urban interface of Canberra?” … It was a pretty short conversation to say, “We don’t at the moment”’.<sup>1299</sup>

Mr Cooper said that he was aware that it was not his role to become involved in strategic planning, but that ‘what I was trying to do was potentially sow a few seeds that might have facilitated something happening’.<sup>1300</sup>

### 5.13.5 Preparations by the ACT Fire Brigade

At a meeting of the ACT Fire Brigade incident management team immediately following the 9.30 am planning meeting that morning, Mr Michael Collins met with Mr Ken Nester and Mr Frayne Pritchard, and assigned to them the task of creating an incident action plan for the ACT Fire Brigade.<sup>1301</sup> The planning issues discussed at that meeting included evaluating what actions had been taken the previous day and reviewing ‘fire hydrants on the western interface’.<sup>1302</sup> The incident action plan prepared by Messrs Nester and Pritchard is timed at 4.30 pm on 17 January 2003, and described the ‘situation’ as follows:

Due to prevailing and forecast weather conditions fire in the Brindabella Mountains and Namadgi National Park are approaching Canberra, from approximately 20km to the west, with spotting near Tidbinbilla and Corin Dam.

Control lines have been established in order to contain the fires to the mountains. At present all Bushfire resources are committed to firefighting operations in the mountains, however if spotting occurs in front of the fire or breaches of the fire lines that bring the fire close to Canberra, the ACT Fire Brigade is the primary response agency for the Canberra urban area and some properties east of the mountains close to Canberra.

Spot fires may occur up to 10–15km in front of the fires. Predominant NW winds are likely to initially cause grass fires within 5km of Canberra’s western boundary, and later to structures and bushland areas within the Canberra urban area.

...

The Brigade has all urban pumbers manned, with 3 heavy tankers crewed. There are 3 urban pumbers available if required.<sup>1303</sup>

Commissioner Bennett saw the situation report in the incident action plan ‘as essentially being a combination of information that was provided to us by Mr Lucas-Smith on the Thursday with, I would imagine, an update from possibly our liaison person we had by that stage working in with the Bushfire Service planning section’. Commissioner Bennett read the incident action plan when it was provided to him by Mr Nester, and he did not ask for anything to be altered.<sup>1304</sup>

In the section dealing with ‘Response’, the incident action plan provided for a response to structures in the built up area: ‘As per SOP 4 Cottage Fires—two pumbers for first alarm’. For responses outside the built up area, the plan also designated a response in accordance with SOP 4, but requiring ‘2 pumbers and tanker for first alarm’.<sup>1305</sup> Commissioner Bennett said that he did not discuss the incident action plan with senior members of the bushfire service because at that

point the ACT Fire Brigade was working to their standard operating procedures so as to ensure that the ACT Fire Brigade was as ready as it could be, and he ‘did not deem it necessary to discuss with Mr Lucas-Smith, nor for that matter with any specific member of his service management team, what our response arrangements specifically were other than the fact that we were in a position to respond’.<sup>1306</sup> Commissioner Bennett emphasised that:

At this stage we had no responses. We were not responding. The focus was on ensuring that we had the capability to respond if called. There were no fires within our jurisdiction nor within close proximity to our jurisdiction. So, in a sense, it was more contingency planning that the planning cell was undertaking … It was not sitting there plotting an operations strategy for the ACT Fire Brigade at that point in time …

As of the 17th our crews were being responded in accordance with our response matrix that underpin our standard operating procedures.<sup>1307</sup>

Commissioner Bennett believed in the event that the fires did impact on urban Canberra, although the Fire Brigade was ‘the primary response agency’ it would have the assistance of the ACT Bushfire Service and of the NSW taskforces, and that there ‘were considerably more vehicles and resources within the proximity to the ACT than there was during the … Christmas fires of 2001’.<sup>1308</sup>

Mr Newham’s evidence was that he did not think that there was a risk of substantial fire impact on suburban Canberra until the afternoon of Saturday 18 January, and that during the afternoon of 17 January the major risk in contemplation was to assets within the ‘extended interface’. He believed that planning on 17 January was for the ability to escalate available resources, but not for a major impact on urban Canberra<sup>1309</sup>, and that as Operations Officer he was ‘comfortable with the resources we had’:

… we had all of our available water tankers stood up and we had our spare appliances on standby. Our staffing alone—and for the days we had that campaign is quite taxing on the firefighters to maintain that level of capability—or to increase it and maintain it is difficult. So I made a decision I believe that we had the capability at that time was appropriate.<sup>1310</sup>

As at 4.30 pm on 17 January, the resources available to ACT Fire Brigade were 12 urban pumbers and 3 heavy tankers.<sup>1311</sup>

Mr Roche was critical of the ACT Fire Brigade’s incident action plan. In particular, he pointed out in his report, ‘The minimum response outside the “built up area” required two pumbers and one tanker to structure fires and one pumber and two tankers to bush/grass fires. Quite clearly, with the resources available, any threat to or involvement of more than five properties would have seen the Brigade overwhelmed’.<sup>1312</sup> Mr Roche was of the opinion that the ACT Fire Brigade ‘had no real appreciation of the extent to which the urban interface could be impacted’.<sup>1313</sup> In submissions on behalf of Mr Newham, it was accepted that the previous statement by Mr Roche was correct, in so far as it appears that no one appreciated on 17 January the extent to which the fires would impact on the Canberra suburbs the following day.<sup>1314</sup>

### **5.13.6 The ESB media update at 3.45 pm**

The ESB media update issued at 3.45 pm was as follows:

ACT Emergency Services Bureau Executive Director Mike Castle said today that the smoke that is currently blanketing the ACT is coming from the McIntyre's Hut fire in New South Wales, and that residents should not be unduly concerned as the NSW Rural Fire Service reports that the fire is still within containment lines. "Because of the prevailing winds, ash and burnt material may be deposited in some suburban areas of Canberra," Mr Castle said. "The McIntyre's Hut fire and the two fires in the ACT continue to be closely monitored both on the ground and from the air." Residents can access the latest information on ACT bushfires through the Canberra Connect Call Centre and web site.

The media update concluded with the relevant contact details.

A draft of the media release had been prepared at 3.30 pm, most probably with the assistance of Ms Lowe.<sup>1315</sup> That draft was then amended by Mr Keady, in particular the quote attributed to Mr Castle stating that 'ash and burnt material may be deposited in some suburban areas of Canberra'. Neither Mr Castle nor Ms Lowe could recall the circumstances in which Mr Keady came to be suggesting amendments to the media release.<sup>1316</sup>

In evidence, Mr Castle agreed that if the information about the McIntyres fire being within containment lines had come from the NSW Rural Fire Service press release at 12 noon or from some other source, it was 'not stating the whole amount of what New South Wales said'. Mr Castle agreed that the message in the ESB release was that everything was under control, and was not able to say why the more cautionary tone in the midday NSW Rural Fire Service media release did not appear in the ESB release.<sup>1317</sup> Mr Castle also agreed that, with hindsight, it would not be unreasonable for someone who looked at the ESB media release to think that, if there was anything to be concerned about, the ESB would be telling them.<sup>1318</sup> It is notable that the media release specifically refers to the McIntyres Hut fire and does not contain the sentence appearing in the midday media release about contacting the NSW RFS media unit for information on that fire.

### **5.13.7 Another request for Commonwealth assistance**

At 4.30 pm Mr Castle arranged for a further request for Commonwealth assistance, the fifth since the fire emergency had commenced. As with the earlier requests, this request included a brief summary of the 'situation':

The bushfires that commenced on 8 January continue. The weather forecast for the weekend and early next week predicts temperatures in the high 30's with strong winds gusting to over 60km/h from the north-west causing concern for the ACT urban environment. Fire operations are currently focusing on strengthening control lines, however, there is the potential for 10m spot fires threatening the containment lines.<sup>1319</sup>

In his evidence, Mr Castle agreed that the reference to 10m spot fires should possibly have been '10km'. He accepted that it appeared from the request for Commonwealth Assistance that the passage referred to above reflected his state of mind as at 4.30 pm on 17 January, but said that while he presumed that he would have read through the request, he 'might not have been concentrating specifically on every content of it'.<sup>1320</sup>

### 5.13.8 Predictive analysis of fire path by the Planning Unit

As indicated above, the minutes of the morning planning meeting for 17 January record that Mr Lucas-Smith ‘requested a map detailing potential spot distances today for all fires’, including the McIntyres Hut fire.<sup>1321</sup> In the early afternoon, Mr McRae tasked Mr Lhuade, Mr Taylor and Mr Gellie to start modelling potential fire spread and spotting distances for the fires.<sup>1322</sup> Mr McRae’s evidence was that during the afternoon the members of his planning team expressed a number of different views, and that the object of the task he had set was for the team of Messrs Lhuade, Taylor and Gellie to come up with an agreed view on fire spread projections for the following day, and to take those predictions to the planning meeting that afternoon.<sup>1323</sup>

According to Mr Taylor:

Some time on the afternoon of the 17th we had a request from Rick McRae into the situation unit where there was a number of us working, particularly Nic Gellie, myself and Nick Lhuade, to urgently look at where the fires were likely to be by Saturday afternoon. And if I recall, the meeting may have even been postponed while we urgently prepared or did some thinking about this. I suspect there were other reasons why the meeting may have been postponed also.

Mr Taylor was referring to the postponement of the regular afternoon planning meeting, which on Friday 17 January was held at 6.00 pm, two hours later than usual.<sup>1324</sup>

Each of Messrs Lhuade, Taylor and Gellie described in their evidence how they worked cooperatively in calculating potential rates of spread for the fires, and in particular, for a potential break-out of the McIntyres Hut fire.<sup>1325</sup> The tools they used in making calculations included an up to date weather forecast, knowledge of the fire behaviour experienced up to that point and their own experience and knowledge of earlier fires, supplemented by local knowledge concerning the terrain and fuel types.<sup>1326</sup> The predictions arrived at were based largely on the McArthur fire spread meters. Mr Gellie recalled using both the grassland and forest meters. However, Mr Lhuade thought the calculations were largely based on the forest fire danger meter<sup>1327</sup>, as did Mr Taylor:

The calculation was being undertaken using the fundamentals of the McArthur meter, I think version 5. At that stage I suspect we were using largely the forest fire danger meter rather than the grassland fire danger meters, given the rush we were doing this in. That was also corrected by some local knowledge about fuel types, slopes and likely or forecast weather changes during the period. So it is an approximation based on Nick Lhuade, Hilton Taylor and Nic Gellie’s experience, combined with the McArthur meter.<sup>1328</sup>

In relation to the McIntyres Hut fire, they were modelling on the assumption of a single outbreak into the pines near the border in the Uriarra pine forest.<sup>1329</sup>

Mr Taylor was aware that there were some problems with the McArthur meter indices, ‘particularly for large intense fire behaviour and spotting distance, that it may underestimate them’. However, he thought that in their planning that afternoon, they ‘stuck reasonably well to the model’.<sup>1330</sup> Mr Taylor was aware of the work undertaken by Project Vesta that suggested that the McArthur meter could significantly under-predict rates of fire spread of large fires in some circumstances, but did not have access to the Vesta results at the time. He suggested that ‘through discussions with Nic Gellie, Nick Lhuade and myself, we may have subconsciously taken it into account but certainly not actively or proactively’.<sup>1331</sup> Mr Gellie was also aware of the Project Vesta work. He could not comment specifically about problems with the McArthur

meter, but gave evidence that all through his career as a fire management officer and fire research officer he was aware of the limitations of the McArthur model in a wide range of vegetation types, and knew that one had to calibrate the model to suit particular field conditions:

You just had to be mindful of the possible errors associated with your predictions by applying it to vegetation types it perhaps wasn't meant to be worked for ... We were all calibrating our models because when conditions get very severe, you start to get into a realm where mass fire behaviour starts to occur and a whole new system of fire behaviour ... starts to become involved.<sup>1332</sup>

Mr Gellie used a topographical satellite image taken in about 1998 showing the extent of pine forest and grassland in the area ‘to work out the likely vegetation in the path from the spot fire that we had located on the ACT/NSW border’. Mr Gellie was aware that some of the vegetation the fire would potentially travel through was eaten out grasslands, but made it clear to Mr Lhuede and Mr Taylor that based on his experience, he thought that the fire would still burn through these areas under the extreme conditions predicted for 18 January:

I used the McArthur grassland meter mark 3 which doesn't take into account fuel state as much in terms of rate of spread and of my experience of fires up in the Hunter Valley in 1994 where I observed from a helicopter fires burning in very heavily grazed country. I used that knowledge to say to the others, “Well, I think it is actually going to burn through the grazed-out country under the conditions because it is an extreme forecast for tomorrow”.<sup>1333</sup>

Ultimately, in making their predictions, the three planners used a number of different McArthur meters (particularly versions III, IV, and V) in conjunction with weather forecasts, their collective knowledge of the vegetation and topography of the area, and their combined firefighting experience. Mr Gellie expected the range of fire danger indices to be somewhere between 50 and 70 based on the information given by the Bureau of Meteorology, which he said they used ‘as a possible worse case scenario’. (In fact, the forest fire danger index peaked at 102 in the mid-afternoon on 18 January 2003.<sup>1334</sup>) Taking into account the above factors, Messrs Lhuede, Taylor and Gellie predicted that the unattended rate of spread from a single break-out of the McIntyres Hut fire on 18 January would be somewhere between 3 and 7 kilometres an hour in the eaten out grasslands, and between 4 and 6 kilometres an hour in the pine forests.

The predicted rates of fire spread were then used to extrapolate a ‘fire path analysis’, starting from a single point representing a spot fire, and from that point applying the rate of spread models to track the path of that spot fire through the landscape under the predicted wind conditions.<sup>1335</sup> That fire path analysis was illustrated graphically on a map of the Canberra area, showing with red line arcs where any break-outs from each of the fires would be predicted to reach the following day.<sup>1336</sup>

Mr Gellie said in his evidence that the estimates of prediction of rate of spread on the map stopped at 8.00 pm, because:

Generally speaking around 20:00 hours in the evening one tends to get an abatement of fire spread and intensity, and depending on what other field factors are happening—such as change in weather such as you might get a change occur around that time—we felt around 8 o'clock was a reasonable time to assume when field fire crews could start to work on uncontained edges and start to do some containment action.

Asked whether containment action was going to be possible prior to 8.00 pm, Mr Gellie's evidence was that:

Given the conditions forecast to be extreme from about midday all the way through until about 5 o'clock in the evening, we anticipated that the fire would continue to burn fairly intensely. Although there may have been areas particularly on the flanks where you could have worked as the wind tends to die later in the afternoon. In terms of the head fire and dealing with this, it was considered with the predictions made that it was unlikely that anyone could do direct attack or attack the head fire.

Mr Gellie thought that if an attempt was made to attack the head fire, the chance of success would be zero. On the question of whether his comment applied even in the eaten out grasslands Mr Gellie said:

I can't exactly comment on the eaten-out grasslands. But in detail of course you need to know the state of the vegetation in the particular part of the landscape where crews might be working. But if the conditions continue to burn as they did, then it would be unlikely that any fire crews would be safe working in paddocks where they had to open up gates and cross through fences and so on and to be able to have good egress; that is, escape routes back out of it.<sup>1337</sup>

The map prepared by Messrs Lhuade, Taylor and Gellie illustrating their fire path analysis for 18 January was presented to the planning meeting commencing at 6.00 pm that evening.

Mr Lhuade also prepared a message form to Mr McRae outlining the group's predictions regarding fire spread for the following day.<sup>1338</sup> Mr Lhuade confirmed that the message form said nothing explicit about a predicted fire impact on the urban edge of Canberra, but said that because they had predicted that the fire may 'reach Narrabundah Hill, which bounds the urban edge ... I think it could be implied'.<sup>1339</sup>

### 5.13.9 The evening planning meeting

The afternoon planning meeting was delayed from its usual time of 4.00 pm to 6.00 pm. In his statement, Mr Graham indicated that the afternoon planning meeting was held:

to discuss the current situation and to determine strategies for the escalating incident. These included:

- Monitoring the fire growth and obtaining situation reports back from the field
- Altering the strategy of indirect attack to property protection
- To consider ways of stopping the fire reaching ACT pine plantations<sup>1340</sup>

As usual, the meeting commenced with Mr Graham providing a report on fire operations, during which the rapidly deteriorating conditions were highlighted. In relation to the Bendorra fire, Mr Graham noted that a spot fire had ignited during the afternoon on the north-east corner of the fire, possibly originating from the McIntyres Hut fire, and that because that spot fire could potentially cut crew egress from the Bendorra fire all crews had been requested to leave the area at 5.50 pm. Another spot fire north of Bendorra was also identified as having crossed Brindabella Creek. Mr Graham also reported that the Bendorra fire was burning on both sides of the Mt Franklin Road north of Bulls Head, and was expected to cross Brindabella Road before 6.30 pm.

Mr Graham reported that crews were withdrawn from the Stockyard Fire at 4.00 pm and redirected to Tidbinbilla Nature Reserve and Paddy's River for structural protection duties. Mr Graham outlined the property protection undertaken that afternoon at Tidbinbilla, including the containment of three spot fires there.

Mr McRae's report was recorded in the minutes under the heading 'Planning':

Rick McRae stated that we need to assess the risks of the new situation, given the weather and fire behaviour conditions. Rick provided an overview of unattended fire behaviour for various periods until tomorrow afternoon. There is the potential for fire to reach Uriarra by midday tomorrow, the Cotter Pub and Reserve at 16:00, and Mt Stromlo and potentially Narrabundah Hill by 2000 hours ...

There is a significant threat to the pine plantation as a result of the McIntyre's Fire.

Peter Lucas-Smith outlined the objectives for this evening and tomorrow. These include monitoring the fire growth and obtain situation reports from the field, alter the strategy of indirect attack to property protection and perform aerial operations, and to determine the best way of stopping the fire from reaching the pine plantation and beyond. Crews will not be placed near the fire line tomorrow.

Liaison to occur with NSW RFS regarding McIntyre Fire situation and planned strategies, including spot over and growth predictions and intervention strategies to prevent fire from reach pine plantation. ACT resources will not be deployed to fight the fire once it is in the pine plantation.

Mr Taylor believed that the information presented to the planning meeting by Mr McRae was possibly augmented with some input from him, presenting the information to the meeting in map form.<sup>1341</sup> Mr Kevin Cooper described the discussion of predicted fire spread for the following day as including the use of maps and said, 'Hilton Taylor and Nic Gellie both gave a briefing. It was very comprehensive and very thorough in terms of rate of spread of fire, particularly McIntyre, but the other two were also included'.<sup>1342</sup> Under the heading 'Weather', the minutes record:

Peter Lucas-Smith reported that the fire weather forecast suggests that the current conditions show no sign of easing.

**Friday.** Winds are expected this evening at 15–25 kms, easing 10–20 kms overnight. West north-westerly winds are expected overnight and for at least the next 24 hours. At 1500 hours today, the temperature was 35.6°, 18% RH and west north-west winds at 30kms.

**Saturday.** The forecast Fire Danger Rating for the highlands is 62, lowland forests [sic] 58 and grasslands 40. The expected temperature is forecast for 38°, dew point 5° and RH 13. Afternoon winds expected north-west at 30 kms, gusting to 45kms for the lowlands. The highlands may expect north-west winds at 30kms, gusting to 50kms with RH 11%.

**Sunday.** Expected temperature around 34° with light winds

**Monday.** Temperature expected 37°, unsettled west north-west winds.

**Tuesday.** Temperature 34°, winds easing.

Finally, under the heading ‘Fire behaviour’, the minutes record:

Fire behaviour today indicates there is nothing to be gained by direct attack. A long distance indirect attack, asset protection and strategies need to be considered to manage the fire and reduce the damage bill.

The Planning Team is to prepare a detailed list of assets at risk and to evaluate and prioritise appropriate actions ...

### ***The SMT response to fire path predictions***

In evidence, Mr Lucas-Smith confirmed that Narrabundah Hill is the hill directly to the west of the suburb of Duffy. He agreed that the potential that Mr McRae was outlining at the planning meeting indicated that the risk to the Canberra suburban area was then a significant risk, and that this possibility was ‘certainly part of our plan and certainly within our strategies’.<sup>1343</sup> However, Mr Lucas-Smith also pointed out that Mr McRae’s assessment was based on fire spread without intervention by firefighters, and so while the possibility of an urban impact had certainly been raised by Mr McRae at the meeting, Mr Lucas-Smith still believed that intervention by firefighters could prevent that impact from occurring:

There were a number of things in the way there. Certainly from our point of view we had in our minds the strategy of the extensive clear area or open area of the grasslands to the east of the Murrumbidgee River which gave us very strong, certainly in my view, gave us very strong control line opportunities to prevent that.<sup>1344</sup>

However, in his evidence Mr Lucas-Smith also agreed with the suggestion that the situation was serious enough and the potential real enough to require that a plan be implemented so that residents could be given as much notice as possible that, in the event that firefighters were unable to stop the fires, they were at risk. Asked whether there was a plan to start letting people within potentially affected areas know that they were exposed to a risk, Mr Lucas-Smith replied ‘not as far as the potential McIntyre’s fire outbreaks were concerned, but certainly as far as a Bendora fire was concerned’. In this regard, he described the process by which rural properties were telephoned and spoken to, and the deployment of firefighting resources in populated areas threatened by the Bendora and Stockyard fires.<sup>1345</sup> As far as media arrangements were concerned, Mr Lucas-Smith’s evidence was that ‘the media people were part of our planning meeting; they got the information; they went away and prepared the material’. However, he conceded, ‘We didn’t emphasise what people really needed to do in the most direct way that we possibly could. The media continued to concentrate on interviews and obviously, as you hear and see and read transcripts, I obviously wasn’t able to convey that message adequately’.<sup>1346</sup>

Mr Castle agreed that, having heard the report by Mr McRae, he was probably more concerned than he had been up to that point about the threat those fires posed to the urban areas of Canberra.<sup>1347</sup> However, Mr Castle said that he did not at that time see the fires as posing a ‘significant threat’ to urban areas of Canberra, because he still had ‘some confidence’ in the ability of firefighters to stop the fires before they impacted on urban Canberra. In this regard, Mr Castle noted that Mr McRae’s predicted fire impact times were based on ‘unattended’ rather than ‘uncontained’ fires, and that he thought that the fires would certainly be attended on 18 January.<sup>1348</sup> He was then asked whether he understood that in telling the meeting that ‘crews would not be placed near the fire line tomorrow’, Mr Lucas-Smith was saying that the fires would indeed be unattended on 18 January. Mr Castle responded that he could not recall drawing a connection between Mr Lucas-Smith’s statement and Mr McRae’s predictions, and suggested that he did not have the operational experience to make that link.<sup>1349</sup>

Mr Castle also agreed in evidence that he was responsible to ensure that the ESB mission was fulfilled and, among other things, that warnings were issued to the public in a timely manner. Mr Castle was then asked whether it was part of his responsibility to be asking Mr Lucas-Smith and Mr McRae what the fire spread predictions meant for the urban area of Canberra and whether it meant that the fire was likely to be in the urban area of Canberra by the following night. There was then this exchange:

A. I suppose if you put it that way.

Q. Did you ask that question?

A. I don't recall asking that specific question.

Q. Did you ask any questions about the threat to the urban area at that time?

A. Not that I can specifically recall.

Q. Why not, Mr Castle?

A. I suppose it was an optimistic view of the ability to suppress.

Q. That was the position you were taking, that fingers crossed everything will be OK; is that what it was?

A. No, I don't think it was fingers crossed.

Q. I suggest it is more than optimistic. It is wishful thinking, isn't it Mr Castle?

A. It could be.

Q. It is not the role of the Emergency Services Bureau or any emergency service, I suggest to you, to take the most optimistic outlook of an emergency situation, is it?

A. No.

Q. It is the role of the Emergency Services Bureau and Emergency Services generally to take something much closer to the worst case scenario, isn't it?

A. Yes, it is.

Q. And to warn people who may be affected by that scenario that they may be affected?

A. I think if the extent and the area is specifically known.<sup>1350</sup>

Mr Castle emphasised that while he could not specifically point to anything that was distracting him from thinking about the need to issue warnings to the Canberra community at the time of the planning meeting on Friday evening, the meeting was focused on responding to threats to rural areas in the ACT, and there was very little discussion of a threat to urban Canberra, or of planning for such an impact.<sup>1351</sup>

The issue of warnings to Canberra community is discussed further below, and in more detail in Chapter 7.

Mr McRae agreed that it was his view that there was a 'significant threat' to the pine plantation as a result of the McIntyres Hut fire. However, he felt that there was a 'good probability' that NSW firefighters would be able to contain any break-outs of that fire, and so prevent it from running or spotting into the pine plantations:

Late on the 17th, the expectation was that we would be getting some abatement in the fire behaviour. If that was occurring, then there was a good probability that the McIntyre's break-out or break-outs, I wasn't sure, would be contained ... I didn't know exactly where the break-outs were. So without knowing the exact situation, that was about the best assessment I could make at that time.<sup>1352</sup>

Mr McRae confirmed that the projection presented to the meeting by the planning team of Messrs Lhuede, Taylor and Gellie was formulated using the McArthur fire danger indices. Mr McRae was aware that Project Vesta had indicated that there could be deficiencies with the McArthur indices as a fire rate of spread prediction tool, and in particular, that the rate of spread for some large fires could be up to three times faster than indicated by the McArthur indices. He said that all fire control officers were presented with the Vesta material prior to the fire season, but that with no alternative tool, they still needed to rely predominantly on the McArthur indices to make their calculations.<sup>1353</sup> However, Mr McRae did not accept that the fire spread projections were based 'purely' on the McArthur fire danger meter 'because whenever an experienced fire officer applies a McArthur fire danger index using the circular slide rule, they will apply a commonsense element as to whether the predictions are making sense in terms of how the fire is currently and has recently behaved. It is not just pure application of the meters'.

This assertion accords with the description of the predictive analysis undertaken by Messrs Lhuede, Taylor and Gellie, as discussed above. Mr McRae reiterated that the consensus view arrived at by the planning team did not incorporate the Project Vesta correction: 'We did not apply that. And today I would not apply it'.<sup>1354</sup>

Mr McRae was aware that the plan for that night and the next day was that all available firefighting resources of the ACT were going to be concentrating on property protection, and that no plans were in place for direct or indirect fire suppression to stop runs by the fires.<sup>1355</sup> However, Mr McRae did not believe that the fires would run as if entirely unattended through the day, because he believed that even property protection by crews would have some incidental effect in slowing fire spread. He said that the predicted fire spread was used 'as a basis for operations to do their work, and I expected operations in both New South Wales and ACT to have some impact on the potential spread of the fire ... I would not consider a no impact option'.<sup>1356</sup>

Mr McRae was then asked about his planning team's assessment that there was a potential for the fire to reach Narrabundah Hill by 8.00 pm and, more particularly, whether it followed from that assessment that there was a potential for some impact on the urban area that was a short distance from Narrabundah Hill. Mr McRae responded that 'it was not my assessment that the fire behaviour we based our forecast on would cause damage at the urban interface on the afternoon or evening of the 18th January'. Mr McRae's evidence was that even if the worst case scenario presented by planning eventuated, and there was an unattended run from the McIntyres Hut fire that reached Narrabundah Hill at 8.00 pm the following evening, that would still put the fire front short of the urban area. According to Mr McRae, while some spotting from the main fire into the urban area could occur from Narrabundah Hill that evening, because the conditions would have abated markedly by that time, any spot fires that did occur could be adequately handled by fire crews. He said that even if the fire did reach Narrabundah Hill by 8.00 pm, his assessment was that:

At that time the weather would abate markedly and there was a forecast wind change in the ACT. With the wind change coming through after a north-westerly airflow, there is usually a couple of hours of very mild winds before the wind change actually hits. So if

the wind change is forecast for the evening, then by this time the fire drivers would have abated. So even if it had achieved its unattended potential, the drivers that were pushing it towards the urban edge at that time would have gone and, if anything, when the wind change hit, it would push the fire in the other direction.

Mr McRae denied that this was an optimistic assessment of the situation, asserting instead that ‘it was a professional assessment based on the best available information and the best available forecasting tools’.<sup>1357</sup> According to Mr McRae, the planning team’s projection was formulated as a ‘worst case’ scenario, which they presented to the incident controller and the operations officer ‘as something for them to work to for making sure that operations did the best possible to prevent impact on the urban interface’.<sup>1358</sup> Mr McRae said that he was not allowing for the possibility that the predicted wind change might not occur, ‘because we had such good liaison with the Bureau of Meteorology’.<sup>1359</sup>

Ultimately, Mr McRae’s evidence was that on the evening of 17 January he thought that there was no chance that Stockyard fire would impact on urban Canberra, that he was still waiting on information on Bendorra, and that he believed that the McIntyres Hut fire was sufficiently contained by NSW crews that it would not threaten urban Canberra the following day.<sup>1360</sup> He said that he believed at that time, and communicated to the planning meeting, that on 18 January the primary threat being faced was to rural areas of the ACT, and that accordingly, he was focused on planning for that threat.<sup>1361</sup>

Mr Graham said that he did not specifically recall Mr McRae providing a report suggesting that the McIntyres Hut fire could potentially reach Narrabundah Hill by 8.00 pm the following day. He said that he did not realise that there was a significant risk of an impact on the urban area on the night of 17 January, but that ‘it was more at the morning of the 18th that I was more concerned by that’.<sup>1362</sup> However, Mr Graham later agreed that it ‘was within his thinking’ on the Friday evening that there was a possibility of an impact from the fires on urban Canberra, although he did not remember when on Friday that possibility entered his thinking.<sup>1363</sup>

Although Mr Graham accepted that it was agreed at the planning meeting that crews would not be placed near the fire front the next day, his view at the time of the meeting was still that, when the fires left the forested areas, containment may have been possible in the grasslands. He was not suggesting that the fires would stop of their own accord or that the fire would stop at the Murrumbidgee River, and Mr Graham agreed that no plans were put in place that evening to contain any potential fire runs into the ACT pine plantations. Rather, Mr Graham’s evidence was that ‘the focus of effort that night was to make sure that the properties in the Tharwa and Naas Valleys were protected’.<sup>1364</sup> Mr Graham did not believe that he did anything in terms of alerting the urban community to the risk, because ‘his focus was on the operations that were happening down in the Tidbinbilla Valley, in the Tharwa area and not on community alerts’. According to Mr Graham, the urban community was not his responsibility, and believed ‘that the incident controller has that responsibility’.<sup>1365</sup>

In his record of interview, Mr Kevin Cooper made the following comments in relation to the fire spread predictions at the afternoon planning meeting on 17 January: ‘The key thing … from my perspective was that they were all saying this—these fires were going to reach Canberra some time on Saturday, whether it was midday or 6 o’clock didn’t make a lot of difference … But the meeting never seemed to produce—well what are we going to do about it?’<sup>1366</sup>

Mr Cooper said that Mr Lucas-Smith was insistent on ensuring that crews would not be endangered by fighting the fires within the pine plantations, but that Mr Cooper was concerned

with the question ‘what happens after it gets in there? You know, when it comes out of the pine forest on the other side?’<sup>1367</sup> He noted:

There was no specific discussion about the fires reaching the urban edge—the western urban edge, the interface of Canberra. In terms of fire activity, the discussion was focused on more if the fire reached the pine plantations what wouldn’t happen. So basically we wouldn’t work in the pine plantations. There was very brief discussion about if the fire reached the grasslands.

But the take-home message for me was that we were to focus our efforts in the rural areas, particularly around Tidbinbilla, Tharwa and Naas.<sup>1368</sup>

Mr Cooper’s evidence was that from about midday on Friday he was becoming increasingly sure that ‘Canberra was going to be burnt’,<sup>1369</sup> and he was concerned that no planning was under way to respond to this possibility at the planning meeting. However, he said that he did not feel that it was appropriate for him to stand up at his first planning meeting and challenge the approach to planning there, particularly as the four NSW taskforces he was in command of were ‘nominally operating under operations’ instructions, so were part of the operations group’.<sup>1370</sup>

#### ***Mr Cheney’s evidence about the fire spread predictions***

In both his report and his evidence, Mr Cheney discussed how he might have approached the task of fire spread prediction on the evening of 17 January 2003.<sup>1371</sup> In evidence, he said that:

My first assumption on receiving a forecast of extreme fire danger would be to say: “What’s the worst we could get?” We know by historical precedent that, at the top end of extreme, we can get rates of spread of 10km/h in forests and 20km/h in standing pastures. So, in terms of being concerned about the fires, that was certainly the first thing that would go through my mind. If it is at the top end of the range, these fires could be here in an hour. As you get better weather forecasts you can then apply the forest fire danger meter, which you have, and the ... grassland fire spread meter.<sup>1372</sup>

Mr Cheney suggested that because under extreme fire weather there was a good chance of getting a fire danger index of 80, his approach would then be to ask what the fires are going to do using the McArthur forest fire danger meter and the grassland fire spread meter, calibrated at an FDI of 80. Mr Cheney explained that given the fuel types between the McIntyres Hut fire and the urban edge of Canberra, calculating fire spread would be even simpler than doing separate calculations for each of the different fuel types along that path: ‘They are both around 5kmh. If you’ve got 15km to go, it is going to cover that distance in 3 hours’.<sup>1373</sup>

In his report, Mr Cheney described the process as follows:

It is not necessary to have highly detailed information about the fuel in the path of the fire but rather make a broad assessment of the fuel types along the predicted path of the fire. A general classification of fuel types between the ACT border and Duffy along the path of the McIntyre fire is: 2km forests; 3km grass; 2km pine; 4km grass; 4km pine: total 15km. Applying the above rates of spread for 7km of eaten out grassland and 8km of forest show that the predicted time for a large fire to travel the 15km is 2.8 hours at a forest fire danger index of 80 and 3.9 hours at an index of 60.<sup>1374</sup>

In evidence, Mr Cheney explained that the information concerning fuel types is taken from a topographical map ‘plus knowing that at that time of year, apart from the Murrumbidgee corridor, most of the rural leases were pretty heavily grazed and approaching a condition that

you would call “eaten out”<sup>1375</sup>. As noted above, the planning team tasked by Mr McRae that afternoon used Landsat satellite imagery of the relevant terrain and vegetation to assist them with their predictive modelling.

Mr Cheney also suggested that in making predictions for 18 January, he would have assumed that the fire danger would reach an ‘extreme’ level by 10.00 am, and then continue at that level for at least 8 hours. He acknowledged in his evidence that on 18 January the extreme weather did not arrive until after 12.00 noon, but added:

... if you are making a prediction on extreme weather you expect the wind speed to get up early and saying, “Well it is probably going to be in the extreme classification by 10 o’clock”. There is no point in being terribly fancy about it. You have got fairly severe conditions. You need to say “Well, you know, what can happen?” This is simply saying, “Well these meters will assist you if you know how far the fire is away from you and what the expected rates of spread could be at those indexes”.<sup>1376</sup>

Mr Cheney concluded the section of his report dealing with predictive analysis on 17 January as follows:

On receiving a warning on Friday 17 January of extreme fire danger the following day, the planning unit should have assumed a fire danger index of 80 was possible and that extreme weather would occur after 1000 hours. Applying the rates of spread calculated above they could predict that it was possible for the fire to reach the suburban area on 18 January between 13:00 and 14:00 hours.<sup>1377</sup>

### **5.13.10 Continued planning during the evening**

Immediately after the planning meeting, Mr Taylor sent a note from Planning to Operations stating that ‘a key requirement is that each asset in the fire footprint is assessed for protection potential and access’. Mr McRae reviewed that note and wrote: ‘Recommend that: a protocol (?based on New South Wales) be used for ‘triage’ tonight. This to be done by field crews. Kel is looking at the protocol now’.<sup>1378</sup>

Messrs Gellie, Taylor and Lhuede then continued working on fire spread predictions, at one stage going to Curtin Hill to observe directly what the fires were doing. They could see considerable fire activity and spread from Curtin Hill, and continued working at Curtin on predictions until 9 pm or 10 pm, before deciding to continue with their work the next morning when more information had come in from the field and new forecasts had been issued by the Bureau of Meteorology. Before going home, Mr Gellie drove to the top of Black Mountain to observe the McIntyres Hut fire.<sup>1379</sup>

### **5.13.11 Lack of effective overnight planning**

Although some additional planning and preparation occurred into the night on 17 January following the conclusion of the evening planning meeting, it is significant that no overnight SMT was appointed, and in particular, that the Planning Unit did not operate overnight. Rather, a single officer, Mr Robert Gore, was ‘appointed as the overnight SMT officer working out of Curtin’.<sup>1380</sup>

Mr Gore had been a volunteer with the ACT SES since 1986, and had joined the Jerrabomberra Volunteer Brigade in 1994. At the time of the fires, he was in his third year as Captain of that

Brigade, having been Deputy for the preceding two years. Mr Gore had arrived at ESB on 17 January at 4.00 pm, where he assisted in the operations area. In his statement, Mr Gore describes his involvement overnight on 17 January 2003 as follows:

At about 22.00 hrs, Tony Graham asked if I could stay on overnight and look after supporting operations from inside ComCen while he went home to get some sleep. I had continued there by myself with the two ComCen operators. There was no other Planning Office Incident Management or Service Management left in the headquarters that night.<sup>1381</sup>

In evidence, Mr Gore described his role overnight as ‘slightly ambiguous. I saw my role as a duty coordinator, point of contact, liaison person’. Mr Graham had made it clear before he left that if he needed any assistance, Mr Gore should contact him, and Mr Gore did telephone Mr Graham at 1.00 am on 18 January 2003 to obtain approval for a back-burn around Tharwa.<sup>1382</sup> Mr Gore did not have direct access to Mr Lucas-Smith, Mr McRae or anyone else if he needed to speak to them overnight.<sup>1383</sup>

In his evidence, Mr Kevin Cooper was critical of the lack of an overnight SMT on 17 January, and in particular, of the lack of overnight planning. He said that some 45 minutes after the evening planning meeting finished, he approached Mr Lucas-Smith with some suggestions for property protection. He said that Mr Lucas-Smith agreed with the suggestions, and referred him to Planning. However, Mr Cooper then discovered that no planning unit was operating overnight, so that his recommended preparations would have to wait until the following morning.<sup>1384</sup> Mr Cooper said in his evidence that although a long stretch of Canberra’s urban interface was potentially exposed (10–20 kilometres), he felt that there was still effective planning that could have been done that night to prepare, including pre-planning with the utilities<sup>1385</sup>, as well as planning community education and warnings.<sup>1386</sup>

Mr Cooper returned to the field that evening, and while at Tidbinbilla he worked with Mr Duckworth and Mr McTaggart to plan the NSW taskforce actions on 18 January, using a tourist map and working on the bonnet of Mr McTaggart’s car. The plan they formulated was for the NSW taskforces to operate on the western side of the Murrumbidgee river, at Tidbinbilla, Tharwa, Naas, and Smith Road, and then move to the Canberra urban interface after the fire had moved through those areas.<sup>1387</sup> Mr Cooper said that he ‘had good agreement from the ACT people who were in the field with that approach’.<sup>1388</sup> They also planned to carry out a back-burn along the Tharwa/Cotter Road that evening.

However, when Mr Cooper returned to ESB at around 11 pm that evening to get approval for the plans he had formulated for the back-burn and for the deployment of the NSW taskforces the following day, Mr Gore, in his capacity as the night operations officer, only acknowledged the plans, but did not approve or commit to them. Mr Cooper said that in accordance with the ICS structure, he did not expect to have his plans approved by someone in Operations, but that when he tried to find someone in the Planning Unit who would be authorised to approve his plans, he found ‘The planning room was empty except for two people right down the back, who indicated that they had no ability or no authority to talk—there was no point in me talking to them about it’.<sup>1389</sup>

Unable to find anyone at Curtin with authority to plan for the following day, Mr Cooper returned to his hotel and continued to plan with Mr Duckworth and Mr McTaggart for operations by the NSW taskforces the following day.<sup>1390</sup>

Mr Roche was also highly critical of the lack of overnight planning at Curtin on 17 January. He noted that by that evening, the combined fires covered around 1200 square kilometres, threatening some 25 kilometres of urban interface (depending on wind direction), and thereby posed an appreciable risk to thousands of lives and several thousands residences and commercial properties that were potentially in the path of those fires. In these circumstances, the lack of a properly constituted overnight SMT, and in particular, of an overnight planning unit, represented a serious deficiency in the SMT's approach, that in Mr Roche's view:

significantly reduced the SMT's ability to respond to the events that unfolded the following day ... The inability to obtain, continually evaluate and corroborate the extensive amount of intelligence that was emerging as the fires continued to escalate overnight, meant that the SMT were not in a position to readily appreciate the circumstances that were presenting on the morning of 18 January. In my view, the approach adopted by the SMT during this period and as far back as 8 January, was again symptomatic of an organization that lacks depth of experience and knowledge associated with major incident management and planning.

Mr Roche concluded that the lack of overnight planning on 17 January exacerbated the problems faced by firefighters the following day, because it forced field incident controllers to develop strategy 'on the run' in relation to enormous fires burning under extreme conditions. The lack of overnight planning also meant that no plans had been made for the prioritization of the limited available resources to protect assets, and adversely impacted on decision making regarding the issuing of warnings to the public.<sup>1391</sup>

In this regard, Mr McNamara noted in his statement that:

It is my understanding that there was no comprehensive planning, logistics and fire analysis overnight at ESB on Friday 17th January 2003, despite the threatening events that had unfolded on that afternoon. Therefore, any incident action plans that were formulated for the day-time crews for 18th January 2003 were based on the knowledge at ESB of what had occurred up until that afternoon, early evening of the 17th. I believed that events moved so fast after that time that this left the incoming incident management team for the morning of 18th January 2003 in a very demanding and difficult position.<sup>1392</sup>

### **5.13.12 A further request for Commonwealth assistance**

At 8.30 pm on the evening of 17 January 2003, Mr Castle signed a further request for Commonwealth physical assistance from Emergency Management Australia, in which the 'Situation' was described as follows:

Further to request ACT 0005, numerous spot fires have significantly spread the fires. The predicted unattended rate of spread, with the current extreme fire weather conditions, indicate that the fires will spread into rural residential areas. Current operational focus is on identifying assets under potential threat and determining protection strategies. There is also a concern over significant assets at risk associated with spot fires from the NSW McIntyre's fire.<sup>1393</sup>

### 5.13.13 Warnings to rural lessees

Shortly after the evening planning meeting, Ms Harvey and Mr Prince (among others) were involved in the task of contacting as many rural lessees as possible to warn them of the threat from the bushfires. Mr Prince described his initial involvement in that task as follows:

I was directed by the Chief Executive Officer of Justice and Community Safety Mr Tim Keady and the Fire Commissioner and tasked to work with Ms Marika Harvey of the Chief Minister's Public relations Unit to develop a process for the Media, Canberra Connect and to inform rural lessees. Other personnel that met at 2000 that night in the Fire Safety Section were Ms Jannelle Wheatley from ACT Education, Ms Barbara Baikie from ACT Education, Ms Felicity Way from Canberra Connect and Mr Keirin Stiles from Environment ACT. Contact lists were obtained for the rural Lessees for the areas under threat. A number of rural lessees were contacted and given appropriate warnings of danger. This work went through to about midnight.<sup>1394</sup>

In evidence, Mr Prince explained that he had contacted Mr Keirin Stiles of Environment ACT to get the telephone numbers for the rural lessees and that Mr Stiles produced a list of those numbers at around 10.00 pm. The task of contacting the rural lessees was undertaken by personnel arranged by Ms Wheatley, who Mr Prince said ‘continued ringing around to ensure that people were contacted. Of about 96 rural Lessees, I think, 47 were contacted’. Mr Prince was not sure if the list that they were working from included forestry settlement residents. There was no discussion that Mr Prince could recall about using other media to contact people, such as radio or television.<sup>1395</sup>

In her statement, Ms Harvey described that at the evening planning meeting ‘The need to contact people in rural areas to apprise them of the threat was discussed; to provide them with the right advice and protective measures to adopt. This became the number one priority for Friday evening and all of our resources were focused on working as hard as we could on this priority’. More specifically, Ms Harvey was involved in putting together ‘standard advice and information to give to these people and obtain lists of rural residences from Environment ACT so we would be able to ring people in those regions if need be. Later I wrote a script for the staff that would be making the phone calls, a prompt for what to say—just the basics’.<sup>1396</sup>

Ms Wheatley gave evidence concerning her involvement in the process of contacting rural residents and, in the course of her evidence, produced a notebook maintained by her,<sup>1397</sup> a map identifying the area under threat and the 12 page list of names and contact details, each provided by Mr Stiles from Environment ACT.<sup>1398</sup> According to Ms Wheatley, after the planning meeting there was a discussion involving Mr Prince of the need to form a communications group ‘to plan for recovery needs in the event of the situation escalating and requirement for some preparedness for evacuation’. A meeting of that group commenced at 8.00 pm that evening.<sup>1399</sup> Ms Wheatley’s notes of the meeting include reference to ‘Dunlop’ and under the heading ‘Public information’, references to ‘Door knock—hard copy’ and ‘Media—TV radio areas under threat’. Ms Wheatley could not recall what ‘Dunlop’ was a reference to. She explained that the other notes were references to ‘a brainstorming exercise to identify communications channels and what we could potentially prepare as resources or would be requiring if needed’. There was no discussion whether a door knock would occur or whether it was something that that was feasible.<sup>1400</sup> Ms Wheatley confirmed in her statement that the ring around to the rural Lessees was completed by midnight of 17 January 2003.<sup>1401</sup>

Ms Wheatley was unable to say whether the list was of all rural lessees throughout the ACT in all the areas identified on the map.<sup>1402</sup> However, in later evidence, Ms Wheatley confirmed that

the first time that there had been any discussion in which she was involved where the need to contact the forestry settlements at Pearce's Creek and Uriarra was raised was at 10.50 am on Saturday 18 January. A short time after 10.50 am on 18 January, Ms Wheatley was sent a fax for the Uriarra, Pearce's Creek and Stromlo settlements which Ms Wheatley faxed on to the Police Operations Centre at Winchester. At 4.10 pm that day, a copy of that list was faxed back to Ms Wheatley with notations suggesting to her that by that time, personnel at the Winchester POC had undertaken a ring around of the residents of the settlements included on that list.<sup>1403</sup> Thus the evidence of Ms Wheatley confirmed that the ring around on the night of 17 February was of rural lessees, with the focus on lessees in the Southern Tuggeranong area (the map produced by Ms Wheatley has a notation 'priority Coree, Paddy's River, Tennant, Booth',<sup>1404</sup> and that no attempt was made to contact residents of the forestry settlements at Uriarra, Pearce's Creek and Stromlo until some time between 10.50 am and 4.10 pm on Saturday 18 January 2003.

Mr McRae described his involvement in the process of warning rural lessees as being:

to assist operations in knowing where those residents were by producing a catalogue of where the ACT rural residences were and getting that reproduced in large numbers to make sure that every fire truck or as many fire trucks as possible would have a copy of that to assist them in not overlooking anyone. Also, to use the terms I used before, I activated the trigger for direct involvement of the community in those areas. I was working with the media section in trying to identify the best way to identify the subset of that community that needed to be directly involved.<sup>1405</sup>

#### **5.13.14 Discussion of warnings to urban Canberra**

None of those present at the evening planning meeting, the subsequent communications meeting or otherwise involved in discussions that evening who gave evidence could recall any discussion or reference to warnings to residents of the urban area.<sup>1406</sup> Mr Keady could not recall whether he was at the evening planning meeting, nor could he recall the contents of a seven minute telephone conversation that he had with Mr Castle commencing at 9.51 pm.<sup>1407</sup> Mr Castle's recollection of the telephone conversation was that he gave Mr Keady an update on the warnings to the rural communities which was ESB's focus at that particular time, but he could not recall whether they discussed the urban edge.<sup>1408</sup>

Although Mr McRae said that it was appropriate on the evening of 17 January to activate the trigger to warn residents in rural parts of the ACT west of the Murrumbidgee River of a potential fire impact, he did not think that it was necessary to trigger warnings to the urban residents of Canberra at that time. Mr McRae reiterated in his evidence that on the evening of 17 January he did not think that urban Canberra would be impacted by the fires the following day, although he thought that this could well occur on Monday 20 January. He therefore concluded that the information about the fires being disseminated by the media was at that time providing an adequate level of general warning to the residents of Canberra, and that on the evening of 17 January the ESB was appropriately focused 'on getting a high level of warning to the affected parts of the rural community'.<sup>1409</sup>

Following the planning meeting on Friday evening Ms Harvey's 'sense was that' there was a chance of the fire reaching the suburbs: 'My view or understanding of what that might mean was based on my experience in the 2001 bushfires when the fire did reach the suburbs, but no property was destroyed and no lives were lost. I think that is what my understanding was of the potential risk'. Ms Harvey agreed that it would have been appropriate at that stage to have started

warning the Canberra community about a threat of an impact.<sup>1410</sup> Both in her statement and in her evidence, Ms Harvey confirmed that on Friday night she did start working on a broader communication strategy:

that included things like how to get information to some of these rural residents if the police had to evacuate them overnight or on Saturday. The strategy I started writing also began to address communicating with the broader Canberra community, but I never got to complete it due to other work that night and events overtaking us.<sup>1411</sup>

Ms Harvey also referred in her statement to discussions that night about:

giving the community information about evacuation centres and the need to bring together a key group of people to start working on the communications and recovery side of things. David Prince from ESB was to work with me on these issues, and between us, we contacted a range of people to attend a meeting early on the Saturday morning.<sup>1412</sup>

This meeting was arranged for 8.00 am on 18 January 2003, and was referred to in Ms Harvey's notes and an agenda she later prepared, as the 'Evacuation Planning Meeting'.

The issuing of warnings to the urban community is discussed in detail in Chapter 7.

### **5.13.15 Further planning by the ACT Fire Brigade**

At some point during the evening of 17 January, Mr Prince had a brief meeting with Mr Gellie. During that meeting Mr Prince recalled that Mr Gellie gave him a map showing 'where that McIntyre's Hut fire would go, and where it would hit'. Mr Prince said that based on that meeting and the map, he knew on Friday evening that there was a potential for the McIntyres Hut fire to impact on the urban area of Canberra.<sup>1413</sup> Mr Prince recalled discussing that possibility with Commissioner Bennett, but said that that discussion did not include reference to how the people on the urban edge of Canberra might be warned.<sup>1414</sup> Commissioner Bennett could not recall Mr Prince showing him the map that had been prepared by Mr Gellie, but said that he 'was aware of those rates of spread from the briefing that evening'.<sup>1415</sup>

During that evening, Commissioner Bennett attempted to contact the NSW Fire Brigade to see whether they had the capacity to provide additional resources to the ACT if requested to:

What I was looking for was an additional urban capability should there be a need over the next couple of days for a greater escalation than the capacity that the ACT Fire Brigade stand-alone would have ...

We had obviously one eye on the fires to the west. Obviously our other eye was also on maintaining our standard response protocols to the routine domestic calls that the urban fire service attends on a daily basis. It was—I guess with that in mind, the issue of having access to additional urban vehicles certainly was raised.

Commissioner Bennett described those calls as providing only 'an early warning or a heads-up' to the NSW Fire Brigade, and that at that point he had 'no real sense of urgency. It was something that I believed we would deal with over the next day or so'.<sup>1416</sup>

### **5.13.16 Preparations by the ACT Ambulance Service**

On the evening of 17 January, Mr Dutton was advised by the Ambulance Service duty manager, Ms Louise Smith, of a substantial change in firefighting operations, and so at 9.00 pm Mr Dutton returned to Curtin to ‘gain a greater appreciation of what the situation was and where we would be placing our staff and potentially at what risk they might be at’. He said that he had a short conversation with Mr Graham ‘about the fire and in particular the movement of resources’, during which Mr Graham told him that ‘the staging points previously identified or used at Bulls Head had been closed and that resources were closer to Canberra, and that included the movement of ambulance resources’. The impression that Mr Dutton had at the conclusion of his conversation with Mr Graham was that ‘the situation had moved from serious to very serious ... in the respect that the fire was spreading and there was a change in the nature of operations that were being undertaken’. Although Mr Dutton did not remember Mr Graham discussing the predicted spread of the fires, it was clear to him from their meeting that with the change in firefighting operations there would be a consequent ‘a change in the location and deployment of ambulance resources to support those operations’.<sup>1417</sup>

Mr Dutton then prepared and distributed to staff of the ACT Ambulance Service a memorandum updating them on the fire situation.<sup>1418</sup> Under the heading ‘Current situation’, the memorandum identified that ‘there is significant concern that the fire could spread to pine forests and rapidly move towards Canberra’. Mr Dutton’s ‘Forecast for ambulance operations’, included:

Extreme fire weather conditions are forecast for Saturday 18 January

Expanded ambulance operations directly related to the fires having the potential to impact upon rural communities to the south of Canberra and the suburban fringe.

In his evidence, Mr Dutton said that the reference in the memo to the ‘suburban fringe’ was to:

draw people’s attention to the fact that the circumstances, as I understood it on the evening of 17 January, was that ambulance operations were no longer to remote staging areas to the west of Canberra, that the situation had changed. And that included, as the fire had moved, that it was closer to home for people ... I am drawing the attention of our staff to the fact that the fire has moved and grown and appears to be continuing to progress towards Canberra.

Mr Dutton confirmed in evidence that he had identified at that stage that the fires had the potential to impact upon the suburban fringe.<sup>1419</sup>

### **5.13.17 The evening media update**

At 8.50 pm on 17 January 2003, the ESB issued its final media update for that day. It was a single page update that differed in format from most of the earlier media updates, in that it did not incorporate headings differentiating between fires or providing details of land and property damaged, the weather and fire ban status and lists of the resources deployed. It also did not direct readers elsewhere for information on the McIntyres Hut and Mt Morgan fires. The full text of the media update is as follows:

- The adverse weather conditions experienced in the ACT today have caused a number of spot fires across containment lines, which have not been contained.

- The current threat to property in Tidbinbilla is serious, with ACT Fire Brigade, ACT Bushfire Service and NSW Rural Fire Service crews deployed to the area to assist with property protection.
- West to north-westerly winds are expected to ease overnight, but with stronger north-westerly winds expected from mid-morning tomorrow. This will result in significant smoke over the urban area.
- The ACT will be coordinating with NSW to manage a spot fire from the McIntyre's Hut fire, close to the ACT border. Ground crews and aerial operations continue to monitor all spot fires.
- The bushfire logistical support staging areas are being relocated tonight from Bulls Head and Orroral Valley, to the North Curtin district playing fields, resulting in these fields being closed to the public. For details on sporting event relocation, please phone the sports ground ranger on 0418-642-567.

Mr Lucas-Smith agreed that the media release did not include any warnings about risks to particular residents, whether rural or suburban. He referred in evidence to the fact that the media update ‘does point out that we would be liaising and coordinating with NSW regarding the McIntyre’s Hut fire and New South Wales were the people responsible for the media notices in relation to the McIntyre’s Hut fire’. He accepted that the media release did not say that New South Wales would be responsible for media notices, but noted:

It does say that we were coordinating with New South Wales in relation to that. I think you will find there were other advice handed out well before that and I think it is attached to a number of the media releases before as to what people should do in the event that a fire should approach their property and that had been done a number of times up to that point. I think that media statement is more or less a status report.<sup>1420</sup>

The evidence is that there were no media releases before a media release issued at 12.00 noon on Saturday 18 January 2003 that contained information about what people should do in the event that a fire should approach their property. There is some evidence that information of this kind appeared on the Canberra Connect website at some point before the afternoon of Saturday 18 January, but it is not clear when that information was first posted on the website. It is likely that that too did not happen before 18 January 2003.<sup>1421</sup>

Mr Castle thought that he may have assisted with the preparation of the 8.50 pm media release. He agreed that the reference in the media release to there already being a spot fire close to the ACT border must have meant a spot fire outside the containment lines. Mr Castle also agreed that there was nothing in the update that identified a threat to the urban area, ‘but could I say that I recall that one of the primary reasons for putting this out was the indication that the North Curtin district playing fields would be closed because we intended to relocate, and a degree of time was involved in organising that through urban services’.

Mr Castle could think of no reason why a media update that evening could not have included information about the potential threat to the urban area of Canberra, but he thought it may not have been done because of ‘the preoccupation with the rural area’.<sup>1422</sup>

Ms Harvey could not recall being involved in the preparation of the media release but said she might have been. She also could not think of any reason why the issue of that media release was not seen as an opportunity to begin alerting the Canberra community to the threat from the fires.<sup>1423</sup> Ms Lowe remembered working on the media release with Mr Castle and Mr Castle

saying that it had to look different from the other media releases, ‘not with the fire status and resources deployed and things like that, that it needed to say something different, in a sense’. According to Ms Lowe, Mr Castle said it needed to look different, ‘maybe because the fire had spotted and it wasn’t contained’. Ms Lowe did not recall discussing with Mr Castle the potential for an impact on the urban area. During her taped record of conversation, Ms Lowe was asked whether she felt the media release adequately portrayed the seriousness of what was happening, to which she responded:

In hindsight I guess not, but at the time there sort of, despite the guys from planning standing up there and saying, ‘the fire’s going to hit here and here, or it has the potential to if it spots at this rate’, you know, there was a certain sense of it’s not going to be that bad … so I guess at the time it seems like, you know, it was the right way to be communicating that.<sup>1424</sup>

In her evidence, Ms Lowe explained that she could not recall any particular comments that led her to that view, ‘just an overall feeling after the meeting of not feeling like there was a great sense of urgency’.<sup>1425</sup>

Mr McRae was not involved with the preparation of the media release that evening, and was not familiar with the exact content of the material that was going out, but said that he ‘would have anticipated what we said in the planning meetings would be reflected in that material’.<sup>1426</sup>

Mr Nicholson was referred to the media release in the course of his evidence. He agreed that the media release seemed to indicate that the ACT were coordinating with NSW in relation to the management of the spot fire from the McIntyres Hut fire close to the ACT border. He agreed that if the media release was issued following a meeting an hour or so beforehand at which the opinion had been formed within ESB that the McIntyres Hut fire was likely to burn to Narrabundah Hill by 8 o’clock the following night, that would be information which the ESB would be obliged to disseminate to the public.<sup>1427</sup>

### **5.13.18 Overnight firefighting operations**

As discussed, by the late afternoon on 17 January the Bendorra and Stockyard fires had broken containment, and with weather conditions rapidly deteriorating and fire behaviour intensifying, all crews were withdrawn and redeployed to property protection duties. During the late afternoon and evening, property protection was successfully carried out by crews from the ACT Bushfire Service, the ACT Fire Brigade, and the NSW Rural Fire Service, primarily at Tidbinbilla, Tharwa and the Corin ski resort.

#### ***Property protection at Tidbinbilla Nature Reserve***

Following the withdrawal of crews from the Bendorra fire, the fire continued to spread, igniting spot fires in the Tidbinbilla Range and Tidbinbilla Nature Reserve during the afternoon and evening.

It appears that many of the firefighting personnel who attended Tidbinbilla that afternoon had self-responded. In addition to the ACT Bushfire Service crews, two NSW taskforces were deployed to Tidbinbilla at some time between 2.30 and 3.00 pm.<sup>1428</sup> At about 4.30 pm a request was made for a Fire Brigade ‘strike team’ to assist with those crews already at Tidbinbilla. This request was immediately granted by Commissioner Bennett, and an urban pumper, a heavy tanker and a light unit were dispatched to the area, accompanied by ‘a district officer from

headquarters to take command of that strike team and to establish liaison with the Bushfire Service incident commander on the scene'.<sup>1429</sup>

Crews attempted to protect property at Tidbinbilla throughout the afternoon, however Mr McNamara's evidence was that 'confusion reigned' at this time, with most firefighting personnel unfamiliar with the area, no clearly defined strategy, and a lack of central coordination of the NSW and ACT crews.<sup>1430</sup> In this regard, Mr Kevin Cooper (heading the NSW taskforces) described there being 'a bit of disagreement between a couple of the [NSW] task forces and some of the ACT people about how to deal with the spot fires'.<sup>1431</sup> During the afternoon, water bombing support was also provided by Navy Sea King helicopters (that had been provided through Emergency Management Australia), however communications problems meant that the Navy pilots were unable to communicate with ground crews, and so were forced to work largely independently. Eventually a civilian pilot contacted the Navy pilots, creating a communications channel to facilitate more effective coordination with the ground crews.<sup>1432</sup>

Numerous witnesses reported observing extreme fire behaviour that afternoon and evening. Observing from a helicopter that afternoon, Mr McNamara described watching the approach of a 'canopy fire' of enormous size that was throwing spot fires 3 to 4 kilometres in front of itself.<sup>1433</sup> Ms Vivien Raffaele said that she saw some 'very incredible fire behaviour' that night of a kind that she never seen before, and said that the fire front 'continued to crown all the way through. It was 20, 30 metres above the tree tops at times'.<sup>1434</sup>

At around 7.00 pm, Mr McNamara reported back to ComCen on the situation they were facing, and told Mr Gore (the overnight operations officer) that the fires were 'basically unstoppable in terms of reaching Mt Tennant'.<sup>1435</sup>

When Mr Murphy arrived at Tidbinbilla that evening to take charge as the evening shift incident controller, he described the situation as 'very hectic', with large numbers of firefighters, property owners, media and others present, to the extent that it was 'like going to a pop concert'. He organised the NSW and ACT crews to work cohesively on property protection<sup>1436</sup>, and set up a field incident management team staffed with senior officers. It appears that this IMT functioned well under Mr Murphy's command, and property protection continued in a more coordinated manner throughout the night.<sup>1437</sup> Mr Kevin Cooper agreed that the problems that had arisen earlier in coordinating ACT and NSW crews were effectively resolved under Mr Murphy's command.<sup>1438</sup>

Mr Gore, the operations officer at Curtin that night, said in his evidence that the primary firefighting activity that occurred that night was in the Tidbinbilla Valley, and that he was aware that Mr Murphy was the field incident controller at that location. He said that he and Mr Murphy contacted each other 'probably hourly', but that Mr Gore had confidence in what Mr Murphy was doing, and it appears that Mr Murphy was managing the operation entirely from Tidbinbilla, without SMT support.<sup>1439</sup>

### ***Property protection at Tharwa***

By the evening of 17 January it was clear that Tharwa was under threat from the rapidly moving fire front, and this was reported by Mr McNamara to Mr Gore at ComCen.<sup>1440</sup>

Mr Val Jeffery gave evidence that residents had been preparing Tharwa village for a potential fire impact over the preceding three days. Therefore when two police officers came to evacuate the village that night, Mr Jeffery explained to them that evacuation was undesirable because the

people still there were prepared and were needed to save the village. He said that he explained to the police that following the planned back-burn the primary danger would be ember attack, and that he ‘needed all these eyes and feet to stamp on these embers as they dropped’. The police concurred and left.<sup>1441</sup>

At approximately 1.00 am Mr Jeffery contacted ComCen to request permission to conduct a back-burn behind Tharwa. Mr Gore passed this request on to Mr Graham, who authorised the back-burn.<sup>1442</sup> The back-burn was about a kilometre long and 300 metres deep, and was successfully conducted with the assistance of ACT Fire Brigade crews that had been redeployed from Tidbinbilla to assist, under the command of Mr Peter Cartwright.

The village of Tharwa was saved.

#### ***Property protection at Corin ski resort***

On the evening of 17 January Mr Dennis Gray was tasked to take all available Parks units to undertake property protection at the Corin ski resort, that was then under threat from the rapidly approaching fire front. He and his crews were successful in saving the resort, fighting the fires until between 4.00 am and 5.00 am on 18 January.<sup>1443</sup>

#### **5.13.19 Overnight developments at the McIntyres Hut fire**

Shortly before handing over to Mr Graham at 6.30 am on 18 January, Mr Gore had received an update from someone within the NSW Rural Fire Service concerning the McIntyres Hut fire:

At that time the status report from New South Wales was that, whilst there had been spotting over at Mountain Creek Road, McIntyre’s Hut was under control and behind containment lines and there had been no additional request for ACT resources throughout that night.<sup>1444</sup>

Mr Gore’s recollection was that he received that status report from New South Wales at around 5.00 am on 18 January, but he could not recall who he spoke to.<sup>1445</sup>

### **5.14 18 January 2003**

#### **5.14.1 Mr Lucas-Smith’s threat assessment**

When Mr Lucas-Smith commenced work at ESB at 5.00 am on 18 January, he was informed of the fire status, and in particular, of the property protection undertaken overnight in the Tidbinbilla and Naas valleys, and at Tharwa. In his evidence he said that the McIntyres Hut fire regained prominence in his thinking on the morning of 18 January, when he learnt at around 6.30 am that a break-out from the north-east corner of that fire was heading across the ACT border.

Mr Lucas-Smith said that by 7.30 am, he knew in his ‘heart of hearts’ that whatever was done, it was ‘inevitable’ that the fire would burn into Canberra.<sup>1446</sup> However, Mr Lucas-Smith said that at the time he formed the view that an impact on the urban area was inevitable, he had not clearly formulated a time in his own mind as to when that impact was likely to happen, nor as to what the extent of that impact might be. He also said that he was still being guided by the predictions

provided by the Planning Unit the night before, namely that the fires could reach the Stromlo pine plantation by 8.00 pm, at approximately the same time as the predicted weather change that would bring about a reduction in fire activity.<sup>1447</sup> Mr Lucas-Smith reiterated that he recognised on the morning of 18 January that fire conditions were conducive to very rapid fire spread that day, but that there was a long distance between the Uriarra plantations and the urban edge of Canberra, and that being aware of the predictions from the night before concerning fire spread, he felt that ESB should continue to focus its efforts on property protection in the south:

It is one thing to know that the potential exists for an impact on the urban edge, whether it be from the fire escaped from Bendora or whether it be from the fires that are now entering the ACT from McIntyre's. I think it is another thing to know as to when, where and in what form that sort of impact was going to take.<sup>1448</sup>

When later asked to clarify whether his state of belief was that it was ‘inevitable’ that the fire would impact on urban edge of Canberra, Mr Lucas-Smith said that he regretted using the term ‘inevitable’, and that he would prefer to say that he was aware that ‘the possibility certainly existed that the interface would be affected’, and that he recognised this ‘potential’ by the morning of 18 January:

... from what I can recollect, at about 6.30 we got a report that the McIntyre's Hut had crossed the border into the ACT, into the Uriarra Pine Plantation. That then meant that our firefighting capabilities in the south were going to be stretched. Whether that impact occurred in the south from the Bendora fire or the McIntyre fire, I thought that the possibility certainly existed that the interface would be affected.<sup>1449</sup>

Mr Lucas-Smith accepted that in his previous evidence he had used the word ‘inevitable’ but countered, ‘I said the word inevitable ... Obviously sitting here you are under pressure, I said the word and I will have to live by that word for the rest of my days. But within my “heart of hearts”, to use your terms, the inevitability was not there but the potential certainly was’.<sup>1450</sup> Mr Lucas-Smith was pressed on whether he was now saying that at about 7.30 am on 18 January he did not see it as ‘inevitable’ that some effect would occur to the urban edge, but there was simply some potential for it to happen, to which he responded, ‘I saw the potential, and I will stick with my words. I thought that eventually it would be inevitable’.<sup>1451</sup>

### 5.14.2 Morning media

#### *Mr Castle’s morning media interviews*

The ABC’s Natalie Larkins noted in her statement that when she started work at 9.00 am on Friday 17 January, she knew she had the responsibility of ensuring there were local news broadcasts before midday on Saturday and Sunday. She said that she believed ‘that the bushfires would feature prominently in the news over the weekend’, and so on Friday she went to great lengths to arrange an interview with either Mr Lucas-Smith or Mr Castle to take place at 6.00 am or thereabouts on Saturday 18 January. She intended the focus of the interview to be the progress of the fires overnight, any overnight damage and the potential for property damage to the rural areas of the ACT.

Shortly after 6.00 am on 18 January, Mr Castle participated in a phone interview with Ms Larkins.<sup>1452</sup> Mr Castle was still at home when the interview took place<sup>1453</sup>, but before commencing the interview he had spoken to either Mr Gore or Mr Graham at Operations at Curtin.<sup>1454</sup> Ms Larkins described in her statement that:

During this interview we discussed the fact that the fires at Bendora and Stockyard Spur had broken their containment lines overnight and crews were battling spot fires from the McIntyre's Hut fire. He also discussed the fact that the fires had travelled down Corin Dam Road and had burned three support buildings at the tourist facility. He stated that the buildings had been damaged. He didn't elaborate whether they had been destroyed. We then discussed the fact that 45 residents in the Tidbinbilla area had been placed on alert. He was emphatic but the people hadn't been evacuated, merely warned. We covered road closures and that people should stay east of the Murrumbidgee River ... We discussed weather conditions. He admitted the conditions were awful and were placing pressure on all fronts. We spoke about how the fires had broken their containment lines and were expected to join up. He was referring to the Bendora and Stockyard Spur fires. He didn't elaborate on when or where they were expected to join ... We spoke of the possibility of the fires entering the Uriarra pine forest. At that stage they hadn't entered the pine plantations. He stated that the smoke was so thick they couldn't see the spot fires ... We briefly discussed the McIntyre's Hut fire. He indicated that they'd only focus on that fire once it came into the ACT. I have some notes that would indicate I asked whether the fire was likely to enter Canberra. I don't recall the specifics but he responded that he appreciated community concerns, but gave no indication that there was any risk to Canberra.<sup>1455</sup>

Mr Castle could recall very little of his conversation with Ms Larkins, and did not remember being asked about or otherwise discussing risks to Canberra. Mr Castle thought his state of mind at the time would have been that there was 'still no immediate threat to Canberra', and that he could have said something like that to her, but that he could not remember doing so.<sup>1456</sup> In her evidence, Ms Larkins was confident that the question she would have asked was 'whether people should be concerned of any risk to Canberra'. She said that, while she could not recall Mr Castle saying that there was no risk to Canberra, she believed 'had he said to me that there was any risk to Canberra, that would have been the story that I would have written. So the indication would be that, from everything I was told, there was no risk to Canberra'.<sup>1457</sup>

At the end of her interview with Mr Castle, Ms Larkins suggested he contact ABC 666 direct and do a live on-air interview. She stated, 'Mike Castle subsequently participated in a live interview that went to air at 7.30 am. This interview largely covered the same information he had given me. In summary he gave the impression that there was no threat east of the Murrumbidgee River'.<sup>1458</sup>

In the on-air interview, after describing events overnight including minor property losses, Mr Castle was asked whether more property losses were expected that day. The interview continued:

Castle: What we're expecting, of course, is not necessarily property damage.

Interviewer: No.

Castle: It does then depend on, in some respects, first of all, in the rural areas, how people have actually prepared around their immediate property, people that live in the rural environment do have expertise and understand that they live in that sort of an environment, and, as I have explained to some people it's—the individual property threats is some way similar to what could happen if it started on their particular property, but of course, with our resources stretched, the precautions that they will have taken around their immediate home will assist in actually surviving that fire.

Interviewer: Right. Which are the greatest areas of concern at this point, Mike?

Castle: The ones that are probably closest out in the ranges would be the Paddys River Road area, which is the road that turns in a great arc around from Tharwa, west and then around near Paddy's River, and comes back in through the top of Cotter and—

Interviewer: Right, and are you asking people to prepare for evacuation?

Castle: Really, it is their decision in the first instance, Peter Lucas-Smith said yesterday, the preparation that people can do around their home actually assists. Properties have best chance of success if people stay with their property, however, they need to be confident that they can actually deal with that sort of approach and trauma of having the bushfire come right up to them. Now, some rural people do have that experience and confidence, and, if they've done preparations around their home then having a hose sort of that can put out ember attack, because properties are generally not threatened by the immediate fire front, but from ember attack that gets under eaves, under houses and can then cause ... the property damage, so, if they're able on-site to extinguish those quickly with a hose that can reach to all components, then that's a greater chance of survival.

Interviewer: With forecast north-west to westerly winds today, turning the fire back towards the city, what will be your main strategy today Mike Castle?

Castle: Our main strategy is to look at property protection, position our resources where we think they can do the maximum protection, we would ask people to basically stay east of the Murrumbidgee River, that is out of, really, the areas, the rural areas, and only need to go into those areas if—really, if they're residents and need to access their property ...<sup>1459</sup>

Mr Castle believed that he was still at home at the time of the on-air interview, and so he had not spoken to Mr Lucas-Smith at any stage during the morning prior to that interview.<sup>1460</sup> In his evidence, Mr Castle denied stating during the live interview that there was 'no threat' to Canberra, and believed that he said that people should stay east of the Murrumbidgee. The interview transcript above is consistent with his recollection. However, he agreed that he did not mention that there was a threat east of the Murrumbidgee.<sup>1461</sup> Mr Castle also confirmed in his evidence that he did not have any expectation at that time on the morning of 18 January that there would be any more property damage. In referring to the experience of people in rural areas, Mr Castle considered that he was saying that rural people have a greater understanding of the threat because they live with it every day. In contrast, he suggested that urban residents 'live with it, but they don't live with it every day'. Mr Castle agreed that he could not have the same degree of confidence that people in urban areas had the experience and had done preparation around their homes.<sup>1462</sup>

Mr Castle confirmed that while he mentioned Paddy's River Road as one of the areas of greatest concern, he did not mention the forestry settlements at Uriarra. He did not have a sense at the time that those settlements were under any threat, and he said that it surprised him that, given the fire was in the Uriarra pines, someone had not told him the Uriarra forestry settlements were an area of significant exposure. Mr Castle did not mention areas such as the Stromlo pine forest and the Stromlo Observatory because his understanding was that, 'there was likely to be success' in stopping the fires when they entered the grasslands between the forests and those assets. However, Mr Castle said that he did not know what strategies were in place at that time to try and stop the fire from crossing the grasslands area.<sup>1463</sup>

The effect of the information outlined above on the state of preparedness of Canberra residents, as conveyed to the media by Mr Castle on the morning of 18 January 2003, is discussed in Chapter 7.

### ***The Canberra Times article***

On the morning of 18 January, the headline across the entire front page of the *Canberra Times* read ‘Bushfires break through’. The article, written by Megan Doherty, included the following:

Fires have escaped containment lines in the ACT and are running out of control, with rural properties along the Namadgi National Park now at risk in the continuing ferocious conditions ...

Firefighters were last night battling to protect rangers’ homes in the Tidbinbilla Nature Reserve as all three fires in the Namadgi National Park were spreading out of control. The \$40 million Uriarra pine plantation in the ACT was last night vulnerable to a spot fire burning 2km away, which had escaped from containment lines around the McIntyre’s Hut fire in NSW. The flames were last night about 12km from the outskirts of Canberra ...

Wind gusts up to 65 km/h and on-the-ground temperatures in the mid-40s created hellish conditions yesterday that forced firefighters to be called off the Stockyard Spur, McIntyre’s Hut and Bendora fires for their own safety. There appears to be no respite in sight with fire authorities facing a top temperature today of 38 degrees, wind up to 35km/h and no chance of rain ...

Emergency Services Bureau executive director Mike Castle said last night the situation was serious, as efforts turned from trying to control the fires to protecting property. ‘It’s the worst conditions we’ve ever had,’ he said.<sup>1464</sup>

#### **5.14.3 The 8.00 am evacuation planning meeting**

Sergeant Kirby of the Australian Federal Police had been contacted in the evening of 17 January by Superintendent Prince of the ACT Fire Brigade, and advised that the weather conditions were still deteriorating and that a meeting would be held at ESB on the morning of 18 January to discuss various aspects of the emergency services response and recovery. Sergeant Kirby arrived at the ESB at 7.40 am on 18 January, where he received a briefing from Superintendent Prince concerning the deterioration of conditions and the escalation of the fires. Superintendent Prince advised Sergeant Kirby ‘that the fires were now predicted to arrive at Duffy by 18:00’.<sup>1465</sup> Superintendent Prince said that in the course of their discussion, he showed Sergeant Kirby a map illustrating the Planning Unit’s fire path analysis for 18 January that had been prepared the previous evening after the planning meeting, and given to Superintendent Prince by Mr Gellie. According to Superintendent Prince, ‘It was a green bushfire topographic map. It had brown texta with onion rings on it. That particular map being produced after 8 o’clock at night was showing it hitting the urban area at about 18:00’.<sup>1466</sup>

Sergeant Kirby agreed that Superintendent Prince showed him a topographic map as described by Superintendent Prince: ‘It showed where the fires were and predictions of where the spread might go ... It was the first time I had heard in fact that the fires could progress two hours in advance of what was considered the day before’.<sup>1467</sup>

Ms Harvey had prepared an agenda for the evacuation planning meeting the previous evening.<sup>1468</sup> The agenda items included: ‘Background on the current situation’ and ‘Evacuations—how are they run and what is already on standby’. Under the heading ‘Public information strategy’, the agenda identified ‘Key aims’ as ‘Alerting the community to heightened risk’ and ‘Alerting the community to immediate evacuation’. The communications mechanisms identified were: ‘Door knocks/telephone, media, call centre, internet’.

Present at the evacuation planning meeting that commenced at 8.00 am were Ms Harvey, Mr McRae, Sergeant Kirby, Superintendent Prince, Mr Tonkin, Ms Lucy Bitmead, Mr Manikis, Ms Wheatley, Ms Cathy Atkins, Ms Barbara Baikie and a number of other people largely from Ms Baikie’s community services area.<sup>1469</sup> There is some uncertainty as to whether or not Mr Keady was present at the meeting. Although Superintendent Prince thought that Mr Keady attended<sup>1470</sup>, Mr Keady did not think he was present<sup>1471</sup>, and Ms Wheatley did not identify him as an attendee in her statement.<sup>1472</sup> Superintendent Prince said that ‘Mr Tonkin and Mr Keady were semi out of the room and having a discussion out of the room and also trying to listen inside’.<sup>1473</sup> Similarly, Sergeant Kirby described the meeting as ‘almost split in two in terms of there was one group sitting within a very, very small meeting room or kitchenette type room, and then I think myself and Superintendent Prince, Tim Keady, Mr Tonkin—we sort of were talking outside the meeting … subsequently I did go inside the meeting’.<sup>1474</sup> There was no one chairing the meeting.

Both Superintendent Prince and Mr McRae addressed the meeting. In his evidence, Superintendent Prince said that he put the map that he had been given by Mr Gellie on the wall and ‘just gave them an update of the possibility of when the fire may, and this was worst case scenario, may hit the urban interface’. According to Superintendent Prince, the predicted time of potential impact was ‘the same opinion I had from the night before—1800’.<sup>1475</sup> Sergeant Kirby confirmed that Superintendent Prince’s presentation included reference to the map that he had shown him earlier, and recalled that Superintendent Prince was talking about the main threat coming from the McIntyres Hut fire:

Again, I think he was basically re-affirming for all people in the room what we had received the previous day at 6 o’clock in that if fire lines were broken and had got into Stromlo forest, Mr Lucas-Smith had said it wouldn’t be fought; it was too dangerous obviously to do that; and the fire would basically come through unchecked from there. I think that’s the general text of what he was saying.<sup>1476</sup>

Sergeant Kirby also gave evidence that Superintendent Prince mentioned the likely timing of impact.<sup>1477</sup>

Ms Wheatley appeared to have the clearest recollection of the presentation to the meeting by Superintendent Prince and Mr McRae:

David Prince and Rick McRae gave an overview on the current fire situation. There were updated planning maps on current fire conditions and operations. We were told the operations base had been moved to North Curtin oval. At this time we were preparing for any possible role, not necessarily evacuation, but it might have been personal support, information via a hot line, or the like. We were told, by David Prince and Rick McRae, that the major concern at the time was McIntyre’s fire, and the potential for it to push into the forest area. Of concern were Stromlo forest and the possibility of Woden West, Duffy, Holder and the Belconnen suburbs of Dunlop, Holt, Higgins and McGregor.<sup>1478</sup>

Ms Wheatley's notes taken at the meeting include reference to: 'McIntyre major concern, push through forests. Stromlo concern—Woden/Weston, Duffy, Holder. Dunlop/Holt/Higgins, McGregor'.<sup>1479</sup> Similarly, Ms Harvey's notes of the meeting also include reference to: 'Duffy, Rivett, Holder don't go west of Murrumbidgee',<sup>1480</sup> although Ms Harvey could not recall any discussion that took place that led to her making those notes.<sup>1481</sup>

According to Ms Wheatley, there was no mention of the timing of the risk to the areas that were identified as being at risk, and she could not recall whether there was any mention of the level of risk. However, she said in her statement, 'I do recall information was provided, that whilst there was a concern, the fire fighters were confident. There was comment that coming out of the forest you have the grassland verge and fire can be attacked differently in that area and it can be contained coming out of the forest at that grassland verge'.<sup>1482</sup>

In her evidence, she confirmed that 'there was confidence that the fire could be contained within that grassland verge' between the forests and the suburbs identified as being at risk.<sup>1483</sup>

Asked whether there was any discussion during the meeting about what, if anything, should be done to warn the residents in the areas that were identified in her notes, Ms Wheatley said, 'There was some discussion that the Canberra Connect website was up and running providing information to the public on the current fire status. Apart from that, I don't recall any other discussion'. Mr Tonkin agreed that Ms Wheatley's recollection of the meeting was a 'good recollection'.<sup>1484</sup>

Ms Harvey, who had organised the meeting with the assistance of Superintendent Prince and Ms Wheatley, said that although the meeting was referred to as an 'evacuation planning meeting', as the Agenda suggested, it was a meeting that was also concerned with the broader issue of community warnings and matters related to 'public communication and evacuations, the recovery centres and those sorts of things'. She explained that during the meeting 'there was a lot of conversation about how we use Canberra Connect and how we would increase the statements, the information going out to the media and to Canberra Connect'.<sup>1485</sup>

The evidence of Superintendent Prince accords with that of Ms Harvey, in that he said that he understood that the purpose of the meeting was to prepare Canberra Connect to take calls from the public and inform the public about the fires: 'The sole purpose of the meeting was to set up Canberra Connect and have it ready as an interface with the public with their Canberra Connect call centre and also having information available on the net'.<sup>1486</sup>

Similarly, Sergeant Kirby said that the purpose of the meeting was 'to look at the information flow in relation to evacuation protocols, looking at Canberra Connect, possible door knocks. Again, mainly to do with the information flow in relation to possible evacuations'.<sup>1487</sup>

In a similar vein, Mr Tonkin thought the purpose of the meeting was to:

inform the people involved in the community recovery aspects of how things were to happen and to set up arrangements whereby we could ensure the information was flowing both to those people and through Canberra Connect, through the web and through the call centre, to make sure that we had current information available to give out to the public through all means that we had. So it was a general coordination interest. We set up a mechanism to ensure that that happened on a regular basis.<sup>1488</sup>

Mr Tonkin said that there was no discussion at the meeting of the issuing of warnings to the Canberra public but that the meeting was 'setting up processes to have in place so you can make

sure that current information is available as the day progresses and as situations change ... My presumption was that a warning would be given when there was a perceived threat to those suburbs as distinct from a potential threat'.<sup>1489</sup>

Mr Tonkin said that, in contrast to a 'potential threat', by a 'perceived threat' he meant 'more likely to happen'. He said that at the time of the meeting, the threat to the identified suburbs of Canberra was described only as a 'possibility', and that the fires were not presented 'as being a direct threat to those suburbs'. Accordingly, it appeared to Mr Tonkin that the level of risk to suburbs identified as under threat at 8.00 am that morning did not at that time require warnings to be issued to residents. He said he was relying on 'the professional advice of the firefighting services' as to when the level of risk would be reached that would require warnings to be issued, and in this regard his evidence was that 'we already had in place an arrangement for hourly updates of information, which took into account if the situation changed advice to the public could be provided'.<sup>1490</sup> Mr Tonkin could not recall much discussion at the meeting regarding evacuations.<sup>1491</sup>

According to Superintendent Prince, any strategy concerning the use of the media or television, 'would have been left with the information unit and the media unit with Marika Harvey working closely with Mr Castle and Mr Lucas-Smith'.<sup>1492</sup> However, Ms Harvey gave evidence that although a key purpose of the meeting was to set up arrangements to ensure an effective flow of current information regarding the fires to the community, she had 'grave concerns about our ability to continue to get updated information out; I raised those concerns in the meeting'. Her concern was whether it would be possible to obtain the necessary information and then have it approved by appropriate persons in a manner that would allow for timely and effective dissemination:

We had already found, you know, in the days leading up to the Saturday that it was a difficult process getting up-to-date information or confirmations of questions that the media asked, because the fires in the week leading up to the 18th were in quite remote areas and it was very difficult to say where the fires were at any given point. It was also very difficult sometimes for us just to get people who were very busy to be able to give us time when we needed it to update the media statements ... Sometimes we struggled to get two updates out a day and the process that was being proposed at the meeting at 8.00 am that morning was that we were going to do a written statement every hour. And what I had concerns about was that we would never be able to get information fast enough to be able to update something like that every hour, and that the approval processes that I recollect being proposed were going to take up quite a lot of time, with not a huge amount of benefit that I could see.

Ms Harvey's recollection was that, assuming they had the information, they were going to issue it to the media and to Canberra Connect, who would be placing that up on the website and giving it to the call centre operators.<sup>1493</sup>

Superintendent Prince's recollection was that when Mr McRae addressed the meeting, he expressed concern regarding the fire weather, and warned that everybody should understand that the fire could do erratic things that day.<sup>1494</sup> In his statement, Mr McRae said that on the morning of 18 January 'I informed the Media Unit that there was presently no immediate risk to assets or personnel east of the Murrumbidgee River, but that as the day progressed this might change, and that they should be prepared for that eventuality'.<sup>1495</sup> Mr McRae made no reference in his statement to attending the evacuation planning meeting, and was not asked questions about it during his evidence.

#### **5.14.4 The morning reconnaissance flight**

Mr Bartlett was appointed as the field incident controller on 18 January.<sup>1496</sup> At 6.43 am he commenced a reconnaissance flight over the fires, with Mr Jim Norrie piloting *Firebird 7*. Mr Bartlett first observed that ‘the McIntyre’s Hut fire had already spread from its north-eastern perimeters and was burning in the top end of the Uriarra pine plantations in young pines (GR 710958) on the NSW–ACT border and fire was crowning in the eucalypt forest on the hill to the east of the pines’. In relation to the Bendorra fire, Mr Bartlett observed:

The Bendorra fire had burnt out to the private property near the Tidbinbilla Visitor Centre. On the north-eastern side of this fire there was fire in the native forest south of Black Spring mountain (GR 736833) and in the upper Oakey Creek portion of Pierces Creek plantation. A control line had been constructed where the fire had actually already burnt onto private land just to the west of Tanners Flat Creek and the Congwarra homestead. Near ‘Nil Desperandum’ the fire edge was burning back up through the Pierces Creek plantation in a NW/SE direction to Camel Back trail at GR 728798. The fire was uncontained in the national park and plantation, with very active fire in eucalypt forest at GR 736792 ... There were limited options for control in forested areas due to the fire activity ... it was evident that the Bendorra fire had made a run on Friday afternoon and night in a south-westerly direction with a front of about 4 km width. There was a spot fire in Tidbinbilla Nature reserve to the east of the dams that had largely been contained overnight ...

With respect to the Stockyard fire, Mr Bartlett said that smoke obscured his view in some areas, but that he could observe sufficiently to map the boundary of the fire from the Cotter River just north of the Corin Dam to Mount Tennant, and observed that:

The northern boundary of the fire passed just south of Billy Billy Rocks, through the southern end of the Gibraltar Pines including Corin Ski Resort (not visible in smoke), across Georges Creek and down the northern slopes of Mt Tennant. The eastern most point of the fire on Mt Tennant was at GR 867643. It was uncontained fire burning quite actively down slope on the eastern side of Mt Tennant, then the fire edge continued in a south-westerly arc around Honeysuckle Creek at GR 836614. From this I was able to determine that the Stockyard fire had made a run of 20 km overnight with a front of at least 4 km in width.

After about an hour in the air, the amount of smoke from the fires was obscuring visibility and making flight conditions hazardous. With *Firebird 7* needing to refuel in any event, Mr Bartlett returned to ESB. He said that:

As I was supposed to be the Incident Controller for that day, this aerial reconnaissance would be invaluable from a strategic point of view in determining strategies for the day. I returned to Curtin at about 0830 hours and passed my fire boundary information to the Planning Section ... To the best of my knowledge, that was the only strategic information they received that morning.<sup>1497</sup>

#### **5.14.5 Initial operational planning**

Mr Bartlett said that, in addition to providing current fire information to Planning, the other reason he returned to Curtin immediately after his reconnaissance flight was for the purpose of ‘having discussed strategic directions with the Service Management Team, to then go out and communicate those agreed goals, objectives and strategies to the crews in the field’.<sup>1498</sup> To this

end, at 8.50 am Mr Bartlett met with Mr Graham, briefing him on what he had observed that morning.

Mr Bartlett's evidence was that having observed during his reconnaissance flight the three uncontained areas of wildfire in the ACT, he was concerned that there was no possibility of establishing control lines that day, and no way of knowing if and when each fire would make a run, and if they did make a run, in precisely what direction and how far that run would be. Mr Bartlett said that in formulating strategy for that day, he was influenced by the fact that 'the fires had made quite different runs the previous afternoon under theoretically similar weather conditions'.<sup>1499</sup>

According to Mr Bartlett, Mr Graham advised him that the 'priority for the day was for the protection of life and property assets, particularly in rural areas to the east of the Murrumbidgee Corridor from the Molonglo River area down to the Naas Valley'.<sup>1500</sup> Mr Bartlett noted that he was not given an incident action plan.<sup>1501</sup>

Mr Bartlett agreed with Mr Graham that it would not be safe to attempt construction of containment lines in the forest during the day, and said they agreed that potentially affected areas would be divided into 10 sectors, with crews working on property protection from sector to sector as the fire developed. The ten sectors identified were:

Sector 1: Cotter Road east of the Murrumbidgee to Kambah Pool Rd around suburbs

Sector 2: Paddys River Rd north of Tidbinbilla Tracking Station

Section 3: Tidbinbilla Nature Reserve Valley

Section 4: Paddys River Rd from Miowera Pines to Tidbinbilla Tracking Station

Sector 5: Tharwa, Tidbinbilla Rd and Booroomba Rd west of Murrumbidgee River

Sector 6: Naas Valley and Boboyon Road valley

Sector 7: Ingledene and Smiths Rd (NSW) west of Murrumbidgee River

Sector 8: Uriarra and Brindabella Rds West of Murrumbidgee River

Sector 9: Uriarra Rd between the Molonglo and Murrumbidgee [sic] Rivers

Sector 10: East of Molonglo, Holt, William Hovell Dr to Coppins Crossing<sup>1502</sup>

Notably, the western edge of Canberra was not identified as a sector potentially threatened by the fires at this time.

Mr Bartlett was told by Mr Graham what resources had been allocated to the various sectors. Mr Graham also noted in his statement, 'all firefighting resources were either tasked to sectors or were staged at strategic locations around the ACT for rapid deployment'. Mr Graham said that he advised operations officers that sector leaders were to be briefed to make contact with landholders within their sectors to determine risk and to engage their cooperation.<sup>1503</sup>

With the sectors under threat spread over 30 kilometres, Mr Bartlett considered that three self-contained firefighting divisions would be required that day, identified as the Northern, Central and Southern divisions:

Given what I had seen from the air, the most effective control structure to deal with the potential situation was to appoint 3 competent Operations Officers to command the units on each Division and for me as Incident Controller to operate from Firebird 7 over the three Divisions and to return to HQ as appropriate to interact with other SMT members.<sup>1504</sup>

In evidence, Mr Bartlett said that he wanted to ensure that each Division had a senior officer in command, because he was concerned that otherwise crews could be trapped without a senior officer commanding them if the fires made runs that cut them off. Mr Bartlett said that despite being in *Firebird 7*, ‘I wasn’t convinced that I could be in every place at every point in time to give them the command instructions that they might need’.<sup>1505</sup>

This evidence of Mr Graham and Mr Bartlett in relation to operational plans and objectives formulated on the morning of 18 January accords with that of Mr Lucas-Smith, who summarised in his statement the position taken following Mr Bartlett’s reconnaissance flight:

I decided in consultation with the Operations Officer, Tony Graham, that the fires to the west and south of the ACT would be treated as a single incident with one Incident Controller, and the fire would be divided into three sectors with an Officer assigned to each sector. Each sector was tasked with having their crews make contact with the landholders within their sector and advising them of the current situation, determining any risks on the rural properties and engaging the rural lessee’s cooperation. The objective at this time was to ensure the protection of life and property.<sup>1506</sup>

#### **5.14.6 The morning planning meeting**

Some 30 to 40 people attended the planning meeting on the morning of 18 January. The meeting commenced at 9.30 am with a report on fire operations, including a report on the status of the fires by Mr Bartlett. The minutes of the planning meeting record that:

Peter Lucas-Smith (PLS) stated that we need to take stock of where we are currently, and to ensure that any decisions that are made are based on accurate information.

Tony Graham (TG) reported that fire has surrounded Mt Tennant to the south, west of Naas Road and into the Tidbinbilla Visitors Centre.

The focus today is to sectorise the Tidbinbilla Valley and Uriarra area and to allocate appropriate resources to concentrate on property protection.

#### **NSW Fires**

There are reports of this fire spreading into the north of the ACT. There is also a report that the north west corner of the fire has crossed the Goodradigbee River into the pines.

There is also a concern that the south of the Broken Cart Tumut fire is heading towards the ACT.<sup>1507</sup>

According to the minutes of the meeting:

Tony Bartlett advised that he conducted a 1 hour air reconnaissance this morning at 0630. He reported that there are 3 fires affecting the ACT. McIntyre’s Fire has a tongue spreading east, crossing the border into the ACT and impacting on the top tip of the pine plantation. The Bendorra Fire has spread into the Tidbinbilla Valley, over Black

Springs Mountain and is presently active in the pines. The fire is still active to the north of Camel's Hump. The spot fire into Tidbinbilla Nature Reserve has not [sic] active fire. The Stockyard Fire has a long tongue extending into Naas and Tharwa.<sup>1508</sup>

According to Mr Bartlett, after providing a summary to the meeting what he had observed in his reconnaissance flight that morning, 'I indicated that each of these fires had the potential to make significant runs during the day ...'<sup>1509</sup>

The briefing from the Bureau of Meteorology was provided that morning by Mr Davis. The typed minutes of the meeting record Mr Davis' forecast for that day as follows:

The temperature at 08:00 hours this morning at Canberra Airport was 29° with the potential for 40° today. This afternoon expected wind speeds of 35–40kms gusting 55–60 on the ridges. The expected upper fire ground temperature is 31°, with a dew point of 3°. A south-east change may be expected this evening at 21.00 hours at the fire ground, with 25–40km winds. Winds easing overnight to 10–20kms with an increase in dew point.

This minute is broadly consistent with Mr Davis' evidence, based on his briefing notes.<sup>1510</sup>

The minutes then record a discussion of 'Planning considerations' that included the following points:

There is significant potential for long distance spotting today. Watchouts much [sic] be read and implemented and safety procedures followed. There is a need for wind change updates, due to the potential for parts of the left flanks to become head fires. Determine accurate fire location, assets, property and fire resources at risk. Prioritise and determine action strategies.

Current areas of concern include:

- a potential run from McIntyre's fire impacting on Weston Creek to Greenway and potential west and south Belconnen resulting from a more westerly wind;
- a potential run from Tidbinbilla impacting on the Bullen Range and southern parts of Tuggeranong;
- a potential threat from the Stockyard Fire to the west of the Murrumbidgee River to Williamsdale.

Ensure there is an active link between Operations and Planning. [original emphasis]

The minutes also refer to Ms Baikie outlining the community recovery strategy including identifying evacuation centres, the involvement of Life Line and the Red Cross and a liaison offer being located at Curtin and an evacuation team located at Winchester Police Centre. The final bullet point under the heading 'Planning considerations' is 'Communications and information flow between POC, ESB and NSW is considered critical'.

The last item in the minutes is the media item, with the matters discussed recorded as follows:

- Mike Castle to determine regular radio interview times.
- Press Conference at 12 noon.
- A community advice and information strategy is being developed.

- Canberra Connect is developing scripts and key answers for community questions;
- Review of Canberra Connect operating hours being undertaken;
- Processes for quick information sharing are being developed;
- Focus placed on local radio.<sup>1511</sup>

In the handwritten notes of the planning meeting taken by Ms Ferry, the reference to the risk to the suburban areas is recorded as follows: ‘High levels of exposure—poten from run from McI SE W-Creek to Greenway. More W-W Belconnen and South Belcon—WH drive. W from Tid → Sth parts of Tugg. Ops + planning link paramount. U under threat 1200 Cotter 1500 W side of Mt Str 1800? W winds = smoke across CBR’.<sup>1512</sup>

Although the phrase ‘high levels of exposure’ recorded in Ms Ferry’s notes of the meeting is not recorded in the Minutes, Ms Ferry was confident that the phrase was actually used at the planning meeting.<sup>1513</sup> Ms Harvey had a note from the planning meeting that said: ‘Urban edge exposures—McIntyre major run, Weston Creek, Greenway, West Belconnen, Southern Belconnen, Southern Tuggeranong, Pearce’s Creek Settlement’. However, she did not recall those places being identified in the course of the meeting as areas exposed to risk, or indeed, any details of the meeting.<sup>1514</sup>

In his statement, Mr Bartlett attributed to himself the remarks made at the planning meeting concerning the potential for the fires to impact on the Canberra urban area, as recorded in the minutes under ‘Current areas of concern’. After referring to his aerial reconnaissance and describing that he went to the planning meeting ‘already with little doubt in my mind that there was great potential for the northern and central fires to impact on the suburbs of Canberra’, he continued:

I recall expressing my views about the potential for fires to burn to the edge of Canberra during the day. I indicated that the McIntyre’s fire could make a run to the urban interface from Weston Creek to Greenway and possibly even affect western south Belconnen if the wind was more westerly than forecast. I also indicated that the fire in the Tidbinbilla Valley could impact on the Bullen Range and then the southern Tuggeranong suburbs. I then expressed a view that the southern-most fire could cross the Murrumbidgee River, impact on Williamsdale and continue into the NSW rural areas around Burra. I do not recall any discussion about communicating the situation to the Canberra community, but I do know that a senior officer from the Police was present in the briefing as was the ESB media liaison officer. I am unaware of any discussions that might have taken place about communications messages following the Planning Meeting ...

The situation officer (Hilton Taylor) indicated that the McIntyre’s fire could reach the top of Mt Stromlo by 17:00 depending on the time it broke out of containment lines.<sup>1515</sup>

In evidence, Mr Bartlett confirmed that there was no dissent from these views expressed by himself and Mr Taylor at the planning meeting.<sup>1516</sup> When cross-examined about his recollection of the events at the planning meeting, Mr Bartlett said that his recollection of having made the comments about the threat to the urban area was quite clear:

After Mr McRae gave some broad information on planning, I recall Mr Lucas-Smith asking a question about what suburbs might come under threat during the day. I believe that I then actually gave those words that are paraphrased in the planning meeting simply on the basis of what I had seen in the helicopter, and then how I had worked out

in my mind and prior to this planning meeting discussed with Tony Graham the operational strategy I wanted to put in place about the distinct possibility of the fire making three particular runs.

So those words in the planning meeting are actually me telling the planning meeting about where I thought each of those runs could get to. The other reason that I am very confident about this—there are two other components: the first one is that I distinctly remember adding the bit about whether the wind was from the north-west or had a slight westerly influence. That was on the basis of my actual experience during the 2001 fire when I was the incident controller. The weather was actually forecast to be a north-westerly wind on that day and turned out to be almost due westerly. So I had that very firmly in mind.

The second part, which is recorded sequentially in those planning meeting minutes, after this discussion about which suburbs would come under threat, I then said that I wanted to establish an operational mechanism between the field people and the planning section to get information to and fro so that new information that the planning section had that was going to be needed to the field people was able to go out; and vice versa, when the field people had new information, it would come back to the planning cell ...

As they said, I was the eyes of ESB. I had been out and flown around; I had a fairly clear indication. I can in fact say with confidence when I got back that I never got to speak to Mr McRae. I spoke to some of his members in his planning unit. I couldn't find Mr McRae that morning. I don't know how he would have come up with the same conclusion if he hadn't had access to the information I had seen from the helicopter.<sup>1517</sup>

Mr Bartlett went on to say that he did not have the capacity to make the predictions regarding the timing of impacts of unattended spread of the fires referred to in the handwritten notes of the planning meeting, namely that the fires would reach Uriarra settlement by 12.00, Cotter by 3.00 pm and possibly the west side of Mt Stromlo by 6.00 pm. Rather, Mr Bartlett remembered those predictions being made by members of the Planning Unit.<sup>1518</sup>

Mr Lucas-Smith directly acknowledged in his statement that 'The possibility of the ACT fires impacting on suburban ACT was discussed at the 09:30 Planning Meeting with the worst case scenario predictions by the Planning Unit being that the fire was likely to be at the west side of Mt Stromlo at about 18:00 hours'. Mr Lucas-Smith then identified in his statement a number of specific issues raised at the planning meeting including that very high to extreme fire weather conditions were expected throughout the day, a wind change from the west was expected at approximately 8.00 pm, that there was potential for long distance spotting throughout the day, and that it was imperative to accurately determine the fire locations, and the assets, property, and fire resources at risk. Mr Lucas-Smith also outlined in his statement the community recovery strategies in place 'in the event of any loss of property (based on the threat already being experienced by rural properties)'.<sup>1519</sup>

Like Mr Lucas-Smith, Mr Graham said in his statement, 'All agencies attending the 09:30 hours planning meeting were advised of the potential for the fires to impact urban ACT. The ACT Fire Brigade agreed to concentrate on intervention and property protection inside the urban area'.<sup>1520</sup> In evidence, Mr Graham accepted, 'There was a discussion at the planning meeting that there was the likelihood of impact into Weston Creek and other areas of the ACT; that I was part of that meeting and so was privy to those discussions'.

Mr Graham said that property protection would be the primary focus of firefighters that day, and that he did not think that anything would be done to attempt to contain the fires as they moved toward Canberra, except for the incidental effects of property protection work around Tidbinbilla Valley and Tharwa. He agreed that water bombing would not have a material affect on the fires under the conditions that day, and that once the fires entered the Uriarra pines there would be nothing to stop them getting into the Stromlo pines, and from there into Duffy. Mr Graham said that although there were no plans to try to prevent the fires from spreading, and that it was therefore ‘likely’ that the impacts referred to in the meeting minutes would occur, in the morning he said that he ‘was still, I guess, having some hope that once the fires left the mountain areas, the forested areas, that there would be some containment’.<sup>1521</sup>

Similarly, Mr Neil Cooper said in his evidence that despite being pessimistic in his outlook, prior to the planning meeting on the morning of 18 January, he had not considered that the Canberra suburbs could be affected by the fires, and that even after that meeting, he still believed that the fires could be contained once they came out of plantations or forests into the grasslands.<sup>1522</sup> Commissioner Bennett did not specifically remember predicted times of fire impact being mentioned at the planning meeting that morning, but said that: ‘It is not that I don’t recall those times being mentioned; I’d heard them a number of times during the last 24 hours’. It was still Commissioner Bennett’s understanding, however, that these times were based on unattended fire spreads as a worst case scenario. However, he also accepted that no firefighters were going to attend the fires if they ran.<sup>1523</sup>

In his statement, Mr McRae referred to the weather forecast from Mr Davis and then stated, ‘I simply stressed the seriousness of the conditions although that was apparent to all concerned. I briefed the planning meeting upon possible outcomes of the fire, but no longer have an independent recollection of what I said. I can only refer to the Planning Meeting Minutes of that morning’.<sup>1524</sup> However, in his evidence Mr McRae was able to comment on a number of the references in the minutes. He confirmed that the ‘potential run from McIntyre’s fire impacting on Weston Creek to Greenway and potentially west and south Belconnen resulting from a more westerly wind’ was a potential he identified as at 9.30 that morning. He went on to explain:

Our planning was based on a north-west wind … there was at least one product that came from the Bureau of Meteorology that discussed westerly wind, although that was quickly replaced to a return to a forecast for a north-westerly. So keeping in mind there had been mention of a westerly wind, we mentioned this potential for the Belconnen impact, although that wasn’t a key in our thinking. As we monitored the day, had a westerly wind resulted in contrast to the forecast we were currently working on at that time, then we would have needed to have put Belconnen into our immediate focus. That’s why that was in there.

In the first part, a potential run from McIntyre’s fire impacting on Weston Creek to Greenway, the purpose of that—it is not necessarily in disagreement with our forecast here—the goal in the planning meeting was to allow the Fire Brigade and the Ambulance Service to effectively coordinate the operations with the operations of the Bushfire Service. They needed to know which parts of the urban interface they should be putting their resources into to carry out their legislative obligations. I wasn’t going to tell them, ‘No, there’s no need to do anything’. So for them to know where to go, they had to go from Weston Creek down to Greenway, which … is where the prediction is pointing at.<sup>1525</sup>

Mr McRae was then asked whether he had in his mind a time frame as to when that impact might occur, focusing on the Weston Creek–Greenway prediction. He responded:

For the fire brigade, the impact they should be ready for was immediate. Their goal was to know when they should be deploying units in the urban interface. The planning meeting was saying, ‘This is where you should go and this is where you should go now’. That is not necessarily deviating from the advice going to the Bushfire Service, which was, ‘As you are chasing the fire across the paddock, this is the sort of script that we will be following’.

In terms of the bushfire side of things, that dot point is perhaps exaggerating what is in our preferred projections, therefore I wasn’t implying there would be an impact on it from Weston Creek to Greenway that afternoon. I would still stick with the notion of a forecast that puts the fire on Narrabundah Hill at—I believe it was 2000 hours I said.<sup>1526</sup>

Mr McRae agreed that the potential was there for impact on the interface from Weston Creek to Greenway at some point over the course of the next day or so, but said:

As I mentioned before, there is always the possibility of a spot fire starting ahead of the projected fire front. And that’s the goal of the Fire Brigade to be in place ahead of spot fires while they are small events … Also I would still stick to what I had said before that, from the starting point that was reached at the conclusion of events on Saturday, the fire could evolve most likely on the Monday into new runs which still had the potential to impact on the urban area … My expectation of the need to activate the trigger to fully engage parts of the urban community was that that would not occur on Saturday.<sup>1527</sup>

By the time that position changed, it was too late: ‘The fire changed its nature, and this new type of fire spread so quickly that we did not have an opportunity to do it, let alone to do it in time’. Mr McRae was conscious of that change basically when the fire was about to impact on Weston Creek, a little before 3.00 pm. Up to that point, Mr McRae hadn’t identified or recognised the need to scale up the warning to the community beyond that that had already been provided.<sup>1528</sup> Later in his evidence, Mr McRae explained that the type of impact that he envisaged at the time of the planning meeting, as a risk by the afternoon, was a series of smaller runs towards the urban area, not the firestorm that came out of the forest of Duffy at around 3.00 pm that afternoon.<sup>1529</sup>

In his evidence, Mr Davis of the Bureau of Meteorology said that following the morning planning meeting Mr McRae asked for a special fire weather forecast for close to Canberra: ‘We had been issuing one for up in the hills around 1400, 1200 metres. He was requesting one for the height of 800 metres closer in to cover the area in closer to Canberra’. According to Mr Davis, ‘there was considerable discussion about the impact of the fires on western Canberra as a possibility during the day’. Mr Davis could not recall exactly whether anyone ventured an opinion as to when that might happen, but his impression was that ‘they were looking at it for later in the afternoon’.<sup>1530</sup> Apart from the change of direction of the wind to the east Mr Davis could not recall discussion at the meeting of any other means of controlling the fires, except that: ‘There may have been some discussion on using water bombing but I can’t recall the exact words’. Mr Davis could not recall the suggestion that the fire front would actually burn into the housing on the western edge of Canberra as a matter discussed at the meeting, but said that ‘obviously, if you’re going to have a fire front affecting the urban interface, there would have been some effect on urban Canberra’.<sup>1531</sup>

Mr Castle recalled a reference during the planning meeting to the fires being very active in the forests, but recalled Mr McRae saying that there was an ability to extinguish the fires in the grasslands.<sup>1532</sup> There is a reference in the handwritten notes of the planning meeting that suggest

how Mr Castle got this impression: ‘Rick today. Wea from 1000 on fires start making run—E to Forests. G/lands today may put fire out’. However, Mr Castle was not able to point to anything in the minutes or notes that indicated what tactics had been formulated to hold the fires in the grasslands.<sup>1533</sup> Mr Castle agreed that he was concerned on hearing that there were ‘high levels of exposure’ arising from the McIntyres fire.

Mr Castle thought that the discussion about the item in the minutes that: ‘Mike Castle to determine regular radio interview times’ was a discussion about ‘attempting to provide information on a regular basis as we became aware of it’. Mr Castle was then asked what he was intending to do, and the following exchange occurred:

A. I am not too sure—we’ll, we were still intending to have the regular briefing at 12 midday.

Q. That is 2½ hours or thereabouts hence, isn’t it? So you would want to be telling people before then wouldn’t you?

A. If I had specific information as to where it was and what I could factually say.

Q. I want to ask you about that, Mr Castle. You can provide information about a threat and a high level of exposure where you have been told that the potential area of impact is Weston Creek and Greenway, can’t you?

A. With hindsight I could have. I suppose I regret that I didn’t.<sup>1534</sup>

It was later put to Mr Castle that it would have been possible to warn people about a fire threat without having precise details in terms of time and place of impact. He answered: ‘I think you can, to some extent’, and agreed that it would have been possible to give a general warning.<sup>1535</sup>

#### 5.14.7 Revised predictions of fire spread

At 9.00 am, immediately prior to the morning planning meeting, Mr Taylor began preparing a message form to Operations.<sup>1536</sup> The first point made in the form was that ‘Reports of active fire in the Uriarra Two Sticks area’, and was based on information from Mr Bartlett’s aerial reconnaissance. After the planning meeting, Mr Taylor completed the message form, adding two additional points. The first additional point was a revised prediction that the McIntyres fire ‘under the influence of westerly/north westerly fire weather has the potential to impact on rural lessees, the Canberra rural/urban interface from Hawker to Western Ck from around 15:00 this afternoon’. In his evidence, Mr Taylor acknowledged that the minutes of the planning meeting record that the predicted time of impact of the unattended fire on the suburbs of Canberra was estimated to be 6.00 pm.<sup>1537</sup> However, he suggested:

At the time it was a large meeting, a busy meeting, with a lot of information to get through. I probably made ... a subjective and qualified statement that afternoon and I think in the meeting it is minuted that I said around 1800 hours. When I had to commit pen to paper and really think about what it was that I wanted to say, I obviously revised that to 1500 hours perhaps as a worst case scenario.<sup>1538</sup>

Mr Taylor described in evidence the work that he did in order to reach this revised estimate of when the unattended fire would impact the urban area, as contained in his message form to Operations:

Broadly, I continued to use this map that we had prepared on the Friday afternoon as a base. I re-looked at the issues, where the fire was, how it was travelling and still arrived at the fact that I thought it would be around the Uriarra area around midday. From Uriarra to the western parts of the urban interface were around 12–15ish kilometre distances and largely grasslands in between with some pine forest in the Stromlo area. With grassland rates of spread for the forecast weather conditions and the types of slopes that were involved from the Murrumbidgee up to the edge of Canberra, I guess that rates of spread could be somewhere in the 3–9kmh rate. I picked a middle number around 5 or 6, applied that to a distance of about 15km, worked out there were about 3 hours-ish of travel time from midday to somewhere around 3 o'clock to the western edge of Canberra.<sup>1539</sup>

Mr Taylor used a computer incorporating the McArthur meter indices in a spreadsheet format, while Mr Gellie drew likely fire movements on a GIS-based model. Mr Taylor said. ‘From time to time we were preparing information separately and then discussing it and seeing where the overlaps were, where the concurrence was and discussing whether there were any differences. Normally the two systems were coming up with similar answers’.<sup>1540</sup>

However, in this case Mr Taylor said that he was not working with Mr Gellie, but rather with Mr Bob Wilcox, who Mr Taylor said he was ‘taking counsel’ from in Mr Wilcox’s capacity as ‘an experienced senior RFS planning officer’. Mr Taylor said that Mr Wilcox was working in the ACT as a quasi-ACT officer at that time, rather than as a liaison officer or representative of the NSW Rural Fire Service.<sup>1541</sup> Mr Taylor did not discuss with Mr McRae the revised prediction contained in the message form, but relied instead on Mr Wilcox to co-author and co-sign the document before taking those revised predictions to Operations:

On that Saturday and in the time leading up to that, as things became very busy in the Emergency Services Bureau and with the nature of the building, it wasn’t always easy to locate Rick. I felt this was fairly urgent and wanted to get it out. I discussed it with Bob Wilcox and got him to sign it in the absence of being able to locate Rick at that time.<sup>1542</sup>

Mr Taylor confirmed in his evidence that he believed that his revised prediction that the fires could impact urban Canberra by 3.00 pm was accurate. However he added that it was a prediction of unchecked fire behaviour, and he was not considering what the effect of the impact on the suburban edge of Canberra might be, ‘in the context that I believe the fire progress could be checked on the grasslands’.<sup>1543</sup> In his statement, Mr Taylor said:

I don’t think anybody comprehended, or could have comprehended, the rate at which the McIntyre’s Hut fire jumped the Murrumbidgee River and came across the open ground between the Murrumbidgee corridor and Stromlo Forest. This happened during the early afternoon. The fire just seemed to burn across bare ground defying all the models.<sup>1544</sup>

The second additional point that Mr Taylor added to the message form to Operations after the morning planning meeting was that the McIntyres Hut fire ‘needs to be resourced as a priority’. Mr Taylor said that he included this last point because he was concerned that there was an imbalance in the placement of firefighting resources in the ACT, with resources concentrated in the south near Tharwa, ‘as opposed to the northern/western edge of the city and the fact that the north-western portion of the fire complex had the greatest potential to cause loss of life and property’. Mr Taylor suspected that this imbalance was ‘because the McIntyre’s Hut fire was

being managed by New South Wales, leaving ACT to deploy more of its resources to the south'.<sup>1545</sup>

Mr Lucas-Smith's evidence largely supports Mr Taylor's understanding of the deployment of ACT resources on 18 January. Mr Lucas-Smith said that most ACT resources were committed to property protection in the south, because NSW resources were already located in the north, and he was not willing to sacrifice rural properties in the south by sending resources north without 'a very good handle on what was going to happen in the northern part of the ACT'. Although Mr Bartlett had reported that morning that the McIntyres Hut fire had crossed into the ACT, and Mr Lucas-Smith acknowledged that this 'obviously presented a whole new range of complexities in relation to our firefighting capacity', Mr Lucas-Smith continued to focus ACT resources on those properties to the south that were under immediate threat. He said that during the morning the McIntyres Hut fire was still a 'considerable distance' from the urban edge of Canberra, and was still west of the Murrumbidgee River, and that this was 'certainly giving me some confidence that we had a little bit more time to get to fully understand exactly what that growth of the fire is going to be, and also to finalise our property protection tasks in the south'.<sup>1546</sup>

Mr Taylor walked the message form to Operations where it was handed to Mr Graham.<sup>1547</sup> Mr Graham confirmed that it was his signature at the bottom left hand side of the form and accepted that it was most likely that he read the whole document. However, he did not recall having seen it and could not explain why he cannot now recall being seized of that important information on the morning of 18 January.<sup>1548</sup>

Mr McRae did not recall seeing the message form from Mr Taylor on 18 January, but said in his evidence that at that time he did not share the views expressed by Mr Taylor in that form. Mr McRae agreed that the prediction of impact at 3.00 pm was close to when the impact in fact occurred that day, but said:

I don't believe what he was forecasting what impacted ... it was a prediction of impact that was close to the time, but it wasn't within the specifications that I required from the planning section ... We had prepared a prediction of the evolution of the fire scenario for the 18th January based on McArthur type predictions, based on fine fuels, fine fuel driven fires burning on the surface. With the weather that was predicted, we came with a single agreed stance which we presented to operations. Those were the requirements that I had from my planning unit.<sup>1549</sup>

Mr Gellie was also updating his assessment of the rate of spread of the fires during the morning of 18 January. In relation to the McIntyres Hut fire, he said that he 'considered that, based on the likely outbreak of a McIntyre's Hut fire, it could enter Holder or Duffy at 16:00. I considered it would reach the urban interface'. Mr Gellie made that updated assessment at around 11.00 am, and said that he told Mr Lhuade and Mr Taylor, and possibly Mr Wilcox, but that he did not communicate his revised predictions to anyone outside of Planning.<sup>1550</sup>

#### **5.14.8 Planning and preparation by the Australian Federal Police**

After attending the evacuation planning meeting, Sergeant Kirby rang Commander Newton at 8.14 am and advised her of the deterioration of the fire situation, and recommended activation of the Police Operations Centre ("POC") at Winchester. Sergeant Kirby then spoke to both Mr Keady and Mr Tonkin and advised them that Commander Newton had authorised the activation of the POC, and that he was arranging for the appointment of liaison officers at both the ESB and the POC.

Commander Newton then recalled Sergeant Kirby to the POC to take the role of Planning Officer. He arrived there at 9.00 am, and at 10.00 am he met with Superintendent Lines and Commander Newton.<sup>1551</sup> Sergeant Kirby was tasked with drawing up contingency plans for the evacuation of Duffy. The process of warning the residents of Duffy in relation to the potential need to evacuate was not discussed at that stage. Sergeant Kirby's expectation was that the ESB, as the lead agency in relation to the fires, would be responsible for warning people in Duffy about what was expected to happen that afternoon, in consultation with other agencies. Sergeant Kirby said that the evacuation meeting he had attended at 8.00 am that morning 'was talking about the flow of information, door knocks and what have you. So again, I presumed that the process for doing that was already being undertaken'.<sup>1552</sup>

At 10.20 am, the Police Liaison Officer at ESB, Sergeant Byrnes, briefed Ms Newton on the content of the morning planning meeting, and in particular, on the potential fire impact on urban Canberra. Commander Newton was concerned by what Sergeant Byrnes told her:

... the briefing I received from Sergeant Byrnes at 10.20 am after he had been in one of the management meetings at ESB increased my concern because of the breadth of where the fires were, their locality and the predictions that were being given to me. So that increased my concern also in regard to the facilities in Canberra, things like water and waste water supply, electricity supply, along with community understanding, which meant that I escalated my requirements around the resources that may be needed of ACT policing. I was also of the view at that time that I didn't understand fire behaviour well enough and that, in considering the issues, I wanted to talk to somebody senior in the fire service to be able to have a full briefing about what it might mean to Canberra.<sup>1553</sup>

Commander Newton had initially sought that further briefing from Mr Castle, but unable to contact him that morning<sup>1554</sup>, she requested a briefing from Superintendent Prince on the basis that he would be fully informed regarding the current situation.<sup>1555</sup> At 10.30 am Sergeant Kirby asked Superintendent Prince to attend the POC and brief Commander Newton.<sup>1556</sup>

Before travelling to the Winchester POC to brief Commander Newton, Superintendent Prince was concerned to obtain more up to date information on the fires.<sup>1557</sup> Superintendent Prince ran into Mr McRae in the corridor at ESB, and asked him for an update regarding the fires:

His expertise is in weather fire behaviour. He told me he was concerned that the fire would not recognise the urban interface. I took this to mean that the fire could travel out of the forest and bush and into the suburbs. The factors that led Mr McRae to this conclusion were the wind speed and direction, the drought factor, and the fire intensity. He also highlighted that the pine forests were very dry in the 2001 fires and they had another 12 months of curing in the drought conditions. I was also concerned about the fire situation but the information from Mr McRae made me feel extremely concerned over the danger posed by the fire.<sup>1558</sup>

In evidence, Superintendent Prince went on to explain that, having been involved in the Sydney bushfires in 1994 and having been at Como and Jannali, 'I had seen fires impact on the urban interface to several streets'. In response to a question as to what Superintendent Prince understood Mr McRae to mean about the fires 'not recognising the urban interface, he responded: 'Exactly the same thing, that the fires would probably go past the urban interface area. If you think of a street such as Eucumbene Drive, that it would go into the suburb'.<sup>1559</sup> Mr McRae recalled having a conversation with Superintendent Prince to the effect described in

Superintendent Prince's statement, and believed that Superintendent Prince accurately recorded what he said.<sup>1560</sup>

Superintendent Prince attended the POC at about 11.30 am:

I attended a meeting attended by police and public service officers. There were about 10 people present. I gave these people a brief overview of where the fires were. I also gave information about the likelihood of fire travel under the conditions that were present. On the information I had at that time the fire was expected to reach Duffy at about 18:00 that evening. That calculation was made by Mr Nick Gellie—who had significant knowledge on rural fire behaviour. He is an ecological consultant who had volunteered his services to the Emergency Services Bureau. I did advise this meeting that in my opinion once the fire reached Stromlo forest it would take about 5 to 10 minutes to reach the top of Mt Stromlo and about another 30 minutes to an hour to reach Eucumbene Drive. I recall that Superintendent Lines asked me what the fire fighters police and residents could expect when the fire arrived. I answered that the height of the flame would be double the height of the material that was burning. Because 30 foot pine trees were in that area, then 60 foot flames could be expected. Chris Lines then asked me if the residents of Duffy should be evacuated. I recall that I told the meeting the normal response to fire, if residents are prepared, is to stay with their houses and fight the fire. I then told the group that in this case the residents were not all prepared and that evacuation should be considered.<sup>1561</sup>

In evidence, Superintendent Prince confirmed that the information about the fire being expected to reach Duffy at about 6.00 pm was drawn from the map he had received from Mr Gellie the night before, 'and looking at the possibility of the north-west winds with the brown onion rings that were on it actually touching that western area'. He said that he presented these predictions to the police as a 'worst case scenario', and that he was unaware of and therefore did not brief the police regarding Mr Taylor's revised prediction that the fire could impact the suburbs by 3.00 pm.<sup>1562</sup> On the question of evacuations, Superintendent Prince explained in his evidence that in responding to Superintendent Lines about whether Duffy residents should be evacuated, he indicated that any evacuation policy should be determined in accordance with AFAC's 'stay and go policy'. Superintendent Prince said that he told Mr Lines 'that the public need to be prepared', but that given his view that many of the public were not adequately prepared, consideration should be given to removing at least the elderly or the very young from the area.<sup>1563</sup>

Commander Newton's recollection of the briefing by Superintendent Prince also accords with that of Superintendent Prince and Sergeant Kirby. In particular, Commander Newton recorded in her statement that:

Superintendent Prince warned of the extensive risk to residents and their homes in the Duffy area. He explained that a fire in the pine trees in this area could reach 60 feet and if that happened radiant heat would advance the fire by approximately 500 metres. This situation would place many residents in danger and destroy property, including homes, within the path of the fire. We then discussed the 500 metres of radiant heat. It was explained that this intense heat would impact on homes immediately adjacent to the pine plantation in the Duffy area. We also discussed the need or requirement to evacuate people from that area. Superintendent Prince indicated that if people were well prepared they should be able to stay with their homes and fight the fire. We also discussed the situation regarding people that may not have been prepared or were unable to defend their homes. With all of these issues taken into consideration

Superintendent Prince supported my decision to develop evacuation contingency plans for the Duffy area.<sup>1564</sup>

Commander Newton confirmed that at about 9.30 am that morning, she ‘had a level of concern about the community awareness of what was taking place and the level of risk associated with it’. However, she said that, ‘the briefing from Superintendent Prince and the lack of contact with Mr Castle and the management group at ESB, raised my concerns to a high level about the situation we may be facing that day’. She then listed a number of issues that she considered at that point, including the threat to members of the community who were not aware that the fires might enter the urban area, and who were not prepared or advised adequately. She went on to describe that the police did have an independent capability to advise the community but that:

our processes would have a media liaison officers or media staff working with the Emergency Services Bureau staff to ensure that we provide consistent messages across the community, particularly when we didn’t have the full level of information that the Emergency Services Bureau had at hand to advise the community of where the fires were moving.

Commander Newton went on to explain that if she had suitable information, the police would have been in a position, in liaison with the ESB, ‘to attend in the suburbs and assist Emergency Services Bureau with fires in the community and provide additional staff to be able to do that’.<sup>1565</sup>

Commander Newton also described how, in her view, the level of the threat and the possible level of impact on the ACT from the fires would ‘potentially require the emergency powers of the Territory Controller to manage’. At 11.52 am, Commander Newton attempted to again contact Sergeant Byrnes, the police liaison officer at ESB ‘because I was particularly concerned about the fires and the associated issue of declaring a state of emergency if things continued to escalate’.<sup>1566</sup>

In his evidence, Mr McRae said that he would not necessarily have agreed with the projections expressed by Superintendent Prince during this briefing at the POC regarding the timing of the fire spread from the Stromlo forest to Eucumbene Drive. Although Mr McRae did not discuss these projections with Superintendent Prince, he said, ‘Well, as we saw in the maps, Mr Gellie was producing forecasts that were to some extent at variance with the agreed forecast … It would appear that Mr Gellie had a conversation with Mr Prince and was passing an alternate view of how the fires might evolve’.

Mr Gellie’s views were not views that Mr McRae would have shared in his role as Planning Officer:

I would not have agreed with his forecasts. The reason I put that qualifier on was if I had taken the time to sit down with Mr Gellie and get an understanding of his modelling, probably I would have said his modelling was correct but maybe his inputs were incorrect. It’s a technical aspect of modelling. You can disagree with models in different ways. From the point of view as the planning officer, I had clearly taken the stance there would be an agreed position on how the fires would evolve. That would be the basis for planning for operations and for liaising with other agencies, in fact as was going on here, and that stance was being, in a sense, short circuited.<sup>1567</sup>

## 5.14.9 Planning and preparation by the ACT Fire Brigade

### *Resourcing*

At around 8.00 am on 18 January, Commissioner Bennett received a telephone call from the NSW Fire Brigade, responding to a message he had left the previous evening asking whether NSW could provide assistance to the ACT Fire Brigade if requested to do so. Commissioner Bennett was informed that the NSW Fire Brigade was heavily committed to fires in their own jurisdiction, but that his request would be considered at a major planning meeting that was to occur that morning. Commissioner Bennett was content with that response at that point.<sup>1568</sup> However, after the 9.30 am planning meeting, Commissioner Bennett was concerned about the continued threat of long-distance spotting under the adverse conditions for the day, and he again contacted the NSW Fire Brigade, changing his informal notification of a possible request for assistance into a formal and immediate request for assistance. According to Commissioner Bennett, Chief Superintendent Dewsnap confirmed that the NSW Fire Brigade had discussed his request at a planning meeting that morning, and that although NSW's resources were stretched, they could make available to the ACT Fire Brigade a taskforce of five urban pumbers with crews.<sup>1569</sup>

Mr Newham's evidence was that all Fire Brigade resources were mobilized on 18 January<sup>1570</sup>, including the three 'spare' appliances. Superintendent Prince's evidence was that the Fire Brigade had a total of 290 officers and firefighters, and that 103 personnel were on duty during the day-shift on 18 January. He said that this was sufficient to crew all available fire units, and that with the three spare pumbers crewed from 1.30 pm, a total to 12 pumbers, 4 heavy tankers and 4 light units were fully crewed and operational.<sup>1571</sup> Mr Collins, the Fire Brigade IMT Planning Officer, also gave evidence that the Fire Brigade was at its maximum response capacity and full state of operational readiness from the evening of the 16 January onward, but qualified that 'maximum' as being 'commensurate to the level of risk that we perceived'. Mr Collins explained that: 'Had information come in that these fires were going to be huge ... greater arrangements could have occurred. That information wasn't forthcoming because probably no-one knew about it'.<sup>1572</sup> In this regard, Mr Collins noted that the Fire Brigade would call up all off-duty staff only in relation to an imminent threat, and that it would be undesirable to do so to respond to an uncertain threat that could still be some days off. Mr Collins reiterated that 'it is important to prepare the brigade commensurate to the threat'.<sup>1573</sup>

Hence although all ACT Fire Brigade appliances were fully crewed on 18 January, it appears that had arrangements been made earlier, additional resources may have been made available to the ACT Fire Brigade.

### *Strategy*

Commissioner Bennett and Mr Lucas-Smith briefly discussed strategy at around 9.00 am, and agreed that the Fire Brigade would withdraw from rural areas such as Tharwa and place its resources along the urban/rural interface, between the fires and the Canberra urban area.<sup>1574</sup> Although the Fire Brigade's objective was to stop the fires entering Canberra along those roads comprising the rural/urban interface, Commissioner Bennett said that if the fires burnt into the Stromlo Pine Plantation, he expected that the Fire Brigade would be responding to fires caused by embers landing in the urban area. Accordingly, Fire Brigade appliances and crews were pre-positioned along Eucumbene Drive and down Cotter Road in anticipation of fire impacts, and crews commenced preparatory work such as spraying trees and houses with water. In addition, hoses were also laid out and connected to hydrants, and stand pipes were installed to gain access to water mains.<sup>1575</sup>

However, Commission Bennett's evidence was that had he known how the fires would impact on Duffy, he would have:

thought long and hard about placing firefighters in between what eventually arrived in those particular areas ... I did not anticipate in any way, shape or form the scale or the intensity that the fires or the impact that those fires would have on the residential areas.<sup>1576</sup>

#### **5.14.10 Planning and preparation by the ACT Ambulance Service**

Mr Dutton attended Curtin at 1.30 pm as the situation deteriorated, primarily to establish a medical emergency control centre. A number of other preparatory steps were taken by the Ambulance Service during the early afternoon on 18 January, however Mr Dutton said that the Ambulance Service was not preparing for an impact on urban Canberra of the kind that in fact occurred later that afternoon.<sup>1577</sup>

#### **5.14.11 Media information at midday and during the early afternoon**

##### ***Ms Larkins' attempts to contact Mr Castle***

In his statement, Mr Castle said that on the morning of 18 January, 'the community information strategy was to use Canberra Connect plus information direct to media'. To facilitate the latter part of the strategy, he tasked the media cell to contact media outlets to obtain the direct telephone numbers for reporters working that day, and to determine the broadcast hours of local stations. He said that 'it was planned we would have hourly updates of information if required and normal media briefing at mid-day'.<sup>1578</sup>

On the morning of 18 January, Ms Larkins arranged with Mr Castle to interview him at 11.00 am for the purpose of getting fresh information on the progress of the fires for the next major ABC news bulletin at 12.00 noon. Shortly before 11.00 am she said that she tried to contact Mr Castle to interview him, but found that he was continually unavailable. She said that eventually Ms Lowe confirmed with her that Mr Castle would be unavailable for the scheduled interview. Ms Larkins described in her evidence becoming increasingly frustrated at the lack of available information, and telling Ms Lowe that she needed fresh information for the midday news. In response, Ms Lowe referred her to the information published that morning in the *Canberra Times*. Ms Larkins informed Ms Lowe that the information in the *Canberra Times* was no longer current, as the paper had been published the night before. In the end, Ms Larkins did not get any fresh information for the midday news bulletin, and she interpreted the lack of available information as a sign that the situation was deteriorating.<sup>1579</sup>

Mr Castle said in his evidence that at 11.36 am he tried to contact ABC Radio to conduct the interview, but got a recorded message. He then gave interviews about the current fire situation to Canberra FM at 11.36 am, and to 2CC at 11.41 am.<sup>1580</sup>

##### ***The midday media update***

Despite the discussion at the evacuation planning meeting that morning about the importance of providing regular and timely information to the public, including hourly media releases<sup>1581</sup>, the 12.00 noon media update was the first formal update that was issued by the ESB on 18 January.<sup>1582</sup> Moreover, based on the time when work started on developing material to be posted to the Canberra Connect website about the precautions residents should take if their

property was affected by fire, it is likely that that type of information did not first appear on the Canberra Connect website until, at the earliest, late on 17 January 2003 and, more likely, during the morning on 18 January 2003.<sup>1583</sup> In any event, apart from what may have been appearing on the Canberra Connect website, there was no formal notification of those precautions that the public should be taking before the ESB media update timed at 12.00 noon on 18 January.<sup>1584</sup>

Ms Harvey was unable to say why it took so long for a media update to be sent out on 18 January: ‘I’m surprised that we didn’t get any statement out at all until midday when we had the meeting at 8 o’clock. And the idea then had been that there was going to be an hourly update’.<sup>1585</sup> Ms Harvey suggested that one reason for the delay was, as she had predicted at the 8.00 am evacuation planning meeting, ‘we struggled to get factual information and it was just so difficult to get people to stop still to give us information’. It was drawn to her attention that at the planning meeting at 9.30 people were talking about threats to various urban areas including Weston Creek through to Greenway and that she had that information at that stage, yet it was 12 noon before the media release went out and, when it did go out, it said nothing about those threats. Ms Harvey was unable to explain that.<sup>1586</sup> However, she said that she had no authority herself to send out any warning, and that all information she released had to be cleared through others.<sup>1587</sup> Ms Harvey gave evidence that it was the responsibility of Mr Castle and Mr Lucas-Smith to make sure that, where a threat had been identified as it had been at the planning meeting, to make sure that people in the areas under threat were notified:

At that stage and throughout all of this, I was simply responsible for coordinating information, as I was asked to do, that went out in media statements that were cleared by Peter and Mike and at the 8.00 am meeting we then had another sort of, I guess, level of direction coming from the people who were at that meeting: the head of the public service, Robert Tonkin, and Lucy Bitmead were guiding us as to what we were to do.

Ms Harvey also suggested that the delay in releasing information on 18 January may have had something to do with the concern that Mr Lucas-Smith and Mr Castle had about being very careful with the sort of information that was then being released. Ms Harvey also confirmed that she reported to Mr Castle and Mr Lucas-Smith, and that she did not recall at any stage getting instruction or direction from Mr McRae about how to fulfil her role.<sup>1588</sup>

Ms Lowe remembered being involved in the preparation of the midday media release:

... the planning meeting didn’t actually start until 9.30 that morning. And the planning meetings were usually the source of gathering information. So it wasn’t until after the planning meeting that I suppose work could begin on updating the media release. After that I remember being in Mike Castle’s office with I think Mike, Marika [Harvey], Robert Tonkin. There may have been other people there, but I can’t remember who they were. I had a draft of this document and I remember Mike and Robert Tonkin talking about which order to put things in and renaming the fires. If you notice it says “Northern, middle and southern”. There was some talk about renaming them. That discussion went on for a little while. So there was that process. I remember that taking some time—that entire sort of drafting process. That would probably be why it didn’t get out later that day.

Ms Lowe could not recall any discussion concerning whether the media release should say something about a threat to any part of the urban area, but she remembered a discussion about moving the section dealing with community safety higher up in the release. She also remembered putting together community safety information outlining what people should do if they were

affected by fire on the previous night in preparation for the script that was being used to contact the rural lessees. She thought that she derived that information from the *Will You Survive?* brochure.<sup>1589</sup>

The midday media release provided a short summary of the fire status in respect of each of the three fires then threatening the ACT, noting that the ‘weather conditions being experienced in the ACT caused a number of spot fires across containment lines—these have not been contained’:

- **Northern Fire (previously referred to as McIntyres Hut fire):**  
Approximately **8000 hectares** in size. A spot fire from the McIntyre’s Hut fire in New South Wales, crossed the ACT/NSW border last night. The fire has entered the north-west corner of the Uriarra pine plantation.
- **Middle Fire (previously referred to as Bendora fire):**  
Approximately **10,000 hectares** in size. A spot fire from the Bendora fire threatened property in the Tidbinbilla and Paddys River Valley. Rural residents in this area were last night contacted by the ACT Emergency Services Bureau, and advised to prepare for bushfires approaching their property—No residents have been evacuated at this time. However, recovery contingencies have been made in the event of serious threat.
- **Southern Fire (previously referred to as Stockyard fire):**  
Approximately **13,500 hectares** in size. A spot fire from the Stockyard fire is threatening property in the Naas and Top Naas areas, as well as potential threat to property in Williamsdale and Royalla.

It appears that the estimates of the size of the Northern and Southern fires contained in the update significantly understated the size of those fires<sup>1590</sup>, and that these estimates were corrected in the subsequent media update released at 1.00 pm, as discussed below.<sup>1591</sup>

Under the heading ‘Community safety’ the following appears:

#### **Property and Personal Safety**

- Members of the public are urged to stay away from the fire areas in the west and south of the ACT. They are advised they may compromise their own safety and the safety of fire crews by entering the fire areas unauthorised—sightseeing is not permitted.

#### **INDOOR: IF FIRE APPROACHES YOUR HOUSE:**

- **Close** all the doors windows.
- **Fill** the bathtub, any buckets etc, and soak towels to place in any crevices such as under the door.
- If you have time and can do it, take down **curtains** and push **furniture** away from the windows.

#### **OUTDOOR: IF YOU HAVE TIME, AND ONLY IF IT IS SAFE TO DO SO, YOU CAN DO THE FOLLOWING:**

- **Connect hoses** that will reach all corners of your house.
- **Store flammable liquids** away from the house.

- **Close-in open eaves and the space under the house.**
- Block your downpipes (ie rags, etc) and fill your cutters with water.
- Use water to dampen all the areas on the side of the house facing the fire.<sup>1592</sup>

The media update also contained a health warning regarding very high temperatures, and specifically for sufferers of asthma and other chronic health conditions, that included a reference to the wind conditions being ‘expected to increase the level of smoke across populated areas of Canberra’. The media update concluded with details of weather and fire ban status, resources deployed and information on road and nature park closures. Finally, under the heading ‘Bushfire information’ the update noted, ‘The ACT community can now access the latest ACT bushfire information through the Canberra Connect call centre and website’, and after providing details of these, noted that both sources would ‘provide information on the status of both the Bendora and Stockyard fires, land and property damage, weather, total fire bans, road and nature park closures’.<sup>1593</sup>

Mr McRae agreed that the media release did not have any explicit material to the effect that the fire, and particularly the northern fire, could impact on the area of Weston Creek to Greenway or otherwise on the urban area of Canberra. According to Mr McRae, the material in the noon media update ‘is consistent with the outcome of the morning planning meeting and the absence of a trigger from me … it is consistent with waiting for the trigger to be activated. But it hadn’t been activated so the material wasn’t in there’.<sup>1594</sup>

Mr Castle was asked about the media release in his evidence, and, in particular, the community safety information. He agreed that the information on community safety was ‘brief information’, and that it did not discuss the purpose for filling the bathtub, although it did refer to ‘buckets, et cetera’.<sup>1595</sup>

#### *The midday press conference*

The press conference foreshadowed during the planning meeting that morning commenced at approximately 12.00 noon.<sup>1596</sup> Mr Castle commenced by providing a brief overview of the status of the fires. Mr Castle said that crews had been pulled back from containment lines and redeployed to property protection, ‘because the fire had well and truly jumped those and spotted. In some instances the spots were 8 to 10 kilometres’. He noted that all ACT units were deployed, that the NSW Rural Fire Service was providing assistance, and that ‘we have the fire brigade in the urban area looking at contingencies around the urban edge as well’.

Mr Castle then discussed warnings given to rural residents, and that ESB was asking the public to stay east of the Murrumbidgee River. He was asked how close the fire was to houses at this stage, to which he responded, ‘the closest fire as the crow flies is probably 8 to 10 kilometres … but of course and there are rural residences in a lot of those grassland areas in between … and we asked the residents to be mindful of fire around their property and the protection they can take’. He was asked whether he was referring to the suburbs near Tuggeranong, to which he answered, ‘No, no that’s rural residents I’m talking about, people out in the rural areas, farms’. Mr Castle was then asked directly how close the fires were getting to the suburbs; he answered, ‘Maybe if I asked Peter to talk specifics about the fires and what we’re actually doing. The risk to Canberra is, is there, we would not want to alarm people but it is some distance yet and we have resources that we will deploy at various stages to provide maximum property protection’.

Mr Lucas-Smith then took over. He described the location of the fires, fire spread overnight and of some relatively minor property damage to some rural properties and to the Corin ski resort. He continued:

The fire is still spreading in a westerly direction, sorry in an easterly direction from the west, in an easterly direction and a lot of that is certainly posing some concern to the southern parts of Canberra. As the day warms up and conditions start to become very similar to yesterday's events, we will see some more rapid growth in the fire behaviour, but we're also seeing a change, a significant change in fuel types that the fire's burning as it comes out into the grasslands it becomes a significantly easier fire to contain and it also spreads rapidly but with a lot less intensity and therefore, a lot easier to control even with garden hoses on the back fence.

There is no doubt whatsoever that people need to be taking precautions that may live adjacent to the grassland area on the western side of the suburbs of Canberra and they need to be making sure they have nothing combustible near their homes. They need to make sure that their gutters are clear, their hoses are connected and they can reach all corners of their houses and to be vigilant for any flying embers that might come as the day progresses ... I think it is prudent under the current conditions that certainly anybody that lives on the western side of the ACT urban area needs to be taking these sort of precautions ... Certainly Weston Creek and ... south. Belconnen is a little out of the frame and bit too far north but I think it is prudent that anybody that lives on that sort of interface area should be taking precautions

Asked whether 'the message is go home and look after your back fence', Mr Lucas-Smith responded, 'Most definitely, make sure you clear around, make sure it's clear, make sure your hoses can fit, make sure you're comfortable and you've got all the things you need to protect your property'. Mr Lucas-Smith was then asked, 'You were saying yesterday that there was a minimal chance of the fires reaching suburban Canberra, is that still your assessment or have you re-evaluated?' Mr Lucas-Smith responded, 'I think the word "minimal" was your word but there has always been a chance that the fire would reach the urban area. I think that the chance still exists and is certainly not out of our planning arrangements but they're precautionary arrangements at this stage'.

Mr Lucas-Smith then described the property protection strategy that had been decided for the day and gave some details of the fire spread predictions. He said that while the prospect existed that the Bendora and Stockyard fires would join up, the weather forecasts indicated that the winds would not be strong enough to do that.

Mr Lucas-Smith was asked whether the ACT would seek more resources:

There is a good point and a bad point about resources and you've got to have a infrastructure of all the logistics that will be able to support them. The resources that we've got at the present time are doing an outstanding job and probably about the maximum we can manage without significantly increasing our infrastructure capability to be able to do that. At this stage we don't believe that is necessary.

Later in the interview, he was asked about the conditions being faced that day as compared with the December 2001 fires:

The spreading of the fire is governed by the weather conditions and moisture content. The fires we had in December 2001 were burning in pine plantations and were certainly weather driven but they were in milder conditions than what we are currently facing but

the fuels, other than the fires that are in the plantations now, well to the west of the ACT nowhere near the urban edge. The fuels are generally in different vegetation types and therefore have different behaviours and will react totally differently to the pine plantations fires we had last year.

Mr Castle concluded the press conference by informing those present that information and regular updates would be available on the Canberra Connect website and call centre and gave details of both.<sup>1597</sup>

In his evidence, Mr Lucas-Smith accepted that during the media conference ‘we didn’t emphasise adequately enough the potential risk’. He agreed that the language used to describe the prospects of the fire actually affecting the suburban area was ‘very hesitant, neutral language’. He also agreed that words such as ‘people ought to be aware that there is an extremely high risk that the fire will hit the suburbs and they need to prepare for it’, could justifiably been used in the press conference. He gave evidence that he would have preferred to express the chance that the fire would reach the urban area

with more emphasis on the level of risk. But our planning situation hadn’t quite clearly indicated as to exactly what that impact was likely to be. Obviously there is a consequence to making a statement about the high risk that you also have to have the other information that the journalists would then follow with where and when ... And I didn’t have that information.<sup>1598</sup>

Mr Lucas-Smith also gave evidence that during the morning of 18 January he still had ‘some confidence’, and that because the McIntyres Hut fire was still a considerable distance to the west of the ACT, that ACT resources should focus on property protection in the south pending further information on any runs by that northern fire.<sup>1599</sup> He then described his approach to the media conference in the following terms:

I went to that media conference at noon and started to convey that sort of information on the belief that at that time I had at least until about 2000 hours, 8 hours from that time, before our prediction had indicated that the fire was likely—if at all—it was likely to come in close to the urban area. So I felt that we still needed to find out exactly what our suppression options and capabilities were and if there were some parts of that fire that could be suppressed that would in fact put pressure on those areas where the fire could not be suppressed. I had to say I had a fair bit of confidence that we could do something ... in the 16 years that I have been Chief Fire Control Officer in the ACT, the ACT Bushfire Service has responded to over 3,000 fires in the ACT, many of those on the interface. And of those ... only six have been significant fires.

Mr Lucas-Smith referred to his experience of the December 2001 fires, which he said were ‘really the largest fire we had in the ACT in the full 16 years I have been Chief Fire Control Officer. That threatened the interface, but we did not lose any structure or had any injury associated with that fire’. He continued:

So I had some, I believe, reasonable expectation that some suppression effort would be successful, and there would be some amelioration of the impact on the ACT. We still needed to evaluate exactly what that was going to be. I think events overtook us quite significantly as things started to accelerate at around 1 o’clock. That was when we started to issue the standard emergency warning signals to the community ...

As I have said in my evidence, I think we didn’t emphasise the warnings adequately enough. I thought we had more time to do that. And I think as the day was going on and

we had moved from that noon media conference into the standard emergency warning signal, which is the highest level of alert in the ACT, to advise the community, and we did that at around 2 o'clock, I think it was. So we were certainly moving in that sort of direction. May be we should have done it earlier. That will certainly be something for others to judge, but as far as I was concerned it was—I was trying to fight the fire at the time, and my job was really to protect property.<sup>1600</sup>

Mr Lucas-Smith emphasised that he was focused on fighting fires and protecting property in what was a ‘very, very dynamic fire situation, and that things were happening very, very rapidly’.<sup>1601</sup> He said that ‘we had property directly under threat. That was the priority and that is where the focus was’.<sup>1602</sup> Mr Lucas-Smith also noted that at 2.00 pm the fire was still west of the Murrumbidgee and 13 kilometres from the urban edge, with open grassland still to cross and in which he believed the fire could be fought. He said that the fire moved at surprising speed from that time on, crossing over 10 kilometres and the Murrumbidgee in slightly over an hour. Although Mr Lucas-Smith then diverted resources from rural to urban protection at this time, he noted that it takes around 50 minutes to drive an appliance from Tidbinbilla to Duffy, and that this was only 20 minutes less than the time it took the fire to travel that distance.<sup>1603</sup>

In later cross-examination by counsel for the ACT Government, it was suggested to Mr Lucas-Smith that he had readily acknowledged in his evidence that not enough was done in relation to informing the Canberra community. Mr Lucas-Smith agreed and continued, ‘I think the information was there. I think what was lacking was the emphasis, which would have added the criticality to the event. There is nothing more I can say about that other than the fact that I recognise now that that needed to be done and wasn’t’. Mr Lucas-Smith went on to deny any suggestion that he ever intentionally sought to withhold information from the public of Canberra: ‘I was certainly not in any way, shape or form trying to withhold or mislead anybody in the ACT’.<sup>1604</sup>

Mr Castle summarised the press conference in his statement, and concluded that ‘the tone of the press conference was definitely one of worry about the breakout of the fires from containment lines’.<sup>1605</sup> However, in his evidence Mr Castle accepted that people at the press conference should not have had to draw information from its ‘tone’, but should have been given the information directly. He also accepted that his remarks at the beginning of the press conference perhaps understated the risk: ‘I think what I have said there perhaps understates the risk and that was and I believed it to be. But then Peter went on to give the details. That’s what I relied on’.<sup>1606</sup>

Mr Castle’s evidence was that he was not under any pressure from anyone not to disclose the true level of risk that the fires presented to the urban area of Canberra, nor did he think that it might be admitting to some kind of failure if he had acknowledged that the fires were not going to be contained before they hit the Canberra suburbs. Asked whether he could offer any other explanation for the understatement of risk at the midday press conference on 18 January, he responded:

I think what my impression, what my view was, that it would reach the urban edge. But what the impact would be was perhaps not in my—not to the forefront of my mind. That’s partly I think because of the 2001 fires and the success we had in 2001. If that’s success. I’m not saying that 2001 was not an impact, but not on the urban edge, as such.<sup>1607</sup>

Ms Harvey could not recall discussing with either Mr Lucas-Smith or Mr Castle what they would say at the midday press conference. Nor did she think that there was any degree of reticence or concern about disclosing the real threat presented by the fires: ‘I don’t recall any feeling like that. As I’ve said in my statement, I think sometime earlier on in the week there were concerns about unnecessarily alarming people. But I can’t—I can’t recall barely anything of that whole day or of the days following’.<sup>1608</sup>

At the time of the midday media conference, Ms Larkins had formed the impression that things were far worse than what she was being told, and that the fires were a lot closer than what was being suggested. However, she said that: ‘Even though I was concerned and annoyed by the fact that we were getting no information, I still didn’t think that the fire was going to hit suburban Canberra’.<sup>1609</sup> Ms Larkins set out her impressions of the media briefing in her statement:

From my perspective, the information that was provided was largely contradictory and didn’t generate the level of concern that was warranted given the seriousness of the situation.

On the one hand, they indicated that they expected the fires to intensify over the coming days, but they expected the fires to be easier to contain over the coming days as they moved out of the forest into grassland. They were also describing how fire crews had been pulled away from containment lines as the fires were spotting 8 to 10 kilometres away. Towards the end of Mike Castle’s involvement in the briefing, another journalist pressed him for an answer as to how far from Canberra the fires were. When he answered 8 to 10 kilometres I realised that the spotting they previously referred to was potentially in the vicinity of my home.

Mike Castle went on to state that there was some potential threat but wouldn’t want to alarm people and they have the resources deployed for maximum property protection.

To me, this briefing really hit home that Canberra suburbs were in danger. This was highlighted by the fact that my home, family and possessions were under threat. Even though throughout the briefing, authorities focused on the threat to rural properties, not urban areas.<sup>1610</sup>

In her evidence, Ms Larkins said:

It was certainly during that briefing that the penny started to drop in my mind, so to speak, from the information that I was gaining, that certainly made me believe that at this stage Canberra suburbs were under distinct threat, even though that was not clearly stated at any stage during that press conference.<sup>1611</sup>

Ms Larkins agreed that Mr Lucas-Smith had said at the press conference that ‘there is no doubt whatsoever that people need to be taking precautions that may live adjacent to the grassland area on the western side of the suburbs of Canberra’ and that ‘certainly anybody that lives on the western side of the ACT urban area needs to be taking … precautions’. However, she said that while these warnings were eventually given, they were extracted from Mr Lucas-Smith under questioning from journalists and so to her ‘looked like precautionary information as opposed to direct orders, so to speak, of what people should do’.<sup>1612</sup> She said that there was certainly ‘not any sense of urgency or definite risk, or potential’ in the context the other statements being made by Mr Lucas-Smith, including that he thought the chance of the fires reaching suburban Canberra ‘still exists and is certainly not out of planning arrangements, but they’re precautionary arrangements at this stage’.<sup>1613</sup>

### ***The 1.00 pm media update and Canberra Connect***

A further media update was issued by the ESB at 1.00 pm.<sup>1614</sup> The section of the update dealing with ‘Fire Status’ made two significant changes to the information in the 12.00 pm update, noting that the Northern Fire was approximately 18 000 hectares in size (as opposed to 8000 hectares), and that the Southern Fire was approximately 24 000 hectares in size (as opposed to 13 500 hectares). The section of the update dealing with community safety was unchanged from what had appeared in the media update of an hour earlier.

Included among the documentation provided to this inquiry is an extract from the Canberra Connect website timed at 1.30 pm on Saturday 18 January 2003. As indicated above, it is not clear how long the information contained in this document had been on the website before this time. The information concerning fire status is in essentially the same terms as the information contained in the media updates timed at 12.00 noon and 1.00 pm. There is also a section similar to the material in the media release under the heading ‘Community safety’. On the website, this information appeared under the heading ‘What do I do if a fire is approaching my home?’ and was as follows:

#### **Personal protection**

1. Protect your exposed skin areas—cover up with natural fibre pants and jumpers if possible.

Make a decision.

Make an early decision to stay and protect your property or vacate to a safe area.

If you decide to vacate, close all windows and doors and leave before the fire front approaches. Take all children and pets with you.

You should only stay if you are confident and fit enough to fight a fire.

If you decide to stay

Close all windows and doors.

Fill the bathtub and buckets.

Connect hoses to taps.

Move flammable liquids away from the house.

Damp down the house and garden on the fire side of the house.

Block your downpipes, remove leaves and twigs and fill your gutters with water.

Turn on the radio to a local station to receive any updates.

When the firefront approaches

Shelter inside your house as the fire passes through

After the fire has passed

Keep checking your property inside and out for burning embers and small fires.

Most building losses occur after the fire front has passed.<sup>1615</sup>

In his statement, Mr Castle said that although Canberra Connect had become ‘very crucial’ in terms of providing public information, and arrangements had been made to extend the operating hours of Canberra Connect that weekend from 7.00 am to 7.00 pm: ‘There were difficulties in

getting confirmed information to Canberra Connect given the rate that unconfirmed information was coming through on the 18th. Call rates and website hits were registered at extreme levels on the 18th.<sup>1616</sup>

### ***Issue of the first Standard Emergency Warning Signal***

In his statement, Mr Castle outlined the events of the early afternoon on 18 January as follows:

We had a series of meetings through the early afternoon. The difficult thing was to keep up with information as it came to us. I suppose we started to become concerned about what was likely to threaten us when reports indicated the fire had crossed the Murrumbidgee some time between 1.00 pm and 1.30 pm and we decided to put out the standard emergency warning signal (SEWS) ... This action followed reports from the field and the difficulty in pinpointing the actual fire sites. Getting that accurate information was difficult ... About 1.45 pm we first distributed the SEWS. We outlined a major deterioration of the situation and listed suburbs under threat. We urged residents to return to their homes and included advice on what to do if fire approached their location.<sup>1617</sup>

It was drawn to Mr Castle's attention during his evidence that the earliest Standard Emergency Warning Signal instruction made available to the inquiry was signed by him at 2:05 pm. He had thought there may have been an earlier one signed by Mr Lucas-Smith but accepted that if there was no other document signed by anyone else, that would appear to suggest that the first time the SEWS went out was some time after 2:05 pm.<sup>1618</sup>

The SEWS was subheaded 'Official request to broadcast an emergency announcement', and commenced with instructions to broadcast every 15 minutes for the next two hours the SEWS signal for 15 seconds and then the 'Emergency Announcement verbatim as provided below':

This is an official emergency announcement. The ACT Emergency Services Bureau has advised that there has been a major deterioration in the ACT fire situation. There is increasing risk due to fire spotting from the fires to the west.

The following suburbs should be on alert:

- MacGregor
- Holt
- Higgins
- Woodhaven Green
- Hawker
- Weetangera
- Cook
- Macquarie
- Aranda
- Duffy
- Rivett
- Chapman
- Holder

Residents in these areas are urged to return to their homes.

Residents should take the following precautions:

- **INDOOR: IF FIRE APPROACHES YOUR HOUSE:**
- **Close** all the doors and windows
- **Fill** the bathtub, any buckets etc and soak towels to place in any crevices such as under the door

The SEWS also contained guidelines as to actions residents can take outside their homes, similar to those appearing in the media releases earlier in the day. The SEWS also noted ‘as a precautionary measure’ evacuation centres were being opened, but that ‘no evacuations are currently taking place’. The SEWS concluded by stating, ‘Residents should keep listening to local radio for more information. They can also call Canberra Connect on 13 22 81 or visit [www.canberraconnect.act.gov.au](http://www.canberraconnect.act.gov.au)’.<sup>1619</sup>

Mr Castle thought the form of the SEWS had been reviewed by Mr Lucas-Smith before it came to him. The information concerning precautions that residents could take looked to Mr Castle to be in accordance with ESB brochures and publications. According to Mr Castle, with his state of mind at the time he signed the SEWS, he was ‘probably’ satisfied that it contained enough information for people to know what to do if they were threatened by fire. But he considered that, with hindsight, more information could possibly have been given.<sup>1620</sup>

The process of despatching the SEWS was referred to in Ms Harvey’s statement. She was aware before the first SEWS that there had been problems in getting faxes out:

so we decided to target the local radio and TV stations as a priority and fax them individually from different fax machines throughout the building so that media got the announcement as soon as possible. I arranged a team of people to do this, and to ring through to alert each of these media agencies that the fax was coming, then to ring again a few minutes later to confirm it got through.<sup>1621</sup>

In his report, Mr McLeod noted: ‘Inexplicably, ABC Radio in Canberra did not receive the fax until 2.31 pm’. However, this comment was made in the context of the information provided to Mr McLeod that suggested that the first SEWS was released by the ESB at 1.45 pm. Mr Castle’s evidence that the first SEWS was in fact not signed until 2.05 pm and, presumably, was not faxed from ESB until some time thereafter, may in part explain the delay referred to by Mr McLeod.<sup>1622</sup>

#### **5.14.12 Preliminary discussions about declaration of a state of emergency**

At 10.15 am on 18 January, Commander Newton called Chief Police Officer Murray as he was driving back to the ACT from Sydney, and suggested that they might need to seek the declaration of a state of emergency. Commander Newton said that she believed that this might be necessary because if the fires progressed as predicted, she believed that they would overwhelm the ACT agencies’ resources, necessitating a multi-agency, multi-jurisdictional response, and that such a situation would best be handled by a person empowered as the ‘Territory Controller’ under a declared ‘State of Emergency’ pursuant to s. 20 of the *Emergency Management Act 1999*. In particular, Commander Newton believed that a declared state of emergency might prove necessary in order to empower police to forcibly evacuate people from situations in which the police believed the person’s life was at risk. Chief Police Officer Murray agreed with

Commander Newton's recommendations, and when he got back to Canberra early that afternoon he attended the ESB to discuss the matter with Mr Castle<sup>1623</sup>, as detailed below.

At 12.20 pm on 18 January, Commander Newton telephoned Sergeant Byrnes, the police liaison officer at the ESB. She discussed with Sergeant Byrnes the current status of the fires and then asked him to find Mr Castle, as she had not been able to get in contact with Mr Castle by telephone. In her statement, Commander Newton describes part of her conversation with Mr Castle as follows:

Sgt Byrnes put me on to Mr Castle and I had a conversation with him. During this conversation I clearly articulated my view that a state of emergency needed to be declared and my reasons for wanting him to support the state of emergency. Mr Castle did not share my opinion. During the conversation we said things to the effect of:

He said, 'What does the declaration give?'

I said, 'Powers to evacuate if needed'.

He said, 'I don't see a need to evacuate'.

I said, 'You can answer to the Coroner if people die'.

He said, 'If people die I will answer to the Coroner'.<sup>1624</sup>

In her evidence, Commander Newton said that this was the first conversation she had with Mr Castle that day, and that she had made some notes of the conversation at the time it occurred, and some afterwards.<sup>1625</sup> Her notes of that conversation included 'didn't see a need to evacuate' and 'said could answer to the Coroner if people died' and were made at around 4.40 pm that afternoon, at the time Commander Newton found out that the first person had died.<sup>1626</sup> She agreed that she did not record Mr Castle's reply in her note: 'It doesn't specifically say that there. My recollection of the conversation was that Mike Castle said that he would reply to the Coroner'. It was put to her that Mr Castle did not make that reply and Commander Newton repeated that her recollection of the conversation was as set out in her statement, and she did not accept any possibility that she might be mistaken that Mr Castle made that reply at that point in the conversation.<sup>1627</sup>

In his evidence, Mr Castle said that he resisted Commander Newton's request for his support in declaring a state of emergency because forced evacuations were at odds with best practice as developed by the Australasian Fire Authorities Council (discussed immediately below), and that he still believed that there was no immediate threat to the Canberra suburbs.<sup>1628</sup> When questioned about Commander Newton's version of their telephone conversation, Mr Castle said that he was shocked when he read the version of their conversation contained in her statement, and that it was not his recollection of the conversation. Rather, he said 'I believe that what I answered was that I would stand by the evacuation guidelines'. He said that he recalled her using words to the effect that 'You could answer to the Coroner' but he did not believe that he responded in the terms she suggested.<sup>1629</sup>

#### **5.14.13 Declaration of a state of emergency**

According to Mr Lucas-Smith:

With the continuing deteriorating conditions and the potential impact on urban ACT now almost certain, the Fire Commissioner, Chief Police Officer, Executive Directors ESB, other senior ACT Executive officers of the ACT's Emergency Management

Committee and myself, met with the Chief Minister at about 1400 hours to discuss the need for a declaration of a State of Emergency. This was agreed and the declaration was made at 1445 hours.<sup>1630</sup>

Chief Police Officer Murray described in his statement arriving at the ESB and then attending a meeting to discuss the declaration of a state of emergency:

At about 2.00 pm Sgt Kirby, Sgt Byrne [sic] and I went into Mr Castle's office. Sgt Kirby and I remained there for approximately 45 minutes and Sgt Byrne and Ms Purnell came in and out of the room periodically. There was a meeting already in progress involving Mr Stanhope, Mr Castle, Mr Keady, Mr Lucas-Smith, Mr Bennett and Mr Tonkin. There were others in the room but I did not specifically note who they were. Mr Lucas-Smith and Mr Castle described the overall state of the fire. My opening comments to the group were that I was strongly of the opinion a state of emergency needed to be declared. I explained that on the basis of the briefings I had received from the Commander in the POC, the views expressed to me by Sgt Kirby and Sgt Byrne and from my experiences in the "Ash Wednesday" fires in Adelaide in 1983, a state of emergency declaration was critical. There was a need to have the authority to evacuate people, if necessary, against their own personal judgment. There had been an example at Uriarra where people's lives may have been put at risk because of their failure to heed the warning of police to leave. Mr Lucas-Smith said as a general rule it was best if people were prepared and able, that they should stay and protect their property.<sup>1631</sup>

Chief Police Officer Murray said that the power to evacuate was not the sole reason for seeking the declaration, and that other powers granted to the police during a declared state of emergency under s. 27 of the Emergency Management Act were also needed.<sup>1632</sup>

Mr Castle gave evidence that the approach to evacuations being taken by himself and Mr Lucas-Smith was the position articulated in the Australasian Fire Authorities Council guidelines on 'Community Safety and Evacuation During Bushfires' and 'that was that people were best off staying with their home to protect their property. The ember attack, it was likely to be the biggest impact and that people should stay. So we were not at this stage in support of forcible evacuation'.

In his statement, Mr Castle described how he produced at the meeting the AFAC guidelines enunciating the 'stay or go' policy on fire evacuation, which he explained as follows:

Its opinion about evacuating is to evacuate early if you are not confident in maintaining your property and weathering a huge fire. However, the collective advice of the fire authorities around Australia is that property can be saved, and people are better off in their house to protect it from ember attack—it's the spot fires that tend to burn houses down, particularly after a fire front has passed ... This collective advice and opinion from fire authorities was acknowledged and signed off on by all police chiefs some time ago as being the best way to operate ...

The bottom line in our advice was to evacuate early if one felt the need, or stay and try to protect houses. The concern from the Chief Minister was that there would be a perception that if he declared a State of Emergency it would automatically give the control to a police officer in accord with the Act. The concern from a public perception was that the CPO would be controlling a fire event.

Given this apparent concern from the Chief Minister about control of the emergency, I offered advice to him that an Alternate Controller could be appointed as provided in the Act. This legislative provision is unique in the ACT. The Chief Minister decided for

that option, and agreed that due to the severity of the imminent threat of the fire at the urban edge he would declare an emergency. However, the Chief Minister was clear that on the declaration and the automatic appointment of the Chief Police Officer as the Territory Controller, the Territory Controller would then appoint Peter Lucas-Smith as the Alternate Controller, with the Minister's approval to manage the fire emergency.<sup>1633</sup> The declaration was made at 2.45 pm.<sup>1633</sup>

The position on evacuations contained in the AFAC guidelines was in substance why Mr Castle said the declaration of a state of emergency was not necessary.<sup>1634</sup> According to Mr Castle, the issue of evacuations was not specifically resolved, in so far as the power to forcibly evacuate was conferred on the AFP as a consequence of the issuing of the declaration.<sup>1635</sup>

Mr Lucas-Smith agreed in evidence that Chief Police Officer Murray's description of the meeting was accurate.<sup>1636</sup> He confirmed that he had disagreed with Chief Police Officer Murray's views regarding the need for a declaration of a state of emergency, particularly if for the purpose of conferring the power to forcibly evacuate residents. Mr Lucas-Smith said that he subscribed to the principle enunciated in the AFAC guidelines that 'people save houses and houses save people', in that it was preferable for well-prepared people to shelter in their homes while the fire front passed, and to then put out any spot fires caused by burning embers.<sup>1637</sup>

In his evidence, Chief Minister Stanhope said that a primary reason given for declaring the state of emergency was to give the police the power to evacuate people compulsorily if necessary.<sup>1638</sup> He agreed that he was caught in the middle of a debate between the Chief Police Officer and the Chief Fire Control Officer, and that he wanted a consensus view, at one point saying: 'You are the experts. All I want is advice'.<sup>1639</sup> According to Mr Roche, 'the Chief Minister was placed in an invidious position on the question of whether to declare a state of emergency, that would not have arisen had the AFP and the ESB adequately addressed the issue of the AFAC position paper'.<sup>1640</sup>

Ultimately, it was decided to declare a state of emergency pursuant to s. 20(1) of the Emergency Management Act. Mr Castle said, 'I think the reason ultimately the declaration went ahead was I think we may have got additional information from what the fire was doing from Mr McRae'.<sup>1641</sup> The declaration was made at 2.45 pm, and the pro forma documents (which had been obtained on Mr Castle's initiative prior to the meeting) were signed by Chief Minister Stanhope.<sup>1642</sup> One immediate effect of the declaration was that Chief Police Officer Murray became the 'Territory Controller'. According to Mr Castle, the Chief Minister, then acting as the Minister for Police and Emergency Services, assigned all emergency functions and powers to the Territory Controller under the Emergency Management Act: 'It was decided that the whole of the ACT would be referred to in the document, rather than a series of areas, because we didn't know what was ahead of us. All the powers possible were assigned'.<sup>1643</sup>

In order to ensure that the fire emergency continued to be led by the fire authorities, at 2.50 pm Mr Lucas-Smith was appointed as 'Alternate Controller', pursuant to s. 23(1) of the Emergency Management Act.<sup>1644</sup> In his evidence, Chief Policy Officer Murray described this as an 'eminently sensible' arrangement, given the extent, nature and proximity of the fires.<sup>1645</sup>

An ancillary effect of Mr Lucas-Smith's appointment as Alternate Controller was that Mr Graham replaced him as the ACT Bushfire Service incident controller, and Mr Dave Jamieson, usually Mr Graham's Assistant Operations Officer, replaced Mr Graham as Operations Officer. Mr Graham said that his responsibility was then to 'co-ordinate the resources

that the Emergency Services Bureau had to support the resources in the field' while Mr Bartlett continued in his role as incident controller for field operations.<sup>1646</sup>

#### 5.14.14 Fire behaviour and spread

##### *The Bendora fire*

As discussed earlier in this chapter, by the evening of 17 January the Bendora fire had spotted into the Tidbinbilla Range and towards the Cotter River, and had broken through several sections of containment lines. When attempts to re-establish containment failed, crews were redeployed to property protection at sites under threat from the rapidly advancing fire front, including Tidbinbilla, Corin ski resort and Tharwa. As noted above, on his morning reconnaissance flight on 18 January, Mr Bartlett had observed that 'the Bendora fire had made a run on Friday afternoon and night in a south-westerly direction with a front of about 4 km width', and that by around 7.00 am that morning the fire was burning uncontained in the national park and plantation with 'limited options for control in forested areas due to the fire activity'.<sup>1647</sup>

Apart from one failed attempt at suppression by burning out timbered country west of Nil Desperandum, on 18 January crews responding to the Bendora fire were focused exclusively on property protection, in accordance with the strategy devised by Mr Bartlett and Mr Graham that morning, in consultation with the other members of the SMT.

The evidence detailing the fire behaviour and spread of the Bendora fire on 18 January is largely uncontentious, and is summarised in the report by Mr Cheney as follows:

At the time of writing, observations of fire behaviour south of Congwarra have not been fully assessed and the pattern of fire spread is still under construction. However the eaten-out pastures in the Paddy's River Valley helped firefighters control spot fires during the morning and early afternoon and when the fire did break out across the valley after 1400 hours the pattern of fire spread was very fragmented. A proportion of the area between the Tidbinbilla Deep Space Tracking station and the Tidbinbilla Road burnt late in the afternoon, after the wind changed to the southeast. Unfortunately this pattern of fire spread was not clearly visible in the aerial photographs taken after the fire.

During the morning the fires on the eastern and western sides of the Cotter River joined together and formed a continuous flank running roughly east-west from Piccadilly Circus to the Tidbinbilla range south of Pierces Creek forest. This flank expanded northwards only slowly as it was backing into the prevailing north-west wind.

At 1345 hours the wind speed at Tidbinbilla increased sharply from 35 km/h to nearly 60 km/h with gusts over 75 km/h. The northern flank of the fire burning in Pierces Creek Forest was blown out as a mass of embers across the eaten-out grasslands of the Paddy's river valley between Flints Crossing Reserve and Congwarra and passed to the south of the Tidbinbilla Deep Space Tracking Station. Despite the strength of the wind the fires spread relatively slowly and were not observed on the eastern side of the Bullen range until around 1530 hours.

Analysis of the spread of the southern flank is incomplete at the time of writing but around 1405 hours a fire front associated with a tornado-strength whirlwind hit Gibraltar Creek homestead from the north-west and destroyed a cottage and blew-in the windows of a utility parked on sparse pasture.

At 1530 hours the wind direction at the Tidbinbilla Deep Space Tracking station changed from north-west to west (the wind recorded at Canberra airport remained steadily from north-west throughout the afternoon). It is possible for this wind change was caused by the convective influence of the intense run of the southern break away from the McIntyre fire, but the overall pattern of fire spread, and particularly the spread of the northern flank of the Broken Cart fire in the Brindabella valley suggests that this may have been a more general shift in wind direction.

Shortly after 1545 hours the Bendorra fire coalesced with the McIntyre fire and burnt into the western edge of the southern suburbs of Canberra between Hindmarsh Drive in Duffy and Woodcock Drive Gordon at around 1600 hours.<sup>1648</sup> [footnotes and grid references omitted]

In his evidence, Mr Cheney confirmed that the Bendorra fire crossed into Kambah, and that the area from the Gleneagles golf club in the south to Gordon was the area impacted by the Bendorra fire.<sup>1649</sup>

### ***The Stockyard Spur fire***

By the morning of 18 January, the Stockyard fire was also burning towards Canberra under the influence of the prevailing west-north-westerly winds. Mr Bartlett had observed early that morning that 'the Stockyard fire had made a run of 20 km overnight with a front of at least 4 km in width'. As for the Bendorra fire, suppression action by crews on 18 January was limited to property protection, in accordance with the strategy devised that morning.<sup>1650</sup>

Although Mr Cheney had not completed his analysis of fire spread data in relation to the Stockyard fire at the time he submitted his amended report, he provided the following outline of the Stockyard fire's spread on 18 January 2003:

The head of the fire burnt through Ingledene pine plantation and had spotted across the Murrumbidgee River onto the southern end of Clear Range by 1355. The fire activity further west [of] the ACT had completely blocked the prevailing wind and conditions near Angle crossing were almost dead calm. The fire was spreading slowly even in the ungrazed pastures in the Murrumbidgee corridor. At 1520 hours a spot fire north of Williamsdale was spreading towards the north up-slope into timbered country.

At some time before 1500 hours the Broken Cart Fire burnt into the back (western perimeter) of the Stockyard-Gingera Fire and burnt the Mt Franklin Chalet. At 1400 hours the northern flank of the combined fires was virtually parallel with the prevailing WNW wind direction. It appears that the wind shift to the west recorded at Tidbinbilla also occurred west of the ranges and the flank of the Broken Cart Fire burnt into Koorabri at the southern end of the Brindabella Valley at around 1630 hours.

Although the presence of the Broken Cart Fire probably increased the rate of spread of the northern flank of the combined fires in the Brindabella Valley, in my opinion it had no effect on the fire behaviour east of the Cotter River.<sup>1651</sup> [footnotes and grid references omitted]

### ***The McIntyres Hut fire***

Over the Friday night and Saturday morning of 18 January, NSW firefighters moved with the fire into the ACT, trying to hold the fire front. Mr Arthur said in evidence that 'they never left the fire at any stage'. When Mr Gore, the overnight Operations Officer at Curtin, handed over to Mr Graham on the morning of 18 January he said that the status report from Queanbeyan at

5.00 am was that despite occasional spotting over Mountain Creek Road, the McIntyres Hut fire was ‘under control and behind containment lines’.<sup>1652</sup> However, the situation rapidly deteriorated throughout the morning.

Mr Cheney provided the following analysis of the development of the McIntyres Hut fire throughout 18 January, including the manner in which it joined with the other fires, and the eventual impact of that combined fire and the associated tornado on Canberra:

During the morning the fire expanded northward in the timber country west of Doctors Flat road and southward in the Uriarra pine plantation and by 1200 hours was burning in the timber country behind Uriarra Station. After 1230 hours, as the weather deteriorated the fire increased in intensity, the northern flank of the fire appears to have broken out first and burnt intensely throwing firebrands down wind that started spot fires in the grasslands near Uriarra Crossing at 1250 hours. As the wind speed increased increasing numbers of spot fire developed and started to spread in areas where the pastures were eaten out.

At around 1340 hours a spot fire started in a pine plantation on the northern side of Mt McDonald and built very rapidly. About this time the mean wind speed over parts of the ACT increased suddenly from 35 km/h to 55 km/h and by 1400 hours the fire burnt to the Murrumbidgee River on several fronts.

By 1430 hours the fire had crossed the Murrumbidgee River into sparse pasture country east of the Murrumbidgee corridor reserve and had thrown a spot fire into the western edge of the Stromlo pine plantation to the west of the Stromlo Observatory. The pasture country between the Murrumbidgee corridor and the Stromlo pine plantation was in an eaten-out condition, which fragmented the head fire into a number of tongues. The average rate of spread in the grassland between 1400 and 1430 hours was 11 km /hr.

The fire behaviour in the grasslands was most intense in the ungrazed pastures of the Murrumbidgee corridor reserve and in the roadside reserve of the Uriarra Crossing Road. The sparse pasture did not light up as readily as the ungrazed fuels on road verges and had the effect of narrowing the head fire before it entered the Stromlo pine plantation. However the high winds and the associated mass of burning embers carried the fire across heavily eaten out pastures at a speed and intensity that surprised experienced firefighters.

At 1445 hours the fire was making a very intense run up the western slopes of Mount Stromlo with high flames that were clearly visible from North Canberra and a spot fire commenced in the forest near the junction of the Uriarra Crossing Road and Cotter Road. The main head fire burnt across on to the eastern side of Mount Stromlo by 1500 hours and was approaching the Cotter Road northwest of Duffy. The rate of spread in the pine plantation was estimated at 6.4 km/hr.

The head of the fire burnt through the Mount Stromlo forestry settlement soon after 1500 hours and first crossed into Duffy just east of the intersection of Warragamba and Eucumbene Drive at 1505 hours. By 1545 hours the fire had entered the suburb of Duffy between Dixon Drive and Hindmarsh Drive.

The fire on the western side of the Goodradigbee River increased in activity and up to 1200 hours this fire was contained on its eastern side by the country burnt out by the McIntyre fire over the previous 10 days. At some time after 1300 hours this fire burnt rapidly in a southerly direction southward up the Brindabella River, burning intensely on the steep slope on the western side of the river. This direction of travel was at right

angles to the direction of the prevailing wind aloft and was probably propelled by a local valley wind from north.

Between 1400 and 1500 hours, the fire in the valley came under the influence of the prevailing west north-westerly wind and made a very high intensity run over Webb's Ridge, across Flea Creek and a further run up the western slopes of the Brindabella range west of Mount Coree. By 1500 the southern extremity of this fire had burnt up the river to the junction of the Goodradigbee River with Flea Creek and had crossed the Brindabella range south of Mount Coree and entered the Uriarra pine plantations just south of Blundell's Arboretum.

I believe that this fire was driven by extremely strong surface winds induced by the convective activity of the outbreak of the McIntyre fire to the North and the Bendora fire to the south. By 1530 hours this fire burnt through Pierces Creek settlement and at 1545 hours had crossed the Murrumbidgee River and burnt onto the property of Fairvale.

Shortly after 1445 hours this fire merged with the flank of the McIntyre fire to the North and Bendora fire to the south and all fires burnt into the western perimeter of suburban Canberra over a distance of 12 km from Hindmarsh Drive, Duffy in the North to Woodcock Drive, Gordon in the south. The fire entered the suburbs at many locations more or less simultaneously at 1600 hours although there would be instances when spot fires ahead of the main front started before 1600 hours and in places where pockets between spots filled out after 1600 hours.

The extreme convective activity of this very intense fire combined with the convection from the McIntyre fire and the Bendora fire, generated a tornado which immediately preceded the leading edge of the head of this fire. This tornado (or at least the damage from the tornado) started in the lee of a hill called Sugarloaf in Pierces Creek plantation and cut a swathe through the plantation between 150 and 200 m wide from Sugarloaf to the Bullen range above the Murrumbidgee River. The wind strength in the tornado is estimated to be in excess of 200 km/h, and snapped off large trees two to three metres above the ground. The observation that the freshly snapped ends of the trees were burnt and the crowns of the smashed trees had been more fully consumed than the standing trees on either side indicate that the tornado preceded the fire rather than followed behind it.

The base of the tornado lifted off the ground at the crest of the Bullen range then came back to ground on Fairvale where it uprooted and smashed large mature yellow box trees and snapped off steel fencing pickets at the base. The tornado then proceeded into the Arawang nature reserve where it removed the roof of a water storage reservoir and then entered the suburb of Chapman at Lincoln close.

Shortly after 1600 hours the tornado crossed Mt Arawang and then moved into Kambah in the vicinity of Colquhoun Street and Sulwood Drive and caused damage to the roofs of houses between here and along Inkster Street. The base of the tornado lifted off the ground near the southern slopes of Mount Taylor.

### ***The nature of the fire spread***

Mr Cheney confirmed in his evidence his opinion that both the tornado and the extremely rapid movement of the fire that came between the Bendora fire and what had been the McIntyres Hut fire, was caused by the fact that the central fire was being drawn between the flanks of the fires on either side of it. He said that as a consequence of this phenomenon, the central fire moved very quickly, 'maintaining a rate of spread of 20 kilometres an hour, which is the fastest

documented rate of spread of a forest fire anywhere to my knowledge'. After referring to similar experiences encountered by him with experimental fires, he concluded, 'So one can't be categoric about it, but in my opinion, it required the interaction of the two convection columns to create the really quite remarkable rate of spread between the two fires—between the two existing fires'.<sup>1653</sup>

Mr Cheney agreed that both the fact that this phenomenon occurred, and the speed with which the resultant fire moved, were a 'complete surprise' to him, and that 'I was surprised there wasn't more lateral spread on some of the fires and that that fire coming through the centre filled out extremely rapidly'.<sup>1654</sup> Mr Cheney's reconstruction of fire spread on 18 January indicated that between 2.00 pm and 2.30 pm the fire moved at around 11 kilometres an hour through the eaten-out grasslands to the west of Canberra, which was three times the rate predicted by the MacArthur grass fire metre. Mr Cheney also agreed that the Project Vesta studies were conducted in relation to fire spread in forest fuels, and so were inapplicable to the eaten-out grasslands.<sup>1655</sup>

In his evidence, Mr McRae said that the ESB was notified at around 1.00 pm that the eastern flank of the McIntyres Hut fire had flared up and was moving into the grasslands. He said that this indicated that the fire had travelled around 3 kilometres from its overnight starting point by 1.00 pm, but that it then 'accelerated quite remarkably' to cover around 12 kilometres in the next two hours, to hit Weston Creek just after 3.00 pm.<sup>1656</sup> Mr McRae said that the McIntyres Hut fire changed from a surface fire to a 'plume driven fire', and then responded to very different drivers to those that the Planning Unit had taken into account in formulating their fire spread analysis. His evidence was that they did not have any warning of this phenomenon before it occurred, and did not have the tools necessary to predict it, with the consequence that the fire spread in a totally unexpected manner and displayed unexpectedly ferocious behaviour.<sup>1657</sup> In his statement, Mr McRae said:

Based on the weather conditions forecast by the BoM, we had expected these worsening conditions somewhere in the four-day period, 18–21 January 2003, with the earliest impact being 6.00 pm on 18 January 2003. For that reason, we had not anticipated the fires hitting Canberra mid-afternoon on the first day of that four day period.<sup>1658</sup>

Similarly, Mr Lucas-Smith said that the Planning Unit were trying to predict what turned out to be exceptional fire behaviour on 18 January, and so 'grossly underestimated' the rate of spread that in fact occurred that afternoon. With respect to fire events on the afternoon of 18 January, he said that 'I had not experienced anything like that in my over 30-years experience involved in bushfire fighting'.<sup>1659</sup> When asked about whether he expected an impact on urban Canberra of the kind that was experienced on 18 January, Mr Lucas-Smith responded:

No, certainly not to that extent or to that ferocity. I certainly did not expect an impact on the ACT interface areas of that sort of ferocity at all. I certainly expected that somewhere, either from the Bendora fire or Stockyard fire or the McIntyre fire, just for the sheer length of the interface there ... I knew we would not be able to cover all of that with the resources we had. So the potential for the Bendora fire or the Stockyard fire to eventually creep through to the interface, or the McIntyre's Hut to eventually reach the interface, that potential really existed. But where I didn't know and when. All we had was the predictions we were able to make based on the best of our ability.<sup>1660</sup>

Mr Bartlett's evidence was that he too was taken by surprise by how fast the fires moved after 1.00 pm on 18 January. He said that he was aware that fires had moved that fast in the past in

Australia, so that, although ‘it is not something that I was completely unfamiliar with, it is not something you see very often either’.<sup>1661</sup>

Submissions were made on behalf of numerous persons represented at this inquiry to the effect that the extreme fire behaviour that occurred on the afternoon of 18 January 2003 resulted from a matrix of interrelated factors that could not have been predicted, and that the timing, ferocity and extent of the impact on urban Canberra that afternoon could also therefore not reasonably have been predicted. In this regard, the ACT referred to the concluding remarks made by Mr McLeod in his report, at which he noted that whilst large destructive fires in the ACT are certainly not unique: ‘The event was unique in the experience of the residents of Canberra and its surrounds and probably of all fire fighters because fires of this kind have never before caused such damage to the region. A house had not been lost to bushfire in suburban Canberra since 1952’.<sup>1662</sup>

The evidence of numerous firefighters before this inquiry generally supports Mr McLeod’s conclusion as noted above. Despite decades of firefighting experience, none of the members of the SMT had experienced fire behaviour of the kind that occurred on the afternoon of 18 January 2003, and it appears that none of them expected it. Some firefighters referred to experiencing similarly extreme fire behaviour to that encountered on 18 January during the Ash Wednesday fires of 1983, however those experiences were in other jurisdictions in the context of different fuel types and topography, and it does not appear that any of the those witnesses expected fire behaviour of that kind to occur in the ACT during the fire event commencing on 8 January 2003.

However, it should be noted that Mr McLeod concluded that the ACT had a documented history of significant fires prior to the January 2003 fires, and that:

Although it was probably the most severe fire experienced in the region in the last 100 years, the emergence of large destructive fires in the region, from time to time, is by no means unique ...

The Inquiry’s view is that one of the lessons of the fires is the realisation that very serious and potentially destructive fires that may threaten the city could happen again in the future. The Canberra community must not forget this. The fires cannot be simply explained away as an unfortunate, unlucky or ‘one-off’ event.<sup>1663</sup>

#### **5.14.15 The SMT’s response**

During the afternoon on 18 January, Messrs Gellie, Taylor and Lhuade shifted from fire predicting to fire ‘tracking’ in an attempt to keep Operations and firefighters in the field up to date with the current fire situation. However, according to Mr Gellie the fires were moving too rapidly for the Situation Unit at Curtin to produce useful planning documents for firefighters engaged in operations: ‘But whether we could actually feed back quickly enough to enable operations to then respond to that information, it was just moving too fast and with such intensity that it was very difficult, I think, to get the information there in a timely fashion’.<sup>1664</sup>

In his statement, Mr Lucas-Smith described how until the early afternoon, the Planning Section of the SMT used a combination of line-scan data, field reports, advice from the public and situation reports from various aircraft to determine the location of the fires, their rates of spread and assets under risk.<sup>1665</sup> However, Mr Lucas-Smith’s evidence was that as fire activity intensified in the early afternoon, it became increasingly difficult to get reliable information about the position of the various fire fronts. Although information was radioed in by firefighters in the field, he said that it was difficult to build a coherent view of the fire front from this

information. The ESB was unable to monitor the police frequency, and so did not have direct access to information coming in from police in the field.<sup>1666</sup> Mr Lucas-Smith said that as conditions further deteriorated during the afternoon:

the smoke made any reasonable assessment of the fire almost impossible, although it was apparent that the McIntyre's Hut Fire (NSW), the Bendora Fire, the Broken Cart Fire (NSW), and the Stockyard Fire were all rapidly accelerating and may merge. The combined smoke plumes from these fires generated dry thunderstorms, and with such a massive release of energy from the combined forces of these fires, very unusual and erratic fire behaviour was occurring around the Pierces Creek area and was rapidly heading east, albeit it was still located west of the Murrumbidgee River.<sup>1667</sup>

Mr McRae also noted in his statement that by mid-afternoon he was receiving relatively little information because of the 'extreme congestion of radio transmissions', and that subsequently the Planning Unit could do little 'as reports of destruction continued to come in'<sup>1668</sup>, Mr Castle also noted that on the afternoon of 18 January 'getting accurate information was difficult'<sup>1669</sup> and that by around 3.00 pm: 'Fragmented information was streaming in and it was difficult for people to keep track of it, and for Canberra Connect to distribute it ... ESB ComCen was extremely busy'.<sup>1670</sup>

At around the same time that the state of emergency was declared at 2.45 pm, a report was received that the fire had entered Deeks Forest at Mt Stromlo and was 'going well'. At 2.55 pm Mr Bartlett reported to ComCen that the fire had entered the Stromlo forest and was heading east.<sup>1671</sup> Mr Lucas-Smith said that at that point 'with the fires so close to the city, all available resources were deployed around the Weston Creek area in anticipation of the potential damage from the advancing fire front'.<sup>1672</sup> In his statement, Mr Lucas-Smith described the SMT's response to the impact on urban Canberra as follows:

The fire was reported as crowning in Dixon Drive, Duffy at about 1530 hours. From this point on there were numerous reports of houses and other structures alight throughout the Weston Creek and Kambah areas. Fire fighters tasked with rural property protection in the Tidbinbilla Valley and Naas Valley, and not actually engaged in rural structure fires, were responded to assist with structural protection in urban ACT.<sup>1673</sup>

Mr Lucas-Smith said that he was aware of the impact of the fires on Duffy and Chapman, but that he received only very limited information from firefighters in those areas at that time, with the effect that there was very little he could do 'in relation to command and control to direct them'.<sup>1674</sup> At this time he said that firefighters were 'not always' provided with specific addresses to respond to, but rather provided assistance at homes or building on fire or under threat as they saw fit.<sup>1675</sup>

As noted above, with the declaration of the state of emergency at 2.45 pm and the appointment of Mr Lucas-Smith as the Alternate Territory Controller at 2.50 pm, Mr Graham took over as the ACT Bushfire Service incident controller. According to Mr Graham, from around 2.00 pm when the fires joined up, 'there were continuous and voluminous calls for assistance from the public, as well as multiple radio transmissions from crews involved in fighting the fire as it approached the urban fringe'. Mr Graham described in his statement his experience of what occurred as the fires first impacted on the suburbs:

At about 1530hrs, the Situation Unit staff in the field reported a firestorm developing in Duffy. At 1531hrs reports from the Hall tanker was that fire was crowning in Dixon

Drive, Duffy. At 1556hrs, Neil Cooper (Oscar 7) reported that the fire was now impacting on three rows of houses in Duffy. Throughout this time I was in frequent contact with David Prince of the ACT Fire Brigade about the unfolding situation. Given the volume of calls for assistance and the speed at which the fire front had approached and then impacted on houses in the Weston Creek area, it became impossible to coordinate and direct units from a central control perspective. As such, I directed units to use their own initiative and to respond as they saw situations develop and endeavoured to prioritise their deployment as the fire threatened assets of strategic importance.<sup>1676</sup>

At this time Mr Graham gave specific directions that ground crews respond to protect the Lower Molonglo Water Treatment Works and the Police Complex at Weston, ‘mindful of the health and safety issues for the entire city of Canberra associated with the water treatment/sewerage facility, and the communications infrastructure and ammunition stored at the Police Complex at Weston’.<sup>1677</sup>

Mr Graham further described the fire impact on the suburbs as follows:

The significant impact of the fire on the western suburbs continued to create demands for resources well beyond our capability. Firefighting crews were also affected in that some of the urban pumbers broke down as their air-cleaning elements caught fire, requiring additional resource allocation to effect the rescue of those stranded crews ...

Throughout the afternoon and into the evening I worked with the other members of the SMT and the ACT Fire Brigade to assess damage and to regain central control of fire fighting resources. This was extremely difficult because of the volume of radio traffic, the fact that dense smoke was affecting the quality of those communications and the fact that many crews were operating independently as life threatening situations became apparent. One of my functions was to analyse the multiple 000 calls for assistance and to manage the deployment of our limited resources to those calls deemed most urgent in terms of threats to life as opposed to property protection.<sup>1678</sup>

Mr Bartlett’s evidence was that on 18 January he was acting more like the Operations Officer than the incident controller, because he was not in control of either the planning or logistics components of the IMT, but rather, was responsible for directing firefighters in the field. He did not believe that he should be querying the SMT’s operational structure on the morning of 18 January, and so took on the role he was asked to that morning.<sup>1679</sup> As had been planned that morning, Mr Bartlett directed operations from a helicopter. However, by the middle of the afternoon Mr Bartlett said that the huge amount of smoke generated by the fires made it very difficult to see what was happening on the ground.<sup>1680</sup> Mr Bartlett’s evidence was that even with the benefit of hindsight, knowing how the fires impacted on the Canberra suburbs on 18 January, he would not deploy resources differently from how they were deployed that day.<sup>1681</sup>

Mr Kevin Cooper said that at around the time the fires hit the urban edge of Canberra, two of the four NSW task forces had been overrun by the fires, and were in refuge areas (at the Tharwa fire station and the carpark at the National Parks offices). However, he said that when a call came through from Mr Graham at some time between 3.00 pm and 3.30 pm requesting the NSW taskforces to assist in Canberra, all task forces were ready to go. Mr Cooper ordered Mr McTaggart to deploy the task forces to Canberra as soon as it was safe to travel. Canberra was approximately 45 minutes from where the task forces were positioned, and as soon as they arrived in Canberra they commenced property protection work. More task forces were then en route to the ACT from Sydney, and Mr Cooper was working to task them as they arrived.<sup>1682</sup>

Indeed, Mr Koperberg said that with the adverse weather materializing as forecast on the morning of 18 January, he believed that the fires would make a major run and hit Canberra's western suburbs, as he had foreshadowed in his conversation with Mr Lucas-Smith on 15 January. Mr Koperberg said that despite 14 declared fire emergencies in NSW that day, he was so concerned about Canberra that at 9.30 am he dispatched to Canberra one of his most senior staff to assist, NSW Rural Fire Service Assistant Commissioner Mark Crosweller. At the same time Mr Koperberg assembled NSW reserve personnel at Campbelltown in case they were requested by the ESB.<sup>1683</sup> Mr Crosweller arrived in Canberra at 1.20 pm, and was briefed on the situation by Mr Kevin Cooper, who said that following the briefing:

It still rings in my ears his summary—that was 30Ks of fire impacting on 25Ks of urban interface. After the briefing with me, he proceeded to discuss options, planning with the operations officer ... His main thrust was: fires are going to reach the urban interface and what plan, what arrangements have you got in place?<sup>1684</sup>

#### **5.14.16 Subsequent media updates**

At 2.55 pm Mr Castle gave an interview on ABC Radio 666. The Rehame Newsline summary of the interview is as follows: 'Castle says that the ACT is now in a state of emergency. He comments that there are no fires in the Canberra suburbs yet, but he is worried about spot-fires. He wants people to prepare their homes immediately and says it is better if residents stay at their properties'.<sup>1685</sup> At 3.02 pm Chief Minister Stanhope was interviewed on Radio 666; he explained what the declared state of emergency meant and urged Canberra residents not to be 'unduly alarmed'.<sup>1686</sup>

A second SEWS was broadcast at 3.20 pm, some 15 minutes after the fire front hit Duffy. The second SEWS advised that the ACT Chief Minister had declared a state of emergency in the ACT and that 'powers of control have been given to Peter Lucas-Smith, Alternative Territory Controller'. The second SEWS also contained new advice that 'severe fire conditions now exist at Eucumbene Drive, Duffy', significantly expanded on the list of suburbs that should be 'on alert', and advised that 'residents in these areas are urged to return to their homes'. The second SEWS also contained advice largely identical to that in the first SEWS regarding precautions that residents should take, noted that water restrictions did not apply, and advised that some evacuations centres had been established as a 'precautionary measure', but that 'no evacuations are currently taking place'.<sup>1687</sup>

#### **5.14.17 Ongoing fire impacts and operations**

Property protection throughout areas of urban Canberra impacted by the fires continued through the afternoon and into the evening on 18 January.

At sometime between 3.30 pm and 4.00 pm there was a power failure at Curtin. Only ComCen, the operations room and some power points in the two larger operations rooms, logistics and planning had an uninterrupted power supply. This meant that many of those at Curtin had to continue working under emergency lighting, creating, in Mr Castle's words, 'quite a challenge'. ESB headquarters was itself threatened by fire during the afternoon, and crews and aircraft were deployed to protect it.<sup>1688</sup> According to Mr Castle, at one point later that afternoon the evacuation of the ESB was discussed, but it was considered impractical do so given the concentration of information and systems at Curtin, and no evacuation occurred.<sup>1689</sup>

During the late afternoon Mr Castle said that he was working to collate information to give to the media, some of which he relayed during an interview with ABC Radio 666 at 5.25 pm. During this interview, Mr Castle said that he indicated that 18 suburbs were on alert and that the situation was critical.<sup>1690</sup> The Rehame summary of that interview states that Mr Castle ‘advises people in high-alert areas to turn off gas and power, close windows, fill buckets and baths with water, wear sturdy clothing and stay with their homes until told to evacuate by emergency services’.<sup>1691</sup>

Mr Castle also requested assistance from Defence at this time, particularly generators, graders, water tankers, and later that afternoon, defence personnel with chainsaws.<sup>1692</sup>

Shortly after 7.00 pm, the predicted weather change arrived, bringing with it much milder south-easterly winds. Mr McRae said that with the change in weather, the fires stopped their runs.<sup>1693</sup> According to Mr Lucas-Smith, this ‘saw much fewer impacts on houses and buildings being reported, though there were still many houses alight’. According to Mr Graham, following the weather change:

... reports of new fires abated and our resources were now focussed on dealing with houses that were still alight and assisting members of the public where property loss was significant or where a threat to life or injury was still evident from fallen trees, power lines, gas mains and burnt structures, or transportation assistance was required for urgent medical reasons.

Our immediate objective was to assist the ACT Fire Brigade with defensive structural firefighting where requested, and to extinguish all fires within the urban perimeter in case of flare-ups and the associated ember attacks.<sup>1694</sup>

At 7.30 pm an emergency management executive meeting was convened at which recovery operations were discussed. It was then known that power and phone lines were down in many places, and that the hospitals were ‘stressed’. At 8.30 pm Mr Lucas-Smith said that he and the Chief Minister were briefed by Mr McRae on the scope of the known fire impacts<sup>1695</sup> and that Mr Lucas-Smith then ‘directed that all efforts were to continue on extinguishing structural fires and minimising the risk of further ignitions’.<sup>1696</sup>

The Canberra Connect system itself became inoperative for approximately three hours on the night of 18 January, and the InTACT system by which press releases were usually prepared also suffered a system failure, requiring press releases to be prepared by hand.<sup>1697</sup>

Later than evening the SMT focused on arranging the overnight shift, and on strategies, objectives and resources requirements for the following day. Mr Graham said that there was a concern that fires to the north and south of Canberra had the potential to impact on suburbs and areas of the ACT that were still unburnt, and that ‘planning and deployment of our limited resources required careful consideration in light of what the fire fighters had experienced and the number of hours some had worked over the last two days’.<sup>1698</sup> Similarly, Mr Castle said, ‘We still had a real problem with the McIntyre’s fire as it still had the potential to cause a large ember storm over the city. Our attention turned to protecting the northern suburbs’.<sup>1699</sup>

Before leaving work at midnight, Mr Graham appointed Ms Odile Arman as the overnight incident controller at Curtin, supported by an overnight Planning Officer and by Rod Hillman as the overnight Operations Officer. In addition to identifying the status of crews in the field and responding to overnight incidents, Ms Arman was tasked by Mr Graham to develop incident objectives and strategies for the following day.<sup>1700</sup>

## 5.14.18 ACT Fire Brigade response

### *Resource deployment*

Despite the ACT Fire Brigade being described in its own Incident Action Plan as the ‘primary response agency’ in the event that the fires impacted on urban areas<sup>1701</sup>, Superintendent Prince said that the SMT was coordinating the urban response to the fires on the afternoon of 18 January, rather than the Fire Brigade IMT.<sup>1702</sup> This would appear to be in accord with Commissioner Bennett’s expectation that while there would be ‘some duality of roles’ between the Fire Brigade IMT and the ESB SMT, in the event of a fire impact on urban Canberra, he expected that the SMT would retain essential management of the incident.<sup>1703</sup> According to Commissioner Bennett, on 18 January the Fire Brigade acted effectively as a division under the command of the SMT, but that despite the cooperation between the SMT and the Fire Brigade IMT by liaison, ‘as the day transpired, obviously as things escalated, it was more difficult for all concerned to maintain a constant liaison based on the activity levels of the various people involved’.<sup>1704</sup>

The ACT Fire Brigade Operations officers working out of Curtin experienced similar difficulties to Mr Graham in trying to coordinate an effective response to the urban fire impacts.

Superintendent Prince said that he was working in ComCen from around 2.00 pm on 18 January, trying to ensure that all 000 calls were answered and responded to. However, he said that once the fires impacted on Canberra, he had great difficulty in locating, contacting and then directing Fire Brigade units:

In my opinion neither the ACT Fire Brigade nor the ACT Bushfire Service had a complete understanding of where available resources were working or awaiting allocation ...

There were so many fires ... that the crews in the field were self-responding to the fires. I didn’t ... at that stage know how many rural fire tankers entered the suburbs to fight the fires.<sup>1705</sup>

Although all ACT Fire Brigade appliances were fully deployed along the urban edge on the afternoon of 18 January, it is clear from the evidence of numerous witnesses that the Fire Brigade was rapidly overwhelmed by the ferocity and scale of the firestorm that hit the urban interface.<sup>1706</sup> As was pointed out by Mr Roche in his report, the Fire Brigade’s Incident Action Plan required that at least two pumbers respond to a structural fire (in accordance with SOP 4), and so with only 12 pumbers, 4 heavy tankers and 4 light units available to it, and dozens of houses ignited within minutes of the first impact on Duffy, the Fire Brigade could not hope to respond to all the house fires caused in accordance with its incident action plan and standard response matrix.<sup>1707</sup>

In this context, it should be noted that a decision was made by the Fire Brigade Operations Officer, Mr Newham, not to utilise the Airport Rescue and Firefighting Service resources on 18 January. Mr Peter Bennetts, the fire station manager at Canberra airport, gave evidence that he had under his command two large tankers, each with a 4000-litre capacity, an ‘ultra-large fire vehicle’ with a 7000-litre tank and foam compatible with water, and 250 kilograms of dry chemical powder. On 18 January he said that six crew and two vehicles were stood up—a large tanker and the ultra-large tanker. The other large tanker was having minor repairs done, but was able to be brought back into service at very short notice.

The Airport Rescue and Firefighting Service had in place a memorandum of cooperation with the ACT Fire Brigade for mutual assistance in fire emergencies<sup>1708</sup> and had assisted the Fire Brigade in relation to previous fires. Mr Bennetts was not at work on 18 January, but said that when he heard about the fires he went in to work at around 5.00 pm, and at 5.21 pm called Mr Newham to offer assistance. According to Mr Bennetts, Mr Newham said that the assistance of the Airport Service was not required at that time, and that they should stay at the airport in case fires broke out nearby. Although there was some dispute about the circumstances in which assistance could be provided under the memorandum of cooperation between the services, Mr Bennetts said that he would have responded a large tanker and the ultra-large tanker in support of ACT Fire Brigade operations in urban Canberra if requested to do so on 18 January.<sup>1709</sup> Mr Bennetts' evidence was that although aircraft were still flying into and out of Canberra airport on 18 January, if the Airport Brigade had been responded to the Canberra fires, the airport would still have been able to operate but would have dropped to 'category 0'—meaning that pilots would be notified that no fire crews were on duty, and would have the choice of whether to land there or not. He conceded that for practical purposes, this would effectively have closed the airport, but reiterated that he would nevertheless have sent both tankers to assist if requested to by the ACT Fire Brigade.<sup>1710</sup> Two subsequent offers of assistance by Mr Bennetts that evening were also declined.<sup>1711</sup>

In his evidence, Mr Newham said that he declined Mr Bennetts' offers of assistance because 'the nature of their vehicles don't make them inherently appropriate for structure firefighting' and because the Fire Brigade did not share a communications network with the Airport Rescue and Firefighting Service: 'We were absolutely stretched with trying to maintain communications, albeit with our own, to try in any way to bring on a vehicle from another organisation'.<sup>1712</sup>

Although Mr Bennetts evidence was that the Airport Service tankers were indeed suited to fighting structural and fuel fires<sup>1713</sup>, he said that he did not disagree with Mr Newham's decision not to accept his services 'initially, at that time'.<sup>1714</sup>

#### ***Evidence of Mr Dannie Camilleri***

Mr Dannie Camilleri was in charge of one of several ACT Fire Brigade crews deployed by Mr Graham to defend the Lower Molonglo Water Quality Control Centre on the afternoon of 18 January. His crew arrived to find much of the area around the plant on fire. Mr Camilleri was aware that the plant contained tanks containing dangerous chemicals such as chlorine, LPG gas and diesel fuel, and that if the chlorine tanks in particular were breached, this would create a poisonous cloud that would blow toward Canberra, necessitating mass evacuations.

Mr Camilleri's crew immediately commenced property protection operations around the plant. Due to difficulties with radio communications, Mr Camilleri was unaware that another Fire Brigade crew was also fighting the fire a few hundred metres away. Mr Camilleri's truck suddenly lost power as one fire front approached, causing an instantaneous loss of water pressure and thus creating an extremely dangerous situation for him and his crew. It appears that the pumper failed because embers were sucked into the air cleaner, where they ignited the paper cleaner elements. (A similar failure occurred to Mr McIntyre's pumper in Duffy that afternoon, as noted below.) This fault has since been rectified.<sup>1715</sup> With the assistance of the other Fire Brigade crews, Mr Camilleri's crew successfully prevented any damage to the chlorine and other chemical storage tanks, and then headed back to Curtin in those appliances that were still operational.<sup>1716</sup>

Mr Camilleri was highly critical in his evidence of the lack of information provided to Fire Brigade personnel on 18 January: ‘We had no idea … what was happening in the mountains … The fact is there was no information flowing from Curtin to the people on the frontline appliances. As far as I know, I don’t know of any firefighter that was informed on the day’.<sup>1717</sup> He was also critical of the fact that the Airport Rescue and Firefighting Service was not called upon to assist, notwithstanding what he described as its ‘exceptional capabilities’, including the ultra-large tanker fitted with a water canon that could be controlled from within the vehicle, thus making the fighting of major fires much safer for the crew.<sup>1718</sup>

### ***Evidence of Mr Shawn McIntyre***

Mr Shawn McIntyre was another of the ACT Fire Brigade officers who gave evidence of his observations and experiences fighting the fires on 18 January 2003. At the time Mr McIntyre was a Station Officer with 14 years experience as a firefighter.

Like Mr Camilleri, Mr McIntyre expressed concern in his evidence about the lack of information he received on 18 January regarding the potential fire impact on the Canberra suburbs. He said that on the morning of 18 January when he started his shift, he had only a general awareness about the fires in the Brindabellas, and that despite seeing leaves and debris falling around his house in Duffy that morning, he was not ‘overly alarmed’. To his mind, Saturday 18 January was no different to the previous 10 days in which the fires had been burning.<sup>1719</sup>

Mr McIntyre described how at 1.40 pm he was instructed to take his unit (Bravo 7) to patrol Eucumbene Drive. He said that he arrived there at around 2.00 pm, not ‘responding under lights and sirens and urgent duty conditions; we drove there at our own pace’. On arrival he said that he was briefed by District Officer Thornthwaite, who told him that the fires would hit Duffy within ‘a couple of hours’.<sup>1720</sup> Mr McIntyre said that he never saw an incident action plan in regard to fire impact on urban Canberra<sup>1721</sup>, and that the first he heard of a threat to the suburbs was when he was briefed by Mr Thornthwaite on arrival that afternoon.<sup>1722</sup>

Mr McIntyre said that his crew were instructed by Mr Thornthwaite that their objective was to prevent the spread of the fire into the urban area by protecting the houses from radiant heat and spotting from the fire front. To achieve this, he said that his crew adopted a ‘defensive approach’: ‘That was to be done by setting up a curtain of water using the monitors on the truck and hose lines. Without being certain where the fire was going to approach from … we were trying to, I suppose, cover all bases with what was there’.<sup>1723</sup>

Mr McIntyre’s crew also set up stand-pipes along Eucumbene Drive at this time. Mr McIntyre suggested in his evidence that the resources available to achieve their objective were ‘grossly inadequate’. He also said, ‘There was a distinct lack of timely notification and information. Areas under threat should have been flagged with operational crews earlier, to allow reconnaissance to be undertaken and local knowledge to be drawn upon’.<sup>1724</sup>

Mr McIntyre said that because he had good local knowledge and mobility with the pumper, he sought a ‘roving commission’ from Mr Thornthwaite to patrol into the back streets of Duffy as well, in case the fire spotted beyond Eucumbene Drive.<sup>1725</sup> As he and his crew familiarised themselves with the area at some time after 2.30 pm, he spoke to a number of residents who approached him to ask what was going on and for advice as to what they should do. He said that he gave residents who asked ‘basic information’, such as ‘If you are going to stay, dress appropriately and make sure you have natural fibre clothing on. Have your hoses ready. Have

your vehicles off the street so they don't impede us. Be vigilant. Look out for little embers landing in your garden and put them out'.

He said that he spoke to approximately 40 people, including his own father. His evidence was that even at this time, he 'didn't believe at that stage that there was any great threat to them'<sup>1726</sup> and that he did not think that the fire 'would be anywhere near the scale of what arrived'.<sup>1727</sup>

Mr McIntyre then received a message from crews on Warragamba Avenue saying that the fire was there. He said he told his driver, 'Let's get around there and get into it'. He then described his arrival at Warragamba Avenue:

I suppose you could liken it from going from day-time to night-time. The visibility was virtually nil. At the most you could probably see a metre, 2 metres in front of you. Extreme heat. Wind. Noise.

I recall the two firefighters in the rear of the truck huddling on the left-hand side behind me. I could see pines probably 50 metres off the road alight with a flame height of somewhere between 20 and maybe 30 metres. The radiant heat from those made it very difficult for me to turn to speak to the driver. Even though the truck was closed up, the radiant heat coming through the truck was almost unbearable.

I suppose our priority then was just survival. There was no thought of getting out and doing anything. In my mind it was imperative to keep moving. I thought if we stopped and tried to get out of the truck we would perish.

... on the left of Warragamba Avenue as we were heading west, there were definitely things alight, property alight. There wasn't a second to even really turn and pay attention to that. We were just trying to get out of there ...

... visibility was very poor so it was very hard to see the road. The driver was having trouble hearing me because of the noise. I made a decision that if we got into some clear air, I would take over the driving because I could tell from where the pines were alight and where the houses were alight and even bits of kerb that I recognised from living in the area, I could tell where the road was.<sup>1728</sup>

Mr McIntyre directed his crew to Eucumbene Drive. He said that the fire had hit that area and that soon after:

There were houses alight everywhere, outbuildings, back yards and I suppose it was an exercise in prioritising what was possible to save and what was already a lost cause ...

Basically if something was on fire and we had ... no chance of putting it out, it was a case of protecting the exposure, making sure it didn't spread to the next house or the next property. Even a house that was involved in fire in a small way at that stage, by the time we moved that bigger hose and shifted the standpipe, it would have been gone. It was a case of setting up between that one and one that was already unaffected and trying to save the one that was unaffected.<sup>1729</sup>

Mr McIntyre went on to describe his crew's firefighting efforts during the course of the afternoon<sup>1730</sup> and how their pumper broke down in Somerset Street as they were attempting to go back up towards the area behind Eucumbene Drive. Mr McIntyre was later informed by a mechanic that the pumper had broken down because sparks had entered the air intake, causing a fire in the vehicle.<sup>1731</sup> One of Mr McIntyre's crew put out the fire underneath the pumper before they left the vehicle. He and his crew collected breathing apparatus and firefighting equipment

from the pumper and, assisted by the police, stayed in the area and continued the firefighting effort among the houses.<sup>1732</sup>

Later in his evidence, Mr McIntyre described how, after reuniting with his family, he went back to Moogerah Street at about 1.30 am on 19 January. He was able to get through police road blocks because of his fire brigade identification. He spent some time looking around the area where he and others had been working earlier in the evening:

There were still bits and pieces flaring up, which I used garden hoses and buckets and things to put those out. At this point my greatest worry was the effort that those firefighters, those police officers and members of the public had put in to saving that dozen or so—13 or 14 houses—was going to go to waste because there was no-one there to monitor these flare-ups. I took that upon myself to do that for as long as I could.

Mr McIntyre patrolled and extinguished flare-ups until 6.00 am.<sup>1733</sup>

Mr McIntyre referred in his statement to his observations regarding the lack of preparedness on the part of the urban residents. He said in his evidence, ‘People were wearing shorts and singlets, thongs. Completely oblivious, I suppose as I was, as to what was coming and they weren’t prepared for it’.<sup>1734</sup> He said that residents seemed to have inconsistent or ‘varying information’ about the fire threat<sup>1735</sup>, which he described at one point as ‘patchy’ information.<sup>1736</sup> According to Mr McIntyre, while there were some people that were taking measures to respond to the fire threat, ‘there were other people who were completely unaware that there was anything at all happening in the suburbs as far as the fire went’. At the time he was speaking to Mr Thorntwaite about deployment, it was not apparent to him that people were beginning to leave the area, ‘It was a normal Saturday. As I say, I live there. It just seemed like a normal day to me’.<sup>1737</sup>

With respect to Fire Brigade operations, Mr McIntyre made a large number of criticisms and recommendations for improvement. Among these were recommendations for improved communication to personnel about the conditions and threats to be faced; improved radio communications within the Fire Brigade; and numerous improvements to logistics and command and control.<sup>1738</sup>

#### ***Evidence of Mr Brett McNamara***

The evidence of Mr Brett McNamara, a deputy captain in the Parks Brigade whose contributions during the earlier days of the fires are detailed above, is in some ways illustrative of the ferocity of the fires that struck on the afternoon of 18 January, and of the heroic efforts made by firefighters to protect properties under threat. Mr McNamara’s house was at Tidbinbilla Nature Reserve, and that morning it had been thoroughly prepared by his wife, to the extent that it had water cascading over its gutters. At 11.00 am Mr McNamara escorted his wife and children from their property. In the early afternoon Mr McNamara returned to defend his house, assisted by Mr Geoff Filmer, Mr Wayne Sayer, and another (unidentified) firefighter[DB1]. Mr McNamara said that its lawns were very green, and that there was ‘basically grassy open country all the way around us’. In addition, a grader had put a containment line around the house two or three blades wide. The four firefighters identified an exit route, positioned the light unit they had with them to escape in if necessary, put on their personal protection equipment, and pre-positioned hoses where they were expected to be needed. At approximately 1.30–2.00 pm, the four officers stood waiting for two different fire fronts to arrive—one from the south and one from the north-west. Mr McNamara said that he was ‘reasonably confident that things were going to be okay’.<sup>1739</sup>

The first front passed by near to the house, but missed them, only setting fire to the chook shed. Mr McNamara then described the arrival of the second front:

It was like being inside an inferno. I have got this vivid recollection of being pelleted with embers. It was absolute chaos. The winds, the sound of the fire was amazing. I have never ever heard anything like it. It was just incredible. Basically it just got to the stage where, yeah, I honestly thought that we were going to die.

Mr McNamara then described trying to fight the fire:

We had the light unit set up there. Wayne was actually inside the light unit. By that stage Geoff Filmer and his mate, I had no idea where they were. It was absolute chaos. By this stage it was just like being inside an inferno, like a furnace. I had no idea where the other guys were. Hopefully, they actually remembered where the exit routes were and had got themselves out. I can recall standing there with the hose and trying to put the fire out as the fires were coming over the top of the light unit ...

My recollection is I actually got knocked to the ground. I actually had a face cloth on and had been using it to keep it damp. I have got this recollection of my face cloth actually catching alight and feeling the intensity of the fire on my face. I actually got burnt on the nose and on the ears and on the cheek. I can recall falling over and trying to get my goggles off and get the helmet off and taking this facecloth, which was now well ablaze on my face.

I was getting up and trying to work out where Wayne was. I couldn't see him. I thought he left the vehicle and somehow got away. As I got closer to the vehicle, I could see what I thought was something lying on the front bench of the vehicle with a blanket over the top of him. I tried to get him out—at this stage the fire was coming right over the top of us. I just got knocked on the ground again and somehow just crawled away from that particular location.

Somehow I found myself at the southern end of our house, which was sort of near where the water pump was. I can recall just crouching there and honestly thinking that Wayne had been killed. And, yeah, sort of thinking that things had taken a turn for the worst.

I can also recall actually looking out towards the west and seeing our picnic table, which actually sits on this green grass, burning in front of me. There was no sign of flames anywhere near it. Just seeing this table burning ...

Somehow I thought that I had to go and find the other guys and see where they were ... The embers were coming over the top of me. The winds and the roar was amazing.

I then found myself back inside the house and I got this recollection of standing in our study and finding Geoff Filmer and his mate. I was so glad to see them ... They must have walked down to our kitchen and got some milk out of the fridge. They are standing there in the study pouring milk all over their face to try and get the smoke out of their eyes. I can recall thinking to myself that Michelle wasn't going to be real happy with that because there was milk going everywhere. It was going all over the computer. It was going all over the place. It was bizarre that I was thinking I was going to get in trouble for this. As it turned out, this was the least of my concerns ...

It was around about at that time, standing looking out of the window that our kitchen window just blew open. I assume it was the fire just cracking the window ... it was like a hungry monster trying to get inside the house. Once the window had broken and it had

the oxygen that was inside the house, there were flames licking in over the top of my head coming into the kitchen. That was an amazing sight ...

I can recall turning around and looking up at the kitchen clock. It was about 10 minutes past 3. It was around about then that I thought this ain't no place to be standing. I can recall walking back up the corridor and looking into the dining room. By this stage the curtains in the dining room were well ablaze. There was this fire licking up the side of the curtains up to the roof. The window in the lounge room had blown open. Again there was just fire coming in through the lounge room area there ...

Then we walked up to the end of the house, up to where the study was. The guys were still standing there. By that time they got rid of all the milk. There was a hell of a mess in the study. I said, "There is no point. We have fire all around us. The front of the house is burning. We are just going to get out of here." Remarkably, this is the part I recall, we walked out. We didn't run. There was no panic. We just walked out. We walked out to where the fire had previously crossed and we had established a safety route, a safety exit point, and sort of walked out and sat there. It was the most eerie walk I had ever done ...

The house by this stage was just completely ablaze. That was an amazing sight, just to see the house burn. To hear the noise. By this stage, the wind or the fire if you like was ripping the corrugated iron off the top of the roof. It was almost like the way you peel a banana with the corrugated iron flying off. The noise and the sound. Then watching sections of the house just sort of cave in ...

By that stage the smoke I suppose had cleared and there was this light unit somehow miraculously still sitting there completely—not untouched—it certainly wasn't burnt. I think Wayne must have moved it. He must have moved it from where it originally was ... I think I walked up to the light unit and saw this big smiley face looking at me. It was, yeah—to say that I was relieved to see him would be an understatement ...

The fire front had then passed. It was heading up towards over Birrigai. We then sat there and exchanged a few pleasantries, which I won't repeat here for obvious reasons. I think we might have even had a couple of smokes and a bit of water—just in shock. Absolute shock.<sup>1740</sup>

### ***Evidence of Mr Arthur Sayer***

The ferocity and speed of the fire event on 18 January 2003 were also vividly described to this inquiry by Mr Arthur Sayer. At the time of the 2003 fires, Mr Sayer had had some 37 years experience as a firefighter, and was one of three Deputy Chief Fire Control Officers of the ACT Bushfire Service. Mr Sayer had been actively involved in the fire event since 10 January 2003, primarily as the incident controller on the Stockyard and Gingera fires. Mr Sayer was not given any duties by ESB on 18 January 2003, and so from early that morning he focused on property protection work and assisted various neighbours to prepare for a possible fire impact, particularly around his own property at Gibraltar View, at Oakey Creek and at Tidbinbilla Nature Reserve.

Late in the morning Mr Sayer reported to ComCen a spot fire at the Tidbinbilla property immediately to the north of his own property. Mr Sayer then assisted the Parks 10 crew that been responded and members of his own family in containing that spot fire.<sup>1741</sup> However, other spot fires were nearby. Mr Sayer described in his statement what happened next:

We moved down to the closest spot fire and attempted to contain it but realised that the cause was lost. There were so many spot fires coming towards us and the winds had

increased in intensity. I estimate the winds at that stage were around 125 kph. I realised that the only thing achievable was to go straight to asset protection. From where we were on the spot fires it was about 20 minutes drive back out to get to any houses, and the main fire was probably 1700 metres away from us at this stage.

My brother parked the backhoe in a burnt area of the first spot fire and got into my car to travel out of Tidbinbilla property. He then opened the gate and I drove through followed by the tanker. Before my brother could get back into my car and shut the door the fire was over the top of us. The fire had travelled about 1.7kms in the time it had taken us to get through the gate. He managed to get in and we sat in the car for approximately 20 minutes in a burn over situation ...

The fire was a wall of flames somewhere between 60 to 100 feet high and of maximum intensity. I estimate that the wind was now at about 150 kilometres per hour. The fire and wind were lifting our vehicle up so that both driver's side wheels were well into the air. I remember hanging on to the steering wheel and door handle and looking down onto my brother in the passenger seat. I could see the tanker and knew that it was full of water because we had only just filled it up from the dam. The tanker was rocking from side to side. The feeling was unbelievable helplessness and fear as we just sat contained in the vehicle. We were running out of oxygen and I remember my younger brother saying, we're going to die, and I said don't be an idiot.<sup>1742</sup>

In his evidence, Mr Sayer said that in his 37-year career fighting fires he had never experienced fire conditions of that kind, including such a rapid rate of travel.<sup>1743</sup>

After the main fire front passed, Mr Sayer continued to assist other rural residents with property protection until the late afternoon, at which point, 'once the worst of it had passed', he went into 'recovery mode', checking in on residents in his area and patrolling for flare-ups. He continued with this work until approximately midnight.<sup>1744</sup>

#### **5.14.19 The Australian Federal Police response**

The Australian Federal Police was actively involved throughout the afternoon in responding to the fire emergency. It appears that to a large extent, the police provided support and assistance in response to requests and directions from the ACT Bushfire Service and Fire Brigade. One significant duty that the police assisted with throughout 18 January was the closing of roads and the directing of traffic. Commander Newton noted in her statement: 'Throughout the afternoon I was repeatedly advised of traffic congestion in locations like Black Mountain and mount Ainslie. Sightseers were directed by patrols to leave because there was a high fire hazard with no ability reach people if reached those areas'.<sup>1745</sup>

At 3.05 pm Sergeant Byrnes accepted an offer from ESB to provide the police officers working at the 'front line' with protective firefighting clothing, and arrangements were made to immediately distribute this clothing to officers.<sup>1746</sup>

#### ***Evacuations***

As noted in relation to the declaration of a state of emergency, the Australian Federal Police supported the evacuations policy set out in the Australasian Fire Authorities Council guidelines on 'Community Safety and Evacuation During Bushfires'.<sup>1747</sup> The preamble to those guidelines stated, 'Research into Australian bushfire fatalities shows that last-minute evacuations from

bushfires contributed to the majority of deaths. Late evacuation is inherently dangerous and can cause greater risks than remaining in the fire area'. However, the guidelines also noted:

It is highly recommended that all people who are not physically or mentally prepared to undertake firefighting activities should move to a safe area well ahead of the fire's arrival ...

During the course of a bushfire it is essential that all people in threatened communities have access to accurate information to assist them in their decision-making.<sup>1748</sup>

Although Chief Police Officer Murray gave evidence that the AFP supported the AFAC guidelines<sup>1749</sup>, he submitted:

It is obvious there was conflict between ACT policing and ESB officers regarding the most appropriate time to evacuate rural residents on the 18th of January 2003. Police urged residents to evacuate while ESB officers supported many locals who were keen to stay to defend their properties. It is recognised that rural homes can be saved if residents stay and fight fires. It is common practice to do so. Both rural and urban fire policy encourages people to stay with their homes as long as they are well prepared and well informed. Such preparation includes accessible exit options, available water levels and pressure and, preferably, fire tankers and fighters to assist residents.

It was obvious to police in the field that some residents were not well prepared and not well informed. Given the unique weather conditions, the fuel loads in gardens and pine forests, and the fire's intensity and speed, some residents were not in a position to safely defend their homes.

In anticipation of the impact of the fire, police provided the residents with as much information as possible so residents could make an informed decision on whether to leave the area or stay and fight the fire.

Police did ask residents to voluntarily leave for their own safety but many residents were reluctant to leave. This was one of the key considerations for police seeking a declaration of a state of emergency.<sup>1750</sup>

During the early afternoon the police were given instructions by ESB to evacuate certain areas under threat from fire, such as the Cotter and Casuarina Sands, the Mt Stromlo Observatory and areas around Kambah Pool.<sup>1751</sup> Mr Byrnes described the police work in this regard as 'very task responsive'.<sup>1752</sup>

According to Commander Newton, when she was advised at 2.50 pm that a state of emergency had been declared, 'it was reinforced that the fire services would make the decision as to whether to evacuate people as a result of the fires unless people's lives were in imminent danger'. However, Chief Police Officer Murray's evidence was that the police communications system was incompatible with that of the other emergency services, and so police in the field had to rely on communications relayed from the POC. These communications difficulties meant that while police sought guidance and instructions from fire personnel where possible, and in accordance with the AFAC guidelines, in many cases police were unable to obtain such advice and so had to make their own decisions about whether to evacuate people.<sup>1753</sup> In this regard, Chief Police Officer Murray submitted:

As the afternoon progressed, despite worsening conditions, policy information from ESB continued to be a problem. Police continued to work on the best fire advice

available. Had police waited until they received clear instructions from ESB regarding all evacuations, it is my belief, the loss of life would have been much higher.<sup>1754</sup>

At 2.57 pm Commander Newton discussed evacuations with Superintendent Lines:

We discussed the fact that we had not been authorised by the Alternate Controller [Mr Lucas-Smith] to evacuate people and that the ESB were still recommending residents stay in their homes. We were both very concerned about the need to potentially evacuate people particularly as the fires were approaching Duffy. I advised Superintendent Lines that if we could not evacuate people using the powers of the Emergency Management Act that we should evacuate people only if their lives were in imminent danger and we believed they would die if we did not move them.<sup>1755</sup>

At about 3.20 pm Commander Newton spoke to Superintendent Lines again. She said it was difficult to hear him because of the noise of the fire, and that he told her that people at Duffy must be evacuated because ‘there was a wall of fire about 60 feet high and everything was on fire’. Commander Newton instructed him to find, Mr Thornthwaite, the senior Fire Brigade in attendance at Duffy on the afternoon of 18 January, and to ask if he agreed that evacuations needed to occur. She said that if Superintendent Lines could not find him, to only evacuate people whose lives were in imminent danger.<sup>1756</sup> Mr Thornthwaite’s evidence was that when he saw how great the fire impact was on Duffy that afternoon, he said to Superintendent Lines ‘Chris, just evacuate anyone you can. Just clear Duffy, if you can’.<sup>1757</sup> This instruction to evacuate was subsequently relayed by Superintendent Lines to Commander Newton.

Mr Lucas-Smith’s evidence was that the process by which the two senior officers at Duffy, Superintendent Lines and District Officer Thornthwaite, discussed evacuations on the afternoon of 18 January reflected the appropriate process for reaching such a decision.<sup>1758</sup> Mr Lucas-Smith said that while he might have made a different decision than to evacuate Duffy at that time, given that the main fire front had then passed, he had no criticism to make of that decision or of the way in which evacuations were handled generally on the afternoon of 18 January.<sup>1759</sup> He acknowledged that at times police officers had to make decisions regarding evacuations based on their own judgment, without the advice of fire officers, and that he had no criticism of the way in which police made these decisions.<sup>1760</sup>

Chief Police Officer Murray summarised the actions of police following the impact on Duffy as follows:

Police did not immediately remove people from streets and only called for evacuations when their initial fire fighting efforts were overwhelmed by conditions. Police assisted fire officers in fire fighting efforts and conducted door knocks. Many people had already left, with the few remaining working to save their homes using garden hoses. In such situations these residents were advised of the status of the fire and of escape routes but were not necessarily prevented from remaining.

Under such conditions and evacuation logistics, the police approach was to evacuate areas prior to them becoming high risk situations, which would then place police and the public in much greater danger of being injured or potentially losing their lives ...

As the fire entered the suburbs it became more than apparent members of the public were ill-equipped and ill-prepared to fight the fire. The significance of localised decisions are borne out in police statistics on rescues: it is estimated that in Duffy alone, 162 people were rescued.

A number of police reported entering burning houses and rescuing people who were trapped inside. Some of these people were elderly, disabled and not equipped or prepared for the fire conditions. Police located people collapsed outside their burning houses. Others were located walking in the street in a dazed and distressed state. They were confused and had become disoriented. Many of these people were dressed in ill-suited clothing such as tee-shirts, shorts and sandals. These people were driven from the area in police vehicles ...

During 18 January 2003, police exercised their primary concern to protect life and only fought to save property when life would not be endangered. In an ideal situation and in determining all priorities and the timings of evacuations, consultation with the agency with the expertise in the event (e.g. the fire brigades) would have been best practice.

On 18 January 2003, this was simply not possible.<sup>1761</sup>

In Mr Roche's opinion, 'the AFP conducted their primary obligations in a responsible and cooperative manner, having regard to the dearth of pre-impact information and warnings provided to both the police and the community'. Although Mr Roche expressed concern that some evacuations were carried out in breach of the general policy set out in the AFAC guidelines, he concluded:

The actions of the AFP in seeking to evacuate people was ... predicated on a lack of confidence concerning the level of knowledge existing with the community on the steps necessary to protect themselves and their property. The fact that an Officer of the ACT FB [Mr Thorne] endorsed the evacuation adds weight to the decision of the police.<sup>1762</sup>

#### **5.14.20 The ACT Ambulance Service response**

Very little evidence was provided with respect to the operations of the Ambulance Service on 18 January 2003. However, it appears that the Ambulance Service carried out its role in an exemplary manner. According to Mr Kevin Cooper, the planning by the Ambulance Service was 'most efficient':

During the Saturday we required an ambulance on two occasions. On both occasions the service, the delivery fitted with the plan ... It was impressive. Even for the standard smoke in eyes, minor cuts and scratches, the ambulance in line with his plan delivered that all the way through.<sup>1763</sup>

It is notable that the evidence of Mr David Dutton, the ACT Ambulance Service Operations Officer, differs from that of some other witnesses with respect to the content and value of information conveyed at the planning meetings:

The multi-agency approach adopted by the ESB and its agencies was a significant strength and positive feature of the extended bushfire operations. Information gained through the regular planning meetings was vital in keeping abreast of the current fire activity and forecasting possible future requirements.<sup>1764</sup>

## 5.14.21 Expert evidence on fire spread into and in the suburbs

### *Dr Peter Ellis: the effect of garden types on fire spread*

Dr Peter Ellis of the CSIRO prepared a report in conjunction with Mr Andrew Sullivan<sup>1765</sup>, at the request of the ACT Planning & Land Authority.<sup>1766</sup> Dr Ellis explained in evidence that the ACT Planning & Land Authority wanted him to investigate likely pathways of fire attack on and within its suburbs and look at the implications for land management at the urban interface.<sup>1767</sup> Dr Ellis described in evidence how on 19 January, a team gathered at the CSIRO and discussed how to help or assist in the fires of the previous day. They decided that information about house survival, as well as house loss, would probably be of most benefit and went on to design a survey sheet. They started gathering information on 20 January:

The aim was to gather information on damage of houses, loss of houses, details about the garden. Ideally we wanted to do every house that was lost or damaged, as well as a large number of houses adjacent to the houses that were lost, so ideally we would have data that would enable us to look at the reasons houses survived as well as the reasons for losses.<sup>1768</sup>

Dr Ellis explained that the evidence gathered relied in part on anecdotal accounts from residents as well as on their own observations of house damage, garden types, outbuildings and so on.<sup>1769</sup>

The Ellis report defined 3 categories of ‘house condition’ after the fires, being in essence: no damage; damaged but liveable; and destroyed.<sup>1770</sup> The report also identified two different garden types: type 1 gardens (gardens with little or no separation between flammable fuels, the presence of heavy surface fuels including mulch, and the presence of conifers); and type 2 gardens (gardens having greater separation between fuels and houses, light or discontinuous surface fuels, and the absence of conifers).<sup>1771</sup> Allocation of gardens to those two garden types was largely subjective and made difficult where gardens were totally destroyed. For the purposes of the statistical analysis undertaken by Dr Ellis, the researchers working with him assumed that any garden that was totally destroyed was a type 2 garden, with the result that any association indicated by the statistics would be conservative.<sup>1772</sup>

The Ellis report contains a statistical analysis of a total of 779 houses allocated into the three categories referred to above.<sup>1773</sup> The results of the survey demonstrated that there was a significant statistical association between house loss and garden type, with houses with more unkempt or fuel heavy gardens (type 1) more likely to be destroyed as a result of ember attack from a bushfire.<sup>1774</sup> Dr Ellis also gave evidence that the statistical tests pointed out that cypress trees in general and conifers in particular, were a factor in house loss and damage.<sup>1775</sup>

Dr Ellis confirmed in his evidence that the research team did not find any evidence that residential properties were ignited or damaged by direct flame contact or radiant heat from flames in the pine forest, bushland or grassland outside the suburban perimeter roads. He outlined in his evidence the indicators of direct flame contact or radiant heat that he would have expected to find if the position had been otherwise.<sup>1776</sup> The Ellis report included a number of case studies of individual houses or groups of houses where the actions of residents patrolling the area and controlling many spot fires, led to a number of houses being saved. In the case of the houses at 63 to 75 Warragamba Avenue and four houses behind those houses, the Ellis report recorded:

A neighbouring house that was destroyed was ignited in the eaves, probably directly by a firebrand. A timber garage post of 1 house was ignited by surface fire in mulch. In the

absence of residents, this could have led to the destruction of a house. The distribution of destroyed houses in this area suggest that the effect of saving the first row of houses influenced the survival of the second row.<sup>1777</sup>

The Ellis report includes a general estimate that 50 per cent of the impact of the fires in the suburbs came from ember attack directly out of the neighbouring forests and the other 50 per cent of impact was likely to have been caused by fire spread within the urban area, either ember attack from fuels within other houses, or direct house-to-house flame contact.<sup>1778</sup>

Dr Ellis described the significance of the findings of the report in his evidence. Among other things, he concluded that land management agencies cannot stop fire brands reaching residential properties and igniting any ignitable fuel on that property. He suggested that given this threat:

Fuels outside the suburbs can be managed relatively easily for the first 50 metres, say, to reduce fine fuels, particularly surface fuels and shrubs, down to very low levels. The fire will travel very quickly through minimal fuels, reach a property. If the property has heavy fuels and those are continuous and there is little space and if the fuels—if the gardens are crowded and the fuels are continuous, the fire will develop quickly into a relatively high intensity fire and, given that it's only got a short distance to travel, but heavy fuels will produce a relatively intense fire within private property. So ... there's a responsibility on the land managers to do all that is practical to reduce the level of radiant heat to some pre-selected criteria at the private property boundary and, after that, there's a responsibility of the residents for fuels within their home.<sup>1779</sup>

The setback distances that Dr Ellis identified at the time of his research indicated that the setback distances at the time of the fires should have been sufficient to have prevented significant damage from radiant heat to homes on the urban edge.<sup>1780</sup>

Dr Ellis was asked about what sort of options in times of water restrictions residents have to deal with fire risk from garden types and garden maintenance. Dr Ellis indicated that he had heavy mulch fuels around his house and he accepted that risk:

There is no such thing as a zero probability at the bush urban interfaces of not suffering loss or damage. People, when they are aware, can manage their fuels and accept a given probability that the garden will ignite. The options that residents have are several. They can in key areas, perhaps close to the house, put non-combustible mulch like gravel. They could break up the area of mulch so that you don't have 100 or 200 square metres of mulch on the likely upwind side coming right up to the house.

Dr Ellis explained that mulch in that type of location does not only present a high risk of fire attack, it can also deny access to the outside of the house by residents following the passage of the bushfire front.<sup>1781</sup>

#### ***Mr Justin Leonard: the effect of building location, design and construction on fire spread***

Similar evidence to that provided by Dr Ellis was also provided by Mr Justin Leonard, who leads the research team in the CSIRO Division of Manufacturing and Infrastructure Technology. Since the Ash Wednesday fires in 1983, that division has studied the impact of major bushfires involving significant house losses, and is 'recognised as a world leader in understanding bushfire impact on urban and peri-urban areas'.<sup>1782</sup> The investigation conducted by Mr Leonard into the impact of the fires on Canberra was carried out to clarify the mechanisms of ignition and propagation of the fire in the Canberra urban area, and to identify the reasons why the fires caused such an unprecedented loss of urban property.

The Leonard report<sup>1783</sup> identifies that the fires on 18 January 2003 destroyed a total of 400 houses, including 219 houses in the suburb of Duffy, five in Weston, 31 in Holder, 13 in Rivett, 88 in Chapman, 35 in Kambah, three in Lyons, one in Torrens and two in Giralang. The report states that in Duffy ‘the proportion of houses destroyed in the surveyed region is very high ... Loss so far into an urban environment is rarely observed’.<sup>1784</sup> The report confirms that the survey of households undertaken for the purposes of Mr Leonard’s research was limited to houses destroyed in Duffy, ‘as it presented the highest density of damage and destruction following the Canberra fire’.<sup>1785</sup> This approach was adopted to allow a high level of detailed study of the fire impact, with the expectation that those findings would also be relevant to other areas of Canberra impacted by the fires.

The Leonard report confirms:

Over 229 Duffy houses were surveyed and were categorised as untouched, damaged or destroyed houses. During the course of the data collection, particular attention was given to gathering information on how the houses might have been ignited, and thus ultimately destroyed. This was done by examining each house, with particular attention given to those that had been damaged but not destroyed and/or had occupants present.<sup>1786</sup>

The report also explains that the main objective of the work ‘was to use a social investigation method such as a survey to obtain information that could be useful to describe the degree of damage to houses reached by the effects of the bushfire event, and also to explain population behaviour and mechanisms of attack’.<sup>1787</sup>

The Leonard report includes a general discussion of mechanisms of bushfire impact on urban assets. In particular, the report identifies the three principal methods by which bushfires may cause property damage: direct flame contact, radiant heat and ember attack, and stated:

Survey work has revealed that many houses are ignited from radiation and flame contact from adjacent buildings or features such as timber fences. The duration of the radiation and flame exposure from adjacent burning structures may be for a significantly longer period (an hour or more) compared to the exposure to the firefront itself (a few minutes). Embers are the major cause of ignition, as they can attack a building for some time before a fire front arrives, during the passage of the fire front and for many hours after the fire has passed.<sup>1788</sup>

As with the work undertaken by Dr Ellis and his colleagues, Mr Leonard’s research also confirmed that there was no evidence from the survey of houses impacted in the Duffy area of damage caused by direct flame contact or radiant heat from the fire front in the adjacent forest:

What was very evident when we performed our initial investigation of the area was that the road and clearing zone that formed the perimeter of the Duffy area between the continuous forest fuel and the structures were significant enough to prevent radiation and flame in themselves causing damage to the structures.<sup>1789</sup>

Rather, the major cause of house ignitions was ember attack, often occurring in conjunction with attack by direct flame contact or radiant heat from surrounding isolated vegetation that had been ignited or from other burning structures. Mr Leonard described in his report and in his evidence the ways in which embers from the main fire and from adjoining properties could lead to house destruction, particularly when the effect of the ember attack is contributed to by radiant heat from the burning of nearby structures. One contributing factor that Mr Leonard identified as

particularly significant in urban Canberra on 18 January 2003 was the siting of houses on the suburban blocks:

The proximity of adjoining houses definitely was a contributing factor to the level of loss not only because large houses were placed on relatively or moderately sized blocks but because the houses were all constructed with a similar setback, so that the structures all formed the line at similar distance back from the front of the property. So that the proximity of each house was almost minimised by that strategy.<sup>1790</sup>

In relation to this matter, the report concluded that:

The initial vegetation and structural fires in Duffy created an even more concentrated and enduring ember attack for those further downwind. The ember attack caused by persistent winds blowing over structural fires played a role in the spread of fire deep into urban areas. Some of the structural fires provided direct flame attack and radiation impact on adjacent structures. This effect was exacerbated by the placement of relatively large houses on medium sized blocks, and the presence of timber fences and vegetation between the closely aligned structures ...

In each major bushfire surveyed by CMIT ... ember attack has been identified as a key ignition mode for both the initial attack and through house-to-house transfer. The presence of very hot and dry conditions, coupled with extensive water restrictions created an urban environment that was very susceptible to ember attack and ember production.<sup>1791</sup>

The report also noted:

The configuration of Duffy indicated that the houses were far enough from the forest not to impacted directly by flames from the fire front. However, the particular conditions of wind and burning vegetation combined to generate a large amount of burning debris. The houses in Duffy were particularly vulnerable to this ember attack as they had no specific design requirements to mitigate the entry of embers into the structure.<sup>1792</sup>

In his evidence, Mr Leonard noted that to have a set back far enough to protect against ember attack 'you would be looking at quite extensive buffer zones that may not meet the aesthetic expectations of those living in an urban interface'.<sup>1793</sup> As noted by numerous witnesses to this inquiry, spotting occurred across several kilometres on 18 January 2003, and this was not unusual spotting behaviour on a day of extreme fire weather.

The Leonard report also noted that impacts from house-to-house fire spread:

endured throughout the afternoon and well into the night. We found many examples of community and agency suppression activities during this time, and examples of many houses being saved. It was highly likely that if no suppression activity occurred during this time, the house loss would have approached 100% in the surveyed area.<sup>1794</sup>

Mr Leonard elaborated on this phenomenon in his evidence as follows:

We certainly found examples where occupants were unable to defend against an adjoining house fire due to the magnitude of it and due to the relatively low level of suppression devices an occupant has. Certainly a brigade has quite a lot of capability in limiting house-to-house transfers. But what appeared to be quite evident was that, in looking at the overview of where houses were in fact lost and surviving, the isolated

clumps of surviving houses usually were associated with a story of occupant or fire brigade interaction that actually saved those structures. So the reason why that comment was made was that there appeared to be a story behind each surviving house or most surviving houses. Hence you could assume that a loss scenario approaching 100% would occur if absolutely no person was present in the Duffy area for say 12 hours after the impact had occurred.<sup>1795</sup>

In his report and in his evidence, Mr Leonard also discussed a ‘time-base study of house loss’. The report included a photograph taken as 7.09 pm on 18 January of a house at 37 Warragamba Avenue. The photograph shows that the fire was well alight at the time the photo was taken, which suggested to Mr Leonard that the contents of that house had only been burning for approximately 45 minutes. The next door house at 39 Warragamba Avenue had been burning for a significant amount of time and had been reduced to rubble. Mr Leonard concluded from the photograph that the aggressive burning of 39 Warragamba Avenue caused sufficient impact on 37 Warragamba Avenue to ignite it, and that ‘that was the predominant transfer mechanism’ some two to three hours after the fire front had occurred.<sup>1796</sup>

In the course of discussing further the aspects of house design that make houses more susceptible to ember attack, and therefore destruction, Mr Leonard referred to a ‘fairly clear statistical verification of the impact of protected versus non-protected vent systems in houses’. This showed that houses with vents that were not protected by a metal mesh with holes smaller than 2 millimetres were more likely to be destroyed during a bushfire.<sup>1797</sup> Mr Leonard also noted a strong statistical bias indicating that a destroyed building has a much higher chance of having a destroyed outbuilding associated with it. He concluded that it could be presumed that a component of this statistical bias ‘was due to the fact that the outbuilding represented a significant additional attack on the main structure through flame radiation and ember source’.<sup>1798</sup> He added that outbuildings are generally designed with many more gaps due to cheap construction, and are therefore more susceptible to ember attack. Sheds and garages often also contain a large number of readily combustible items such as stored timber, paint tins and the like.<sup>1799</sup>

Mr Leonard also confirmed that timber fences often constitute a large component of dried timber located very close to the main structure, and once ignited may contribute to radiation and direct flame attacks on surrounding structures. In contrast, ‘in some cases, non-combustible fences provide radiation barriers, thus reducing the potential for fire attack from either the main fire front or the burning of an adjacent structure’.<sup>1800</sup>

Mr Leonard also discussed the effect of breached gas lines on house losses in Duffy, suggesting that ‘the presence of a burning gas plume adjacent to a structure represented a significant risk to the structure’. However, Mr Leonard could reach no conclusions about houses being destroyed by breached gas lines, because:

Once a house is reduced to rubble, it is virtually impossible to determine that its loss was due to a gas line ... So the only evidence that can be provided is the observation of surviving houses and a potential extrapolation of that to say that potentially some destroyed houses may have been destroyed through this mode, but we certainly can’t categorically say that that was the case.<sup>1801</sup>

In relation to the role of residents, Mr Leonard confirmed in his evidence that ‘previous survey investigations have highlighted that the presence of occupants have had the single greatest

impact on probability of house loss compared to any other single factor'. He concluded that this was likely to be the case in Canberra.<sup>1802</sup> Consistent with this, Mr Leonard noted in his report:

The presence of brigades and resident activity deep within the Duffy area was low compared to previous surveyed bushfires. Traditionally, it has been accepted that suppression activities by agencies and residents are sufficient to mitigate the spread of structural fires deep into the urban areas. The house loss in Duffy stands as an isolated example of how this assumption is not always true.<sup>1803</sup>

Mr Leonard's recommendations are set out in his report. In particular, he recommends that Australian Standard 3959, Construction of Buildings in Bushfire Prone Areas, be implemented for the Canberra urban–rural interface. Mr Leonard explained that implementation of AS 3959 would not mean that all houses built in urban Canberra would in the future need to comply with the standard, because the standard has a built-in process for assessing the level of exposure of houses in a particular area, and requires a level of compliance with the building standard based on that level of exposure. Mr Leonard said that most houses in urban Canberra would fall outside the higher standard. As for houses on the edge of Canberra, Mr Leonard pointed out in his report and his evidence that because of the degree of the setbacks around the Canberra urban area, the exposure level of houses on the urban edge would be deemed to be 'medium' under AS 3959, requiring the provision of only basic ember protection at little additional cost to construction. Mr Leonard added, 'this zoning may also lead to increased voluntary adoption of these mitigation measures'.

Mr Leonard's other recommendations included increasing bushfire awareness, maintaining radiation and flame buffers around urban assets, and encouraging the use and positioning of outbuildings around residential structures that reduce their potential to ignite and thereby impact on the main structure.<sup>1804</sup>

#### **5.14.22 Deaths**

The four deaths associated with the fires that occurred on the afternoon of 18 January 2003 are discussed in detail in Chapter 8.

#### **5.14.23 Recovery operations from 19 to 28 January 2003**

From 19 January 2003 until the revocation of the state of emergency on 28 January 2003, firefighting and recovery operations continued throughout the ACT. These continued operations are beyond the scope of this inquiry.

## Notes

- <sup>1</sup> DPP.DPP.0008.0051, Cheney report, pp. 10–11 (McIntyres Hut fire), p. 28 (Bendora fire), p. 42 (Stockyard Spur and Mount Gingera fires).
- <sup>2</sup> T339–342 (McIntyres Hut fire), T0395 (Bendora fire), T416–417 (Stockyard Spur and Mount Gingera fires).
- <sup>3</sup> NSP.AFP.0013.0154, Letter and attached Lightning Data Search report from Kattron to Detective Sgt Adam Phillips, Strike Force Tronto II, 30 January 2003.
- <sup>4</sup> T375–381.
- <sup>5</sup> T381.
- <sup>6</sup> T377–379.
- <sup>7</sup> Cheney report, p. 28.
- <sup>8</sup> *ibid.*
- <sup>9</sup> *ibid.*, p. 42.
- <sup>10</sup> NSW Coronial Inquiry into the Circumstances of the Fire(s) in the Brindabella Range in January 2003, 18 September 2003. Findings of Deputy Coroner Carl Milovanovich, p. 19.
- <sup>11</sup> ESB.AFP.0001.1307, Statement of Mr Graham, para. 8.
- <sup>12</sup> T2986.
- <sup>13</sup> Statement of Mr Graham, para. 9.
- <sup>14</sup> ESB.AFP.0110.0551, Statement of Mr Lucas-Smith, para. 14.
- <sup>15</sup> ESB.AFP.0111.0291, Statement of Mr Ingram, para. 8; ESB.DPP.0002.0001 ESB radio transcript, 8 January 2003, p. 5.
- <sup>16</sup> Statement of Mr Ingram, para. 9; ESB.DPP.0002.0001 ESB radio transcript 8 January 2003, p. 6.
- <sup>17</sup> Statement of Mr Graham, paras 11–13.
- <sup>18</sup> ESB.AFP.0111.0001, Statement of Ms Arman, paras 20, 21; DPP.DPP.0004.0021 TROC with Ms Arman, Q. 178–184.
- <sup>19</sup> Statement of Mr Graham, para. 14.
- <sup>20</sup> *ibid.*, para. 25.
- <sup>21</sup> Statement of Mr Lucas-Smith, para. 19.
- <sup>22</sup> *ibid.*, para. 20.
- <sup>23</sup> *ibid.*, para. 15.
- <sup>24</sup> T795.
- <sup>25</sup> T794; T802–806.
- <sup>26</sup> T3114–3117.
- <sup>27</sup> ESB.AFP.0110.0481, Statement of Mr McRae, para. 11.
- <sup>28</sup> T3116.
- <sup>29</sup> T3118.
- <sup>30</sup> T325; T327.
- <sup>31</sup> Statement of Mr McRae, paras 9–11; T3119.
- <sup>32</sup> Statement of Mr McRae, para. 16; T3120.
- <sup>33</sup> ESB.AFP.0111.0262, Statement of Mr Sayer, paras 6–8, 11–12.
- <sup>34</sup> ESB.AFP.0001.1140, Statement of Mr Bartlett, paras 28–30.
- <sup>35</sup> T796.
- <sup>36</sup> T2709.
- <sup>37</sup> T5943.
- <sup>38</sup> T5941–5944.
- <sup>39</sup> T6594–6595.
- <sup>40</sup> T4714.
- <sup>41</sup> ESB.DPP.0001.0206 Amended Statement of Mr Cooper, paras 18–20.
- <sup>42</sup> ESB radio transcript 8 January 2003, p. 20.
- <sup>43</sup> *ibid.*, p. 22; see also Statement of Mr Ingram, paras 10–11.
- <sup>44</sup> Statement of Mr Bartlett, paras 30.
- <sup>45</sup> Statement of Mr Ingram, para. 11.
- <sup>46</sup> ESB radio transcript, 8 January 2003 pp. 28–29; Statement of Mr Ingram, para. 16.
- <sup>47</sup> ESB.AFP.0108.0262, Statement of Mr Stevens, para. 7.

- <sup>48</sup> DPP.DPP.0004.0021 TROC with Ms Arman, Q. 178, 185; Statement of Ms Arman, paras 23 and 28.
- <sup>49</sup> ESB radio transcript, 8 January 2003 pp. 37–38.
- <sup>50</sup> Statement of Mr Stevens, para. 8.
- <sup>51</sup> Statement of Ms Arman, para. 32.
- <sup>52</sup> ESB radio transcript, 8 January 2003, pp. 48–49.
- <sup>53</sup> Statement of Ms Arman, para. 28.
- <sup>54</sup> *ibid.*, para. 33.
- <sup>55</sup> ESB.AFP.0111.0068, Statement of Ms Beath, para. 12; ESB.AFP.0108.0115, Statement of Ms Blundell, para. 16; ESB.AFP.0111.0091, Statement of Mr Brooke, paras 13–16; ESB.AFP.0108.0138, Statement of Mr Harding, paras 12–17.
- <sup>56</sup> Statement of Ms Arman, para. 35.
- <sup>57</sup> *ibid.*, paras 36–37.
- <sup>58</sup> *ibid.*, para. 40.
- <sup>59</sup> *ibid.*, para. 41.
- <sup>60</sup> T4030–4031.
- <sup>61</sup> Statement of Ms Arman, para. 38, TROC with Ms Arman, Q. 191.
- <sup>62</sup> T4029.
- <sup>63</sup> DPP.DPP.0011.0001 Ms Arman video walkthrough of Bendora fire site, 36–38 mins.
- <sup>64</sup> Statement of Ms Arman, para. 42.
- <sup>65</sup> TROC with Ms Arman, Q. 191; T4033.
- <sup>66</sup> Statement of Ms Arman, para. 43.
- <sup>67</sup> TROC with Ms Arman, Q. 191.
- <sup>68</sup> Statement of Ms Arman, para. 46.
- <sup>69</sup> DPP.DPP.0006.0096, Transcript of telephone conversation between Mr Arthur and Mr Graham, 8 January 2003, 7.03 pm.
- <sup>70</sup> T2673–2674.
- <sup>71</sup> ESB radio transcript, 8 January 2003, pp. 55–56.
- <sup>72</sup> T3535–3536.
- <sup>73</sup> T821, T830, T2734, T3122.
- <sup>74</sup> DPP.DPP.0003.0207, Transcript of telephone conversation between Mr Lucas-Smith and Mr Graham, 8 January 2003, 7.42 pm.
- <sup>75</sup> T829.
- <sup>76</sup> T830.
- <sup>77</sup> T832–834.
- <sup>78</sup> T2680–2681.
- <sup>79</sup> T2681.
- <sup>80</sup> T2683–2684.
- <sup>81</sup> T2683.
- <sup>82</sup> ESB radio transcript, 8 January 2003, p. 60; Statement of Ms Arman, paras 46–48.
- <sup>83</sup> *ibid.*
- <sup>84</sup> Statement of Mr Graham, paras 18–20.
- <sup>85</sup> T832.
- <sup>86</sup> T831.
- <sup>87</sup> Statement of Ms Arman, para. 47.
- <sup>88</sup> T2685–2688.
- <sup>89</sup> T2689.
- <sup>90</sup> ESB radio transcript, 8 January 2003, p. 61; Statement of Ms Arman, para. 51.
- <sup>91</sup> T2693.
- <sup>92</sup> T2689–2691.
- <sup>93</sup> ESB radio transcript, 8 January 2003, pp. 62–63; Statement of Ms Arman, paras 56–57.
- <sup>94</sup> *ibid.*
- <sup>95</sup> TROC with Ms Arman, Q. 243.
- <sup>96</sup> Statement of Ms Arman, para. 53.
- <sup>97</sup> *ibid.*

- <sup>98</sup> T4043.
- <sup>99</sup> T4044.
- <sup>100</sup> T4034–4036.
- <sup>101</sup> Statement of Ms Arman, para. 55.
- <sup>102</sup> T2712–2713.
- <sup>103</sup> Statement of Mr Graham, para. 18.
- <sup>104</sup> TROC with Ms Arman, Q. 236.
- <sup>105</sup> T4037.
- <sup>106</sup> T4038.
- <sup>107</sup> TROC with Ms Arman, Q. 238 and 243.
- <sup>108</sup> *ibid.*, Q. 244 and 247.
- <sup>109</sup> T4039.
- <sup>110</sup> T4046.
- <sup>111</sup> TROC with Ms Arman Q. 266.
- <sup>112</sup> T4045.
- <sup>113</sup> T4046.
- <sup>114</sup> TROC with Ms Arman Q. 281–282.
- <sup>115</sup> T4047–4049.
- <sup>116</sup> TROC with Ms Arman Q. 243 and 249.
- <sup>117</sup> Statement of Ms Arman, para. 53.
- <sup>118</sup> T4044.
- <sup>119</sup> While none of these witnesses gave evidence, they were all in the ‘make available’ category of witnesses, and no Counsel requested that they be made available for cross-examination.
- <sup>120</sup> Statement of Mr Stevens, para. 4.
- <sup>121</sup> *ibid.*, paras 9–14.
- <sup>122</sup> TROC with Ms Arman Q. 293.
- <sup>123</sup> ESB.AFP.0111.0229, Statement of Ms Mitchell, para. 11.
- <sup>124</sup> Statement of Ms Beath, paras 15–17; Statement of Ms Blundell, paras 17–21; ESB.AFP.0108.0158, Statement of Ms Hewlett, paras 14–15; Statement of Mr Brooke, paras 13–17; Statement of Ms Harding, paras 16–19.
- <sup>125</sup> T4078.
- <sup>126</sup> T2698.
- <sup>127</sup> T2640–2642.
- <sup>128</sup> T2699; T3008.
- <sup>129</sup> T2715.
- <sup>130</sup> T2717.
- <sup>131</sup> T2721.
- <sup>132</sup> T2716; T2721.
- <sup>133</sup> T2717.
- <sup>134</sup> T2992–2993.
- <sup>135</sup> T2720.
- <sup>136</sup> TROC with Ms Arman Q. 244 and 247.
- <sup>137</sup> T2728–2729.
- <sup>138</sup> T2664–2665.
- <sup>139</sup> T3019; T2993–2996.
- <sup>140</sup> T2722–2723.
- <sup>141</sup> T2723.
- <sup>142</sup> T2726.
- <sup>143</sup> T2726–2728.
- <sup>144</sup> T2729.
- <sup>145</sup> T2715.
- <sup>146</sup> T2722.
- <sup>147</sup> TROC with Ms Arman Q. 243 and 249.
- <sup>148</sup> T825.

- <sup>149</sup> T775–776.
- <sup>150</sup> T834.
- <sup>151</sup> T835.
- <sup>152</sup> T862–863.
- <sup>153</sup> T397.
- <sup>154</sup> Cheney report, p. 30.
- <sup>155</sup> T6857–6858.
- <sup>156</sup> T6858.
- <sup>157</sup> T7070.
- <sup>158</sup> T7069.
- <sup>159</sup> T7070.
- <sup>160</sup> T7071–7072.
- <sup>161</sup> T7077.
- <sup>162</sup> T7080.
- <sup>163</sup> T7178.
- <sup>164</sup> T7196.
- <sup>165</sup> Cheney report, pp. 30–31.
- <sup>166</sup> DPP.DPP.0009.0001 Report of Mr Roche, p. 71.
- <sup>167</sup> *ibid.*, p. 70.
- <sup>168</sup> *ibid.*, p. 71.
- <sup>169</sup> *ibid.*, p. 69.
- <sup>170</sup> T7347.
- <sup>171</sup> T7350–7352.
- <sup>172</sup> T7533.
- <sup>173</sup> Roche report, p. 72.
- <sup>174</sup> *ibid.*
- <sup>175</sup> *ibid.*
- <sup>176</sup> T7353.
- <sup>177</sup> T7440–7441.
- <sup>178</sup> T8056–8057.
- <sup>179</sup> T8058.
- <sup>180</sup> T8059–8060.
- <sup>181</sup> T8065.
- <sup>182</sup> TROC with Ms Arman Q. 244.
- <sup>183</sup> HIL.DPP.0001.0001, Report of Mr Nicholson, p. 14.
- <sup>184</sup> *ibid.*, p. 9.
- <sup>185</sup> *ibid.*, p. 13.
- <sup>186</sup> *ibid.*, p. 7.
- <sup>187</sup> T8213.
- <sup>188</sup> T8224–8225.
- <sup>189</sup> T8218.
- <sup>190</sup> T8223–8225.
- <sup>191</sup> T8225.
- <sup>192</sup> T8226–8227.
- <sup>193</sup> T8231.
- <sup>194</sup> T8233–8234.
- <sup>195</sup> T8236–8237.
- <sup>196</sup> Statement of Ms Arman, para. 65.
- <sup>197</sup> T4051.
- <sup>198</sup> T2787–2788.
- <sup>199</sup> ESB radio transcript, 8 January 2003, pp. 62–63.
- <sup>200</sup> T4049–4050.
- <sup>201</sup> T4050.
- <sup>202</sup> T4066–4069.

- <sup>203</sup> T4050.
- <sup>204</sup> T4053.
- <sup>205</sup> Statement of Mr Graham, para. 21.
- <sup>206</sup> T2735.
- <sup>207</sup> T810; T3143.
- <sup>208</sup> Statement of Mr Graham, para. 22.
- <sup>209</sup> ESB.AFP.0052.0056, Standard Operating Procedures (SOP) 7, at 0069.
- <sup>210</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003, p. 10.
- <sup>211</sup> ESB.DPP.0014.0079, Transcript of telephone conversation between Mr Graham and Mr Hayes, 8 January 2003, p. 7.
- <sup>212</sup> T2990–2992.
- <sup>213</sup> T2998.
- <sup>214</sup> T3023.
- <sup>215</sup> T3182.
- <sup>216</sup> T3145–3146.
- <sup>217</sup> T3146; T3165.
- <sup>218</sup> T3147–3152; T3157.
- <sup>219</sup> T3143–3146; T3152.
- <sup>220</sup> DPP.DPP.0004.0029, TROC with Mr Hayes, Q. 272.
- <sup>221</sup> *ibid.*, Q. 108.
- <sup>222</sup> ESB.AFP.0108.0002, Statement of Mr Hayes, para. 23.
- <sup>223</sup> TROC with Mr Hayes, Q. 432–434.
- <sup>224</sup> Statement of Mr Ingram, para. 8; ESB.DPP.0002.0001, ESB radio transcript, 8 January 2003, p. 5.
- <sup>225</sup> Statement of Mr Ingram, paras 9–10; ESB radio transcript, 8 January 2003, p. 20.
- <sup>226</sup> T3695.
- <sup>227</sup> ESB radio transcript, 8 January 2003, p. 10.
- <sup>228</sup> Statement of Mr Hayes, paras 13–15.
- <sup>229</sup> T3739.
- <sup>230</sup> ESB.AFP.0108.0230, Statement of Mr Gray, para. 11.
- <sup>231</sup> ESB radio transcript, 8 January 2003 p. 48–50; Statement of Mr Gray, paras 12–13; Statement of Mr Ingram, paras 27–28.
- <sup>232</sup> ESB radio transcript, 8 January 2003, pp. 50–51.
- <sup>233</sup> *ibid.*
- <sup>234</sup> ESB radio transcript, 8 January 2003, p. 51; Statement of Mr Gray, paras 12–13; Statement of Mr Ingram, paras 27–28.
- <sup>235</sup> Statement of Mr Gray, para. 17.
- <sup>236</sup> TROC with Mr Gray, Q. 104–107.
- <sup>237</sup> T3696–3697.
- <sup>238</sup> TROC with Mr Gray, Q. 70, 82; T3699.
- <sup>239</sup> ESB radio transcript, 8 January 2003, p. 57–58; Statement of Mr Gray, para. 14: TROC with Mr Gray, Q. 58.
- <sup>240</sup> Statement of Mr Graham, para. 24.
- <sup>241</sup> T3702–3703.
- <sup>242</sup> Statement of Mr Gray, para. 15; T3699–3701; ESB radio transcript, 8 January 2003, pp. 66–68.
- <sup>243</sup> Statement of Mr McNamara, paras 29–30.
- <sup>244</sup> ESB radio transcript, 8 January 2003, p. 10.
- <sup>245</sup> Cheney report, pp. 43–44.
- <sup>246</sup> *ibid.*, p. 43.
- <sup>247</sup> Roche report, pp. 75–76.
- <sup>248</sup> AUS.AFP.0035.0016, Namadgi National Park Pre-Suppression Minute, p. 3.
- <sup>249</sup> Roche report, p. 76.
- <sup>250</sup> T8096–8098.
- <sup>251</sup> T3857.
- <sup>252</sup> Statement of Mr Ingram, paras 19–20; ESB radio transcript, 8 January 2003 p. 38–39.

<sup>253</sup> Statement of Mr Ingram, para. 29, ESB radio transcript, 8 January 2003 p. 52.

<sup>254</sup> Statement of Mr Graham, para. 25.

<sup>255</sup> T2738–2739.

<sup>256</sup> Statement of Mr Lucas-Smith, para. 24.

<sup>257</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003, pp. 5, 25–28; ESB.AFP.0111.0102, Statement of Mr Callan, paras 12–13.

<sup>258</sup> ESB.AFP.0108.0179, Statement of Mr Meredith, para. 13.

<sup>259</sup> Roche report, p. 80.

<sup>260</sup> ESB.AFP.0111.0102, Statement of Mr Callan, para. 12, ESB.AFP.0108.0179, Statement of Mr Meredith, para. 12

<sup>261</sup> DPP.DPP.0001.0338, Transcript of NSW Coronial Inquiry, 27 August 2003, p. 1.

<sup>262</sup> A category 9 tanker is a light unit carrying 400 litres of water.

<sup>263</sup> T4422.

<sup>264</sup> T4420.

<sup>265</sup> T4420; RFS.AFP.0093.0002, NSW submission to NSW Coronial Inquiry, p. 22.

<sup>266</sup> T4419–4420.

<sup>267</sup> T4421, NSW submission to NSW Coronial Inquiry, p. 22.

<sup>268</sup> T4429.

<sup>269</sup> T4550.

<sup>270</sup> Cheney report, pp. 11–12.

<sup>271</sup> T4635.

<sup>272</sup> T4423; T4634.

<sup>273</sup> NSW submission to NSW Coronial Inquiry, p. 23; T4636–3467.

<sup>274</sup> NSW submission to NSW Coronial Inquiry, p. 22–23; T4420.

<sup>275</sup> T4424–4426.

<sup>276</sup> T4429.

<sup>277</sup> T4430.

<sup>278</sup> Cheney report, p. 12.

<sup>279</sup> DPP.DPP.0006.0289, Statement of Mr James Gould pp. 3–4; T6326–6333.

<sup>280</sup> NSW submission to NSW Coronial Inquiry, p. 24.

<sup>281</sup> T4436.

<sup>282</sup> T4447.

<sup>283</sup> NSW submission to NSW Coronial Inquiry, p. 24.

<sup>284</sup> T4554; T4437; T4451.

<sup>285</sup> Mr Arthur noted that some 72 fires were burning in NSW at the time and that they had already deployed about 10 units to other fires burning to the east and south of Queanbeyan at the time of the interagency meeting. Accordingly, the meeting was not focused solely on the McIntyres Hut fire. T4549.

<sup>286</sup> T4432; see also T4555.

<sup>287</sup> Cheney report, p. 12; NSW submission to NSW Coronial Inquiry, p. 24.

<sup>288</sup> T4447.

<sup>289</sup> T4727.

<sup>290</sup> T0816.

<sup>291</sup> Statement of Mr McRae, para. 25; T3130–3131.

<sup>292</sup> T3133–3134.

<sup>293</sup> T5948.

<sup>294</sup> Cheney report, p. 6.

<sup>295</sup> Cheney report, p. 9.

<sup>296</sup> T6617.

<sup>297</sup> ESB.DPP.0001.0206, Statement of Mr Cooper, para. 24.

<sup>298</sup> T4430–4431.

<sup>299</sup> T4430–4431, T4445.

<sup>300</sup> T4722–4723.

<sup>301</sup> T4720–4721.

<sup>302</sup> T4722.

- <sup>303</sup> ibid.
- <sup>304</sup> Statement of Mr Bartlett, para. 32.
- <sup>305</sup> T4639–4640.
- <sup>306</sup> T4559.
- <sup>307</sup> T4614–4615.
- <sup>308</sup> T4724.
- <sup>309</sup> T4557–4660.
- <sup>310</sup> T4441.
- <sup>311</sup> T4469.
- <sup>312</sup> T4439–4441.
- <sup>313</sup> Cheney report, p. 12–13.
- <sup>314</sup> ibid., p. 14.
- <sup>315</sup> T6846.
- <sup>316</sup> T6954.
- <sup>317</sup> T6955.
- <sup>318</sup> T6959–6960.
- <sup>319</sup> Roche report, pp. 61–62.
- <sup>320</sup> T7851.
- <sup>321</sup> T7853.
- <sup>322</sup> T7855.
- <sup>323</sup> T7857, see also, T7870–7871.
- <sup>324</sup> T7878–7879.
- <sup>325</sup> T7881.
- <sup>326</sup> T7906.
- <sup>327</sup> T7907.
- <sup>328</sup> T3139.
- <sup>329</sup> T4442; T4561; T4725.
- <sup>330</sup> T4420.
- <sup>331</sup> T4537–4538.
- <sup>332</sup> T4444.
- <sup>333</sup> T4537.
- <sup>334</sup> T4443.
- <sup>335</sup> T4584.
- <sup>336</sup> T4584–4586.
- <sup>337</sup> T4627–4628.
- <sup>338</sup> T5948.
- <sup>339</sup> T4726.
- <sup>340</sup> T0813.
- <sup>341</sup> T6611.
- <sup>342</sup> DPP.DPP.0006.0311, Statement of Mr Smith, p. 4–5.
- <sup>343</sup> ibid., p. 5.
- <sup>344</sup> T6612.
- <sup>345</sup> T6849.
- <sup>346</sup> T0540.
- <sup>347</sup> T6850–6851.
- <sup>348</sup> T0817.
- <sup>349</sup> T4446–4447.
- <sup>350</sup> T4559.
- <sup>351</sup> T4448.
- <sup>352</sup> T4557.
- <sup>353</sup> T4564.
- <sup>354</sup> T4447–4448, T4565.
- <sup>355</sup> T4754.
- <sup>356</sup> T5956.

- <sup>357</sup> T6619–6620.
- <sup>358</sup> NSW submission to NSW Coronial Inquiry, p. 24.
- <sup>359</sup> NRF.AFP.0001.0001, Situation report—McIntyres Hut fire, 9 January 2003; T4445.
- <sup>360</sup> T4446, T4448.
- <sup>361</sup> NRF.AFP.0001.0003, Incident Action Plan—McIntyres Hut fire, 9 January 2003; T4455.
- <sup>362</sup> T4565–4566.
- <sup>363</sup> Cheney report, p. 13.
- <sup>364</sup> T0351.
- <sup>365</sup> Roche report, pp. 60–61.
- <sup>366</sup> T7371–7372.
- <sup>367</sup> T7371–7372.
- <sup>368</sup> T7346–7347.
- <sup>369</sup> T8138, T7905–7909.
- <sup>370</sup> Statement of Mr Ingram, para. 34; ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003, p. 4–5.
- <sup>371</sup> Statement of Mr Ingram, para. 35; ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003, p. 5–6.
- <sup>372</sup> Statement of Mr Ingram, para. 36; ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003, p. 6–8.
- <sup>373</sup> Statement of Mr Ingram, para. 37; ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003, p.
- <sup>374</sup> T3536.
- <sup>375</sup> T3539–3541.
- <sup>376</sup> After the fires, Mr Hayes tried to estimated the fire size on the morning of 8 January and arrived at a ‘ballpark estimate’ that the fire was between 7 and 10 hectares. At 10.00 am that morning an estimate of 20 hectares was provided by Mr McRae; ESB.AFP.0108.0002, Hayes statement, para. 23; T3896.
- <sup>377</sup> T3744–3746.
- <sup>378</sup> DPP.DPP.0004.0002, Transcript of interview of Mr Lucas-Smith radio ABC 666 before 09:00 9 January 2003.
- <sup>379</sup> T0851.
- <sup>380</sup> T0854.
- <sup>381</sup> Statement of Mr McRae, para. 33.
- <sup>382</sup> ESB.AFP.0111.0117, Castle statement, para. 62; T1355. For Mr Castle’s evidence regarding this flight, see; ESB.AFP.0111.0117, Castle statement, paras 63–65; T1357–1361.
- <sup>383</sup> Statement of Mr McRae, para. 34.
- <sup>384</sup> Statement of Mr McRae, paras 40–41., ESB.AFP.0110.0761, R McRae “Fires in and adjacent to the ACT” 11.00 am, 9 January 2003.
- <sup>385</sup> T3188.
- <sup>386</sup> T3445–3447.
- <sup>387</sup> AFP.AFP.0003.0384, R McRae “Rick’s Brief” 11:50 9 January 2003.
- <sup>388</sup> T3191–3193.
- <sup>389</sup> T0856–0858.
- <sup>390</sup> Statement of Mr Lucas-Smith, para. 33.
- <sup>391</sup> Statement of Mr McRae, paras 40–41.
- <sup>392</sup> T3256.
- <sup>393</sup> Statement of Mr McRae, paras 45–46.
- <sup>394</sup> T4895–4896.
- <sup>395</sup> T3213.
- <sup>396</sup> T857.
- <sup>397</sup> T3216.
- <sup>398</sup> T2741, T2753–2754, T2997.
- <sup>399</sup> T2791–2793.
- <sup>400</sup> Statement of Mr Lucas-Smith, paras 36–37.
- <sup>401</sup> T3256; Statement of Mr McRae, para. 46.
- <sup>402</sup> T2742–2743; See also T0864.
- <sup>403</sup> ESB.AFP.0108.0215, Statement of Mr Beutel, paras 6–8.
- <sup>404</sup> T3213, T3219–3220, T3257.
- <sup>405</sup> T0854.

- <sup>406</sup> ESB.AFP.0111.0163, Galvin statement, para. 23; T4088.
- <sup>407</sup> T4090–4092.
- <sup>408</sup> Statement of Mr Bartlett, para. 34.
- <sup>409</sup> ESB.DPP.0001.0071, email ‘Preparing for the Unexpected’ 9 January 2003.
- <sup>410</sup> T1371–1375.
- <sup>411</sup> DUS.DPP.0001.0008, Fire Status Report, 9 January 2003, T0843; T4894.
- <sup>412</sup> T5952.
- <sup>413</sup> Statement of Mr Bartlett, para. 33.
- <sup>414</sup> T5952.
- <sup>415</sup> T2744.
- <sup>416</sup> T2745.
- <sup>417</sup> T2815–2816.
- <sup>418</sup> T0853.
- <sup>419</sup> Statement of Mr Lucas-Smith, para. 27.
- <sup>420</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 1.
- <sup>421</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 3–4.
- <sup>422</sup> T3890–3891.
- <sup>423</sup> ESB.AFP.0108.0002, Hayes statement, para. 23; T3896.
- <sup>424</sup> T3852.
- <sup>425</sup> T3897, T3910–3911.
- <sup>426</sup> T3897–3898. See also T2804.
- <sup>427</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 9.
- <sup>428</sup> ESB.AFP.0108.0002, Hayes statement, paras 21–22.
- <sup>429</sup> T2704–2705.
- <sup>430</sup> T3880–3881.
- <sup>431</sup> ESB.AFP.0108.0002, Hayes statement, para. 19, T3881.
- <sup>432</sup> T2705.
- <sup>433</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 1.
- <sup>434</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 14, 18.
- <sup>435</sup> ESB.DPP.0014.0079, Telephone discussion between Mr Graham and Mr Hayes, January 2003 21:48 p. 3.
- <sup>436</sup> ESB radio transcript, 8 January 2003 p. 62–63; Arman, T4049–4050.
- <sup>437</sup> T2704.
- <sup>438</sup> T3893–3894.
- <sup>439</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 26.
- <sup>440</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 28.
- <sup>441</sup> ESB.AFP.0108.0002, Hayes statement, para. 24, DPP.DPP.0004.0029, TROC with Mr Hayes, Q. 147FF.
- <sup>442</sup> T3894.
- <sup>443</sup> T3891.
- <sup>444</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 32–34.
- <sup>445</sup> T3203.
- <sup>446</sup> T3896–3897.
- <sup>447</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 17–18.
- <sup>448</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 32.
- <sup>449</sup> ESB.AFP.0108.0002, Hayes statement, para. 31.
- <sup>450</sup> ESB.AFP.0108.0002, Hayes statement, paras 31–38.
- <sup>451</sup> T3907.
- <sup>452</sup> ESB.AFP.0108.0002, Hayes statement, para. 39.
- <sup>453</sup> Cheney report, pp. 31–32.
- <sup>454</sup> Cheney report, p. 32.
- <sup>455</sup> T0876.
- <sup>456</sup> T2998.
- <sup>457</sup> T2810–2811, T3023–3024.

- <sup>458</sup> T2757–2758.
- <sup>459</sup> T2756.
- <sup>460</sup> T2757–2758.
- <sup>461</sup> T2821.
- <sup>462</sup> T3189.
- <sup>463</sup> T3199–3202.
- <sup>464</sup> Roche report, p. 74; T7357.
- <sup>465</sup> T7651.
- <sup>466</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 43.
- <sup>467</sup> T3901.
- <sup>468</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 58.
- <sup>469</sup> T3902.
- <sup>470</sup> T2810.
- <sup>471</sup> ESB.AFP.0110.0726, AIIMS Situation Report; Bendorra Fire; 9 January 2003; 6.00 pm
- <sup>472</sup> Statement of Mr McRae, para. 47; T3267–3268, T3451.
- <sup>473</sup> T0875–0877, T0882.
- <sup>474</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 3–4.
- <sup>475</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 3–4.
- <sup>476</sup> ESB.AFP.0103.0052, McNamara statement, para. 8.
- <sup>477</sup> T3740–2.
- <sup>478</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 7–8.
- <sup>479</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 13.
- <sup>480</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 16.
- <sup>481</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 20.

The travel times and time for arrival at the fire apparent from the ESB radio transcript are not entirely consistent with Mr McNamara's estimates in his statement. In particular, in his statement he estimated arriving at the site of the fire at about 10.00 am. The ESB radio transcript referred to above would suggest he arrived at the fire and provided his initial situation report at 9.00 am.

- <sup>482</sup> ESB.AFP.0103.0052, McNamara statement, para. 36.
- <sup>483</sup> T3744–3746.
- <sup>484</sup> T3746–3753.
- <sup>485</sup> ESB.AFP.0103.0052, McNamara statement, paras 38–39
- <sup>486</sup> T3746–3753.
- <sup>487</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 24–25.
- <sup>488</sup> ESB.AFP.0103.0052, McNamara statement, paras 40–41.
- <sup>489</sup> ESB.AFP.0103.0052, McNamara statement, para. 41.
- <sup>490</sup> T2749–2750.
- <sup>491</sup> ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 30.
- <sup>492</sup> T3754–3756.
- <sup>493</sup> ESB.AFP.0103.0052, McNamara statement, paras 42–46; T3759–3763.
- <sup>494</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 40, T3762–3763.
- <sup>495</sup> ESB.AFP.0103.0052, McNamara statement, para. 47.
- <sup>496</sup> Dearsley, T5523–5525.
- <sup>497</sup> ESB.AFP.0103.0052, McNamara statement, paras 47–48.
- <sup>498</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 58.
- <sup>499</sup> Statement of Mr Graham, para. 39.
- <sup>500</sup> Roche report, pp. 77–78.
- <sup>501</sup> AFP.AFP.0003.0390, AIIMS Situation Report; Stockyard Spur Fire; 9 January 2003; 5:45 pm
- <sup>502</sup> T3556, T3684.
- <sup>503</sup> T0872–0873.
- <sup>504</sup> T3764. Mr Roche was critical of this recommendation, Roche report, pp. 78–79.
- <sup>505</sup> T3765–3766.
- <sup>506</sup> Statement of Mr McRae, para. 48.
- <sup>507</sup> T4895–4898, T4951–4952.

- <sup>508</sup> ESB.AFP.0110.0757, AIIMS Incident Objective and Strategies form; 9 January 2003; 9.00 pm.
- <sup>509</sup> T0883.
- <sup>510</sup> ESB.AFP.0110.0712; T3545–3547.
- <sup>511</sup> ESB.AFP.0110.0761, R McRae “Fires in and adjacent to the ACT” 11.00 am, 9 January 2003.
- <sup>512</sup> Statement of Mr Ingram, para. 37, ESB.DPP.0003.0001, ESB radio transcript, 9 January 2003 p. 9.
- <sup>513</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 4–5, ESB.AFP.0111.0102, Callan statement, para. 12.
- <sup>514</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 pp. 25–27, ESB.AFP.0111.0102, Callan statement, para. 12.
- <sup>515</sup> ESB.AFP.0111.0102, Callan statement, para. 13.
- <sup>516</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 51–53.
- <sup>517</sup> ESB.AFP.0111.0102, Callan statement, para. 14, ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 61.
- <sup>518</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 68–70.
- <sup>519</sup> ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 77
- <sup>520</sup> ESB.AFP.0111.0102, Callan statement, para. 15.
- <sup>521</sup> Cheney report, p. 46.
- <sup>522</sup> Roche report, pp. 81–82; ESB.DPP.0003.0002, ESB radio transcript, 9 January 2003 p. 74; p. 81.
- <sup>523</sup> Roche report, p. 82.
- <sup>524</sup> T4895–4898, T4951–4952.
- <sup>525</sup> T0879.
- <sup>526</sup> T0869.
- <sup>527</sup> T0880.
- <sup>528</sup> T0872–0878, T0880–0885.
- <sup>529</sup> NRF.AFP.0001.0003, NSW Incident Action Plan; 9 January 2003.
- <sup>530</sup> T4569. See also Cheney report, pp. 14–16.
- <sup>531</sup> NSW submission to NSW Coronial Inquiry, p. 25.
- <sup>532</sup> T4441.
- <sup>533</sup> T4440.
- <sup>534</sup> T4441.
- <sup>535</sup> NSW submission to NSW Coronial Inquiry, p. 26.
- <sup>536</sup> NSW submission to NSW Coronial Inquiry, p. 26, T4441.
- <sup>537</sup> NSW submission to NSW Coronial Inquiry, p. 26; T4642.
- <sup>538</sup> T4467.
- <sup>539</sup> T4466.
- <sup>540</sup> T4572.
- <sup>541</sup> T4643.
- <sup>542</sup> T6852–6853.
- <sup>543</sup> T0355.
- <sup>544</sup> Roche report, p. 65.
- <sup>545</sup> T7878.
- <sup>546</sup> T7896.
- <sup>547</sup> MLI.DPP.0005.0191, Yarrawlumla Section 44 9 Jan–7 Feb 2003 Incident Controller’s Report, p. 7.
- <sup>548</sup> Statement of Mr Cooper, para. 28.
- <sup>549</sup> T4747–4750.
- <sup>550</sup> T0847–0849.
- <sup>551</sup> Statement of Mr Bartlett, para. 36.
- <sup>552</sup> NSW submission to NSW Coronial Inquiry, p. 27.
- <sup>553</sup> T4457–4459.
- <sup>554</sup> T4462–4466.
- <sup>555</sup> T4460.
- <sup>556</sup> T4573.
- <sup>557</sup> Cheney report, p. 15; T6851.
- <sup>558</sup> T6967.

<sup>559</sup> Roche report, p. 88.

<sup>560</sup> See for example; ESB.AFP.0111.0001, Arman statement, paras 100–104; ESB.AFP.0108.0076, Taylor statement, paras 25–28.

<sup>561</sup> Cheney report.

<sup>562</sup> T0881–0884, T3212–3213, T3256, 3263, T2791–2793, Statement of Mr Graham, paras 44; 53–54, ESB.AFP.0111.0001, Arman statement, para. 94, Statement of Mr Bartlett, para. 45.

<sup>563</sup> Statement of Mr Lucas-Smith, paras 37, 47, 58; T0881–0882.

<sup>564</sup> T0917.

<sup>565</sup> Statement of Mr Lucas-Smith, para. 47; T0902.

<sup>566</sup> T0903.

<sup>567</sup> T2851–2852.

<sup>568</sup> T2855.

<sup>569</sup> T2831.

<sup>570</sup> T2831.

<sup>571</sup> T2851–2854.

<sup>572</sup> Statement of Mr McRae, para. 53.

<sup>573</sup> Statement of Mr Bartlett, para. 42; T5956–5961.

<sup>574</sup> T0893–0910.

<sup>575</sup> DPP.DPP.0004.0001, Radio ABC 666 transcript, 10 January 2003; T1388–1392.

<sup>576</sup> DPP.DPP.0003.0212, Radio ABC 666 transcript, 10 January 2003; T1420–1421.

<sup>577</sup> T3274–3275.

<sup>578</sup> T1393–1395.

<sup>579</sup> T2482.

<sup>580</sup> T3273–3274.

<sup>581</sup> T1882–1883.

<sup>582</sup> T1884–1886.

<sup>583</sup> ESB.AFP.0110.0852, Fire Situation Analysis Form—Bendora; T0908–0913.

<sup>584</sup> T0912.

<sup>585</sup> Arman, T4054–4055.

<sup>586</sup> T3257.

<sup>587</sup> ESB.AFP.0111.0001, Arman statement, para. 74.

<sup>588</sup> Arman, T4056.

<sup>589</sup> Arman, T4054, T4059.

<sup>590</sup> Mr Graham believes that four heavy tankers were deployed to the Bendora fire that morning. Mr suggests that only three were deployed. T2832., Roche report, p. 90.

<sup>591</sup> Arman, T4055, T4073.

<sup>592</sup> T2832.

<sup>593</sup> Arman, T4056.

<sup>594</sup> Arman, T4074.

<sup>595</sup> T3989–3991.

<sup>596</sup> ESB.AFP.0103.0010, Flint statement, para. 23.

<sup>597</sup> ESB.AFP.0103.0010, Flint statement, para. 25.

<sup>598</sup> T0933.

<sup>599</sup> T0932–0933.

<sup>600</sup> Roche report, p. 92.

<sup>601</sup> T3258, T3273.

<sup>602</sup> T4899–4900; ESB.AFP.0110.0300.

<sup>603</sup> T3959–3960.

<sup>604</sup> T4907–4909.

<sup>605</sup> T3867–3869.

<sup>606</sup> T3867.

<sup>607</sup> T3867.

<sup>608</sup> Statement of Mr Cooper, para. 34.

<sup>609</sup> T3871.

- <sup>610</sup> ESB.DPP.0004.0001, ESB radio transcript, 10 January 2003 p. 30.
- <sup>611</sup> T2834.
- <sup>612</sup> T2838–2846.
- <sup>613</sup> T0898.
- <sup>614</sup> T0896–0897.
- <sup>615</sup> T0906.
- <sup>616</sup> T3873–3874; see also T3709.
- <sup>617</sup> T0905–0907.
- <sup>618</sup> T3874–3875.
- <sup>619</sup> T4163.
- <sup>620</sup> ESB.AFP.0108.0049, Watson statement, para. 4.
- <sup>621</sup> DPP.DPP.0008.0109, Cheney report, p. 42.
- <sup>622</sup> Roche report, pp. 101–102.
- <sup>623</sup> T3258.
- <sup>624</sup> T3877.
- <sup>625</sup> NRF.AFP.0001.0018, IAP for day shift 10 January 2003.
- <sup>626</sup> T0894–0895.
- <sup>627</sup> T0904, T0930–0931; T4755–4766; Cheney report, p. 15.
- <sup>628</sup> T0914–0916; ESB.AFP.0108.0128, Winter statement, para. 11.
- <sup>629</sup> T4758.
- <sup>630</sup> Statement of Mr Bartlett, para. 42.
- <sup>631</sup> Statement of Mr Bartlett, paras 42–43.
- <sup>632</sup> T5957; T6338.
- <sup>633</sup> T5959–5960; Statement of Mr Bartlett, para. 43.
- <sup>634</sup> T6338–6339.
- <sup>635</sup> T6355.
- <sup>636</sup> T6347.
- <sup>637</sup> Mr Thompson did not contact Bill Wood, the ACT Minister for Police and Emergency Services, because Mr Thompson did not think that Mr Wood, who had only taken over that ministry in November, would have the necessary senior contacts within the NSW government to immediately raise the issues at the appropriate level, and Thompson wanted to ‘move very quickly’. T6356.
- <sup>638</sup> T5958–5961.
- <sup>639</sup> T6343–6344.
- <sup>640</sup> T6071–6072, T6077–6079.
- <sup>641</sup> T6346–6349.
- <sup>642</sup> T5993–5994.
- <sup>643</sup> T5994; T1402–1403; ESB.AFP.0111.0117, Castle statement, para. 77.
- <sup>644</sup> Statement of Mr Bartlett, para. 49.
- <sup>645</sup> T4573.
- <sup>646</sup> T4599, It appears that Mr Bartlett’s understanding of the nature and content of that conversation was not correct. T5992.
- <sup>647</sup> T4599. See also, Statement of Mr Bartlett, para. 50; T4475–4476.
- <sup>648</sup> Statement of Mr Bartlett, para. 50; T5995.
- <sup>649</sup> Statement of Mr McRae, para. 64.
- <sup>650</sup> Statement of Mr McRae, paras 64–71; T3278.
- <sup>651</sup> ESB.AFP.00053.0002, Graham statement, para. 73; T2865.
- <sup>652</sup> T0942–0946.
- <sup>653</sup> ESB.AFP.0007.0072.
- <sup>654</sup> T0936–0937.
- <sup>655</sup> T0937–0938, T0957–0962.
- <sup>656</sup> DUS.AFP.0002.001, Murphy statement, para. 27, para. 32.
- <sup>657</sup> ESB.AFP.0108.0076, Taylor statement, para. 29.
- <sup>658</sup> T0960; ESB.AFP.00053.0002, Graham statement, para. 78.
- <sup>659</sup> T0961.

- <sup>660</sup> ESB.AFP.0111.0117, Castle statement, para. 79; T1406.
- <sup>661</sup> T0941.
- <sup>662</sup> Statement of Mr Bartlett, para. 118.
- <sup>663</sup> Statement of Mr Bartlett, paras 53–81.
- <sup>664</sup> T3992–3993.
- <sup>665</sup> Statement of Mr McRae, para. 70.
- <sup>666</sup> T4761; Statement of Mr Cooper, para. 42.
- <sup>667</sup> T0952.
- <sup>668</sup> Statement of Mr Cooper, para. 42.
- <sup>669</sup> T4766.
- <sup>670</sup> Statement of Mr Cooper, para. 44.
- <sup>671</sup> Statement of Mr Cooper, para. 44; T4766–4768.
- <sup>672</sup> Statement of Mr Cooper, para. 44; T4768–4769.
- <sup>673</sup> Statement of Mr Graham, para. 70.
- <sup>674</sup> T4916–4918; T3961–3963.
- <sup>675</sup> Statement of Mr McRae, para. 70.
- <sup>676</sup> Cheney report, pp. 44–45, Roche report, pp. 102–103.
- <sup>677</sup> Statement of Mr McRae, para. 70.
- <sup>678</sup> T4477; Cheney report, pp. 15–17.
- <sup>679</sup> T4122.
- <sup>680</sup> ESB.AFP.0108.0128, Winter statement, para. 17.
- <sup>681</sup> Cheney report, pp. 16–17.
- <sup>682</sup> T4525.
- <sup>683</sup> Statement of Mr Lucas-Smith, para. 61; T0964.
- <sup>684</sup> Statement of Mr Lucas-Smith, para. 63.
- <sup>685</sup> T3287–3290.
- <sup>686</sup> Statement of Mr McRae, para. 79; ESB.AFP.0009.0328, Graham's briefing notes.
- <sup>687</sup> T0968.
- <sup>688</sup> T0967.
- <sup>689</sup> Statement of Mr Graham, para. 88.
- <sup>690</sup> ESB.AFP.0014.0268, ESB media release 18:30 hours 12 January 2003, T0969–0975.
- <sup>691</sup> T1430, ESB.AFP.0014.0268, ESB media update 18:30, Sunday 12 January 2003.
- <sup>692</sup> DPP.DPP.0003.0226, Draft media release 12 January 2003.
- <sup>693</sup> T1429–1435.
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- <sup>696</sup> T0977; T1436–1441; ESB.AFP.0111.0117, Castle statement, paras 82–84; Statement of Mr Graham, para. 94.
- <sup>697</sup> ESB.AFP.0111.0117, Castle statement, para. 84.
- <sup>698</sup> T5997–5998.
- <sup>699</sup> ESP.DPP.0001.0206, Cooper statement, para. 44.
- <sup>700</sup> Statement of Mr Bartlett, paras 82, 85–89.
- <sup>701</sup> ESB.AFP.0110.0770, Incident Analysis, Bendorra Fire, 09:30; 12 January 2003; T0964–0967; T2870–2871; T3288–3289.
- <sup>702</sup> Cheney report, p. 31–32.
- <sup>703</sup> Statement of Mr Graham, para. 88; T2875–2876., Cheney report, p. 32.
- <sup>704</sup> Cheney report, p. 34.
- <sup>705</sup> Cheney report, pp. 45–46.
- <sup>706</sup> T4922; T3964.
- <sup>707</sup> Cheney report, p. 49.
- <sup>708</sup> ESB.AFP.0008.0328, Graham notes; Statement of Mr Graham, para. 84.
- <sup>709</sup> Cheney report, p. 49.
- <sup>710</sup> NRF.AFP.0001.0048. See also, NRF.AFP.0001.0046.
- <sup>711</sup> T4580.

- <sup>712</sup> T2091–2092, T2150.
- <sup>713</sup> T4574–4577.
- <sup>714</sup> Cheney report, pp. 17–18.
- <sup>715</sup> T3293–3297.
- <sup>716</sup> Statement of Mr McRae, paras 82–83; T3291.
- <sup>717</sup> Statement of Mr McRae, paras 83–86; T3289–3290.
- <sup>718</sup> T0983–0984.
- <sup>719</sup> T0997–0998.
- <sup>720</sup> T1888.
- <sup>721</sup> T4249.
- <sup>722</sup> ESB.AFP.0007.0025, Request for Commonwealth physical assistance ACT 0001 10:55 13 January 2003.
- <sup>723</sup> T1438.
- <sup>724</sup> T1544–1545.
- <sup>725</sup> T0993; T2514–2516.
- <sup>726</sup> ESB.AFP.0007.0025, ACT Request for Commonwealth physical assistance ACT 0001 10:55 13 January 2003.
- <sup>727</sup> T1450–1454.
- <sup>728</sup> T1478–1480.
- <sup>729</sup> DPP.DPP.0004.0003, Interview with Mr Castle, radio ABC 666, 11:55, 13 January 2003.
- <sup>730</sup> T1463–1474, T1483.
- <sup>731</sup> T1474.
- <sup>732</sup> T0995.
- <sup>733</sup> T0982–0983.
- <sup>734</sup> T3603–3604.
- <sup>735</sup> T6372–6374.
- <sup>736</sup> T4222.
- <sup>737</sup> T1888–1889.
- <sup>738</sup> T0528–0529.
- <sup>739</sup> T7288. See also T0434.
- <sup>740</sup> T7067.
- <sup>741</sup> T0985.
- <sup>742</sup> ESB.AFP.0110.0033, Planning meeting notes 16:00 14 January 2003, ESB.AFP.0110.0048, Planning meeting notes 16:00 14 January 2003.
- <sup>743</sup> T0989.
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- <sup>745</sup> ESB.AFP.0007.0127, Operations Section Briefing, 9.40 am 13 January 2003.
- <sup>746</sup> ESB.AFP.0111.0163, Galvin statement, para. 29; T4097.
- <sup>747</sup> ESB.AFP.0111.0163, Galvin statement, para. 32.
- <sup>748</sup> Cheney report, p. 34–36.
- <sup>749</sup> Statement of Mr Graham, para. 100.
- <sup>750</sup> Cheney report, p. 49.
- <sup>751</sup> DPP.DPP.0004.0004, Interview with Mike Castle ABC 666 before 06:15 14 January 2003.
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- <sup>753</sup> ESB.AFP.0111.0117, Statement of Mr Castle, para. 92; T1494.
- <sup>754</sup> T1487–1488, ESB.AFP.0110.0028, Planning meeting minutes 09:30 14 January 2003.
- <sup>755</sup> T1148; T1489–1490.
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- <sup>758</sup> T2517; T2565–2566.
- <sup>759</sup> ESB.AFP.0110.0782, Planning meeting minutes 09:30 14 January 2003.
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- <sup>761</sup> Statement of Mr McRae, para. 98.
- <sup>762</sup> T0086.

- <sup>763</sup> Statement of Mr McRae, para. 98.
- <sup>764</sup> ESB.AFP.0111.0117, Castle statement, para. 91.
- <sup>765</sup> T1007–1010.
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- <sup>772</sup> ESB.AFP. 0110.0481, McRae statement, para. 100; Statement of Mr Graham, para. 128.
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- <sup>774</sup> ESB.AFP.0110.0033, Planning meeting notes 16:00 14 January 2003 p. 6; ESB.AFP.0110.0048, Planning meeting notes 16:00 14 January 2003 p. 11.
- <sup>775</sup> ESB.AFP.0110.0775, Planning meeting minutes 16:00 14 January 2003 p. 4.
- <sup>776</sup> T2061–2062.
- <sup>777</sup> T2382–2383.
- <sup>778</sup> T2903–2905.
- <sup>779</sup> T3574.
- <sup>780</sup> T1891–1893.
- <sup>781</sup> T1029–1030.
- <sup>782</sup> T1018–1019.
- <sup>783</sup> T1021–1022.
- <sup>784</sup> T1512–1513.
- <sup>785</sup> T3321.
- <sup>786</sup> T3317–3318.
- <sup>787</sup> T3318–3319.
- <sup>788</sup> T3319–3320.
- <sup>789</sup> T3321–3322.
- <sup>790</sup> T3323–3324.
- <sup>791</sup> T3325.
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- <sup>793</sup> T3329.
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- <sup>795</sup> T3938.
- <sup>796</sup> Statement of Mr Graham, para. 120.
- <sup>797</sup> Cheney report, p. 34.
- <sup>798</sup> Statement of Mr Graham, para. 114, para. 121.
- <sup>799</sup> T3965.
- <sup>800</sup> Cheney report, p. 50.
- <sup>801</sup> Cheney report, p. 50; ESB.AFP. 0110.0481, McRae statement, para. 100; Statement of Mr Graham, para. 128.
- <sup>802</sup> Cheney report, p. 19.
- <sup>803</sup> T4621.
- <sup>804</sup> ESB.AFP.0110.0142, Planning meeting minutes 09:30 15 January p. 2.
- <sup>805</sup> T1026–1028.
- <sup>806</sup> T1046–1051.
- <sup>807</sup> Statement of Mr Lucas-Smith, paras 77–78.
- <sup>808</sup> Statement of Mr McRae, para. 101.
- <sup>809</sup> T3330.
- <sup>810</sup> T3331–3332.
- <sup>811</sup> T2909.
- <sup>812</sup> ESB.AFP.0111.0117, Castle statement, para. 94.
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- <sup>814</sup> ESB.AFP.0110.0166, Planning meeting notes 09:30 15 January 2003 p. 5.

- <sup>815</sup> T1541–1542.
- <sup>816</sup> T2570.
- <sup>817</sup> T2085.
- <sup>818</sup> T2104.
- <sup>819</sup> Statement of Mr Lucas-Smith, para. 82.
- <sup>820</sup> T1032.
- <sup>821</sup> T1032–1033.
- <sup>822</sup> Mr Lucas-Smith said ‘I am not saying that it was not Koperberg; I am just saying that it could very well have been Bruce Arthur who said it, but I do not know for sure.’; T1035–1036.
- <sup>823</sup> T2088–2089.
- <sup>824</sup> T1033–1034; NRF.DPP.0001.0014, Koperberg statement, paras 7–9.
- <sup>825</sup> T1037–1037.
- <sup>826</sup> T1039–1040.
- <sup>827</sup> T1034.
- <sup>828</sup> T1034–1035; NRF.DPP.0001.0014, Koperberg statement, para. 9. See also, DPP.DPP.0004.0005, Koperberg P, ABC “Stateline” Interview with NSW RFS Commissioner Koperberg Transcript, 15 January.
- <sup>829</sup> T1038.
- <sup>830</sup> T2097–2098.
- <sup>831</sup> T3485.
- <sup>832</sup> T2256–2257.
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- <sup>834</sup> T2094.
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- <sup>836</sup> T2152.
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- <sup>841</sup> T2092.
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- <sup>843</sup> T2103–2104.
- <sup>844</sup> T2149–2150.
- <sup>845</sup> T2150.
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- <sup>849</sup> T2136–2137.
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- <sup>851</sup> T4590–4592.
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- <sup>853</sup> T4593–4594.
- <sup>854</sup> T4595.
- <sup>855</sup> T4486–4487.
- <sup>856</sup> T4487–4488.
- <sup>857</sup> T4494.
- <sup>858</sup> T4541–4542.
- <sup>859</sup> T4491.
- <sup>860</sup> T4493–4494.
- <sup>861</sup> T4495–4496.
- <sup>862</sup> T4680–4682.
- <sup>863</sup> T4682–4684.
- <sup>864</sup> T4682–4683.
- <sup>865</sup> T4684–4685.

<sup>866</sup> ESB.AFP.0110.0115, ACT Request for Commonwealth Physical Assistance No. ACT0003 13:00 15 January 2003, ESB.AFP.0110.0117, ACT Request for Commonwealth Physical Assistance No. ACT0004 13:00 15 January 2003.

<sup>867</sup> T1543–1545.

<sup>868</sup> T1548.

<sup>869</sup> T2533–2534, T2514.

<sup>870</sup> T2533–2334.

<sup>871</sup> T1046.

<sup>872</sup> T1046–1047.

<sup>873</sup> T1049–1050, ESB.AFP.0020.0368, Planning meeting minutes 16:00 15 January 2003.

<sup>874</sup> ESB.AFP.0110.0984, Operations Officer Situation Report Planning Meeting 16:00 15.1.03.

<sup>875</sup> ESB.AFP.0020.0368, Planning meeting minutes 16:00 15 January 2003 p. 1–2.

<sup>876</sup> ESB.AFP.0020.0368, Planning meeting minutes 16:00 15 January 2003 p. 1.

<sup>877</sup> ESB.AFP.0110.0154, Planning meeting notes 16:00 15 January 2003 p. 3, ESB.AFP.0110.0159, Planning meeting notes 16:00 15 January 2003 p. 3.

<sup>878</sup> T3337.

<sup>879</sup> Statement of Mr McRae, para. 102–para. 93 p. 22–23, *Paragraph misnumbering in original document*

<sup>880</sup> ESB.AFP.0020.0368, Planning meeting minutes 16:00 15 January 2003 p. 3.

<sup>881</sup> T3333, T3338.

<sup>882</sup> T3337–3338.

<sup>883</sup> T3339.

<sup>884</sup> T3339.

<sup>885</sup> T3341.

<sup>886</sup> T3340–3343.

<sup>887</sup> T3344–3345.

<sup>888</sup> T3344–3345.

<sup>889</sup> T2918–2919.

<sup>890</sup> T2913–2914; T3001, 3008.

<sup>891</sup> ESB.AFP.0008.0336, NSW Rural Fire Service media release for Wednesday 15 January 2003. The copy of the media release provided to the inquiry appears to have been faxed to NSW Rural Fire Service State Operations at 7.11 pm on 15 January.

<sup>892</sup> T1566.

<sup>893</sup> T2915–2916.

<sup>894</sup> T3348–3349.

<sup>895</sup> T1567, see also T1689.

<sup>896</sup> T2492.

<sup>897</sup> T2390–2392.

<sup>898</sup> T4675–4676.

<sup>899</sup> DPP.DPP.0006.0268, Jeffery statement, para. 30.

<sup>900</sup> T5438.

<sup>901</sup> ESB.AFP.0012.0113, Letter from Val Jeffery to local residents 15 January 2003.

<sup>902</sup> T2916–2918.

<sup>903</sup> DPP.DPP.0006.0099, Telephone call transcript, Byrnes to Graham, 17:34, 15 January 2003.

<sup>904</sup> T2889.

<sup>905</sup> T2890.

<sup>906</sup> T2889–2891.

<sup>907</sup> T2977.

<sup>908</sup> T3020.

<sup>909</sup> T4412.

<sup>910</sup> T4388–43489.

<sup>911</sup> T4384–4386.

<sup>912</sup> T1555.

<sup>913</sup> T3490.

<sup>914</sup> T3491.

- <sup>915</sup> T2537–2538.
- <sup>916</sup> DPP.DPP.0003.0078, Cabinet briefing paper—January 23 bushfires  
<sup>917</sup> T1563.
- <sup>918</sup> T2538–2539.
- <sup>919</sup> T4099.
- <sup>920</sup> DPP.DPP.0008.0109, Cheney report, pp. 34–35.  
<sup>921</sup> T4098–4099.
- <sup>922</sup> T4100–4101; ESB.AFP.0111.0163, Statement of Mr Galvin, para. 41.  
<sup>923</sup> Roche report, p. 94.  
<sup>924</sup> Roche report, p. 94.  
<sup>925</sup> T4773.
- <sup>926</sup> ESB.AFP.0004.0242.  
<sup>927</sup> T4923–4931.
- <sup>928</sup> DPP.DPP.0008.0109, Cheney report, p. 47.  
<sup>929</sup> T4498. See also, DPP.DPP.0008.0109, Cheney report, pp. 19–20.  
<sup>930</sup> T2085–2088, T2104–2105.  
<sup>931</sup> T4487.
- <sup>932</sup> NRF.AFP.0001.0101, IAP for McIntyres Hut Fire; 3.45 am, 15 January 2003.  
<sup>933</sup> T4482–4483, T4497–4498.
- <sup>934</sup> ESB.AFP.0004.0219, Planning meeting minutes 09:30 16 January 2003; T3349.  
<sup>935</sup> T2920–2922.
- <sup>936</sup> ESB.AFP.0004.0219, Planning meeting minutes 09:30 16 January 2003 p. 2.  
<sup>937</sup> T1907–1909.  
<sup>938</sup> T1909–1910.  
<sup>939</sup> T1910–1911.  
<sup>940</sup> T2922–2923.  
<sup>941</sup> T3350.  
<sup>942</sup> T1576.
- <sup>943</sup> DPP.DPP.0003.0078, Cabinet briefing—January 2003 bushfires tabled 16 January 2003.
- <sup>944</sup> DPP.DPP.0003.0269, Kwiatkowski notes of Cabinet briefing, 16 January 2003.
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- <sup>947</sup> DPP.DPP.0003.0084, ACT Government Cabinet Minute Canberra 16 January 2003 decision No. 0516.
- <sup>948</sup> DPP.DPP.0003.0406, ABC news footage and audio of Cabinet briefing 16 January 2003. This footage is heavily edited, and documents only a small portion of the entire briefing.
- <sup>949</sup> T1587.
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- <sup>951</sup> ESB.DPP.0001.0104, Tonkin notes of Cabinet Briefing 16 January 2003; DPP.DPP.0003.0269,  
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- <sup>952</sup> DPP.DPP.0003.0266, Wall notes of Cabinet Briefing, 16 January 2003.
- <sup>953</sup> DPP.DPP.0003.0084, ACT Government Cabinet Minute Canberra 16 January 2003 decision No.0516;  
T4235–4236.
- <sup>954</sup> DPP.DPP.0003.0078, Cabinet briefing—January 2003 bushfires tabled 16 January 2003.
- <sup>955</sup> T1059.
- <sup>956</sup> T1065–1066.
- <sup>957</sup> T1061–1062.
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- <sup>959</sup> T1062.
- <sup>960</sup> T1064.
- <sup>961</sup> T1573–1575.
- <sup>962</sup> T1579.
- <sup>963</sup> DPP.DPP.0003.0269, Kwiatkowski notes of Cabinet Briefing 16 January 2003; T1850–1851.
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- <sup>965</sup> T1853–1854.

- <sup>966</sup> DPP.DPP.0003.0266, Claire Wall notes of Cabinet Briefing 16 January 2003; T1861.
- <sup>967</sup> T1849.
- <sup>968</sup> DPP.DPP.0003.0266, Claire Wall notes of Cabinet Briefing 16 January 2003.
- <sup>969</sup> DPP.DPP.0003.0269, Kwiatkowski notes of Cabinet Briefing, 16 January 2003.
- <sup>970</sup> T1853–1854.
- <sup>971</sup> T1846–1847.
- <sup>972</sup> T1859–1860.
- <sup>973</sup> DPP.DPP.0003.0084, ACT Government Cabinet Minute Canberra 16 January 2003 decision No.0516.
- <sup>974</sup> T1063–1064.
- <sup>975</sup> T1065.
- <sup>976</sup> T1588–1590.
- <sup>977</sup> T3606–3607; see also T3609.
- <sup>978</sup> GSO.GSO.0004.0103, Stanhope supplementary statement, para. 12.
- <sup>979</sup> *ibid.*, paras 14–16.
- <sup>980</sup> T3611.
- <sup>981</sup> T3611.
- <sup>982</sup> T3611–3612.
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- <sup>984</sup> T3615.
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- <sup>986</sup> DPP.DPP.0003.0269, Kwiatkowski notes of Cabinet Briefing, 16 January 2003.
- <sup>987</sup> T3617–3618.
- <sup>988</sup> T3620.
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- <sup>991</sup> T3631–3632.
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- <sup>1007</sup> T3513–3515.
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- <sup>1012</sup> T4227–4228.
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- <sup>1014</sup> T4233–4234.
- <sup>1015</sup> T4230–4231.
- <sup>1016</sup> T4236–4238.
- <sup>1017</sup> DPP.DPP.0003.0468, Press conference transcript, 16 January 2003; T1636, 1672.
- <sup>1018</sup> DPP.DPP.0003.0468, Transcript of ESB press conference, 16 January 2003 p. 2.
- <sup>1019</sup> DPP.DPP.0003.0468, Transcript of ESB press conference, 16 January 2003 p. 3.

- <sup>1020</sup> DPP.DPP.0003.0468, Transcript of ESB press conference, 16 January 2003 p. 4. The only part of the question that was recorded in the transcript was ‘how far’, the balance being indecipherable.
- <sup>1021</sup> DPP.DPP.0003.0468, Transcript of ESB press conference, 16 January 2003 p. 5.
- <sup>1022</sup> DPP.DPP.0003.0468, Transcript of ESB press conference, 16 January 2003 p. 5.
- <sup>1023</sup> DPP.DPP.0003.0468, Transcript of ESB press conference, 16 January 2003 pp. 7–8.
- <sup>1024</sup> ESB.AFP.0110.0973, ESB.AFP.0110.0972, ‘Next 5 Days Critical’ *Canberra Times*, 17 January 2003.
- <sup>1025</sup> T1089–1090.
- <sup>1026</sup> T1624.
- <sup>1027</sup> T1673–1675, These meetings are discussed below.
- <sup>1028</sup> T3373–3374.
- <sup>1029</sup> ESB.AFP.0012.0114, Email from Val Jeffery 12:25, 16 January 2003; T5440.
- <sup>1030</sup> DPP.DPP.0006.0268, Statement of Mr Jeffery, para. 32. Mr Jeffery confirmed the content of this conversation in his evidence: T5441.
- <sup>1031</sup> DPP.DPP.0006.0276, Statement of Mr Jeffery, para. 33; T5440.
- <sup>1032</sup> ESB.AFP.0012.0114, Email from Val Jeffery 12:25, 16 January 2003.
- <sup>1033</sup> T5449–5450.
- <sup>1034</sup> T1077–1078.
- <sup>1035</sup> T3358–3368.
- <sup>1036</sup> ESB.AFP.0004.0219, Planning meeting minutes 09:30 16 January 2003 p. 2.
- <sup>1037</sup> T3350–3351.
- <sup>1038</sup> T3351.
- <sup>1039</sup> T3351.
- <sup>1040</sup> T3351–3353.
- <sup>1041</sup> T3353.
- <sup>1042</sup> T3355–3356.
- <sup>1043</sup> T3358–3359.
- <sup>1044</sup> T3359–3362.
- <sup>1045</sup> T3363–3364.
- <sup>1046</sup> T3363–3364.
- <sup>1047</sup> T3366.
- <sup>1048</sup> T3366–3367.
- <sup>1049</sup> T3402–3403.
- <sup>1050</sup> T1051.
- <sup>1051</sup> T5317, T5332.
- <sup>1052</sup> T1593, T3379, T2928.
- <sup>1053</sup> T5348–5349.
- <sup>1054</sup> ESB.AFP.0026.0195. Mr Cartwright confirmed in evidence that he took notes as Mr Lucas-Smith was speaking at the briefing, and that he accurately transcribed those notes into his diary ‘I believe within 24 hours, most likely on the evening of the 16th. And I added the names to this later, I would suggest within a few days, realising then the importance as to who was at the meeting’. Mr Cartwright said that his notes had been transcribed into his diary by 20 January at the latest because he remembered reading from his diary at a meeting of ACT Fire Brigade crews on that day, where the crews were expressing frustration about what had occurred. He no longer had the original notes. T5318, T5326, T5335–5336, T5341, T5345–5346.
- <sup>1055</sup> T5320.
- <sup>1056</sup> T5319–5320.
- <sup>1057</sup> T5320–5321.
- <sup>1058</sup> T5324.
- <sup>1059</sup> T5323–5324.
- <sup>1060</sup> T5349–5340.
- <sup>1061</sup> T5355–5356.
- <sup>1062</sup> ESB.AFP.0049.0324, Statement of Mr Cartwright.
- <sup>1063</sup> T1052–1053.
- <sup>1064</sup> Mr Cartwright’s notes record ‘Possibility this fire could do the same’.

<sup>1065</sup> T1053–1054.

<sup>1066</sup> T1917.

<sup>1067</sup> T1054–1055.

<sup>1068</sup> T1056.

<sup>1069</sup> T1916–1918.

<sup>1070</sup> T1922–1923.

<sup>1071</sup> T1919–1920.

<sup>1072</sup> T1919.

<sup>1073</sup> ESB.AFP.0049.0274, Collins TROC, Q. 49–52.

<sup>1074</sup> T5441. Mr Prince's statement broadly replicates his verbal evidence, summarising the first part of the briefing from Mr Lucas-Smith as follows:

Mr Lucas-Smith told us that on Saturday 18th January and Monday 20th January the weather will present an extreme fire danger. Monday was seen as the major problem day at that time. At that time Mr Lucas-Smith stated that the local bushfires were within containment lines. He was hopeful containment measures would control the fires. Mr Lucas-Smith stated that on Saturday 18th January 2003, 45kph north westerly winds gusting up to 60kph were expected. He told us of a fire he was involved in during the early 1980's in Bundanoon that had spotted 15 kilometres in strong winds. The information from Mr Lucas-Smith made me feel gravely concerned. All the factors Mr Lucas-Smith had outlined indicated to me that the fires could well jump containment lines.

AUS.AFP.0070.0002, Statement of Mr Prince, para. 6.

<sup>1075</sup> ESB.AFP.0046.0282, Prince TROC, Q. 35–37.

<sup>1076</sup> ESB.AFP.0046.0282, Prince TROC, Q. 35–37.

<sup>1077</sup> T6469.

<sup>1078</sup> T4254–4255.

<sup>1079</sup> T4256–4257.

<sup>1080</sup> ESB.AFP.0048.0204, Dutton TROC, Q. 43.

<sup>1081</sup> ESB.AFP.0049.0274, Collins TROC, Q. 49–52.

<sup>1082</sup> T5389–5390.

<sup>1083</sup> T5391.

<sup>1084</sup> ESB.AFP.0049.0274, Collins TROC, Q. 70–71.

<sup>1085</sup> T5057; ESB.AFP.0049.0264, Newham TROC, Q. 29.

<sup>1086</sup> T5062.

<sup>1087</sup> T5059–5060.

<sup>1088</sup> T5064.

<sup>1089</sup> T5065.

<sup>1090</sup> T5069–5070.

<sup>1091</sup> ESB.AFP.0046.0374, Leary TROC; T1069–1071.

<sup>1092</sup> T1071–1073, ESB.AFP.0053.0103, Hobbs TROC p. 0105.

<sup>1093</sup> T1073–1074.

<sup>1094</sup> AUS.AFP.0070.0002, Statement of Mr Prince, para. 28.

<sup>1095</sup> T1166–1167.

<sup>1096</sup> ESB.AFP.0026.0195, Cartwright diary page 16 January 2003.

<sup>1097</sup> T5362.

<sup>1098</sup> T1055.

<sup>1099</sup> T1915–1923.

<sup>1100</sup> T5360.

<sup>1101</sup> T5321–5322.

<sup>1102</sup> T1056–1057.

<sup>1103</sup> ESB.AFP.0046.0282, Prince TROC, Q. 40.

<sup>1104</sup> T6470.

<sup>1105</sup> T6470.

<sup>1106</sup> T6492–6494.

<sup>1107</sup> ESB.AFP.0049.0274, Collins TROC, Q. 73–76.

<sup>1108</sup> T4257.

<sup>1109</sup> T4281.

<sup>1110</sup> T5062–5063.

- <sup>1111</sup> AFB.AFP.0001.0058, Barr TROC p. 0063.
- <sup>1112</sup> T1066–1069.
- <sup>1113</sup> T1070, ESB.AFP.0046.0374, McCleary TROC, Q. 36–39.
- <sup>1114</sup> T1073–1075, ESB.AFP.0048.0216, Ross TROC, Q. 36.
- <sup>1115</sup> 1593–1594.
- <sup>1116</sup> T4297–4299.
- <sup>1117</sup> DPP.DPP.0003.0078, Cabinet briefing—January 2003 bushfires tabled 16 January 2003, as discussed above.
- <sup>1118</sup> T4300.
- <sup>1119</sup> ESB.DPP.0001.0104, Tonkin notes of Cabinet Briefing, 16 January 2003, as discussed above.
- <sup>1120</sup> T4301.
- <sup>1121</sup> T4321.
- <sup>1122</sup> T4324–4325, T4331.
- <sup>1123</sup> T4331.
- <sup>1124</sup> T4338.
- <sup>1125</sup> T5265.
- <sup>1126</sup> T1596–1597.
- <sup>1127</sup> T1807–1809.
- <sup>1128</sup> T1811–1812.
- <sup>1129</sup> T1082.
- <sup>1130</sup> T1081–1083.
- <sup>1131</sup> T1083.
- <sup>1132</sup> T1084.
- <sup>1133</sup> T1924–1926.
- <sup>1134</sup> T2543.
- <sup>1135</sup> ESB.AFP.0020.0154, Keane draft email “Bushfire Update” 16 January 2003; T2543.
- <sup>1136</sup> T2544–2545.
- <sup>1137</sup> T2557–2558.
- <sup>1138</sup> T5073.
- <sup>1139</sup> T1924.
- <sup>1140</sup> ESB.AFP.0024.0145, Statement of Mr Collins, p. 6.
- <sup>1141</sup> T6442.
- <sup>1142</sup> T1392–1393.
- <sup>1143</sup> T5074; T5392; T6442.
- <sup>1144</sup> T5393.
- <sup>1145</sup> T5392–5393; T5073.
- <sup>1146</sup> T1930.
- <sup>1147</sup> T6442–6443.
- <sup>1148</sup> T1928.
- <sup>1149</sup> T1919–1920.
- <sup>1150</sup> ESB.AFP.0024.0145, Statement of Mr Collins, p. 7.
- <sup>1151</sup> T5395–5396.
- <sup>1152</sup> T5418.
- <sup>1153</sup> T5401–5407; AFB.AFP.0001.0001, ACT Fire Brigade IMT Planning Section Report at 0015: ‘List of All ACT FB Planning Activities from 3.00 pm 16 January 2003 to 3.00 pm 18 January 2003.’ See also T1931–1934.
- <sup>1154</sup> T6444.
- <sup>1155</sup> AUS.AFP.0070.0002, Statement of Mr Prince, p. 9.
- <sup>1156</sup> T6444.
- <sup>1157</sup> Submissions on behalf of Superintendent Newham of the ACT Fire Brigade, 28 June 2006, para. 29.
- <sup>1158</sup> T5070–5071.
- <sup>1159</sup> ESB.AFP.0053.0167, Statement of Mr Dutton, p. 7.
- <sup>1160</sup> T4258–4259.
- <sup>1161</sup> T4259.

<sup>1162</sup> ESB.AFP.0016.0441, ACT AS strategy meeting 16 January 2003, ESB.AFP.0016.0443, ACT AS strategy meeting 16 January 2003.

<sup>1163</sup> T4258.

<sup>1164</sup> ESB.AFP.0016.0443, ACT AS strategy meeting 16 January 2003 p. 1.

<sup>1165</sup> T4259.

<sup>1166</sup> T4259, T4264.

<sup>1167</sup> ESB.AFP.0016.0441, ACT AS strategy meeting 16 January 2003.

<sup>1168</sup> T4264–4265.

<sup>1169</sup> T1079.

<sup>1170</sup> ESB.AFP.0010.0168, Planning Meeting Minutes 16 January 2003 16:00 hours.

<sup>1171</sup> Statement of Mr Graham, para. 154.

<sup>1172</sup> T2935–2936.

<sup>1173</sup> T2938–2939.

<sup>1174</sup> ESB.AFP.0010.0168, Planning meeting minutes 16:00 16 January 2003.

<sup>1175</sup> Statement of Mr Lucas-Smith, para. 88.

<sup>1176</sup> T0096–0097.

<sup>1177</sup> ESB.AFP.0111.0117, Statement of Mr Castle, para. 103.

<sup>1178</sup> T1608.

<sup>1179</sup> DPP.DPP.0004.0006, Radio ABC 666 17:00 16/1/03.

<sup>1180</sup> T1088–1089.

<sup>1181</sup> NSP.AFP.0047.0407, NSW RFS Media Release 16/01/03.

<sup>1182</sup> T2937–2939.

<sup>1183</sup> T4853–4854, T6303–6304, T6193, A List of resources provided set out in Exhibit 69.

<sup>1184</sup> T4853.

<sup>1185</sup> T1604.

<sup>1186</sup> T6174; ESB.AFP.0111.0117, Statement of Mr Castle, para. 102.

<sup>1187</sup> T6559–6561.

<sup>1188</sup> Statement of Mr Lucas-Smith, para. 88.

<sup>1189</sup> ESB.AFP.0108.0128, Statement of Mr Winter, para. 23; Statement of Mr Graham, para. 147.

<sup>1190</sup> DUS.AFP.0002.0001, Statement of Mr Murphy, para. 50.

<sup>1191</sup> DUS.AFP.0002.0001, Statement of Mr Murphy, paras 50–52.

<sup>1192</sup> Cheney report, p. 38., Statement of Mr Graham, para. 152.

<sup>1193</sup> DUS.AFP.0002.0001, Statement of Mr Murphy, para. 53.

<sup>1194</sup> Cheney report, p. 38.

<sup>1195</sup> Cheney report, p. 51.

<sup>1196</sup> T4939–4940.

<sup>1197</sup> T3967.

<sup>1198</sup> ESB.AFP.0006.0252, Option Analysis Incident Name: North Namadgi Complex - Stockyard Division, 4.00 pm 16 January 2003.

<sup>1199</sup> T3970–3971, T3979; ESB.AFP.0111.0272, Statement of Mr Sayer, para. 38; T4941.

<sup>1200</sup> T6220–6221; Mr Sayer also indicated in his statement that at least some NSW crews were involved that evening.; ESB.AFP.0111.0272, Statement of Mr Sayer, para. 39. See also, Statement of Mr Graham, para. 155.

<sup>1201</sup> T3971–3973; ESB.AFP.0111.0272, Statement of Mr Sayer, paras 39–42; Statement of Mr Graham, para. 156.

<sup>1202</sup> Statement of Mr Lucas-Smith, para. 87.

<sup>1203</sup> Cheney report, p. 51.

<sup>1204</sup> Roche report, p. 97.

<sup>1205</sup> T4499.

<sup>1206</sup> T4503; NRF.AFP.0001.0132.

<sup>1207</sup> T4604–4605.

<sup>1208</sup> Cheney report, p. 22.

<sup>1209</sup> T4523.

<sup>1210</sup> Cheney report, p. 21.

<sup>1211</sup> ESB.AFP.0110.0973, *Canberra Times* ‘Next Five Days Critical’, 17 January 2003, see also, ESB.DPP.0014.0152\_13.

<sup>1212</sup> ESB.AFP.0110.0868, Planning meeting minutes 09:30 17 January 2003, ESB.AFP.0110.0871, Operations Officer situation report 17/1/03.

<sup>1213</sup> DPP.DPP.0004.0006, Radio ABC 666 17:00 16/1/03.

<sup>1214</sup> ESB.AFP.0110.0868, Planning meeting minutes 09:30 17 January 2003.

<sup>1215</sup> ESB.AFP.0110.0868, Planning meeting minutes 09:30 17 January 2003.

<sup>1216</sup> T3381.

<sup>1217</sup> T1631–1632.

<sup>1218</sup> Statement of Mr McRae, para. 105.

<sup>1219</sup> T3386–3387.

<sup>1220</sup> ESB.AFP.0110.0868, Planning meeting minutes 09:30 17 January 2003 p. 2–3.

<sup>1221</sup> ESB.AFP.0111.0117, Statement of Mr Castle, para. 106.

<sup>1222</sup> Statement of Mr McRae, para. 106.

<sup>1223</sup> ESB.AFP.0110.0911 McRae notes 17 January 2003.

<sup>1224</sup> T3384–3385.

<sup>1225</sup> T3387.

<sup>1226</sup> T6128.

<sup>1227</sup> T6129.

<sup>1228</sup> T6129–6138.

<sup>1229</sup> T6131–6132.

<sup>1230</sup> Statement of Mr Graham para. 168.

<sup>1231</sup> DPP.DPP.0003.0476, ESB press conference 17 January 2003 p. 9–10.

<sup>1232</sup> DPP.DPP.0003.0476, ESB press conference 17 January 2003 p. 13.

<sup>1233</sup> DPP.DPP.0003.0476, ESB press conference 17 January 2003 p. 18.

<sup>1234</sup> T1094.

<sup>1235</sup> T1092.

<sup>1236</sup> ESB.AFP.0111.0117, Statement of Mr Castle, para. 107–108.

<sup>1237</sup> T1660–1661.

<sup>1238</sup> T1638–1639.

<sup>1239</sup> T1679.

<sup>1240</sup> T1681–1682.

<sup>1241</sup> T1687.

<sup>1242</sup> T1644–1645.

<sup>1243</sup> T1092–1093.

<sup>1244</sup> T2120–2121.

<sup>1245</sup> DPP.DPP.0003.0481, Wade press conference 17 January 2003 p. 19.

<sup>1246</sup> DPP.DPP.0003.0481, Wade press conference 17 January 2003 p. 22.

<sup>1247</sup> T1664–1668.

<sup>1248</sup> ESB.AFP.0110.0900, ACT media update 12:00 17 January 2003.

<sup>1249</sup> T1689–1691.

<sup>1250</sup> NSP.AFP.0047.0409, NSW RFS media release 12:00 17 January 2003.

<sup>1251</sup> Statement of Mr Graham, para. 163.

<sup>1252</sup> Cheney report, pp. 39–40; Roche report, p. 124; Statement of Mr Graham para. 170; T1095; T1711; T2945.

<sup>1253</sup> T2945; Statement of Mr Graham, para. 172.

<sup>1254</sup> Cheney report, p. 39.

<sup>1255</sup> Statement of Mr Graham para. 175.

<sup>1256</sup> *ibid.*, para. 178.

<sup>1257</sup> T3914; T3917.

<sup>1258</sup> T4942–4943.

<sup>1259</sup> Statement of Mr Graham paras 164–165.

<sup>1260</sup> Statement of Mr Graham, para. 167.

<sup>1261</sup> Cheney report, p. 52.

- <sup>1262</sup> Roche report, p. 127.
- <sup>1263</sup> Statement of Mr Graham, para. 173. Roche report, p. 127. T4949.
- <sup>1264</sup> T4448–4449; NRF.AFP.0001.0001, McIntyres Hut fire situation report 24:00 08/01/03.
- <sup>1265</sup> T4449–4450; T4482–4483.
- <sup>1266</sup> T4499–4500.
- <sup>1267</sup> T4500–4501.
- <sup>1268</sup> *ibid.*
- <sup>1269</sup> T4605–4606.
- <sup>1270</sup> MLI.DPP.0005.0191 Yarrowlumla Section 44 9 Jan–7 Feb 2003, Incident Controller's Report, p. 10.
- <sup>1271</sup> Cheney report, p. 22–23; T0382–0384.
- <sup>1272</sup> T0384.
- <sup>1273</sup> Cheney report, p. 22–23; T0384–0385.
- <sup>1274</sup> *ibid.*, p. 119–120.
- <sup>1275</sup> *ibid.*
- <sup>1276</sup> T2945.
- <sup>1277</sup> Cheney report, pp. 23–24.
- <sup>1278</sup> MLI.DPP.0005.0191 Yarrowlumla Section 44 9 Jan–7 Feb 2003, Incident Controller's Report, p. 10.
- <sup>1279</sup> Cheney report, p. 24.
- <sup>1280</sup> *ibid.*
- <sup>1281</sup> Roche report, pp. 118–119.
- <sup>1282</sup> T2942.
- <sup>1283</sup> ESB.AFP.0006.0045, Message operations to planning 11:12 17 January 2003.
- <sup>1284</sup> Statement of Mr Graham, paras 167, 169.
- <sup>1285</sup> T2944–2945.
- <sup>1286</sup> ESB.AFP.0006.0041, Message planning to operations 11:16 am 17 January 2003.
- <sup>1287</sup> T2943.
- <sup>1288</sup> T3382–3383.
- <sup>1289</sup> Statement of Mr Graham, paras 170; 172–174.
- <sup>1290</sup> Statement of Mr Lucas-Smith, paras 97–98.
- <sup>1291</sup> Statement of Mr Lucas-Smith, paras 99–100.
- <sup>1292</sup> Statement of Mr McRae, paras 108–111.
- <sup>1293</sup> Statement of Mr McRae, paras 112–114.
- <sup>1294</sup> T3388–3390.
- <sup>1295</sup> T3390–3391.
- <sup>1296</sup> Statement of Mr Cooper p. 4.
- <sup>1297</sup> T6316.
- <sup>1298</sup> T2958–2960.
- <sup>1299</sup> T6135–6138.
- <sup>1300</sup> T6138.
- <sup>1301</sup> T5399–5400.
- <sup>1302</sup> T5399–5400.
- <sup>1303</sup> ESB.AFP.0110.0860, IAP ACT Fire Brigade 16:30 17/01/03.
- <sup>1304</sup> T1951–1953.
- <sup>1305</sup> ESB.AFP.0110.0860, IAP ACT Fire Brigade 16:30 17/01/03.
- <sup>1306</sup> T1957–1959.
- <sup>1307</sup> T1948–1950.
- <sup>1308</sup> T1958.
- <sup>1309</sup> T5079.
- <sup>1310</sup> T5082.
- <sup>1311</sup> T1954.
- <sup>1312</sup> Roche report, p. 107–108.
- <sup>1313</sup> *ibid.*, p. 108.
- <sup>1314</sup> Submissions on behalf of Superintendent Newham, 28 June 2006, paras 31–39.
- <sup>1315</sup> ESB.AFP.0110.0904, Draft media update 3.10 17 January 2003; T2487.

- <sup>1316</sup> T1698; T2487.
- <sup>1317</sup> T1695–1696.
- <sup>1318</sup> T1698–1699.
- <sup>1319</sup> ESB.AFP.0110.0929, Request for commonwealth assistance 16:30 17 January 2003.
- <sup>1320</sup> T1708–1710.
- <sup>1321</sup> ESB.AFP.0110.0868, Planning meeting minutes 09:30 17 January 2003.
- <sup>1322</sup> T4943–4944.
- <sup>1323</sup> T3398.
- <sup>1324</sup> T4994.
- <sup>1325</sup> T4943–4944; T4994–4995; T5026.
- <sup>1326</sup> T4994–4995; T5025–5026.
- <sup>1327</sup> T4946.
- <sup>1328</sup> T5027; T4995; see also T4944.
- <sup>1329</sup> T5027.
- <sup>1330</sup> T4944.
- <sup>1331</sup> T4996.
- <sup>1332</sup> T5032–5034.
- <sup>1333</sup> T5028.
- <sup>1334</sup> BOM.AFP.0092.0001 The Commonwealth Bureau of Meteorology ‘Submission to the ACT Coroner’s Bushfire Inquiry’ 25 August 2003, p. 27.
- <sup>1335</sup> T4946.
- <sup>1336</sup> T5031, ESB.AFP.0110.1035, Map of predicted fire spread, 17 January 2003.
- <sup>1337</sup> T5031–5032.
- <sup>1338</sup> ESB.AFP.0110.0976 AIIMS Message to Planning Officer from Situation Officer - Risk Analysis for PM 17/1/03 and day 18/1/03; T4946.
- <sup>1339</sup> T4946; T4950.
- <sup>1340</sup> ESB.AFP.0110.0865, Planning meeting minutes 18:00 17 January 2003, Statement of Mr Graham, para. 176.
- <sup>1341</sup> ESB.DPP.0001.0236, Taylor amended statement, para. 35; T4996.
- <sup>1342</sup> T6141; NRF.AFP.0085.0001, Mr Cooper, record of interview, Q. 103.
- <sup>1343</sup> T1100–1101.
- <sup>1344</sup> T1102.
- <sup>1345</sup> T1102–1103.
- <sup>1346</sup> T1103.
- <sup>1347</sup> T1722.
- <sup>1348</sup> T1721.
- <sup>1349</sup> T1722–1723.
- <sup>1350</sup> T1723–1724; T1814.
- <sup>1351</sup> T1725–1726.
- <sup>1352</sup> T3394–3395.
- <sup>1353</sup> T3094–3097.
- <sup>1354</sup> T3398–3399.
- <sup>1355</sup> T3402.
- <sup>1356</sup> T3405.
- <sup>1357</sup> T3396–3397.
- <sup>1358</sup> T3397.
- <sup>1359</sup> T3406–3408.
- <sup>1360</sup> T3403.
- <sup>1361</sup> T3397; T3430.
- <sup>1362</sup> T2950–2951.
- <sup>1363</sup> T2952.
- <sup>1364</sup> T2949–2950.
- <sup>1365</sup> T2953.
- <sup>1366</sup> NRF.AFP.0085.0001, Mr Cooper, transcript of interview, Q. 103.

- <sup>1367</sup> T6139–40.
- <sup>1368</sup> T6140.
- <sup>1369</sup> T6149.
- <sup>1370</sup> T6170–6071.
- <sup>1371</sup> Cheney report, p. 54–57; T6877, and following.
- <sup>1372</sup> T6877–6878.
- <sup>1373</sup> T6878.
- <sup>1374</sup> Cheney report, p. 56–57.
- <sup>1375</sup> T6879.
- <sup>1376</sup> T6979–6880.
- <sup>1377</sup> Cheney report, p. 57.
- <sup>1378</sup> T4993.
- <sup>1379</sup> T5035.
- <sup>1380</sup> Statement of Mr Graham, para. 180.
- <sup>1381</sup> ESB.AFP.0001.1256, Statement of Mr Gore, paras 6, 23.
- <sup>1382</sup> T4159.
- <sup>1383</sup> T4160.
- <sup>1384</sup> T6143–4.
- <sup>1385</sup> T6226–8.
- <sup>1386</sup> T6312.
- <sup>1387</sup> T6145; T6208–6209.
- <sup>1388</sup> T6145.
- <sup>1389</sup> T6142–6152.
- <sup>1390</sup> T6152–3.
- <sup>1391</sup> Roche report, p. 125; p. 133.
- <sup>1392</sup> ESB.AFP.0103.0052, Statement of Mr Brett McNamara para. 104.
- <sup>1393</sup> ESB.AFP.0110.0921, ACT Request for Commonwealth physical assistance Friday 17 January 2003 20:30 hours.
- <sup>1394</sup> AUS.AFP.0070.0002, Statement of Mr Prince, p. 16.
- <sup>1395</sup> T6456–6458.
- <sup>1396</sup> ESB.AFP.0111.0196, Statement of Ms Harvey, paras 30–31.
- <sup>1397</sup> GSO.GSO.0004.0038, Wheatley notebook ACT Bushfires 2003.
- <sup>1398</sup> GSO.GSO.0004.0072, Wheatley notebook ACT Bushfires 2003.
- <sup>1399</sup> DPP.DPP.0006.0169, Statement of Ms Wheatley, p. 3.
- <sup>1400</sup> T4185–4186.
- <sup>1401</sup> DPP.DPP.0006.0169, Statement of Ms Wheatley, p. 5.
- <sup>1402</sup> T4188.
- <sup>1403</sup> T4198–4201.
- <sup>1404</sup> GSO.GSO.0004.0072, Map of ACT Districts.
- <sup>1405</sup> T3402–3403.
- <sup>1406</sup> T1725; T4202; T2496; T4196; T6457.
- <sup>1407</sup> T3504–3505.
- <sup>1408</sup> T1729.
- <sup>1409</sup> T3406–3408.
- <sup>1410</sup> T2405.
- <sup>1411</sup> ESB.AFP.0111.0196, Statement of Ms Harvey, p. 32; T2402–2403.
- <sup>1412</sup> ESB.AFP.0111.0196, Statement of Ms Harvey, para. 33.
- <sup>1413</sup> DPP.DPP.0004.0040, Prince TROC, Q. 132; T6460–6461.
- <sup>1414</sup> T6461.
- <sup>1415</sup> T1974.
- <sup>1416</sup> T1969.
- <sup>1417</sup> T4276.
- <sup>1418</sup> ESB.AFP.0042.0150, ACT AS memo 17/01/03; T4271.
- <sup>1419</sup> T4274–4275.

- <sup>1420</sup> T1103–1104.
- <sup>1421</sup> T1785; T2410–2411; T2499–2500; T6463; T5863.
- <sup>1422</sup> T1374–1376.
- <sup>1423</sup> T2406–2407.
- <sup>1424</sup> DPP.DPP.0003.0408, Lowe TROC, Q. 331–332.
- <sup>1425</sup> T2495–2496.
- <sup>1426</sup> T3408–3409.
- <sup>1427</sup> T2876–2877.
- <sup>1428</sup> T4895.
- <sup>1429</sup> T1971–1972.
- <sup>1430</sup> T3793–3794; T3827.
- <sup>1431</sup> T6144.
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- <sup>1434</sup> T3933.
- <sup>1435</sup> T3802; T4156–4158.
- <sup>1436</sup> T3998–3999.
- <sup>1437</sup> T3804.
- <sup>1438</sup> T6144.
- <sup>1439</sup> T4164–4165.
- <sup>1440</sup> T3802.
- <sup>1441</sup> T5444.
- <sup>1442</sup> T4159.
- <sup>1443</sup> Statement of Mr Graham para. 174.
- <sup>1444</sup> ESB.AFP.0001.1256, Statement of Mr Gore, para. 31; T4168.
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- <sup>1446</sup> T0998–0999, T1095, T1104–1105.
- <sup>1447</sup> T1118; see also, T1198–1199.
- <sup>1448</sup> T1198.
- <sup>1449</sup> T1208.
- <sup>1450</sup> T1209.
- <sup>1451</sup> T1209.
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- <sup>1453</sup> T1738.
- <sup>1454</sup> T1737, T1741.
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- <sup>1456</sup> T1739–1741.
- <sup>1457</sup> T2301.
- <sup>1458</sup> DPP.DPP.0003.0054, Statement of Ms Larkins, p. 2–3.
- <sup>1459</sup> DPP.DPP.0004.0007, Radio ABC666 07:30 18/01/03 p. 1–3.
- <sup>1460</sup> T1751, DPP.DPP.0004.0007, Radio ABC666 07:30 18/01/03.
- <sup>1461</sup> T1750.
- <sup>1462</sup> T1758–1759.
- <sup>1463</sup> T1758–1760.
- <sup>1464</sup> *Canberra Times*, 18 January 2003, p. 1.
- <sup>1465</sup> DPP.DPP.0003.0218, Statement of Sergeant Kirby, p. 3.
- <sup>1466</sup> T6460.
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- <sup>1468</sup> T2410; ESB.DPP.0001.0064, Evacuation planning meeting agenda, 8.00 am, Saturday 19 (sic) January 2003.
- <sup>1469</sup> T2408–2409; T4239.
- <sup>1470</sup> T6463–6464.
- <sup>1471</sup> T4837.
- <sup>1472</sup> DPP.DPP.0006.0169, Statement of Ms Wheatley, p. 5.

- <sup>1473</sup> T6463–6464.
- <sup>1474</sup> T4358.
- <sup>1475</sup> T6464.
- <sup>1476</sup> T4361–4362.
- <sup>1477</sup> *ibid.*
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- <sup>1479</sup> GSO.GSO.0004.0038, Wheatley notes.
- <sup>1480</sup> ESB.AFP.0024.0002, Harvey notes p. 12.
- <sup>1481</sup> T2407.
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- <sup>1483</sup> T4207–4208; T4193.
- <sup>1484</sup> T4239–4241.
- <sup>1485</sup> T2409–2410.
- <sup>1486</sup> T6463–6464.
- <sup>1487</sup> T4361–4362.
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- <sup>1490</sup> T4243–4245.
- <sup>1491</sup> T4239–4241.
- <sup>1492</sup> T6464–6465.
- <sup>1493</sup> T2411.
- <sup>1494</sup> T6464.
- <sup>1495</sup> Statement of Mr McRae, para. 121.
- <sup>1496</sup> Statement of Mr Graham, para. 181.
- <sup>1497</sup> Statement of Mr Bartlett, paras 133–138.
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- <sup>1499</sup> T6589–6590.
- <sup>1500</sup> Statement of Mr Bartlett, para. 139.
- <sup>1501</sup> Statement of Mr Bartlett, para. 145.
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- <sup>1503</sup> Statement of Mr Graham, para. 184.
- <sup>1504</sup> Statement of Mr Bartlett, para. 141.
- <sup>1505</sup> T6590.
- <sup>1506</sup> Statement of Mr Lucas-Smith, para. 109.
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- <sup>1515</sup> Statement of Mr Bartlett, paras 146, 148–149.
- <sup>1516</sup> T6006–6009.
- <sup>1517</sup> T6509–6510.
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- <sup>1519</sup> Statement of Mr Lucas-Smith, para. 110.
- <sup>1520</sup> Statement of Mr Graham, para. 188.
- <sup>1521</sup> T2964–2965.
- <sup>1522</sup> T4780.
- <sup>1523</sup> T1985–1986.
- <sup>1524</sup> Statement of Mr McRae, p. 121.
- <sup>1525</sup> T3416.
- <sup>1526</sup> T3416–3417.

- <sup>1527</sup> T3417–3418.  
<sup>1528</sup> T3418–3420.  
<sup>1529</sup> T3431.  
<sup>1530</sup> T0105–0107.  
<sup>1531</sup> T0115–0117.  
<sup>1532</sup> ESB.AFP.0111.0117, Statement of Mr Castle, p. 118.  
<sup>1533</sup> ESB.AFP.0010.0278, Notes of planning meeting 18 January 2003 09:30, p. 2; T1764–1765.  
<sup>1534</sup> T1767–1768.  
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<sup>1536</sup> ESB.AFP.0110.0693, Message form to ops from planning 09:00 18/01/03; T4998.  
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<sup>1539</sup> ESB.AFP.0110.0693, Message from to ops from planning 09:00 18/01/03; T4998–4999.  
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<sup>1541</sup> T5003.  
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<sup>1543</sup> T5003.  
<sup>1544</sup> Statement of Mr Taylor, para. 41.  
<sup>1545</sup> *ibid.*, para. 38.  
<sup>1546</sup> T1199–1122.  
<sup>1547</sup> T5000–5001.  
<sup>1548</sup> T2961–2962.  
<sup>1549</sup> T3414–3415.  
<sup>1550</sup> T5037.  
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<sup>1552</sup> T4364–4365.  
<sup>1553</sup> T5273.  
<sup>1554</sup> AFP.AFP.0110.0398, Statement of Commander Newton, p. 13; T5269–5271.  
<sup>1555</sup> T5293.  
<sup>1556</sup> DPP.DPP.0003.0218, Statement of Sergeant Kirby, p. 3–4.  
<sup>1557</sup> T6472, DPP.DPP.0004.0040, Prince TROC, Q. 197.  
<sup>1558</sup> AUS.AFP.0070.0002, Statement of Mr Prince, para. 26; T6473.  
<sup>1559</sup> T6473–6474.  
<sup>1560</sup> T3432.  
<sup>1561</sup> AUS.AFP.0070.0002, Statement of Mr Prince, p. 27–28.  
<sup>1562</sup> T6475.  
<sup>1563</sup> T6475.  
<sup>1564</sup> AFP.AFP.0110.0398, Statement of Commander Newton, p. 17–18.  
<sup>1565</sup> T5271–5272.  
<sup>1566</sup> AFP.AFP.0110.0398, Statement of Commander Newton, p. 18–20.  
<sup>1567</sup> T3422–3434.  
<sup>1568</sup> T1980–1981.  
<sup>1569</sup> T1990.  
<sup>1570</sup> T5092.  
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<sup>1572</sup> T5421–5422.  
<sup>1573</sup> T5424.  
<sup>1574</sup> T1982.  
<sup>1575</sup> T2002–2007.  
<sup>1576</sup> T2002–3.  
<sup>1577</sup> T4279.  
<sup>1578</sup> Statement of Mr Castle, para. 119.  
<sup>1579</sup> DPP.DPP.0003.0054, Statement of Ms Larkins, p. 3–4; T2306.  
<sup>1580</sup> Statement of Mr Castle, para. 120.

<sup>1581</sup> T2497; T2410–2411.

<sup>1582</sup> ESB.AFP.0014.0375, Media update 12:00 18/01/03; T2414–2415.

<sup>1583</sup> T2499–2500.

<sup>1584</sup> T1772; T2412–2413.

<sup>1585</sup> T2413–2414.

<sup>1586</sup> T2437.

<sup>1587</sup> T2438.

<sup>1588</sup> T2430–2432.

<sup>1589</sup> T2498–2499.

<sup>1590</sup> See for example the relevant fire size estimates in the Cheney report, pp. 23–24; p. 51.

<sup>1591</sup> ESB.AFP.0014.0371, Media update ACT Bushfire Status 13:00 pm, Saturday 18 January 2003.

<sup>1592</sup> ESB.AFP.0014.0375, Media update 12:00 18/01/03. (Emphases in original.)

<sup>1593</sup> *ibid.*

<sup>1594</sup> T3421.

<sup>1595</sup> T1778.

<sup>1596</sup> DPP.DPP.0003.0491, ESB press conference transcript, 18/01/03.

<sup>1597</sup> DPP.DPP.0003.0491, ESB press conference transcript, 18/01/03.

<sup>1598</sup> T1125–1126.

<sup>1599</sup> T1199–1202.

<sup>1600</sup> T1199–1202.

<sup>1601</sup> T1202.

<sup>1602</sup> T1211.

<sup>1603</sup> T1202.

<sup>1604</sup> T1207.

<sup>1605</sup> ESB.AFP.0111.0117, Statement of Mr Castle, para. 121.

<sup>1606</sup> T1774.

<sup>1607</sup> T1775–1776.

<sup>1608</sup> T2438.

<sup>1609</sup> DPP.DPP.0003.0054, Statement of Ms Larkins, p. 4.

<sup>1610</sup> DPP.DPP.0003.0054, Statement of Ms Larkins, p. 4–5.

<sup>1611</sup> T2304.

<sup>1612</sup> T2341–2342.

<sup>1613</sup> T2349.

<sup>1614</sup> ESB.AFP.0014.0371, Media update ACT Bushfire Status 13:00 pm, Saturday 18 January 2003.

<sup>1615</sup> ESB.AFP.0009.0095, Canberra Connect website information 13:30 18/01/03.

<sup>1616</sup> Statement of Mr Castle, para. 111.

<sup>1617</sup> ESB.AFP.0111.0117, Statement of Mr Castle, para. 122.

<sup>1618</sup> T1786.

<sup>1619</sup> ESB.AFP.0110.0768, Standard Emergency Warning Signal 18/01/03 14:05.

<sup>1620</sup> T1787.

<sup>1621</sup> ESB.AFP.0111.0196, Statement of Ms Harvey, para. 48.

<sup>1622</sup> McLeod report, p. 44.

<sup>1623</sup> T4307.

<sup>1624</sup> AFP.AFP.0110.0398, Statement of Commander Newton, p. 21.

<sup>1625</sup> T5274.

<sup>1626</sup> AFP.AFP.0001.0902, Notes by Commander Newton p. 3; T5283.

<sup>1627</sup> T5300–5301.

<sup>1628</sup> T1821–1824.

<sup>1629</sup> T1782–1783.

<sup>1630</sup> Statement of Mr Lucas-Smith, para. 114.

<sup>1631</sup> AFP.AFP.0110.0001, Statement of Chief Police Officer Murray, p. 14.

<sup>1632</sup> T4292–4293.

<sup>1633</sup> ESB.AFP.0111.0117, Statement of Mr Castle, paras 127–129, ESB.AFP.0020.0288, Declaration of a State of Emergency 14:45 18/01/03, ESB.AFP.0020.0286, Assignment of Territory Controller Functions

and Powers 14:45 18/01/03, ESB.AFP.0020.0285, Approval of an Alternate Controller 14:50 18/01/03, ESB.AFP.0020.0293, Authority: Mr Lucas-Smith 14:55 18/01/03, ESB.AFP.0020.0284, Appointment of an Alternate Controller 14:55 18/01/03.

<sup>1634</sup> T1790.

<sup>1635</sup> T1791–1792.

<sup>1636</sup> T1133.

<sup>1637</sup> T1123–1124; T1130.

<sup>1638</sup> T3639.

<sup>1639</sup> T3640.

<sup>1640</sup> Roche report, p. 165.

<sup>1641</sup> T1791–1792.

<sup>1642</sup> ESB.AFP.0020.0288.

<sup>1643</sup> Statement of Mr Castle., para. 130.

<sup>1644</sup> ESB.AFP.0020.0285.

<sup>1645</sup> T4310.

<sup>1646</sup> Statement of Mr Graham, para. 198; T2980.

<sup>1647</sup> Statement of Mr Bartlett, para. 134.

<sup>1648</sup> Cheney report, pp. 23–28, pp. 40–43.

<sup>1649</sup> T6867–6868.

<sup>1650</sup> Statement of Mr Bartlett, para. 135.

<sup>1651</sup> Cheney report, p. 53.

<sup>1652</sup> T4168.

<sup>1653</sup> T6868–6869.

<sup>1654</sup> T6999–7000.

<sup>1655</sup> T7148–7149.

<sup>1656</sup> T3459–3461.

<sup>1657</sup> T3461–3463.

<sup>1658</sup> Statement of Mr McRae, para. 130.

<sup>1659</sup> T1204.

<sup>1660</sup> T1205.

<sup>1661</sup> T6586.

<sup>1662</sup> McLeod report, p. 239. Submissions on behalf of the Australian Capital Territory, para. 211.

<sup>1663</sup> *ibid.*

<sup>1664</sup> T5045–5046.

<sup>1665</sup> Statement of Mr Lucas-Smith, para. 111.

<sup>1666</sup> T1151.

<sup>1667</sup> Statement of Mr Lucas-Smith, para. 113.

<sup>1668</sup> Statement of Mr McRae, para. 125.

<sup>1669</sup> Statement of Mr Castle, para. 122.

<sup>1670</sup> *ibid.*, paras 132–133.

<sup>1671</sup> Statement of Mr Graham, para. 198; Statement of Mr Lucas-Smith, para. 115; Statement of Mr Bartlett, para. 167.

<sup>1672</sup> Statement of Mr Lucas-Smith, para. 115.

<sup>1673</sup> *ibid.*, para. 116.

<sup>1674</sup> T1156.

<sup>1675</sup> Statement of Mr Lucas-Smith, para. 112.

<sup>1676</sup> Statement of Mr Graham, para. 196; T2980–2981.

<sup>1677</sup> Statement of Mr Graham, para. 197.

<sup>1678</sup> Statement of Mr Graham, paras 199–200.

<sup>1679</sup> T6567–9.

<sup>1680</sup> T6519–21; Statement of Mr Bartlett, paras 171–173.

<sup>1681</sup> T6566–7.

<sup>1682</sup> T6160–6164.

<sup>1683</sup> T2110–2114; T2137–2139.

<sup>1684</sup> T6156.

<sup>1685</sup> DPP.DPP.0003.0232 Rehame Newsline, p. 19. See also Statement of Mr Castle, para. 131.  
<sup>1686</sup> Rehame Newsline, p. 19.

<sup>1687</sup> ESB.AFP.0023.0409 Standard Emergency Warning Signal, 18 January 2003. (emphasis in original.)  
<sup>1688</sup> Statement of Mr Castle, para. 133.

<sup>1689</sup> Statement of Mr Castle, para. 136.

<sup>1690</sup> Statement of Mr Castle, para. 135; para. 137.

<sup>1691</sup> Rehame Newsline, p. 19.

<sup>1692</sup> ibid., paras 139; 144.

<sup>1693</sup> Statement of Mr McRae, para. 135.

<sup>1694</sup> Statement of Mr Graham, paras 202–203.

<sup>1695</sup> Statement of Mr McRae, para. 133.

<sup>1696</sup> Statement of Mr Lucas-Smith, paras 120–121.

<sup>1697</sup> Statement of Mr Castle, paras 142–144.

<sup>1698</sup> Statement of Mr Graham, para. 205.

<sup>1699</sup> Statement of Mr Castle, para. 144.

<sup>1700</sup> Statement of Mr Graham, paras 205–206.

<sup>1701</sup> ESB.AFP.0110.0860 ACT Fire Brigade Incident Action Plan, 4.30 pm 17 January 2003.

<sup>1702</sup> T6482.

<sup>1703</sup> T1988.

<sup>1704</sup> T1987; T2013.

<sup>1705</sup> Statement of Mr Prince, para. 40; 42. T6481.

<sup>1706</sup> T5212.

<sup>1707</sup> Roche report, pp. 107–108.

<sup>1708</sup> ESB.AFP.0021.0282; T5909–10.

<sup>1709</sup> T5893–4; T5896–8.

<sup>1710</sup> T5902; T5096–7.

<sup>1711</sup> T5899.

<sup>1712</sup> T5093.

<sup>1713</sup> T5900.

<sup>1714</sup> T5914.

<sup>1715</sup> T5180; T6500. See also MacLeod report, p. 55; p. 129.

<sup>1716</sup> T5100–5110.

<sup>1717</sup> T5121.

<sup>1718</sup> T5126.

<sup>1719</sup> T5185–5186.

<sup>1720</sup> T5188.

<sup>1721</sup> T5211.

<sup>1722</sup> T5188.

<sup>1723</sup> T5190.

<sup>1724</sup> T5213.

<sup>1725</sup> T5189.

<sup>1726</sup> T5192.

<sup>1727</sup> T5230.

<sup>1728</sup> T5193–5195.

<sup>1729</sup> T5202.

<sup>1730</sup> AFP.AFP.0086.0019, Statement of Mr McIntyre, pp. 3–5.

<sup>1731</sup> T5197.

<sup>1732</sup> T5200.

<sup>1733</sup> T5209–5210.

<sup>1734</sup> T5211.

<sup>1735</sup> T5216.

<sup>1736</sup> T5230.

<sup>1737</sup> T5231.

- <sup>1738</sup> Statement of Mr McIntyre, pp. 6–15.
- <sup>1739</sup> T3111.
- <sup>1740</sup> T3812–3817. See also ESB.AFP.0103.0052, Statement of Mr McNamara, paras 122–132.
- <sup>1741</sup> ESB.AFP.0111.0262, Statement of Mr Sayer, paras 53–56.
- <sup>1742</sup> *ibid.*, paras 57–59.
- <sup>1743</sup> T3975, T3979.
- <sup>1744</sup> Statement of Mr Sayer, paras 60–68.
- <sup>1745</sup> ESB.AFP.0110.0398, Statement of Commander Newton, page 27.
- <sup>1746</sup> ESB.AFP.0110.0345, Second Statement of Sergeant Byrnes, p. 7.
- <sup>1747</sup> AFP.AFP.0001.0596, Agenda and Resolutions of the Police Ministers Council, 20 September 2001. T1235–1237.
- <sup>1748</sup> T1839; T4367.
- <sup>1749</sup> T4291.
- <sup>1750</sup> AFP.AFP.0110.0001, Statement of Chief Police Officer Murray, p. 16.
- <sup>1751</sup> *ibid.*, p. 17.
- <sup>1752</sup> T4402.
- <sup>1753</sup> T4291.
- <sup>1754</sup> Statement of Chief Police Officer Murray, p. 17.
- <sup>1755</sup> Statement of Commander Newton, pp. 27–28.
- <sup>1756</sup> *ibid.*, p. 29.
- <sup>1757</sup> DPP.DPP.0004.0041 Thornthwaite TROC p. 24.
- <sup>1758</sup> T1164.
- <sup>1759</sup> T1159; T1164.
- <sup>1760</sup> T1160.
- <sup>1761</sup> Statement of Chief Police Officer Murray, pp. 17–18.
- <sup>1762</sup> Roche report, p. 162–3.
- <sup>1763</sup> T6320–6321.
- <sup>1764</sup> ESB.AFP.0053.0167, Statement of Mr Dutton, p. 14.
- <sup>1765</sup> AUS.AFP.0100.0001, Ellis & Sullivan Report on Assessment of ACT Suburban House Loss from the 18 January 2003 Bushfires, August 2003 (Ellis report).
- <sup>1766</sup> T0584.
- <sup>1767</sup> T0585.
- <sup>1768</sup> T0586.
- <sup>1769</sup> T0587–0588.
- <sup>1770</sup> AUS.AFP.0100.0001, Ellis report, p. 10; T0588–0589.
- <sup>1771</sup> AUS.AFP.0100.0001, Ellis report, p. 12; T0591–0592.
- <sup>1772</sup> T0592–0593.
- <sup>1773</sup> AUS.AFP.0100.0001, Ellis report, p. 13.
- <sup>1774</sup> T0595.
- <sup>1775</sup> T0596.
- <sup>1776</sup> T0597.
- <sup>1777</sup> AUS.AFP.0100.0001, Ellis report, p. 24; T0601–0602.
- <sup>1778</sup> T0605–0606.
- <sup>1779</sup> T0603–0604.
- <sup>1780</sup> T0604–0605.
- <sup>1781</sup> T0607.
- <sup>1782</sup> DPP.DPP.0009.0210, J Leonard ‘Investigation of Bushfire Attack Mechanisms Involved in House Loss in the ACT Bushfire 2003’ (Leonard report) July 2004, p. 51.
- <sup>1783</sup> DPP.DPP.0009.0210, J Leonard ‘Investigation of Bushfire Attack Mechanisms Involved in House Loss in the ACT Bushfire 2003’ (Leonard report) July 2004.
- <sup>1784</sup> Leonard report, p. 14.
- <sup>1785</sup> DPP.DPP.0009.0210, Leonard report, p. 7.
- <sup>1786</sup> DPP.DPP.0009.0210, Leonard report, p. 8.
- <sup>1787</sup> DPP.DPP.0009.0210, Leonard report, p. 10.

<sup>1788</sup> DPP.DPP.0009.0210, Leonard report, p. 12.

<sup>1789</sup> T6753.

<sup>1790</sup> T6764–6765.

<sup>1791</sup> Leonard report, pp. 48–49.

<sup>1792</sup> Leonard report, p. 23.

<sup>1793</sup> T6767.

<sup>1794</sup> DPP.DPP.0009.0210, Leonard report, p. 18.

<sup>1795</sup> T6765–6766.

<sup>1796</sup> T6773–6774.

<sup>1797</sup> T6769–6770.

<sup>1798</sup> T6771.

<sup>1799</sup> T6771.

<sup>1800</sup> Leonard report, p. 41.

<sup>1801</sup> T6773.

<sup>1802</sup> T6773.

<sup>1803</sup> DPP.DPP.0009.0210, Leonard report, p. 48.

<sup>1804</sup> DPP.DPP.0009.0210, Leonard report, p. 49.



# Shortened forms

ACTAS	Australian Capital Territory Ambulance Service
ACTFB	Australian Capital Territory Fire Brigade
ACTPLA	Australian Capital Territory Planning and Land Authority
ACTRFS	Australian Capital Territory Rural Fire Service
ACTSES	Australian Capital Territory State Emergency Service
AFAC	Australasian Fire Authorities Council
AIIMS	Australian Inter-Service Incident Management System
AIIMS-ICS	AIIMS Incident Control System
AR	agency representative
BAZ	bushfire abatement zone
BOM	Bureau of Meteorology
BOP	bushfire operations plan
BUA	built-up area
CAD	computer-aided dispatch
CM	Chief Minister
CMD	Chief Minister's Department
ComCen	ESB communications centre
DUS	Department of Urban Services
ECC	Emergency Coordination Centre
EIC	Emergency Information Centre
ESA	Emergency Services Authority; Emergency Services Agency
ESB	Emergency Services Bureau
GIS	geographic information system
GPS	global positioning system

IAP	incident action plan
IC	incident controller
ICS	Incident Control System
IMT	incident management system
IMT	incident management team
JCS	Department of Justice and Community Safety
JOPG	Joint Operations and Planning Group
KBDI	Keech–Byram Drought Index
LMA	land management agency
LMWQCC	Lower Molonglo Water Quality Control Centre
LO	liaison officer
MOU	memorandum of understanding
NSW NPWS	New South Wales National Parks and Wildlife Service
NSW RFS	New South Wales Rural Fire Service
POC	Police Operations Centre
RAF	remote area firefighting
RAFT	remote area firefighting team
RFS	Rural Fire Service
SBMP	strategic bushfire management plan
SES	State Emergency Service
SEWS	Standard Emergency Warning Signal
SMT	service management team
SOP	Standard Operating Procedure
TRN	trunk radio network
TROC	taped record of conversation