

2 The January 2003 fires and how they were dealt with

(A chronology of the fires' progress and an appraisal of how the authorities tackled them and informed the community)

The synopsis provided in this chapter focuses on the operational response to the January 2003 fires, in accordance with the Inquiry's terms of reference. It does not attempt in any way to be a complete record, to include all the matters raised in submissions, or to deal with all the operational issues relevant to the fire event. Its purpose is to provide context for the subsequent discussion in the report. Omitting matters and concerns raised with the Inquiry is not a reflection of them being of lesser importance; rather, it reflects the reality that the Inquiry could examine only what it considered to be the key issues in the available time. Further, information gathering, from a variety of sources that were not necessarily available to this Inquiry, is continuing, as is the scientific analysis of the fires.

When the fires ignited on 8 January 2003 it fell to the ACT Bushfire Service to respond. The Service was responsible for managing and directing the suppression effort throughout the event. The Emergency Services Bureau submission to the Inquiry set out in detail the ACT response to the fires on a daily basis. The Inquiry used this information, submissions from other agencies and individuals, and the media releases that were issued from Day 3 onwards to produce the synopsis of events that follows, focusing on key aspects of the operational response. Three distinct phases in the overall response are evident:

- Phase One: 8 to 16 January—ignition and the fires' development during the next eight days
- Phase Two: 17 and 18 January—when the separate fires joined up and reached Canberra
- Phase Three: 19 to 30 January—the fires' subsequent progression until their extinguishment.



Phase One: 8 to 16 January

Day 1: Wednesday 8 January¹

Responding to forecasts provided by the Bureau of Meteorology, the ACT Bushfire Service declared a total fire ban for both Tuesday 7 January and Wednesday 8 January, even though it was predicted that the fire weather on 8 January would be less severe. The forecast forest fire danger index was 45 (extreme is 50+).

Observers were on duty at all four fire towers in the ACT. At about 3.30 pm on 8 January an electrical storm passed over the region with a ‘decaying shower’², leading to a series of lightning strikes in a north–south line along the Brindabellas.³ The fires that broke out in the ACT and adjoining parts of NSW; running north to south, were referred to as the McIntyre Hut, Bendora, Stockyard Spur, Gingera and Mount Morgan fires. The McIntyre Hut and Mount Morgan fires were in NSW. Other nearby fires in NSW were reported at Yarrangobilly and Broken Cart.

The fires were first seen by the observers in the fire towers, and they reported them to ACT Bushfire Service headquarters at ESB. The NSW Rural Fire Service and the NSW National Parks and Wildlife Service at Queanbeyan were also advised. The ACT Bushfire Service dispatched its contracted light helicopter, *Firebird 7*, which was on standby at the Australian Federal Police facility at Weston, together with a trained air observer (who was a Group Officer in the ACT Bushfire Service) to carry out a reconnaissance.

At the same time, the ACT Bushfire Service dispatched two response groups that had been placed on standby during the day because of the prevailing conditions. The resources dispatched were intended to be the set responses for a high-risk day—two tankers and three light units to each of the two fires initially identified in the ACT, those at Bendora and Stockyard Spur. This was normal procedure, as laid down in the ACT standard operating procedures. A brigade Captain was incident controller for the group destined for the Bendora fire, and a Deputy Captain was incident controller for the group destined for the Stockyard Spur fire.

The ACT response consisted of a combination of ACT Parks and ACT Forests personnel and some volunteer firefighters, amounting to three light units and two tankers (a total of 12 personnel) for the Bendora fire and two light units and two tankers (10 personnel) for the Stockyard Spur fire. They made their way to the Bendora and Stockyard Spur fires respectively, taking about 90 minutes to arrive in the area of the fires. There was no response to the Gingera fire on 8 January, since at the time it was thought to be in NSW. Submissions to the Inquiry claimed that, on their own initiative, some local volunteer and Department of Urban Services fire crews were at their stations expecting advice about deployment for an initial attack on the fires—advice that never came.

Both response groups had reached the fires by about 6 pm. Crews approached the Stockyard Spur fire later than the Bendora fire because they needed to travel further south along the Mount Franklin Road, the common primary access route. Each crew set about determining the exact location, behaviour and size of the fires. The Bendora fire was close to an access track, and ESB stated in its written submission that crews ‘waited on the fire trail for the fire to come to them’⁴, although it was later confirmed by ESB that more active firefighting occurred.

The incident controller conducted a reconnaissance around the perimeter of the Bendora fire. There was considerable dense understorey, and the fire was burning up an east-facing slope with rocky outcrops and stands of mountain gum. There was relatively easy proximate road access, but access from the road to the fire front was up a 2- to 3-metre steep embankment and then 50–100 metres upslope. There was another track fairly close by above the fire, but it was overgrown and was not located until the next day.

After reconnaissance, the incident controller provided the following situation report to ESB concerning the Bendora fire:

Okay this fire’s doing about 100 metres from the Warks Road uphill. It’s drawing into itself, its 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 and water bombing on the top section as well the fuel loads fairly heavy from wet sclerophyll forest.⁵

After further discussion and consideration between the incident controller and the Duty Coordinator at ESB headquarters, the radio transcript records that the Duty Coordinator indicated via the communications centre staff:

Thanks for your attendance at this incident. You may return to your area and crews will be returning in the morning.

Discussions the Inquiry had with the incident controller revealed that concerns about:

- unfamiliar terrain (difficulty keeping footing when moving in the dark over rocky outcrops and fallen logs to lay out fire hoses)
- fallen trees and debris
- potential fatigue of the crew (who had been working since that morning) when considering the demanding terrain
- doubt about adequate rationing carried by the firefighters on the scene and lack of nearby medical assistance

also influenced thoughts about the safety of overnight firefighting. These safety matters were balanced by the incident controller with the assessment that remote area firefighting teams⁶ and water-bombing aircraft, which could be brought in early the next day, would be required.

The ESB submission to the Inquiry reported that the Bendora incident controller ‘... felt that due to the rugged terrain and access issues, together with the threat of falling trees and tree branches, keeping crews at the fire overnight posed significant safety issues’.⁷

From the various reports that headquarters received from observers in helicopters and on the ground, it was estimated that the fire was of the order of 500 square metres (approximately 20 x 25 metres). It was on this basis that resourcing for the following day was determined.

At the Stockyard Spur fire, the incident controller halted vehicles at the Mount Ginini gate and proceeded forward with one light unit. The fire track running down Stockyard Spur could not be identified because of the growth on the track. This meant moving on foot to the fire, and the incident controller talked with the observer in the helicopter, who advised that the walk in was likely to take ‘up to an hour’. The incident controller discussed with the Duty Coordinator the options of walking in or returning from the fire and was advised that the crew should return to Canberra and that fresh crews would be deployed first thing in the morning. Safety concerns did not appear to influence the decision to abandon the idea of walking to the site of the fire.

The ESB submission referred to the incident controller considering that:

There was little to be gained by undertaking direct firefighting by ground crews on this fire and that, with the access difficulties arising from the fire's remote location, there was no benefit in keeping the crews on this fire overnight.⁸

The ACT Bushfire Service subsequently informed the Inquiry that safety concerns were also expressed at the Stockyard Spur fire. No consideration was given to both fire crews combining at the Bendora fire or, alternatively, tackling the Mount Gingera fire, which was a relatively short distance further on and was far more accessible, despite being thought to be just across the border in NSW. Instead, the crews for both fires operated independently and returned to Canberra at about 10 pm.

The Inquiry spoke to some individuals who had travelled to the fires on that first evening but did not conduct any firefighting operations. One person who had gone to the Bendora fire appeared unable to explain this approach, other than to say that they were directed off the mountain without having initiated any firefighting activity. Another individual, at the Stockyard Spur fire, had walked some distance towards the fire but cited safety concerns as the reason for not reaching the fire itself. Regardless of whether or not their efforts would have contained the fire, the fact that they did not attempt to fight the fire remained a concern to both these people.

The Bendora incident controller advised the Inquiry that upon arrival at the fire some of the firefighters began a direct attack on the fire—they laid out fire hoses and sprayed water on the fire. At the same time the incident controller and one other person undertook reconnaissance. A helicopter was dropping water on the fire. Other firefighters located a water point and marked an access route to the water. After returning from reconnaissance the incident controller instructed the personnel who had marked the water access route to spray water on the fire. Those people laid out their hoses. However, the advice to leave the fire ground was issued before they began spraying water on the fire.

Before the response groups had arrived at the fires the Service Management Team⁹ at ESB had met and decided to deploy the Snowy Hydro Southcare helicopter¹⁰ as a water bomber that evening. The ACT Bushfire Service advised the Inquiry that the Snowy Hydro Southcare helicopter was used as a water bomber for almost three-and-a-half hours¹¹, initially on the Stockyard Spur fire and later on the Bendora fire; it was using a 'bambi bucket', delivering up to 1100 litres of water at each drop. *Firebird 7*¹² was also involved in water-bombing

operations on 8 January at Stockyard Spur. When used as a water bomber, it carried a 450-litre bambi bucket, about 40 per cent of the capacity carried by the Snowy Hydro Southcare helicopter. *Firebird 7* also directed crews towards the fires and reported on fire behaviour and progress.

Water-bombing operations for both aircraft involved filling from the Bendora and Corin Dams and then, because of the reduced lift capacity of the aircraft in the hot conditions, taking an indirect flight path back to the fires. The water-bombing operations were largely independent of the limited ground operations, although there was ground-to-air communication. No air attack supervision was considered necessary and helicopter operations ceased at sunset.

ACT Bushfire Service management advised the Inquiry that it was initially confident the fires would be extinguished—either by suppression or self-extinguishment—in the first 48 hours and that this confidence was based on experience. They acknowledged the severe climatic conditions, but their initial view was that the fires could nevertheless be swiftly put out. This view was confirmed by a comment in the ESB submission—that one of the fires, the Gingera fire, ‘was not posing any immediate risk’¹³ on the evening of 8 January 2003.

The Inquiry was told that additional demands were being made of the ACT Bushfire Service on that day. An unrelated fire incident on Paddys River Road required resources to be deployed, while other personnel were also required to be on standby in Canberra.¹⁴ During the evening of 8 January the Service Management Team organised firefighting crews for the following day, based on advice from the incident controller.

For the McIntyre Hut fire in NSW the initial response was one light unit from the NSW Parks and Wildlife Service, one NSW Rural Fire Service tanker from a local brigade at the hamlet of Fairlight, and a light unit sent from the ACT Forests brigade. After ignition, a westerly wind had rapidly pushed the fire up a slope: its size was estimated at 200 hectares when viewed from an aircraft. Other fires were seen nearby and, while they were initially thought to be spot fires, it was later decided they were most probably the result of other lightning strikes. It was assessed that direct attack was not viable and that indirect attack would be more productive because of the rapid initial spread of the fire, the steep terrain, and the amount of time involved in deploying resources to the site.¹⁵

On the evening of 8 January the ACT Chief Fire Control Officer and a Deputy Chief Fire Control Officer and his deputy attended a planning meeting at Queanbeyan with NSW Rural Fire Service and NSW Parks and Wildlife Service

staff to review the fire situation and coordinate resource allocation. The McIntyre Hut fire was initially managed out of the NSW Parks and Wildlife depot at Queanbeyan with a Parks officer in control.

The NSW Rural Fire Service highlighted to the Inquiry that the meeting was called in recognition of the potential threat to Canberra; the Chief Fire Control Officer also indicated that his attendance reflected the immediate concerns about ACT forests and subsequently Canberra. It was advised that the NSW Rural Fire Service had put out a fire at Captains Flat that afternoon. It was agreed that a 'Section 44 Declaration'¹⁶ would be sought for the McIntyre Hut fire, identifying it as a local bushfire emergency and allowing for the seeking of resources from elsewhere in NSW. The ACT agreed to send a number of tankers and crews to the fire, particularly since it posed an immediate threat to ACT pine forests adjacent to the Territory border east of the fire.

Notes

- 1 The daily schematic maps were provided by ESB.
- 2 Bureau of Meteorology submission, p. 17.
- 3 The Inquiry was unable to confirm beyond doubt that the fires resulted from lightning strikes. However, for the purposes of the Inquiry it is assumed that the large number of fires that were ignited in the alpine country of NSW, the ACT and Victoria on the afternoon of 8 January resulted from lightning strikes as a dry storm moved through the region. The coronial inquiry in the ACT will consider further the actual cause of the fires.
- 4 ESB submission, p. 98.
- 5 Radio transcript.
- 6 Any fire that requires people to be self-sufficient, and away from their vehicles for their full shift, is classed as a remote area fire.
- 7 ESB submission, p. 98.
- 8 *ibid.*
- 9 The Service Management Team is an ACT Bushfire Service-specific arrangement that coordinates and supports large incidents from the Emergency Operations Centre at ESB headquarters.
- 10 The Snowy Hydro Southcare helicopter provides medical retrieval services in the ACT and southern NSW.
- 11 ESB submission, p. 98.
- 12 *Firebird 7* is a contracted light observation helicopter supporting the ACT Bushfire Service over the summer months.
- 13 ESB submission, p. 99.
- 14 The logic of holding crews back from a fire in progress in order to respond to threats that were yet to appear does, however, seem questionable.
- 15 NSW Rural Fire Service submission, p. 5.
- 16 A declaration under the *NSW Rural Fire Act 1997*. A Section 44 Declaration took effect from 1 pm on 9 January.



Day 2: Thursday 9 January

In its submission to the Inquiry ESB described the weather as ‘relatively benign for some time’¹ from Thursday 9 January. The wind, at 10–15 kilometres an hour, was from the west to south-west until an east to south-easterly change arrived in the late afternoon. The forest fire danger index was 18.

An aerial reconnaissance was conducted at first light on 9 January. There had been some spread in the fires overnight, and the stated objectives for the day were to ‘keep [the fires] contained to their smallest

possible size using direct attack’² and to ‘keep the fire away from the Mt Franklin Road’³ because it provided vital access to the Stockyard Spur and Gingera fires and was an effective ridgeline control line.

In contrast, at the McIntyre Hut fire, the NSW Parks and Wildlife Service and the NSW Rural Fire Service had decided on an indirect attack ‘due to the steep terrain, difficult access and unpredictable fire behaviour’.⁴ Containment lines were identified, generally on existing trails and tracks, and heavy plant was brought in to improve and ‘clean up’ these earth breaks.

At the Bendora fire, and particularly the Stockyard Spur fire, heavy plant was going to be needed to reopen tracks and construct control lines. Access was generally considered poor: some fire tracks had been allowed to become overgrown and some had been blocked off to deny recreational traffic access in areas that could affect water catchments. A heavy dozer was deployed on 9 January but it was not able to commence work until early on Day 3.

Crews were deployed to the fires early in the day, assembling at a staging area in the mountains at 6 am. It is of note that the incident controllers assigned to each fire were different from those assigned on Day 1, being two Deputy Captains. On arrival at the fires, it was established that there had been no self-extinguishment overnight—‘a somewhat common feature of highland fire behaviour with cooler easterly winds’⁵—which alerted ESB staff to the fact that there were ‘some unusual fire behaviour patterns occurring’.⁶



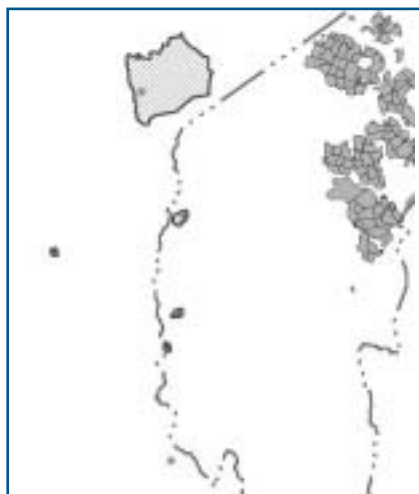
Stockyard Spur fire taken on the morning of 9 January 2003. Photo courtesy ESB.

Direct attack proved unsuccessful and the fire's size increased 'fairly quickly'.⁷ *Firebird 7* and the Snowy Hydro Southcare helicopter were used for reconnaissance and aerial bombing. A light unit with two firefighters was sent to the Gingera fire: it had been confirmed that the fire was in the ACT. One light unit remained monitoring the Gingera fire overnight; other crews did not remain overnight as a result of 'safety concerns posed by access limitations'.⁸ The Gingera fire moved into NSW under an easterly influence that night.⁹

Day 2 also saw initial tasking of ACT crews to assist with the McIntyre Hut fire in NSW. The Chief Fire Control Officer attended meetings at Queanbeyan and an ACT Bushfire Service liaison officer was assigned there, an arrangement that continued until the end of January. ESB made efforts to increase the number of aerial resources by contacting the NSW Rural Fire Service and the ACT's existing contractor. Only one additional light helicopter was obtained (and it later crashed into Bendora Dam). The Inquiry received conflicting advice about whether other aerial resources were available at this time: some individuals suggested that, had the ACT Bushfire Service made a greater effort, more aircraft could have been brought in to assist with the ACT firefighting effort.

Notes

- 1 ESB submission, p. 20.
- 2 Direct attack refers to 'directly attacking' the fires with water or hand tools.
- 3 ESB submission, p. 100.
- 4 NSW Rural Fire Service submission, p. 5. 'Indirect attack' refers to fighting the fire through back-burning to reduce available fuel, as opposed to attacking the flanks or 'head' of the fire directly with water.
- 5 ESB submission, p. 101. Notwithstanding this comment, it is noteworthy that the easterly winds did not arrive until the afternoon of 9 January.
- 6 *ibid.*
- 7 *ibid.*
- 8 *ibid.*
- 9 NSW Rural Fire Service Operations record, p. 3.



Day 3: Friday 10 January

Easterly winds prevailed during most of Friday 10 January, reaching 10–15 kilometres an hour. The forest fire danger index was 17.

Arrangements were made for the ACT Fire Brigade to deal with any bush and grass fires within the city boundaries. This allowed the ACT Bushfire Service to concentrate on the fires in the mountains. ACT Fire Brigade rural tankers were crewed during ACT Bushfire Service 'stand-up periods'; this involved another four station officers and 12 crews.

In the morning the Chief Fire Control Officer attended a planning meeting with the NSW Rural Fire Service in Queanbeyan, to coordinate the fire response at McIntyre Hut, and the ESB Executive Director and a Deputy Chief Fire Control Officer attended a further meeting with the Rural Fire Service in the afternoon. A D9 dozer had been deployed the previous day and began establishing a firebreak on the north-west edge of the Uriarra pine plantation (close to the ACT–NSW border), which was potentially under threat from the McIntyre Hut fire.

At the Bendora fire a combination of direct and indirect attack on various flanks of the fire was adopted. Further changes in staffing for the position of incident controller occurred, and in the afternoon the level of the position was upgraded from Brigade Captain to Group Officer, which meant that a more experienced person assumed the leadership role on the ground. ESB, in consultation with the Group Officer, chose to keep crews at the fire overnight, to carry out back-burning. That was the first occasion in the ACT on which crews remained on the scene overnight. It was not a change of conditions that led to this decision; rather, it was a change in the method of firefighting, to indirect attack, and a change in the experience of the on-site incident controller.

Day 3 also led to eight ACT firefighting units and two command units being directed to the McIntyre Hut fire, under the command of the NSW Rural Fire Service. Apart from some occasional 'hot spot water bombing'¹, no resources were deployed to the Stockyard Spur fire during the day because Stockyard Spur was considered a lower priority than the Bendora fire. Two tankers and crew were deployed to the Gingera fire during the morning to construct rake hoe lines², but they were redeployed to the Bendora fire before

lunchtime, leaving the Gingera fire with only a light unit crew observing it from the road.

Media releases began to be issued on Day 3.³ ESB provided the following information to the community on that day:

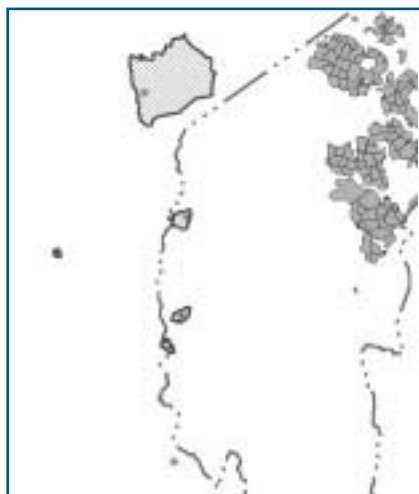
- The bushfires in the ACT had expanded their reach during the previous 24 hours. The Bendora fire was now about 200 hectares, Gingera was about 40 hectares and Stockyard Spur was about 84 hectares.
- Approximately 110 personnel and four helicopters were working to contain the fires, although it was expected they would burn for the next few days.
- Resources were being focused on the Bendora fire.
- The ACT Bushfire Service was being kept informed about the McIntyre Hut and Mount Morgan fires in NSW.
- There was a high fire danger rating but no total fire ban.
- Namadgi National Park remained open but about 324 hectares of it had been burnt.
- The Mount Franklin Road south from Piccadilly Circus was closed to the public to facilitate fire crew access. No other roads were closed, although motorists were advised to avoid the Brindabella Road because of smoke and the need to protect fire crew access.

Notes

1 ESB submission, p. 106.

2 'Rake hoe lines' refers to the construction by firefighters on foot of an area of earth cleared of all combustible material to form a firebreak adjacent to the flanks and rear of a fire. It may also require the use of chainsaws to assist in removing trees and branches.

3 Depicted in this chapter is information passed by ESB (and others) to the community via its formal media releases. Numerous other media interviews were conducted conveying a range of information that is not reflected in this report.



Day 4: Saturday 11 January

On Saturday 11 January the winds continued to be east-south-easterly, reaching speeds over 35 kilometres an hour. It was the coolest day so far, with a maximum of 23°C. The forest fire danger index was 14.

ACT Bushfire Service representation at NSW Rural Fire Service planning meetings continued. The incident controller for the Bendora fire was further upgraded, to Deputy Chief Fire Control Officer. Firefighting continued overnight through back-burning¹ and monitoring control lines.²

Under an easterly influence, the Bendora fire crossed into NSW overnight. Access to the Stockyard Spur fire and firebreaks were developed during the day, although no resources were deployed overnight. Resources altered on the Gingera fire during the day but were withdrawn overnight.

From this day the ACT Ambulance Service began deploying resources to the staging area in the Brindabellas, to support firefighting operations.

Media releases issued on Day 4 provided the following information:

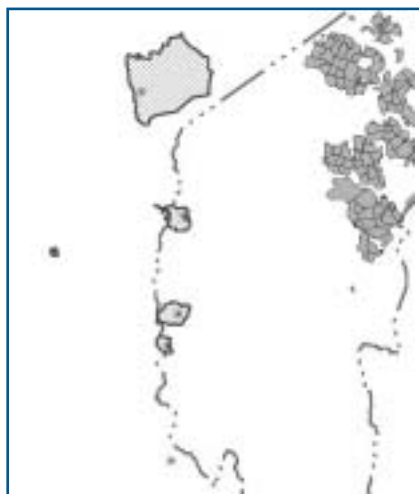
- The three bushfires in the ACT had continued to expand during the previous 24 hours—Bendora, 320 hectares; Gingera, 100 hectares; Stockyard Spur, 160 hectares.
- Resources were again mainly focused on Bendora and Gingera, while Stockyard Spur was being monitored.
- Crews were working on containment and the fire danger was moderate.
- A total of 110 personnel, including ESB headquarters, and two helicopters were available for aerial observation and water bombing.
- Although Namadgi National Park remained open, about 580 hectares of it had been burnt.
- Mountain trails in Tidbinbilla Nature Reserve were closed and motorists were advised to avoid the Brindabella Road.

Notes

- 1 'Back-burning' refers to an indirect method of firefighting, where fuel ahead or to the flank of a fire is deliberately burnt in an effort to control the fire's spread and reduce the available fuel. Back-burning requires a mineral earth break to begin from and is often conducted at night, when fire conditions are less aggressive.
- 2 Control, or containment, lines are roads and tracks of fire breaks identified as a viable position from which to contain a fire's spread or progress. In the worst case, control lines may need to be established by earth-moving equipment, which is a time-consuming task.



Air support included both aerial reconnaissance and water bombing. Photo printed with permission of the *Canberra Times*.



Day 5: Sunday 12 January

On Sunday 12 January weather conditions remained relatively mild, although it did become more windy. The forest fire danger index was 15, but it was from this day that temperatures began to rise.

A vehicle accident involving a NSW Rural Fire Service crew blocked the Mount Franklin Road, denying access to the Gingera fire. The Service Management Team 'reached the conclusion that the objectives it was seeking to achieve required capabilities that were not available locally'.¹ Heavy earth- moving plant and additional aircraft for water bombing and

observation were sought from the Commonwealth Department of Defence through Emergency Management Australia, after an unsuccessful attempt to obtain access to NSW Rural Fire Service aircraft. On the evening of 12 January, the Chief Fire Control Officer advised the NSW Rural Fire Service that the ACT would have to withdraw resources from the McIntyre Hut fire 'to attend to the fires in the ACT'.²

Media releases issued on Day 5 provided the following information:

- Crews were continuing to work on containing the three fires, all of which had expanded during the past 24 hours—Bendora, 590 hectares; Gingera, 480 hectares; Stockyard Spur, 500 hectares.
- The focus continued to be on Bendora and Gingera fires, and a controlled burn had been conducted at Bendora overnight. An ACT crew would also assist with a back-burn at McIntyre Hut.
- There was a high fire danger rating and 110 personnel and two to four helicopters were involved in the firefighting effort.
- There were further road closures, at Curries Road, Warks Road and Old Mill Road.
- A total of 1440 hectares had been burnt in Namadgi National Park, and restrictions were placed on camping in the Park. It was announced that Tidbinbilla Nature Reserve would be closed until 15 January.
- ACTEW was reviewing its contingency arrangements.

Notes

¹ ESB submission, p. 112.

² *ibid.*, p. 111.



Day 6: Monday 13 January

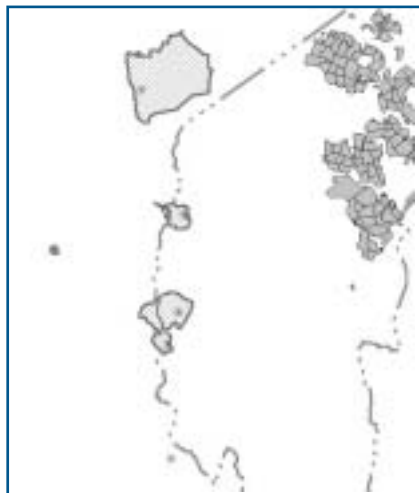
On Monday 13 January temperatures climbed to 27°C and humidity dropped to 30 per cent; north-easterly winds were reaching 20 kilometres an hour. The forest fire danger index reached 19.

Two Navy Seahawk medium-lift helicopters for aerial bombing and two Navy Squirrel light helicopters for observation arrived. A civilian helicopter crashed into Bendora Dam. The pilot was rescued and successfully resuscitated by ACT Ambulance Service intensive care

paramedics and then conveyed to Canberra Hospital. A Defence liaison officer was assigned to ESB; this position remained until the end of January. Additional Defence resources were requested. (Appendix D lists all Defence resources requested and provided.)

Media releases issued on Day 6 provided the following information:

- The fires continued to extend their reach—Bendora, 850 hectares; Stockyard Spur, 950 hectares; Gingera, 450 hectares.
- A total of 140 personnel were deployed. The ACT task force that had been sent to McIntyre Hut returned to the Territory. Four helicopters were available for firefighting operations.
- In Namadgi National Park 2250 hectares had been burnt.
- Details of the helicopter accident at Bendora Dam were given.



Day 7: Tuesday 14 January

On Tuesday 14 January the wind turned west-north-westerly for much of the day, although it remained no stronger than 16 kilometres an hour. A stronger easterly change arrived late in the afternoon. The forest fire danger index reached 19.

The ESB submission to the Inquiry stated that formal planning meetings—for ‘information and strategic decision making’¹—were instituted twice daily, at 9.30 am and 4.00 pm, chaired by Chief Fire Control Officer. The Gingera and

Stockyard Spur fires had joined at about 2.00 am (henceforth referred to as the ‘Stockyard fire’) and the fire burnt into NSW under the influence of an easterly wind. The ESB submission stated that the Service Management Team ‘put in place via Canberra Connect efficient channels to inform the ACT public on the progress of the ACT bushfires’²; these arrangements were, however, more rudimentary compared with the information channels established on 18 January. The NSW Rural Fire Service State Operations record notes, ‘Bendora fire—containment preparation ... being done. Stockyard and Gingera fires ... surveillance patrolling only in isolated areas’.³

Media releases issued on Day 7 provided the following information:

- The ACT Chief Health Officer announced a health warning for high smoke levels.
- ESB urged the public to call 000 only in cases of immediate threat from fire; it had been receiving numerous 000 calls reporting smoke over Canberra.
- A high fire danger was being experienced.
- About 250 personnel were deployed to the fires.
- There was an increased deployment of ACT Ambulance Service intensive care paramedics to the fire ground, to provide 24-hour paramedical support during night back-burning.

- Four bulldozers, one large tanker of jet A1 fuel, and two Seahawk and two Squirrel helicopters from Defence were assisting.
- Helicopter operations were suspended from time to time because of thick smoke.
- The Snowy Hydro Southcare helicopter and the south-eastern NSW aeromedical rescue helicopter had completed 236 water-bombing missions in the six days from 8 January to 13 January.
- There was no dramatic increase in the size of existing fires, a consequence of milder weather conditions.⁴
- There were no accurate details of fire sizes due to aircraft operation restrictions. The estimates were—Bendora, about 950 hectares; Stockyard, about 1360 hectares; Gingera, about 600 hectares.
- In Namadgi National Park 2850 hectares had been burnt.
- The helicopter was retrieved from Bendora Dam. The ACT Fire Brigade Hazmat crew was involved in providing float booms as a precaution in the event of fuel leakage.

Notes

1 ESB submission, p.116.

2 *ibid.*, p. 117.

3 NSW Rural Fire Service Operations record, p. 5.

4 Even though statistics quoted appeared to be 20 per cent or more than reported the previous day.



Day 8: Wednesday 15 January

On Wednesday 15 January at lower elevations the winds were from the north-east to south-east, although at higher elevations they were from the west, which probably affected the fires. The forest fire danger index was 19.

A Bureau of Meteorology meteorologist started attending meetings of the Service Management Team, to 'provide specialist weather services'¹ and in-person briefings. This involved a specific meeting with the planning section of the Service Management

Team, followed by participation in the general briefing conducted daily at 9.30 am. The Service Management Team was advised that 'extreme fire weather conditions ... with strong winds, high temperatures, low humidity and a high degree of vertical instability in the atmosphere'² were likely for Canberra on the weekend. This advice was reinforced on Thursday 16 January. Some ACT Fire Brigade staff joined the Incident Control System planning function.³ The NSW Rural Fire Service State Operations record notes, 'Bendora fire—strategies in place, currently back burning, potential property threat. Stockyard and Gingera fires—keeping under surveillance, dozers currently working'.⁴

At about 11.30 am the ACT Bushfire Service liaison officer located at the NSW Rural Fire Service in Queanbeyan rang his Chief Fire Control Officer, saying the NSW Rural Fire Service Commissioner was at the office with the Director General of the NSW Parks and Wildlife Service. The Chief Fire Control Officer spoke to the NSW Rural Fire Service Commissioner and asked him to remain at the office while he immediately travelled to Queanbeyan to meet with him. At the 15-minute meeting the NSW Rural Fire Service indicated that the McIntyre Hut fire was within control lines and the ACT Bushfire Service indicated that the Bendora fire was all but controlled. The NSW Rural Fire Service asked the ACT Bushfire Service what additional resources it might need; the Chief Fire Control Officer requested the following:

- four task forces of five units, with command and support personnel numbering approximately 200 firefighters, and associated vehicles

- up to six additional staff to be employed in the Incident Control System teams
- additional aerial resources.

These resources were sought by the Chief Fire Control Officer to assist with containment of the Stockyard fire, which had become the ACT's highest priority. The NSW Rural Fire Service agreed that the resources would be available for deployment in the ACT on the following day.

The NSW Rural Fire Service Commissioner and the Chief Fire Control Officer each told the Inquiry that he had called the meeting. What does not appear in dispute is that an offer of resources was made by NSW and taken up by the ACT. It appears to the Inquiry that the NSW offer was made in consideration of the overall threat to Canberra, whereas the Chief Fire Control Officer at that time was solely considering what was necessary to contain the Stockyard fire. The Inquiry was informed that at the time no one suggested more resources were required and, indeed, for Stockyard, with only two narrow access routes to the fire, additional resources would have been difficult to deploy there. This meant a total of almost 60 vehicles, five graders and four dozers were being concentrated on the Stockyard fire. The view of the Inquiry is that, when the meeting concluded, the ACT request for four task forces consisting of 20 vehicles and crew from an ACT perspective was meant for Stockyard fire and from a NSW perspective was what was requested to assist with the protection of Canberra. It appears discussions did not occur to clarify this.

The NSW Rural Fire Service considered an aerial incendiary⁶ program for the McIntyre Hut fire in an effort to achieve thorough burning within existing control lines. This program was, however, postponed for further consideration the following day.

Media releases issued on Day 8 provided the following information:

- The Bendora fire now covered about 1150 hectares. Successful back-burning overnight had provided a continuous containment line around the south-western, southern and south-eastern flanks of the fire.
- The Stockyard fire now covered about 2300 hectares.
- Approximately 3450 hectares of Namadgi National Park had been burnt.

- There was a high fire danger rating but no total fire ban. The public was asked to be mindful of the dry conditions; similar conditions were expected to continue for the next few days.
- Easterly airflows were expected in the next few days, with north to north-westerly swings. It was also expected that rising temperatures and decreasing humidity from Friday until early the following week would place additional pressure on firefighting operations.
- Helicopter operations resumed.

Notes

- 1 ESB submission, p. 118.
- 2 Bureau of Meteorology submission, p. 4.
- 3 The Incident Control System is discussed in detail in Chapter 4.
- 4 NSW Rural Fire Service Operations record, p. 5.
- 5 Incendiary devices dropped from a helicopter may be used to initiate controlled burning of grass and undergrowth.



An ACT Bushfire Service crew conducting back-burning at night. Photo courtesy David Tunbridge.



Day 9: Thursday 16 January

On Thursday 16 January the temperature rose to 33°C and humidity dropped to 20 per cent. The forest fire danger index reached nearly 30. Winds remained from the south-east to north-east, although mid-level winds were from the west, most likely ahead of the large-scale frontal feature that was to follow.

The Executive Director of ESB and the Chief Fire Control Officer, accompanied by the Chief Executive of the Department of Justice and Community Safety, briefed

Cabinet; later in the day they also briefed the ACT Chief Police Officer and staff and the ACT Fire Brigade Commissioner and staff. The briefing notes detailed the history of the fire and provided weather predictions for the period to Monday 20 January and information on current fire developments, planning contingencies and external support. The Cotter catchment, ACT pine plantations and the Tidbinbilla Nature Reserve and Tracking Station were all listed as potentially under threat. Also listed was the 'urban edge', although there is no greater specificity in the notes. The notes did, however, acknowledge that '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 Forests pines and subsequently the urban area'.¹

The ACT Fire Brigade commenced planning for their involvement should the fires enter urban Canberra and to supplement the existing ACT Bushfire Service Service Management Team. The ACT Fire Brigade began contingency planning for protection of the urban-rural interface and bought satellite phones for use in areas where existing ESB communications were poor. The Service Management Team acknowledged that suppression, or even control, of the fires in advance of the forecast extreme fire weather 'was recognised as being difficult'.² NSW task forces arrived at 4 pm and were sent to the Stockyard fire. Back-burning was intended for that night but it did not happen because a vehicle accident had blocked access along the control lines.

A total fire ban was declared for the five days from midnight on 16 January to midnight on 21 January 2003. This was unprecedented in the ACT's history, total fire bans generally being in place for only one to two days. The NSW Rural

Fire Service State Operations record noted, 'Bendora fire—back burning, mopping up and dozer work continued, property protection implemented. Stockyard and Gingera fires—under ACT control'.³

The NSW Rural Fire Service aerial incendiary program at the McIntyre Hut fire was further delayed by a lack of incendiary devices. It began on the following day.

The Ambulance Service of NSW was formally requested to provide assistance to the ACT.

Media releases issued on Day 9 provided the following information:

- Two hundred volunteer firefighters from the Hunter, Great Lakes, Coffs Harbour and Lismore areas would be sent to the ACT to assist, arriving at 6 pm. They would be welcomed by the Chief Minister and be deployed to the Stockyard fire.
- Two hundred and fifty ACT and Defence personnel were already involved in bushfire operations.
- The forecast was for the wind to move to the north-west and begin to pick up as the weekend approached. This would probably blow the Bendora and Stockyard fires, and a third fire burning in NSW in the Brindabella National Park – Goodradigbee River area, back towards the city.
- NSW Rural Fire Service Commissioner said, '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'.
- The northern area of Namadgi National Park was closed. A total fire ban was declared for the ACT, beginning at midnight on 16 January and in force until midnight on 21 January. (As noted, this was unprecedented.)
- The Bendora fire had grown to about 2100 hectares. Favourable burning conditions had allowed successful back-burning operations to be carried out overnight.
- The Stockyard fire was now about 3500 hectares. Construction of containment lines would continue during the day, in preparation for back-burning operations planned for the evening.

- In Namadgi National Park 5600 hectares had been burnt.
- Tidbinbilla Nature Reserve and Googong Foreshores were closed.

Notes

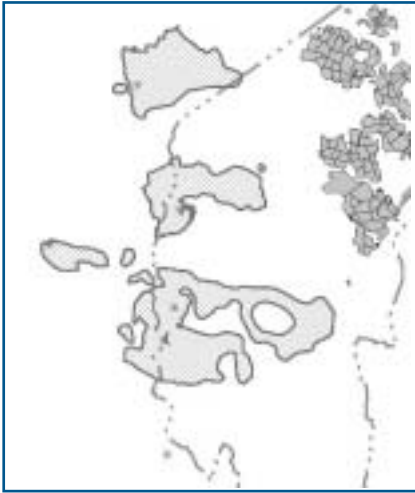
- 1 ESB briefing notes.
- 2 ESB submission, p. 121.
- 3 NSW Rural Fire Service Operations record, p. 5.



NSW Rural Fire Service trucks and personnel. Photo printed with permission of the *Canberra Times*.

Phase Two: 17 and 18 January

By 17 and 18 January NSW itself was experiencing a fire emergency across much of the state.



Day 10: Friday 17 January

The initially light, variable winds on Friday 17 January increased to between 30 and 35 kilometres an hour for much of the afternoon, then dropped significantly in the evening. The temperature peaked at 36°C and relative humidity fell to 15 per cent. The forest fire danger index reached 50.

A total fire ban was in force. The Bureau of Meteorology advised that this day was the first of several successive days of severe fire weather. There was a further meeting between the Chief Fire Control Officer and the NSW Rural Fire Service Commissioner. As a result of the arrival of a predicted wind change from the south-east to the north-west, the fires spread extensively to the east, travelling over 10 kilometres in the afternoon.

The ACT Fire Brigade focused on preparedness. Among its specific activities were:

- staff recall and standby
- familiarisation with the urban—rural interface
- vehicle and radio readiness
- additional communication centre and command staffing
- additional mapping
- warnings to rural lessees, forest settlements, ActewAGL, and institutions on the urban fringe.

The ACT Fire Brigade Commissioner sought additional resources on standby from the NSW Fire Brigade, identifying Monday 20 January as the day when the ACT would be most likely to need assistance. The first two Ambulance Service of NSW crews arrived, providing further back-up support to firefighters.

The planning section of the Service Management Team developed detailed predictions of the fire spread, reflecting the progress and impact of the fire;

one individual informed the Inquiry that the predictions were accurate to within a few hours. The predictions suggested that fire could spread to the city's edge on Saturday 18 January. This information would have been available to the operations section of the Service Management Team.

The Orroral Valley staging area was established by 8.00 am to support efforts at the Stockyard fire. The McIntyre Hut fire in NSW broke its containment lines and headed east towards the ACT. Later in the day it was assessed as contained. Up to 17 aircraft were engaged to assist with fire suppression. During the day unsuccessful attempts were made to re-establish containment lines around elements of the Bendora fire. The logistics base at Bulls Head (north of the Bendora fire, on the Mount Franklin Road) became threatened by a fire to the west in the Brindabella Valley. Because of this threat and the continued spotting of the fire outside containment lines, all firefighting resources were withdrawn from the Bendora fire and Bulls Head staging area by 6.46 pm. The Bendora fire continued spreading east overnight, crossing the Cotter River.

Work continued on the Stockyard fire during the day in an effort to re-establish containment lines. But fire weather conditions 'deteriorated rapidly through the morning'¹, leading to the Group Officer acting as incident controller and the Service Management Team agreeing to withdraw all resources from that fire to the Orroral Valley staging area. The fire was spotting over Corin Dam and the Orroral Valley and 'moving rapidly east'.² It reached Mount Tennent 'early in the night'. Because the fire had moved into Tidbinbilla all crews were withdrawn from the Stockyard fire at 4.00 pm due to safety concerns regarding access.

At 4.30 pm the ACT Fire Brigade began helping with property protection around Tidbinbilla, with a task force deploying until about 11.30 pm. Another task force deployed towards midnight to support back-burning operations at Tharwa; it remained there until early morning. Additional resources from NSW arrived and the Service Management Team deployed them to operate through the night.

At a 6.00 pm meeting at ESB headquarters the Chief Fire Control Officer advised that firefighting efforts on the following day would focus on property protection, including protection of the pine plantations. It was recorded in the minutes of this meeting that 'there is potential for fire to reach Uriarra by mid morning tomorrow, the Cotter Pub and reserve by 4 pm and Mt Stromlo and potentially Narrabundah Hill by 8 pm'.³ That night 42 rural landholders west of Canberra were advised by ESB that their properties were under threat.

The NSW Rural Fire Service State Operations record noted, 'Bendora fire—back-burning right around not completed, western part completed but north still to be done. Stockyard and Gingera fires—ACT doing track work, Army cutting track east, west to north, vehicle through bridge has delayed work in the ACT'.⁴ The delayed incendiary program was started at the McIntyre Hut fire; it lasted over two hours but was brought to a halt because of 'increasing winds, erratic fire behaviour and deteriorating flying conditions'.⁵

Media releases issued on Day 10 provided the following information:

- The Chief Minister announced that the ACT community could now obtain the latest bushfire information through the Canberra Connect website and call centre.
- The Bendora fire now covered about 2443 hectares. Favourable conditions had allowed more than 6 kilometres of back-burning to be carried out overnight. Containment lines were in place around the south-eastern sector of the fire. Some break-outs had occurred to the north and south.
- The Stockyard fire now covered about 4750 hectares. Planned back-burning operations involving additional resources from the NSW Rural Fire Service were prevented by an accident involving an ACT tanker on the Lickhole Creek trail, which blocked access to the south-east.
- Bulldozer construction of containment lines was to continue, in preparation for further back-burning operations in the evening and for extreme fire weather during the weekend. Water bombing would continue.
- In Namadgi National Park 7193 hectares had been burnt. The entire park was closed.
- Approximately 450 personnel were working around the clock on 12-hour shifts. Eight bulldozers and six aircraft were operating.
- At 6.15 pm the Executive Director of ESB said the ACT had sufficient trained personnel to cope with the emergency. (Members of the public had been inundating the ESB phone line with offers of assistance for the firefighting effort.)
- At 8.50 pm ESB advised that adverse weather had caused spotting over containment lines.

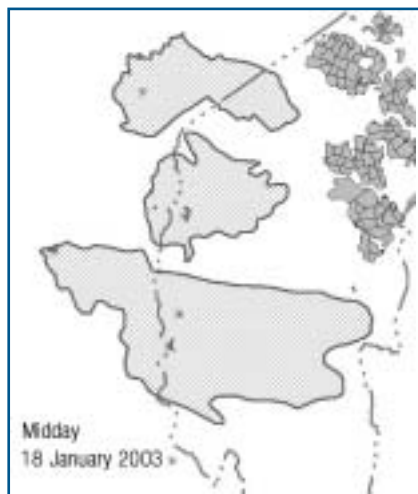
- The threat to property in Tidbinbilla was serious. ACT Fire Brigade, ACT Bushfire Service, and NSW Rural Fire Service crews were deployed to the area to assist with property protection.
- The ACT was coordinating with NSW to manage a spot fire from McIntyre Hut close to the ACT border.
- The bushfire logistical support staging areas were being relocated from Bulls Head and Orroral Valley to the north Curtin district playing fields.

Notes

- 1 ESB submission, p. 127.
- 2 *ibid.*
- 3 Meeting minutes.
- 4 NSW Rural Fire Service Operations record, p. 5.
- 5 *ibid.*, p. 10.



Coordination of aerial bombing with firefighters on the ground is essential. Photos printed with permission of the *Canberra Times*.



Day 11: Saturday 18 January

By 9.00 am on Saturday 18 January, winds were 30 kilometres an hour gusting to 40; by 2.30 pm they were 37 kilometres an hour gusting to 52. They continued to increase and became quite erratic. Gusts of 78 kilometres an hour were recorded at 3.20 pm. The wind direction was from the west-north-west until a south-easterly change arrived late in the afternoon. The Bureau of Meteorology submission noted that local topography could affect 'wind direction, speed and gustiness'.¹

Atmospheric stability was characterised by a 14-kilometre-high cumuliform plume of dry, unstable air above the fire. Its inherent instability and vertical motion would have drawn in air at lower levels, and the vertical exchange of air on the down side probably contributed to the very gusty conditions and may have led to the narrow, intense vortices that caused structural damage. The temperature reached 37.4°C at 12.42 pm; it was still 33.6°C at 7.00 pm but then dropped more rapidly. Relative humidity was measured at 46 per cent at 6.30 am but was 8 per cent by 2.50 pm and fell to 4 per cent at 4.30 pm. The forest fire danger index peaked at 105 at 3.30 pm.

The total fire ban remained in force. One of the two Deputy Chief Fire Control Officers was appointed Field Controller and assigned a helicopter. His task was to adjust the deployment of resources during the day so as to best deal with the fire threat. Rural areas were divided into sectors and resources were allocated with the initial intent of keeping the fire to the west of the Murrumbidgee and fighting the fire flanks. Apart from resources deployed to the Lower Molonglo water-treatment works, ACT Fire Brigade resources were concentrated in the city.

Officers of Canberra Connect met at 8.00 am to prepare their facility for the likely calls during the day. The 9.30 am planning meeting at ESB received advice from the Bureau of Meteorology that the day would be one of 'extreme fire danger', with 'perhaps more to follow'. 'All agencies involved in the incident were briefed on the implications of this.'²

On receiving confirmation of the day's forecast, the NSW Rural Fire Service Commissioner dispatched by road an Assistant Commissioner from

headquarters to ESB in Canberra. On arrival (at about 1.00 pm) and after an initial assessment, the officer contacted the Commissioner and asked that all available NSW Rural Fire Service resources be directed to assist the ACT. This led to multiple NSW responses from regions adjacent to the ACT, which were subsequently coordinated by the NSW Rural Fire Service in Queanbeyan. At times, this was without the knowledge of the Service Management Team at ESB, although the NSW Rural Fire Service Assistant Commissioner advised ESB of his overall intent.

The minutes of the daily 9.30 am briefing show that three separate threats were discussed:

- a potential run from McIntyre Hut fire affecting Weston Creek through to Greenway and potentially west and south Belconnen if the wind were a more westerly wind
- a potential run from Tidbinbilla affecting the Bullen Range and southern parts of Tuggeranong
- a potential threat to Williamsdale from the Stockyard fire to the west of the Murrumbidgee.

Recovery strategies were also discussed, although ESB management stated these were in preparation for potential rural evacuations, not urban evacuations.

ACT Policing activated its Police Operations Centre at the Winchester Police Centre in Belconnen early on 18 January in anticipation that it would be needed to manage police and Territory resources and responses and against the possibility that it would be needed should a state of emergency be declared.

The ACT Fire Brigade carried out further planning in the morning, visiting key facilities. A liaison officer was placed at the ACT Police Winchester Centre and assistance from the NSW Fire Brigade was requested.

The Service Management Team reinforced its strategy of protection of people and property, rather than directly attacking the fire. As the day progressed the McIntyre Hut, Bendora, Stockyard and Broken Cart fires drew closer together, eventually joining to create a very substantial single fire front threatening Canberra's western edge. The exact movement and development of the fires is still being studied. Winds were blowing from the north-west to the west, and numerous sub-weather patterns were occurring around the fire, partly as a result of the convection column that was being generated up to 14 kilometres above the fire.

Rural fire crews were reporting fire locations and retreating along escape routes towards the city. Property protection efforts were made where possible, but the priority became the safety of crews and the public. Effectively, this meant that few crews were available for subsequent positioning along the suburban edge when houses were threatened. The NSW Rural Fire Service State Operations record noted, 'Brindabella Complex—property protection implemented and trying to establish location of actual fire front'.³

The normal media liaison function within ESB was very limited and on a day-to-day basis was more focused on public relations. Over several days as the crisis developed, the ACT Government brought in additional experienced staff from the Chief Minister's and Urban Services Departments to assist ESB's sole media liaison officer.

During the morning it became apparent to ESB that rural properties to the west and south were under immediate threat. The Service Management Team and the ACT Fire Brigade discussed the deployment of resources to protect the urban fringe. The media unit within the planning section of the Service Management Team 'was tasked with preparing, having approved, and disseminating advisory notices to the community about the threatened areas'.⁴ ESB released the first Standard Emergency Warning Signal fax at 1.45 pm. Inexplicably, ABC radio in Canberra did not receive the fax until 2.31 pm. This appears to have been a consequence of a failed fax-stream addressing arrangement.

Descending from Mount Tennent, the fires passed around Tharwa at about noon. The village was unscathed, protected by the back-burning of the night before. The fires reportedly hit the outer streets of Duffy at about 3.00 pm, although modelling from the fire services suggests a later arrival; this could have been because of the ember storm preceding the main fire front. Locating and tracking the fires' progress towards Canberra was problematic. Smoke greatly hindered observation from both the ground and the air and radio communications were impaired. Reporting of fire movement by firefighters on the ground was not extensive and, when attempted, was reliant on an increasingly overloaded communication system that could not be heard across the total fire ground. The speed of the fires' progress, the magnitude of the fires' impact, and the mass of emergency service and community involvement and activity led to great complexities and confusion.

ACT Policing, and at one time the ACT Fire Brigade, sent their own patrols forward to report on the fires' progress, but the information gained did not

always reach the Service Management Team at Curtin. Members of the Team's planning section had in the communication centre representatives who, through constant monitoring of operational messages, were able to relay to the planning section information about the location of fire outbreaks and the movement of crews withdrawing from the fires.

ACT Policing established initially two, and later a third, forward control points to coordinate the Police response as the fires approached the city. Despite invitations from the Police, no ESB personnel were assigned to these posts. Effectively, they operated independently, focusing on intelligence gathering, public safety, evacuation, and traffic control in support of police operations. No other emergency service established a forward command post during the initial stages.

At about 2.00 pm ESB management, ACT Policing and government representatives began discussing the 'vulnerability of the urban area and the desirability of declaring a state of emergency'.⁵ The Police capacity to enforce evacuation appeared to be the pivotal concern, although ACT Policing also wanted the ability to coordinate resources and efforts such as inter-agency cooperation that it believed would be required. It was argued that this could not be resolved without a state of emergency being declared. The Chief Minister declared a state of emergency at 2.45 pm and under the legislation the ACT Chief Police Officer became the Territory Controller. In an effort not to compromise the Chief Fire Control Officer's authority to continue managing the response to the fires, a decision was made to appoint the Chief Fire Control Officer as the Alternate Controller, as allowed for under the *Emergency Management Act 1999*. The ACT Chief Police Officer identified recovery as a specific function that should be coordinated by him and later decided that the function should be managed from ACT Policing's headquarters, at the Winchester Centre.

The ACT Fire Brigade deployed resources to those areas assessed as being at greatest risk—Duffy and the Lower Molonglo Water Quality Control Centre, reflecting the importance of this infrastructure, and Giralang, where a fire not directly related to the bushfire needed attention.

Once the fire arrived in urban Canberra, further deployments were made to Chapman and Kambah. The crews at Lower Molonglo (the ACT Fire Brigade and the ACT Bushfire Service) were faced with particularly adverse conditions in an isolated environment. Their actions did limit the fire's impact on the facility, despite two Fire Brigade pumpers becoming inoperative because they caught fire.

The fires that passed through western Canberra caused significant damage. Their impact was extensive in a number of suburbs and along fingers of parkland between suburbs. Linked to the fires was a major firestorm that in some locations appeared to travel within the fire and at other times appeared to travel ahead of the fire. The focus on the fire and the limited resources available to deal with the widespread damage that occurred diverted attention from residents whose homes had been subjected to storm damage. The emergency response concentrated on fire rather than associated storm damage, even though some ACT Emergency Services workers were involved in providing storm-damage support in the Kambah area.

ESB was experiencing significant command and control problems at the time the fire front reached Duffy. The ESB building lost power intermittently for two to three hours from about 4.30 pm onwards. This added another layer of complexity to the management of operations. Emergency power provided the back-up for the communications and operations room but not for the rest of the facility, where a substantial number of operational support personnel were working.

With a state of emergency declared, the ACT Ambulance Service together with the Territory's Health Coordinator established a Medical Emergency Coordination Centre at Curtin, in accordance with the ACT Emergency Plan. A liaison officer from the St John Ambulance and the Ambulance Service of NSW also joined the coordination centre. Local hospitals were advised and they activated their emergency plans and began preparing for anticipated increases in workload. A total of 15 ambulance crews were on duty, almost double the normal daily shift, leading to the busiest day on record for the ACT Ambulance Service. With the fires threatening to further penetrate into the city, the Medical Emergency Coordination Centre planned the evacuation of Calvary Hospital.

Media coverage of the event varied. It was ABC Radio 666 that became the carrier of most information for the public, in keeping with its service charter. The ABC had maintained close contact with ESB as the fires were developing and had reporters available to deploy to ESB and the field as the emergency unfolded. Commercial stations had very limited capacity to respond to events. With television and some radio being programmed nationally at the time, local radio stations were more responsive.

As the seriousness of the threat to Canberra became more apparent during the afternoon the interest of the national media increased. When power losses affected much of Canberra, interstate citizens were ironically often receiving better coverage than local Canberra residents. In fact, submissions to the

Inquiry claimed that numerous emergency service workers (particularly those from interstate) were also listening to the ABC radio to gain information about the fire event. Chapter 5 deals in more detail with the way the community was informed about the approach of the fires on 17 and 18 January.

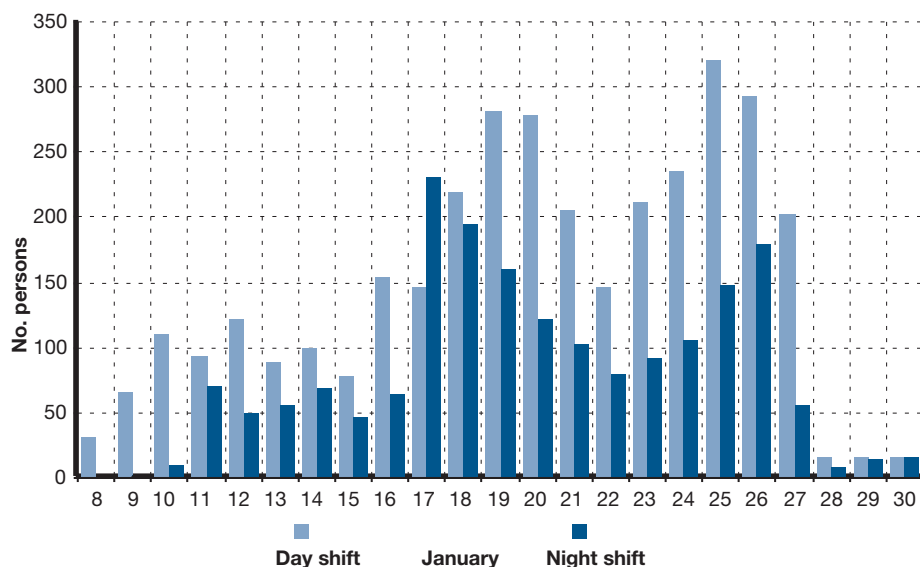
The fires and the associated firestorm resulted in the following:

- the death of four residents
- severe injuries to one helicopter pilot and a number of civilians
- 160 000 hectares burnt in the ACT—almost 70 per cent of the Territory—and a further 100 000 hectares burnt in NSW. Among ACT lands burnt were
 - Namadgi National Park
 - Tidbinbilla Nature Reserve
 - all government pine forest west of the Murrumbidgee River
 - Stromlo pine plantation
- the loss of 87 rural houses and 414 urban houses
- fire damage to 14 rural houses and 161 urban houses
- firestorm damage to 140 houses not destroyed by fires
- major losses to government infrastructure and facilities.



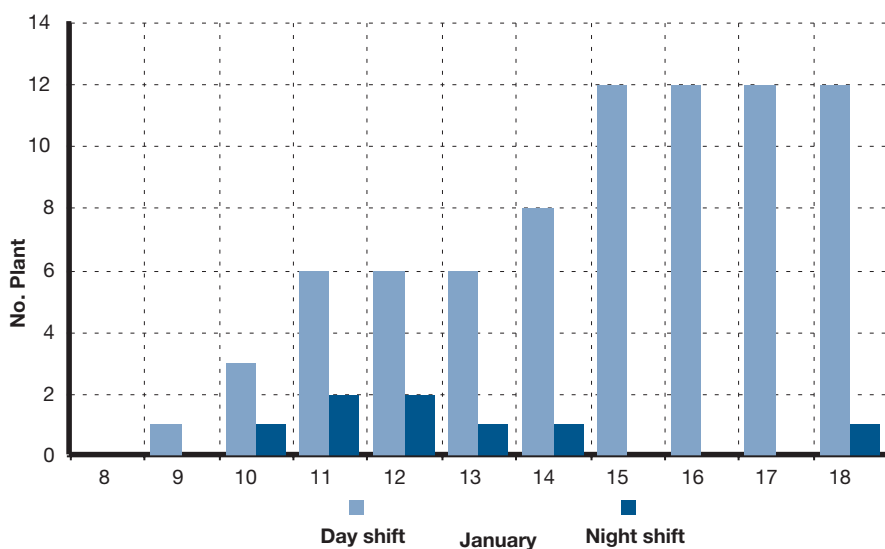
Police road block controlling movement into fire affected areas. Photo printed with permission of the *Canberra Times*.

ACT Bushfire Service response to fires, 8–30 January 2003: personnel resources committed, by shift



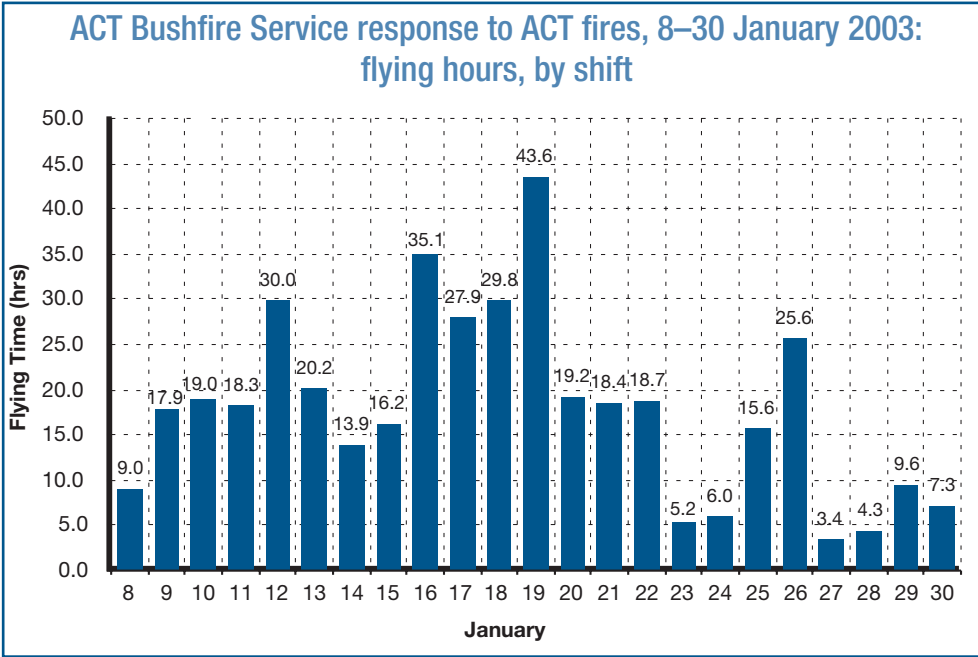
1 The first shift, on the 8th, covered the later part of the day. Source ESB.

ACT Bushfire Service response to ACT fires, 8–18 January 2003: plant resources committed, by shift



1 Day shifts often spanned 15 or 16 hours.

2 Plant numbers include dozers, graders and similar equipment. Source ESB.



1 Flying may be a combination of observation and water-bombing tasks. Source ESB.

The McIntyre Hut Fire

The McIntyre Hut fire in New South Wales was early recognised by both the NSW and ACT authorities as potentially having serious implications, as a consequence of both its early rapid spread and its location to the due west of Canberra in close proximity to the border and the western edge of the Uriarra pine plantation.

While the Inquiry was concerned with the operational response of the ACT authorities to the bushfires, ACT resources were also involved in responding to the McIntyre Hut fire. This fire eventually became part of the collection of fires that affected Canberra. For these reasons, and to place on record the substantial assistance the NSW authorities provided, a summary of the McIntyre Hut fire follows. The Inquiry does not include any assessment of the suitability or appropriateness of NSW Rural Fire Service actions: this is outside its terms of reference.

An observer at the Mount Coree fire tower initially identified the McIntyre Hut fire. The NSW Parks and Wildlife Service office at Queanbeyan dispatched a Ranger and a separate light unit with crew to investigate. The NSW Rural Fire Service dispatched a tanker and crew from Fairlight, a small hamlet just across the ACT–NSW border. The ACT Bushfire Service also dispatched a light unit

from the ACT Forests Brigade. The crews reported that the fire had 'taken a significant run to the east up a mountainside'.⁶

This initial fire activity reportedly combined with:

- a number of ignitions in the same vicinity
- steep terrain leading to rapid fire spread
- deteriorating fire weather
- travel distances and time to access the fire.

These factors 'made a direct attack impractical at that time'.⁷

Of the four ignitions, only one was adjacent to a road, and it is unclear whether that particular ignition was even identified on the afternoon of 8 January. The main fire, as identified by the Parks ranger, was reported as 200 hectares in size moving up a western-facing, particularly dry slope. No further operational response on site was taken that evening.

No aircraft or plant was recorded as deploying, although an aerial reconnaissance was completed by a NSW Parks and Wildlife aircraft.

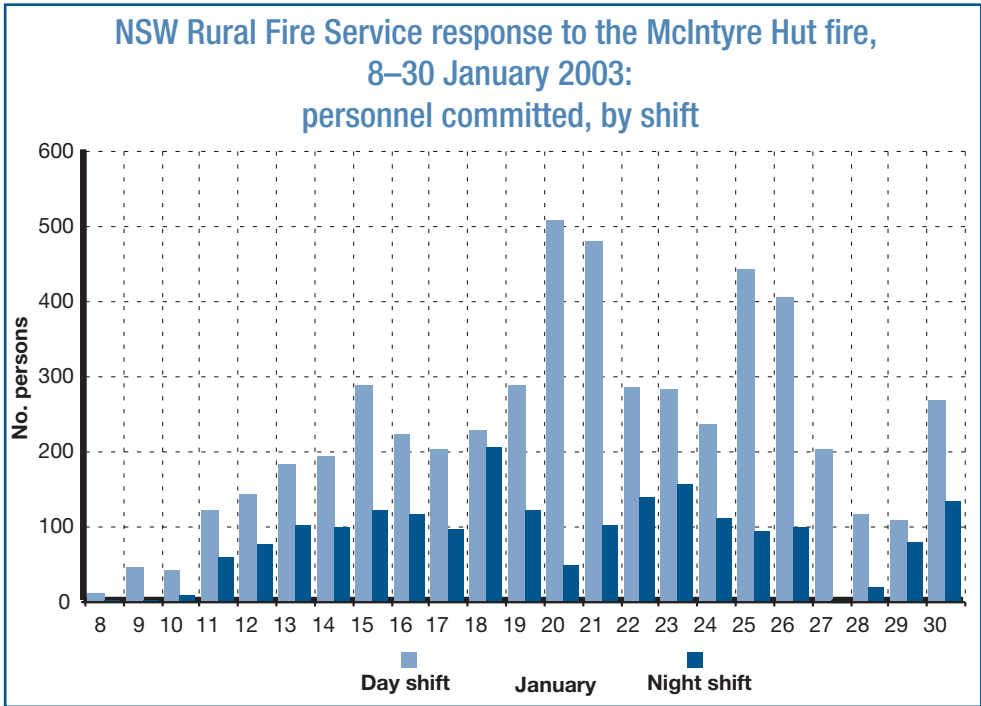
Due to the fire behaviour, the initial response on 8 January involved a strategy of indirect attack from the start and while the number of resources grew steadily so did the length of control lines being established.

The strategies adopted on Thursday 9 January were focused on defending properties ahead of the fire and identifying suitable perimeters to establish control lines and implement a containment strategy. Winds had swung from the west-north-west on 8 January to the south-south-east on 9 January. Resources deployed to the fire on 9 January were:

- one Cat 1 tanker
- one Cat 4 older style two-wheel-drive tanker
- eight Cat 7 smaller 'Cantor size' tankers
- one Cat 9 light unit
- three Cat 16 command vehicles
- five dozers
- three helicopters.

An indirect strategy continued until the fires broke containment lines late on 17 January, and further still on 18 January. Vehicle resources increased from 36 firefighting vehicles on 12 January, 54 vehicles on 15 January, 59 on 17 January, 49 on 18 January through to 85 on 20 January and on 30 January, when predictions were for an even more severe day than that experienced on 18 January. Aircraft numbers increased from three on 11 January to 10 on 12 January and 15 on 17 January. Dozer numbers increased to seven on 16 January, although the number fluctuated on a daily basis.

On 12 January the 36 vehicles deployed were to cover control lines totalling 43 kilometres; on 17 January the 59 vehicles in place were to cover a perimeter of 90 kilometres. These calculations do not analyse the type of vehicle: some were command or support vehicles that carried no water. Since the approach adopted was indirect attack, the vehicles and crews were there to initiate back-burns and to ensure that control lines were maintained. The success of this operation was reliant on the area within the control lines being burnt out before severe weather arrived.



1 Source NSW Rural Fire Service.

In an effort to achieve thorough burning within the control lines, use of aerial incendiaries was planned from 15 January, but this approach was not particularly successful. Their use was postponed on 16 January because of a lack of incendiary devices and ceased earlier than planned, on 17 January, due to 'increasing winds, erratic fire behaviour and deteriorating flying conditions'.⁸

While the NSW Rural Fire Service declared the fire 'contained' on 17 January, it was still burning large areas of fuel within the containment lines and, with the extreme weather conditions that followed, could not be restricted to the designated area.

Being located north-west of Canberra, the fire became a major threat when it broke the containment lines on 17 January. Because of the prevailing winds, the fire advanced directly into the Uriarra pine plantation, just across the border.

It appears to the Inquiry that this major fire later fused with the Stockyard–Bendora fire, and possibly the Broken Cart fire, contributing to the firestorm that hit Canberra's western suburbs.

The CSIRO and others are still researching the precise nature and circumstances of the fires, their paths and confluence and how that influenced the exceptional fire behaviour experienced over the course of the day. Comments made to the Inquiry referred to this convergence of fires across an area containing significant fuel sources, which, combined with the extreme weather conditions, helped to produce an extraordinary event with some unique fire behaviour, including intense, destructive local windstorms.

Ultimately, the containment effort was unsuccessful, despite the considerable resources applied.

Notes

- 1 Bureau of Meteorology submission, p. 24.
- 2 ESB submission, p. 129.
- 3 NSW Rural Fire Service Operations record, p. 5.
- 4 ESB submission, p. 132.
- 5 *ibid.*
- 6 NSW Rural Fire Service, incident controller's report, p. 5.
- 7 *ibid.*
- 8 *ibid.*, p. 10.

Phase Three: 19 to 30 January

Day 12: Sunday 19 January

By Sunday 19 January it was clear that there was an urgent need to move from response to recovery, despite the fact that a serious threat remained, with severe fire weather continuing. A balance had to be struck between ongoing preparedness and recovery.

A state of shock permeated the ACT community.

As the ESB submission put it, the scale and impact of the fires were ‘well beyond anything seen before in the ACT’.¹

The minutes of a meeting of the Management Executive² on 19 January show that the ACT Chief Police Officer proposed that he become the ‘Recovery Territory Controller’ in charge of recovery operations and that the Chief Fire Control Officer would remain ‘Territory Controller for management of fire operations’. The proposal was endorsed by the committee, and recovery functions began operating out of the Winchester Centre in Belconnen. The actual recovery processes had begun even before the fires hit Canberra; for example, preparations for the establishment of the evacuation centres had begun on the Friday afternoon. The formalisation of the management arrangements endorsed by the Management Executive meant that the arrangements supplanted the ACT Emergency Plan’s Community Recovery Sub-Committee, but they nevertheless worked effectively.

For practical purposes, command and control was now split along functional lines of response and recovery. Although the ACT Emergency Plan provides that the Police Operations Centre is to become the Territory Emergency Operations Centre, both the Police Operations Centre and the ESB command centre had separate functions and each retained a media responsibility. Further comments on the emergency management arrangements appear in Chapter 6.

Notes

1 ESB submission, p. 134.

2 The section dealing with the Emergency Management Act in Chapter 6 provides a more extensive analysis of the management arrangements after a state of emergency has been declared.

Days 13 to 23: Monday 20 January to Thursday 30 January

Between 20 and 30 January response activities continued, in the form of communication with the public, continuing operational deployment of resources, and a high level of coordination with other agencies.

Extensive advice and other information for the public was conveyed through the media, Canberra Connect and the ESB website. Daily teleconferences were held with NSW Rural Fire Service fire control centres at Queanbeyan, Yass, Cooma and Tumut.

Operational resources were deployed as follows:

- ACT Bushfire Service crews were sent to the south of Canberra, together with *Firebird 7* to help with fire suppression, asset protection and construction of containment lines.
- The NSW Fire Brigade and ACT Policing, under the direction of the ACT Fire Brigade, began a systematic search of fire-damaged houses, looking for possible victims and to ensure the safety of structures.
- ACT Aviation Fire and Rescue appliances provided support to the ACT Fire Brigade.¹
- Heavy plant (mostly graders) was used to establish containment lines around the west and north of Belconnen.

The continuing threat led to the Medical Emergency Coordination Centre at Curtin developing extensive plans for the evacuation of nursing homes and respite care facilities in Belconnen. It finally closed on 30 January. The Ambulance Service of NSW continued to provide support to the ACT until 29 January.

The weather conditions predicted for the weekend of 25 and 26 January were even more severe than had been predicted on the previous weekend. Fortunately, however, the precautions that had been taken and the efforts made to suppress the fires during the preceding week proved sufficient to protect the city from further loss.

By Tuesday 28 January it was evident that the immediate threat to Canberra had passed and the Chief Minister revoked the state of emergency. Other demands remained, though, and on 29 January Michelago in NSW was threatened and six ACT appliances were deployed in support of the NSW Rural Fire Service.

Notes

- ¹ An offer to make these appliances available for use on 18 January was not taken up because of what the ACT Fire Brigade Commissioner described as an oversight at the time due to other operational pressures.

The contributions of so many

During the course of the Inquiry the level of commitment to public safety and the sense of community, on the part of both public and private members of the ACT community, became very evident. The Inquiry wants to acknowledge this, even though it is impossible to recognise the efforts of everyone involved.

While firefighters choose to, and are expected to, confront and fight fires, the sustained efforts of the members of the ACT Bushfire Service, supported by ACT Emergency Services, require particular mention. The success of campaign fires is dependent on the efforts of large numbers of rural firefighters. In the ACT they are assisted by dedicated Emergency Services volunteers, who provide extensive logistic support. Fighting fires in summer is hard, hot work. The ACT should be proud that what is essentially a city-state has a significant number of citizens prepared to volunteer their time over a sustained period and place their lives in danger to protect their community. Volunteering reflects special values in any community, and the ACT is a richer and safer place for their efforts during a harrowing summer.

Our urban firefighters also made contributions, both within the city and further afield, beyond what would normally be expected. Those few crews facing the full fury of the fire front in Duffy will never forget the experience, let alone the indignity of a destroyed pumper. The crews (both urban and rural) providing structural protection at the Lower Molonglo Water Quality Control Centre faced extreme risks in an isolated area, with failed equipment and little external support, and ultimately succeeded in protecting vital plant that if destroyed, would have created a very serious environmental hazard. Their efforts were exemplary.

While this surreal event evolved over much of January, urban fire crews remained ready to provide the local, daily protection and response for our homes and city, as they do throughout the year.

The ACT Ambulance Service was a quiet achiever throughout the emergency. Initially, it assisted with the coordination of the Snowy Hydro Southcare helicopter, as it became a significant contributor to water-bombing efforts. Ambulance crews were deployed in the mountains to support firefighting crews throughout the emergency. On 18 January the Ambulance Service experienced its busiest day on record. Emergency medical evacuations, together with the relocation of aged and frail community members, meant that on that day crews went about their duties in very hazardous conditions, receiving little public recognition. The efforts of ambulance officers, on and off duty, in assisting the public drew much favourable comment.

All this activity was coordinated by ESB. The staff at Curtin were placed under extreme pressure in an inadequate facility. They worked valiantly over a number of weeks, before, when and after the fires hit Canberra, with little if any respite.

ACT Policing played a crucial role, too, retaining a presence in the most threatened areas, attempting to warn isolated and urban communities alike, often working in isolation, and rescuing numerous citizens with little concern for their own safety. Despite some problems with the difficult question of evacuation, Police helped many residents defend their homes from the fires, they directed traffic when large numbers of vehicles were departing threatened suburbs, and they subsequently provided high-profile patrols in all affected suburbs to protect community and personal property. They were also instrumental in coordinating the initial recovery effort, which led to the rapid restoration of many utilities and ongoing support for emergency services personnel who continued fighting the fires.

All of the staff I communicated with in the ESB Control Centre during the fires did try and provide as much advice and assistance as was possible on the end of the telephone line. It must have been very difficult for them to have to tell people...that there was no assistance available to them.

- Tharwa resident

Numerous government departments from both the ACT and the Commonwealth contributed to the disaster response and recovery effort with speed and professionalism. The Defence heavy plant drivers and aircraft pilots performed under extreme conditions. A vast range of public servants in the ACT Government responded with no notice to assist in re-establishing government services and functions. Canberra Connect provided an outstanding service, and the Recovery Centre is being heralded as 'best practice' in such circumstances. The health and medical profession responded magnificently and handled record numbers of people seeking assistance on the day. Government managers and officers who initiated services and gave advice are far too many to list, but all contributed to a better response and a quicker recovery. Numerous contractors were prepared to provide additional services or make personal contributions beyond what was required or expected. When the Inquiry visited interstate bodies, it heard comments about the surprising speed with which Canberra re-established its essential services and administrative systems.

Then there were the unofficial heroes, presenting themselves in so many ways—the numerous businesses that donated the time of volunteer emergency service workers or delivered free of charge goods and services, particularly food, to the emergency response and the subsequent recovery effort; those neighbours, often not known or identified, who by remaining to protect their property also saved others nearby; children who took extraordinary risks saving horses and other animals; individuals who made the effort to carry out large and small acts of kindness, simply to support others and acknowledge their compassion for victims...

The event was a terrible experience, and it is seared into the memory of so many in the ACT; but like so much in life, it also highlighted the huge capability of human endeavour under pressure and the healing capacity of the human spirit.

How the authorities handled the fires and informed the community: an appraisal

Fire behaviour in northern NSW during the winter preceding the 2002–03 bushfire season signalled unusual conditions associated with the prolonged drought. Firefighters had one of their busiest winters. During the period there had been a series of fires that were difficult to hold behind containment lines: they kept spotting over. This was a consequence of the combined effects of high fuel loads and the extreme dryness of the fuel.

Fire authorities further south would have known about the experience in northern NSW and would have been expecting very trying conditions as the focus of the fire season moved south with the approach and onset of summer—a normal seasonal pattern. ACT authorities should have been aware that bushfires, when they inevitably emerged, would be very difficult to extinguish once they gained a hold and that on unfavourable days the risk of spotting would be considerable where fires were in an area with high fuel loads.

These circumstances ought to have alerted authorities to the absolute importance of trying to put out any fires as quickly as possible, when they were small, especially if they started in locations where there was a major risk of wildfire developing.

I am not convinced that the ACT authorities' response during the first two days (8 and 9 January), when the fires were most amenable to extinguishment, reflected the sense of urgency that in my opinion should have prevailed. I reached this view on the basis of the following factors.

The extent of the initial call-out to bushfires in the ACT is determined by the Bushfire Service, according to a graduated scale based on the prevailing weather conditions. The graduated response makes no allowance for the nature of the fuel load. There was a total fire ban on 8 January. Accordingly, a standard response at the top end of the scale occurred, although the number of units called out actually fell marginally short of that specified for the response. There was no addition to this minimum response level to allow for the fact that fuel loads in the mountains were known to be very high and extremely dry. All the accepted dryness indicators on 8 January gave either maximum or extreme readings, depending on their scale.

When the crew arrived at the site of the Bendora fire, at about 6.00 pm, efforts were made to put the fire out with the assistance of water bombing by the Snowy Hydro Southcare helicopter, but as evening approached the incident controller concluded it was not advisable to continue fighting the fire overnight. The headquarters of the ACT Bushfire Service was consulted and it supported this decision. As noted, the incident controller's judgment was influenced by the possible danger to the crew, the unfamiliar terrain, potential fatigue of the crew, and doubt about adequate rationing.

The crew assigned to the Stockyard Spur fire was able to drive to within 4 kilometres of the fire; crew members then began walking but, because of overgrowth, were unable to locate a track leading to the site. The incident controller was in contact with an observation helicopter, which informed him that he was about an hour's walk from the seat of the fire. After reporting back to headquarters, the incident controller was advised to return to Canberra. The crew was about an hour's drive beyond the Bendora fire, which they passed on their return journey. Had it been decided to keep personnel at the Bendora fire, the crew returning from the Stockyard Spur fire could have been re-assigned to Bendora to double the numbers on the fire ground. Alternatively, the Stockyard Spur crew could have attempted to deal with the Gingera fire, which was burning about 6 kilometres further south, along the Mount Franklin Road. Neither of these options was pursued.

It is common practice to fight bushfires in mountain country overnight, when in some respects conditions are often easier than during the day. Wind strength and temperature are invariably lower, the moisture content of the air is usually higher, and it is easier to see where fire is burning. Firefighting in rough country often involves arduous physical effort, particularly when hand tools are needed to clear and build firebreaks. At night conditions

are often more comfortable than during the day for this work. These factors offset to some degree the difficulties created by lack of light.

I visited the Bendora site, and I acknowledge the challenges facing the fire crews, the ignition being on the side of a hill with undergrowth and rocky outcrops. However, after discussing with the Chief Fire Control Officer the nature of the hazards present, I am of the view that it would have been practical for crews to stay and attack the fires. In particular, had the number of personnel on the site been augmented by the crew returning from Stockyard Spur or others that were available in Canberra, the prospect of making some impression on the fire would have been improved.

The Bendora incident controller noted safety as influencing the decision not to stay to fight the fires overnight: I respect the controller's judgment in this regard, and I accept that the safety of personnel under command is a very important consideration. Nevertheless, the nature of the hazards that made it unsafe to remain and fight the fires overnight ought to have been clearly described and independently assessed in discussions with more senior staff at ACT Bushfire Service headquarters. I am unconvinced that this occurred. The transcript of the radio communication between the incident controller and the Duty Coordinator at Curtin contains no reference to safety issues having been raised. I believe, on this basis, that the decision to withdraw and return to Canberra was confirmed by Bushfire Service headquarters without safety factors entering into the consideration. Having regard to the potentially significant implications of failing to take full advantage of the opportunity then available, the lack of rigour in not fully testing the incident controller's conclusions was a serious error on the part of headquarters. In hindsight, the manner in which the decision not to remain fighting the fires was taken must therefore be regarded as seriously flawed.

While heavy plant—ACT Forests had both a D7 and a D9 dozer—was used in the Uriarra forest from 8 January, such equipment was not immediately available for the Bendora and Stockyard fires. Had heavy plant been available for deployment to the two sites on the evening of 8 January or on the following morning, the situation would have been different. But it was not until the afternoon of 9 January that the Bendora controller asked for this assistance, and it was not until the third day that plant arrived on the scene. This delay was a consequence of the need to obtain the services of a plant contractor; further time was lost because it was necessary to work on overgrown sections of the access tracks to the fires.

On Day 2, two helicopters were used for water drops. Considering that efforts were being made to deal with fires at three separate locations in the ACT—and considering the limited impact they had had on Day 1—every possible effort should have been made to obtain additional aerial assistance from outside the Territory. Although approaches were made to the NSW Rural Fire Service and commercial aerial charter firms, there is some doubt that enough was done at this critical stage. In fact, it was not until 13 January that Navy helicopters supplied through Emergency Management Australia arrived to strengthen the aerial suppression efforts.

The Stockyard Spur fire was reached at mid-morning on 9 January by remote area firefighting teams, after difficulty had again been experienced in getting to the site. Because of access problems and the related safety concerns, the fire was not attended overnight. Nor was it attacked on the ground the following day or night: a higher priority had been assigned to the Bendora fire. Heavy plant was used at Stockyard Spur on 11, 12 and 13 January to clear access tracks and construct firebreaks, but no ground crews were allocated: the Bendora fire continued to have priority. On 14 January the Stockyard Spur and Gingera fires merged and began to spread.

Little had changed by 15 January, a week after the fires had begun. The Stockyard and Gingera fires had been subjected to extremely limited direct ground attack since the time of ignition, although there had been some attack from the air, albeit of limited effectiveness.

Redeploying resources from one fire front to another when a series of separate fires are burning makes sense only as a very temporary strategy—for example, tackling a break-out, to help hold a containment line, or as a means of rationing the use of limited resources. During the early days of the fires, there were resources in reserve in the ACT that could have been deployed in an all-out effort to gain control of the fires, and assistance could have been sought sooner from NSW and Emergency Management Australia. When this external support was sought at a later stage—given the expansion of the fires—the possibility of putting them out was a much more remote prospect.

No effort should have been spared during the first two days, when the fires were of very limited size and most amenable to extinguishment. In my opinion, the ACT authorities did not respond as aggressively in this vital period as they should have.

Although I acknowledge that the firefighters faced some access problems at Stockyard Spur, the responses to all the fires in the first few days present a

picture of a measured approach to a threat that was growing on a daily basis—as opposed to an all-out attempt to beat the fires from the outset, using every resource at the ACT’s disposal.

On Day 3 it was decided to cease direct attack on the fires since efforts to extinguish them in this way had been unsuccessful; a containment strategy (indirect attack) was adopted instead. While the Inquiry does not question the appropriateness of this decision, it did mean that, given the dryness of the hills and the fuel loadings, for practical purposes the only way the fires could be completely extinguished would be as a result of either a change in the weather, bringing rain, or a change in the wind direction, putting the fires on a path that did not threaten rural properties and the urban edge of Canberra. Although indirect attack can, and does, put fires out, the extreme drought conditions increased the likelihood that areas burnt would rekindle and flare up and that embers would restart fires even days later.

These factors suggest that there should have been limited confidence that back-burning would be successful in this instance. First, the long-range forecasts were predicting no respite from the drought: no rain was in sight. Second, although at the time the winds were blowing from the east and directing the fire away from the ACT, a wind change to the north or north-west was only a matter of time given normal weather patterns. When the wind change did arrive, as happened on 17 January, the fires would inevitably change direction and be driven towards Canberra.

The commitment and personal endeavours of the firefighters and others supporting them in the field over the period of the fires deserve the highest praise. But from Day 3 on they were fighting an increasingly difficult battle: the fires grew every day and containment lines were progressively breached, forcing the fire crews to fall back further and further.

It might have been thought that the fires could eventually be contained and extinguished when they reached the large areas of open pasture in the Tidbinbilla Valley and between the Murrumbidgee River and the western fringe of Canberra. This country had very low levels of fuel, having been cleared for agricultural use and because the pasture fodder had mostly been eaten by stock during the course of the drought. Such an expectation would have been reasonable in normal circumstances, but in the face of a fire front fanned by the extremely strong winds that developed on 18 January, this natural protective barrier proved of little value.

The ACT authorities' attitude seems to have been one of dogged optimism that the fires would eventually be brought under control, an expectation based on past experience rather than acknowledging the particular hazards of the 2002–03 fire season. In my opinion, the tendency to view the situation from a 'best-case scenario' perspective had the effect of understating the risks of a less favourable outcome. I consider that this contributed to the fact that the information ESB released to the public was slanted towards reassuring the community about progress being made, instead of giving a more sober and realistic estimation of the dangers that might lie ahead.

There is a good deal of evidence of special preparations under way on 17 January to prepare for a difficult situation the next day, yet this information was not shared with the community in an open and frank way that would have allowed the city and surrounding areas to be better prepared. Although no one could have accurately predicted the speed and ferocity of events on the Saturday afternoon, there were ample signs that the urban area was likely to be under serious threat, even if the more optimistic observers still thought the primary threat was to the rural properties west of the city.

Almost all the information released to the community through the media was factually based and retrospectively focused on what had happened or had been achieved. It thus did not help the community to understand what might happen under a worst-case scenario, which would have been more useful as a warning to the city to be prepared. Only as the fires were approaching the outskirts of Canberra, early on Saturday afternoon, did the focus switch to warnings; by then it was too late for many people to be informed and adequately prepared.

The Chief Minister's declaration of a state of emergency at 2.45 pm on 18 January was basically a response to arguments that special powers of evacuation were needed to allow police to remove people from threatened areas when directed to do so. Although the declaration had the important immediate and beneficial effect of accentuating the critical situation facing the city, it subsequently served to add a degree of confusion and uncertainty to the event. This was because it concentrated media attention and public interest on the possibility of evacuations, when ESB was continuing to encourage able-bodied people who felt confident and well prepared to remain at their residences.

The emergency warning siren was meant to be broadcast from 1.45 pm at regular intervals following the issue of an ESB media directive. This was not effective, though, because the public had been poorly informed about the meaning and purpose of the warning and because there were problems with distribution of the directive to the media.

During 18 January the pace of events also increased sharply at ESB. About 330 personnel were fighting the fires in the hills and pasture country to the west of Canberra. A very high volume of communications traffic was flowing into and out of the Curtin headquarters, but as the day progressed there was a significant build-up in the number of calls from the general public. This tested the communication centre's capacity since it could not easily separate operational from non-operational traffic. Although Canberra Connect played a very important role in taking pressure off Curtin, it did not solve the overload problem, which became acute in the afternoon. This interfered with the flow of information to the public as well as being a most undesirable development from the standpoint of controlling and managing operational resources in the field.

When the ESB headquarters facility began losing power at about 4.30 pm as a result of fire damage to power lines, emergency power was used for the communications centre but other activities at Curtin were affected until power was restored several hours later.

The difficulty of managing the event as its seriousness escalated revealed major deficiencies at the Curtin facility, which proved quite inadequate for handling the complexities of an operational activity of this scale. The controllers did their best, hampered by technological and physical limitations.

It must also be recognised that, even without these limitations, the smoke created by the fires themselves made it extremely difficult to maintain an accurate picture of the movement of the fire front and the exact deployment and status of the ground crews.

Criticism should not be levelled at staff at ESB for the loss of control and confusion that occurred at the height of the fires during the afternoon of 18 January. They were battling against impossible odds and, despite being completely overwhelmed, they struggled on. As the fires began to abate later in the day, some sense of control returned to the operation, but it was not until the following morning that the full extent of the damage became apparent.

There were many reports of heroic actions by bush and urban firefighting personnel, police, ambulance and emergency service workers as the fires hit the city. They were hopelessly overwhelmed, but they did more than could have been expected of them. Many individual citizens also felt confident in their capacity to stay to protect their own and their neighbours' properties despite the severe conditions. The efforts of those who contributed during the greatest challenge Canberra has ever faced are a credit to all concerned.

That so few people were killed or injured also deserves high praise. Although, very sadly, the lives of four members of the public were lost, a helicopter pilot suffered serious injuries having crashed into Bendora dam, and members of the public suffered serious burns and other injuries, the fact that there were no serious injuries incurred by the hundreds of firefighters who fought the fires for over three weeks, assisted by the police, emergency service and ambulance workers, is remarkable. That there were no life-threatening injuries to members of the public from road accidents on 18 January is equally remarkable, particularly when there was so much movement immediately before and as the fires moved into the city. Had the road infrastructure been less adequate, the result might have been very different.

Almost as quickly as the fire front passed, a little later in the afternoon the weather changed for the better and conditions began to ease. The fires did, however, continue well into the night.

Execution of the recovery process was a significant achievement for the authorities. Over 5000 people were temporarily without accommodation, and the recovery centres, which had been in preparation since the previous day, coped well with the large influx of people. Hospitals and ambulance services were extremely busy during the day and evening, treating record numbers of patients. The Canberra community responded magnificently, swamping the recovery centres with food and provisions and offers of help. Generous contributions also began coming through from elsewhere in Australia.

The threat from the fires was not over, of course, and for the following week activity remained intense as the fires continued to cause concern for the city's northern suburbs. With the experience of the previous week behind them, citizens were much better prepared, as were the authorities, particularly in terms of public information, media liaison, and the identification and state of readiness of areas that continued to be threatened. The weather conditions were as extreme as predicted but the preparations made and the fire-suppression efforts during the week allowed the weekend to pass without further loss of life or damage to property.