

## **AFAC STREAM PAPER**

### Multi-Agency Response – Victorian 2003 Fires

Russell Rees  
Country Fire Authority, Victoria, Australia

Gary Morgan  
Department of Sustainability & Environment,  
Victoria, Australia

Operations  
CFA  
8 Lakeside Drive  
Burwood East, Vic  
PO Box 701  
Mount Waverley, Vic 3149  
Tel: (03) 9262 8311  
Fax: (03) 9262 8397

Fire Management  
DSE  
6<sup>th</sup> Floor, 240 Victoria Pde  
East Melbourne, Vic 3002  
Tel: (03) 9412 4524  
Fax: (03) 9416 4750

The North East/East Gippsland campaign encompassed Victoria's largest fires on record since the Black Friday Fires of 1939. The integration of around 40 Emergency Service Organisations and support agencies, over the 59-day firefighting campaign, saw the largest mobilization of emergency personnel in Victoria on record. With the scale of this operation not witnessed in Victoria before, both successes and failures were encountered and endured.

### **2002-2003 Fire Season**

The 2002-2003 Victorian Fire Season was one of the most significant in more than 60 years, burning a cumulative total of approximately 1.3 million hectares (1,190,000 ha public land, 100,000 ha private land). Two significant fire events stand out from this fire season: the Big Desert Fire in December 2002 and the Alpine Fires beginning in early January 2003. It was the 'Alpine Fires', as they became known, that would see nearly 40 agencies pull together to contain the fire and assist affected communities in what would eventually be a 59-day fire fighting campaign.

It is important to note that prior to the beginning of the fire season in 2002, Victoria was in the grip of a prolonged drought. Below average rainfall had been recorded for most of Victoria every year since 1996. From a forest fire management perspective fine, elevated, heavy and bark fuels were all extremely dry.

For many the fire season began early, and Victoria had already provided substantial support to the United States in August/September and to New South Wales in October/November.

On 17 December 2002, lightning strikes started two fires in the Big Desert National Park, northwest Victoria. The fires eventually merged and spread into the adjoining Wyperfield National Park, travelling on occasions up to 8 kilometres an hour, and burning a total of 181,400 hectares of public land and approximately 300ha of private land in 15 days. The Big Desert fire was declared safe on 31 December after rain in the area assisted with containment. At the peak of this fire, 319 DSE and 167 CFA firefighters, nine water-bombing aircraft and 75 specialised vehicles were deployed.

The largest fire event, the Alpine fires in eastern Victoria, began on 7 January 2003. The evening and the following morning saw 86 fires start predominantly in the east of Victoria after lightning associated with a cold front passed over the State and across the border into NSW. Fire crews worked extremely hard and efficiently, containing most of these fires, including some major fires in Gippsland, within the first week. Nine fires in the Bogong, Buffalo and Pinnibar areas remained uncontrolled and merged on 29 January to form the largest fire Victoria has seen in over 60 years.

**This fire event alone burnt more than 1.06 million hectares (977,500 ha public land and 90,000 ha private land), requiring the construction of approximately 9,000 kilometres of control line in the North East and East Gippsland. This can be compared to an average annual public land area burnt of 110,000 hectares.**

The Alpine fires were not the only large fires to occur in this 59-day period. On 21 January 2003, additional fires around Beechworth started and burnt a combined total area of 16,000 hectares (12,600 ha public land, 3,400 ha private land). These fires were contained within six days. Fires also occurred in other parts of the State further stretching fire resources.

Concurrently to the Alpine fires, NSW and ACT were experiencing major fires.

### **The Suppression Effort**

The fires rapidly escalated and before long Victoria would mobilise resources on an unprecedented scale. Nearly 40 agencies would work together for the next 59 days to achieve a common goal.

Approximately 3,350<sup>1</sup> employees from DSE, DPI and PV, 8,595 CFA personnel, 75 Metropolitan Fire and Emergency Services Board (MFESB) staff, 234 Australian Defence Force staff, 1,016 SES personnel and numerous personnel from Red Cross, Salvation Army, and St John's Ambulance worked together to directly control, or provide crucial help in controlling the fires during this exceptional campaign.

Interstate support also became critical as resources were stretched. The Alpine Fires would see personnel from Queensland (68), New South Wales (178), Tasmania (31), and South Australia (584) providing assistance.

The complex strategic planning, logistics and operations involved with this Type 3<sup>2</sup> fire also resulted in the rapid escalation of CFA and DSE's Emergency Co-ordination Centres and the development of an extra level of regional inter-agency co-ordination, the Integrated Multi Agency Co-ordination Centres.

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<sup>1</sup> Figure taken from DSE statistics – all other figures based on CFA data. Total numbers of personnel are approximate, as figures available do not always differentiate between total numbers of individuals engaged at any one time and individuals engaged over a number of rotations. Figures may vary from information in other reports due to variations in methods of recording personnel deployment.

<sup>2</sup> Type 3 Incident as defined in the Co-operative Agreement between CFA and DSE September 2002, means a large or complex fire where resources from a range of locations are involved and which, but not necessarily, involves several agencies. This type of incident is normally expected to exceed 24 hours in duration and is the equivalent to an AIIMS-ICS Large Incident.

Over the course of the fire, the State Aircraft Unit (jointly managed by DSE and CFA) deployed six reconnaissance-type aircraft, eight light helicopters, 13 fixed-wing firebombing aircraft, six fire bombing-medium helicopters, two infra-red mapping aircraft, two heavy helicopters and over a dozen crew transport aircraft. The State Aircraft Unit also co-ordinated an enormous number of additional crew transport movements on commercial aircraft.

In an Australian first, Victoria requested assistance from the United States of America and New Zealand. The international contingents comprised firefighters, incident management team specialists and technical specialists. In total, 35 US fire personnel and 62 New Zealand firefighters were deployed within Victoria. An additional infrared mapping aircraft was also engaged from the National Interagency Firefighting Centre (USA) to join the locally contracted team.

While the 2002-2003 fire season was long and arduous, DSE and CFA are very proud of what was achieved. These achievements were not only on the fire-line, but also at the community and departmental levels and were supported by nearly 40 other emergency service and support agencies. These experiences have left Victoria in good stead for future fire seasons.

The experience gained from a season such as this is worth that of many 'normal' seasons. It is these experiences, the lessons learnt, and agency relationships formed that need to be captured and built on to ensure continued improvement in fire management.

When the comments captured from debriefs were considered collectively, the debrief project team considered the main issues to be:

- Maintenance of adequate levels of skilled resources for fire suppression - Many issues in this event ultimately stem from the reality that resources of skilled, experienced staff were insufficient to sustain operations during an event of this size and duration. Succession planning is essential to maintain the fire suppression capacity that currently exists. Shortages of experienced operational personnel were particularly noted, as was the importance of leadership at the crew level. The debriefs highlighted the need for real time performance appraisal which feeds into accreditation systems. Comments also highlighted the need for a more structured approach to mentoring. There is also a requirement for systems to capture skills and to induct personnel from outside traditional sources of Victorian fire suppression staff (including interstate and overseas). The importance of maintaining access to these wider resources was emphasised, particularly within DSE, but this has a significant impact on other Departmental programs, on staff that remain behind and on firefighters when they return to a backlog of work. The debriefs also commented on the importance of efficient and consistent resource management systems to maximise the efficiency of deployment of all the various resources available.

- Maintenance of focused, safe, consistent operations when staff changeover - The scale and duration of the fires meant that flaws in changeover processes became very apparent. Structured briefings using the SMEACS format were well received but briefings varied in quality and information did not reach everyone that it should. Handover of information between crews on the line and Incident Management Teams was often insufficient and was exacerbated by deployment of personnel to different areas or roles throughout the fire and by changeover processes that removed several layers of the organisation from the fire at one time. Inconsistency of applied strategies and processes and the management of local resources and their inclusion into the IMT are also part of this broad issue.
- Safety of fire firefighters - The emphasis on safety during the fires was acknowledged, both by agency personnel and international/interstate personnel, to the extent that some comments referred to an overcautious approach. This contrasts with comments concerning several near miss incidents that occurred during the fire, a reflection perhaps of the scale of the operation and the conditions that were encountered on the fireground. The importance of training was frequently mentioned. Competency/accreditation programs, which are used by both agencies, were supported. CFA personnel acknowledged the value of the Minimum Skills Program, recently introduced into the CFA. However the duration of the event was such that fatigue was a major issue, both in terms of long work shifts and repeated tours of duty to fires. While processes were in place to manage fatigue, these were not always clearly understood or applied. The need to improve near miss reporting processes and OHS incident management in a fire context was a major theme. Difficulties with communications and with distribution and adherence to Communications Plans were noted.

Other major themes noted from the debriefs were the:

- general success of the Community Information process
- widespread application of the AIIMS ICS structure
- successful use of international/interstate firefighters in fire suppression operations
- need to improve plant management
- integration that occurred between DSE and CFA operations
- introduction of the IMAC process, with some uncertainty about this function
- need to improve the transition from incident management to recovery.