11

THE REDESDALE FIRE

The township of Redesdale is on the Kyneton–Heathcote road, south of Lake Eppalock. It is 95 kilometres north-west of Melbourne and 35 kilometres south-east of Bendigo.

The Redesdale fire was reported at 15:11 on 7 February 2009 and burned towards the south-east for about 19 kilometres. After the south-westerly wind change arrived at 18:35, the fire turned to the north and north-east. It affected four municipalities—Greater Bendigo, Mount Alexander, Macedon Ranges and Mitchell—destroying 14 houses and burning 7,086 hectares. It was the first of two fires in the region on that day, the second originating in Maiden Gully, 8 kilometres north-west of Bendigo, at 16:20. Figure 11.1 shows the extent of the Redesdale fire.

OVERVIEW

<table>
<thead>
<tr>
<th>Maximum temperature</th>
<th>The maximum temperature recorded was 44.7°C at Redesdale automatic weather station at 16:00.¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum relative humidity</td>
<td>The minimum relative humidity recorded was 7 per cent at Redesdale AWS between 16:00 and 17:30.²</td>
</tr>
<tr>
<td>Wind</td>
<td>The maximum winds recorded before the wind change were north-north-westerly at 50 kilometres an hour at Redesdale AWS at 15:30.³ The wind change was recorded by the Redesdale AWS at 18:35 at 39 kilometres an hour.⁴ The maximum winds recorded after the wind change were south-westerly at 42 kilometres an hour at Redesdale AWS at 19:00.⁵</td>
</tr>
<tr>
<td>Fire Danger Index</td>
<td>The maximum Fire Danger Index was 87.2 at Redesdale AWS at 16:00.⁶</td>
</tr>
<tr>
<td>Cause</td>
<td>Undetermined.⁷</td>
</tr>
<tr>
<td>Fatalities</td>
<td>No fatalities.⁸</td>
</tr>
<tr>
<td>Casualties</td>
<td>One casualty.⁹</td>
</tr>
<tr>
<td>Houses destroyed</td>
<td>Fourteen houses.¹⁰</td>
</tr>
<tr>
<td>Overall area burnt</td>
<td>7,086 hectares.¹¹</td>
</tr>
<tr>
<td>Firefighting resources</td>
<td>On 7 February, 536 CFA and 127 NEO personnel attended the fire. They were supported by 103 CFA appliances, 21 NEO dozers and 1 aircraft.¹²</td>
</tr>
</tbody>
</table>

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¹ Redesdale AWS
² Redesdale AWS
³ Redesdale AWS
⁴ Redesdale AWS
⁵ Redesdale AWS
⁶ Redesdale AWS
⁷ Redesdale AWS
⁸ Redesdale AWS
⁹ Redesdale AWS
¹⁰ Redesdale AWS
¹¹ Redesdale AWS
¹² Redesdale AWS
Figure 11.1 The Redesdale fire

The following time line summarises events associated with the Redesdale fire. For the most part, the times given are approximate. Further details about the events are provided in the accompanying narrative.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:11</td>
<td>Fire crosses Metcalfe–Redesdale road</td>
</tr>
<tr>
<td>15:20</td>
<td>Fire crosses Metcalfe–Redesdale road</td>
</tr>
<tr>
<td>15:30</td>
<td>Epsom ICC advised fire is out of control</td>
</tr>
<tr>
<td>15:37</td>
<td>Awareness message issued</td>
</tr>
<tr>
<td>15:43</td>
<td>Additional 40 trucks sent to fire ground</td>
</tr>
<tr>
<td>15:47</td>
<td>Request made to close Heathcote–Kyneton road</td>
</tr>
<tr>
<td>7 February 08:30</td>
<td>IMT in readiness at Epsom ICC</td>
</tr>
<tr>
<td>7 February 11:00</td>
<td>Pre-designated Incident Controller arrives at Epsom ICC</td>
</tr>
</tbody>
</table>
Mobile operations point established next to Redesdale Town Hall  
First local weather forecast requested

16:00

17:00
Red flag warning issued

17:30
Mobile operations point established next to Redesdale Town Hall
First local weather forecast requested

17:30

18:35
South-westerly wind change moves through fire ground

18:35

20:00
Request for army graders cancelled: threat subsiding

20:00

8 February
Fire controlled

8 February

14 February
Fire completely blacked out.
11.1 SEQUENCE OF EVENTS

11.1.1 PREPARATION
On 6 February Mr John Deering, Operations Manager of Country Fire Authority Region 2, and Mr Andrew Matthews, the Department of Sustainability and Environment acting Area Land and Fire Manager, established a joint level 3 incident management team at the Epsom Incident Control Centre, for a ‘hot start’ the following day. Many of the IMT members selected for the hot start were at the ICC on 6 February and used that day to test and confirm ground observer arrangements and begin fire behaviour prediction work. Those present also participated in a practice scenario involving a multi-agency response to a level 3 fire.14

On the morning of 7 February Mr Deering and his DSE counterpart, Mr James Dalton, ensured that all units in the IMT were preparing for the day ahead. For example, the Planning Section carried out fire behaviour predictions and ensured that the ground observer team was in place; the Information Unit prepared templates for fire information releases and established contact with the ABC and local media. A fully staffed IMT was ready from 11:00 on 7 February. Mr Deering arrived at 08:30 that day and took a joint leadership role with Mr Dalton. Both were accredited level 3 Incident Controllers.15

Superintendent Peter Bull was the Divisional Emergency Response Coordinator for the division, which takes in the municipalities of Greater Bendigo, Mount Alexander and Macedon Ranges. By Friday 6 February he had ascertained that each of these municipalities was prepared to activate its Municipal Emergency Coordination Centre if required.16

Table 11.1 summarises the state of preparedness for the Redesdale fire.

Table 11.1 The Redesdale fire – IMT preparedness

<table>
<thead>
<tr>
<th>Pre-designated level 3 ICC</th>
<th>Yes17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-formed IMT at ICC</td>
<td>Yes18</td>
</tr>
<tr>
<td>Pre-identified level 3 IC</td>
<td>Yes19</td>
</tr>
<tr>
<td>Pre-identified IMT members</td>
<td>Yes20</td>
</tr>
<tr>
<td>Time fire started</td>
<td>Approx 15:11</td>
</tr>
<tr>
<td>Full IMT in place by</td>
<td>11:00, 7 February 200921</td>
</tr>
<tr>
<td>Safety adviser appointed</td>
<td>No22</td>
</tr>
</tbody>
</table>

11.1.2 7 FEBRUARY

Origin and cause
VicFire was notified of the fire at Redesdale at 15:11 on 7 February. The fire was initially reported to have started at Coliban Park Road, about 2 kilometres to the west of Redesdale on the western side of the Coliban River. Fire investigators subsequently discovered that the fire actually started on the eastern side of the river.23

Ms Samantha Siddle lives on a property at Racecourse Road, Redesdale, very close to the fire’s point of origin. Ms Siddle first smelled smoke at around 15:00. She got into her car and drove across her property in search of the origin of the smoke. Within about 15 minutes, however, her paddocks were on fire. At 15:20, having returned to her home, she called 000 to report the fire.24

DSE fire tower observers in the Mount Ida and Fryers Ridge fire towers also saw the fire soon after it had started.25

Victoria Police has investigated the cause of ignition of the Redesdale fire but has made no determination.26
Fire run, response and management

At 15:12 the Redesdale, Metcalfe, Sutton Grange and Langley–Barfold brigades were sent to attend the fire. The ground observer crew that had been pre-positioned on 6 February was also promptly dispatched. Nine minutes after the initial report the fire crossed the Metcalfe–Redesdale road.28

Mr Peter Wilson, Group Officer with the CFA Metcalfe group, was the initial level 1 Incident Controller at the fire ground. The Epsom IMT shadowed the first response, preparing to assume control on the basis that the first attack was unlikely to succeed. At 15:30 Mr Wilson telephoned to advise the ICC that the fire was beyond the control of the initial resources of the responding brigades and asked that the Epsom IMT assume control. From that time until about 09:00 the following day Mr Deering was the level 3 Incident Controller.29

Shortly after 15:25 Mr Andrew Chapman, captain of the Elphinstone brigade, went to the Elphinstone fire station, where he learnt of the Redesdale fire. One of the first to arrive at the fire, he intended to set up a control point at the corner of the Kyneton–Redesdale road and Siddles Road. While on his way there he realised that the fire had travelled past this point and was out of control. The control point was eventually established with Deputy Group Officer Mr Dave Penno at the Heathcote–Kyneton road and Perry's Lane intersection.30

The first alert the Elphinstone brigade received came at about 15:26, while Mr Chapman was on his way towards the fire. The Mia Mia brigade also received this alert.31

At the ICC Mr Deering was not directly involved in decisions about allocation of resources on the fire ground. He left those tactical decisions to the commanders in the field, conceiving his role as more strategic. He and Mr Dalton had discussed beforehand how they would work together: Mr Dalton took responsibility for internal management of the IMT and Mr Deering concentrated on external relationships, including keeping the integrated Emergency Control Centre and the public informed.32

On becoming aware of the fire at Redesdale the Epsom ICC information officer prepared an awareness message for the communities of Metcalfe, Metcalfe East, Barfold, Langley and Redesdale, distributing it by email at 15:37. The message was broadcast on 774 ABC radio at 15:50 and on ABC Bendigo at 15:53.33

Thirty additional tankers were requested at 15:43; 40 appliances eventually attended the fire. At 15:47 Superintendent Bull received a request from DSE to close the Heathcote–Kyneton road.34

Police working independently of each other operated roadblocks to the north and south of the fire. Communications between the Epsom ICC and police to the north of the fire were better than those with police to the south, who had great difficulty tracking the fire’s progress because of a lack of information and received no requests to establish roadblocks. In some cases residents wanting to return to their properties managed to bypass road closures, gaining access to their properties via back roads and tracks.35

When the fire was first reported Mr John Cutting, manager of the Bendigo Regional Emergency Coordination Centre on 7 February, immediately sent Mr Craig Brittain, CFA Operations Officer, to the fire ground; Mr Brittain was accompanied by Mr Andrew Gill as his deputy. The two men arrived at the fire within 40 minutes and made contact with Mr Chapman.36

Mr Chapman briefed them both, and together they formulated a strategy, sectorised the fire and appointed three senior CFA volunteers as sector commanders.37

Superintendent Bull was already at the Epsom ICC when the Redesdale fire began, and for a period he performed the roles of police liaison, command operations and Divisional Emergency Response Coordinator simultaneously. He promptly relayed the ICC’s requests for tankers and graders to Sergeant Grant Morris, the Bendigo Municipal Emergency Response Coordinator. Sergeant Morris sent the requests to the Municipal Emergency Resource Officer for Greater Bendigo, who arranged for the equipment to be provided.38

Just over 6 kilometres from the fire’s point of origin, and before 16:00, the fire crossed the Kyneton–Redesdale road in several places before reaching the community of Barfold. It was deemed too dangerous to attack the head of the fire, so the majority of resources were concentrated on its eastern flank. The Bendigo Regional Emergency Coordination Centre redirected to the Redesdale fire two strike teams that had been assembled in CFA Region 2 to respond to the Kilmore East fire.39
An emergency relief centre was established at the Redesdale community hall soon after the fire started, and Sergeant Morris was advised of the establishment of an evacuation centre at Barrack Reserve at Heathcote. At about 16:00 an operations point was established in a mobile control vehicle. The fire crossed Watchbox Road at about 16:49.

Mr Andrew Howlett, the Epsom ICC planning officer, asked for local weather forecasts at 16:00 and at 17:00. The Bureau of Meteorology issued the forecasts within 30 minutes of the request being received, and the forecasts were passed on to the Operations Unit and the information officers. Fire prediction maps were produced in the Epsom ICC at 15:55, 18:14 and 20:11 and were projected onto a screen for everyone in the IMT to see.

The first urgent threat message was issued at 15:57; subsequent threat messages were prepared, distributed and broadcast in a timely manner on 7 February, telling local communities of the fire's location and the timing and impact of the wind change.

Dozers and graders, supported by slip-on units and tankers, were used to establish containment lines along the north-eastern flank of the fire. Mr Brittain asked that graders create a firebreak in front of Redesdale township. More work was done near Mia Mia; this work was limited by difficult terrain, but crews were able to establish effective containment lines along most of the fire's north-eastern flank before the wind changed. Tanker crews were unable to attack the head of the fire before the wind change and instead supported the crews by direct attack on the flanks of the fire, building containment lines, and assisting with protection of property.

It is apparent from log entries made by Mr Howlett and Mr Leslie Vearing, the operations officer at the Epsom ICC, that both the Planning Unit and the Operations Unit became aware shortly before 17:30 that the forecast wind change would arrive between 18:30 and 19:00. Within minutes a red flag warning was transmitted from the Epsom ICC to the Redesdale operations point and passed on to all stations on the fire ground.

Mr Robert Jarvis of Parks Victoria had been on standby at Bendigo airport as air attack supervisor for the Epsom ICC. By 17:40 the wind had begun to moderate and he was able to take off in his aircraft and do some reconnaissance in the area of the fire. Mr Jarvis provided to Mr Vearing information about the location of the head of the fire and the northern flank. He was hampered in his work, however, by extreme turbulence and poor visibility. He was on approach to Bendigo airport when the wind changed.

At 17:46, the incident management team produced an incident action plan summary, which detailed where the fire was, where it was travelling, the towns it was near and the incident management team's objectives—to protect life and assets in the fire area and track and hold the eastern edge of the fire ahead of the wind change. The summary also detailed the means by which the eastern edge was to be held.

By 18:00 the fire had reached the locality of Sidonia, where it burnt a number of private blue-gum plantations. Between 18:35 and 18:46 the south-westerly wind change moved through the fire ground, pushing the eastern flank of the fire towards the communities of Redesdale, Mia Mia and Heathcote. The firefighters' efforts to secure the north-eastern flank of the fire during the afternoon proved effective, and the fire did not reach these communities. Once the wind change had passed, weather conditions eased and firefighters were able to attack the fire directly on all flanks.

Soon after 20:00 Mr Vearing was sufficiently confident that the fire would be contained overnight to cancel an earlier request that the Army provide graders. He decided DSE did not need to allocate any further resources to the Redesdale fire.

Residents and firefighters in the area affected by the Redesdale fire do not appear to have experienced the difficulties and frustrations with police roadblocks that were experienced in other areas. This could be because the Redesdale fire burned largely in open country and was brought under control relatively quickly.

The fire's average rate of spread was 6 kilometres an hour. During the course of the afternoon the fire spread rapidly through grassland, at up to 12 kilometres an hour, while slowing to as low as 1 kilometre an hour in areas of heavy fuel and forest.
The Redesdale fire was controlled by 07:00 on 8 February, although in the following days there were some break-outs as a result of strong southerly winds. During this time firefighters continued to secure the fire perimeter; this involved redeploying resources from the nearby Bendigo fire. The fire was not listed as contained until 09:56 on 10 February. It was completely blacked out by 14 February.\(^3\)

As noted, the Redesdale fire burned in four separate municipalities. It started in the City of Greater Bendigo, burned mainly in Mount Alexander Shire, and extended to Mitchell and Macedon Ranges Shires.\(^4\)

The fire was observed as a ‘blanket of fire’ spreading across the landscape, with a flame front 20 metres deep and a flame height of 1 to 2 metres over grassland. It developed into a crown fire in some forested areas, including in the Mt Lofty reserve.\(^5\)

Fourteen houses and more than 50 sheds and outbuildings were destroyed, as were the Baynton church, a bridge, two olive plantations and a vineyard. Two CFA forward control vehicles were damaged.\(^6\)

11.2 CONCLUSIONS

The efficient way in which information was gathered and shared by the incident management team enabled assessment of communities at risk, prompt preparation and distribution of informative warnings, and the setting up of appropriate road closures. Most crucially, it allowed the IMT to develop the firefighting strategy, which involved a concentrated effort to secure the north-eastern flank before the wind change, thus improving the protection of the Redesdale, Mia Mia and Heathcote communities further to the north-east. This approach was finalised within an hour of the Epsom ICC assuming control of the incident and was effectively implemented in the two hours before the wind change arrived.\(^7\)

In the Commission’s view, the Epsom IMT’s effective management of the Redesdale fire is testament to good planning and agency cooperation in the lead-up to a day of extreme fire danger—in particular pre-positioning properly qualified and experienced staff in an IMT. It also highlights the value of focusing on gathering and sharing information within the IMT, between fire agencies and with the public.

Fire agencies’ response to the Redesdale fire was, however, impeded by communication difficulties. Radio communications between Redesdale divisional command and the fire ground were poor. Mobile telephone communications were intermittent, and ground observers were unable to transmit information electronically via broadband internet connection. At times Mr Brittain was unable to make contact with sector commanders, and it was necessary to bring them to the operations point at Redesdale for briefings. Mr Brittain attributed these difficulties to various causes, among them the topography of the area, heat and smoke, and radio black spots.\(^8\)

Communications issues are considered in more detail in Chapter 3 of Volume II.

Members of Victoria Police responding to the Redesdale fire also had problems with radio communications. Although they appear to have had better radio reception than CFA members, their communications were impeded by the high volume of radio traffic directed through the police communications network, D24.\(^9\)

The Commission heard evidence that Mount Alexander and Macedon Ranges Shires provided a great deal of support, considering that Greater Bendigo and Mitchell Shires were fully occupied with other fires in their municipalities. The detail of the emergency response within the Mount Alexander and Macedon Ranges Shires is, however, largely unknown because no statements were provided to the Commission for the Municipal Emergency Response Coordinator and Municipal Emergency Resource Officers for those municipalities.\(^10\)
The Redesdale fire

40 Exhibit 439 – Statement of Brittain (WIT.3004.020.0251) [43]; Exhibit 464 – Statement of Morris (WIT.3010.007.0298) [31]
41 Exhibit 439 – Statement of Brittain (WIT.3004.020.0251) [45]; Exhibit 466 – Statement of Vearing (WIT.3024.004.0215) [33];
Deering T9961:3–T9961:12, T9962:15–T9962:16; Brittain T9975:2–T9975:25
42 Exhibit 468 – Statement of Howlett (WIT.3004.020.0289) [33]; Exhibit 22 – Statement of Williams, Annexure 1 (WIT.013.001.0012) at 0194–0195, 0210–0211; Exhibit 453 – Fire Prediction Maps (TEN.127.001.0001); Deering T10159:5–T10161:13
43 Exhibit 469 – Statement of Downes (WIT.3004.020.0314) [23], [26], [31], [33], [37]; Exhibit 144 – ABC Local Radio – Disc 1 (TEN.052.001.0001);
Exhibit 452 – Statement of Deering (WIT.3004.019.0192) [75], [79]; Exhibit 7 – Transcript – 774 ABC Radio (SUM.M.001.002.0001)
44 Exhibit 439 – Statement of Brittain (WIT.3004.020.0251) [46], [49]–[50]; Exhibit 466 – Statement of Vearing (WIT.3024.004.0215) [40]–[42]
45 Exhibit 468 – Statement of Howlett, Annexure 3 (WIT.3004.020.0305) at 0307; Exhibit 466 – Statement of Vearing, (WIT.3024.004.0215) [45], Annexure 5 (DSE.HDD.0052.0750) at 0754, Annexure 6 (DSE.HDD.0052.0745) at 0748; Exhibit 439 – Statement of Brittain, Annexure 6 (WIT.3004.020.0276)
46 Exhibit 463 – Statement of Jarvis (VPO.001.012.0032) at 0032–0033; Exhibit 466 – Statement of Vearing (WIT.3024.004.0215) [43], [48]
47 Exhibit 854 – CFA Wildfire – Redesdale – Coliban Rd – Fire 81 (DSE.0045.0363.0019); Beasley T17864:21–T17866:20
48 Exhibit 458 – Statement of Gilmore (WIT.3004.019.0001) [57]; Deering T9964:4–T9964:12
49 Deering T9961:3–T9961:26, T9963:13–T9963:18
50 Exhibit 466 – Statement of Vearing (WIT.3024.004.0215) [54], [57]
51 Exhibit 444 – Statement of Elder (WIT.114.001.0001_R) [56]; Exhibit 459 – Statement of Siddle (WIT.115.001.0001_R) [21]; Exhibit 462 – Redesdale Debriefing Report – Pastoria Fire Brigade (CFA.001.011.0033) at 0034; Exhibit 462 – Redesdale Debriefing Report – Kyneton Fire Station (CFA.001.011.0033) at 0034
52 Deering T9959:8–T9959:12
53 Exhibit 4 – Supplementary Statement of Rees (WIT.004.002.0001) [107]–[108]; Deering T9963:23–T9963:27, T9957:20–T9957:21,
T9958:6–T9958:10
54 Deering T9962:17–T9962:20
55 Deering T9959:18–T9959:29
56 Exhibit 980 – Correspondence – Houses Destroyed – Breakdown by Fire (CORR.1003.0048_R) at 0048_R; Deering T9957:20–T9957:27,
T9963:28–T9964:12
57 Exhibit 452 – Statement of Deering (WIT.3004.019.0192) [41]; Deering T9961:2–T9962:26, T10160:8–T10160:27
58 Exhibit 439 – Statement of Brittain (WIT.3004.020.0251) [60], [62]; Exhibit 462 – Redesdale Debriefing Report – Pastoria Fire Brigade
(CFA.001.011.0043) at 0044; Brittain T9980:25–T9981:1, T9981:3–T9981:20
59 Exhibit 473 – Statement of Brundell (WIT.3010.006.0215) [17]
60 Deering T9962:20–T9962:25
Volume I: The Fires and the Fire-Related Deaths

Source: Courtesy of the Herald & Weekly Times.