Coroners Act 1996 [Section 26(1)]



Coroner's Court of Western Australia

RECORD OF INVESTIGATION INTO DEATH

Ref: 13/19

I, Sarah Helen Linton, Coroner, having investigated the deaths of Kym Brett CURNOW, Thomas Leslie BUTCHER, Julia KOHRS-LICHTE and Anna Sushchova WINTHER, with an inquest held at the Esperance Courthouse on 25 to 29 March 2019, find that the identities of the deceased persons were Kym Brett CURNOW, Thomas Leslie BUTCHER, Julia KOHRS-LICHTE and Anna Sushchova WINTHER and that the deaths occurred on 17 November 2015 at Grigg Road, Scaddan, in the following circumstances:

Counsel Appearing:

Sgt L Housiaux assisting the Coroner.

Ms R Hartley (State Solicitor's Office) appearing on behalf of the Department of Biodiversity, Conservation and Attractions (and specifically the Parks and Wildlife Service) and the Department of Fire and Emergency Services as well as the witnesses Gregory Mair, Robert Blok, Andrew Duckworth, Gavin Wornes, Trevor Tasker and Gary Gifford.

Mr M Trowell QC and Ms Crosby (DLA Piper) appearing on behalf of the Shire of Esperance.

Mr T Nolan appearing on behalf of the United Professional Firefighters Union of Western Australia.

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INTRODUCTION

- 1. In mid-November 2015 major bushfires were raging in the area around Esperance, a small town situated on the Southern Ocean coastline in Western Australia. It is an area blessed with much natural beauty, situated as it is on the Southern Ocean coastline. However, like much of regional Western Australia, it is also an area that is prone to bushfires due to its many national parks and significant agricultural industry.
- 2. During the afternoon of 17 November 2015 one of the fires had nearly reached the Karingal farming property, located on Grigg Road in Scaddan. Scaddan is a small town located about 53 kilometres north of the town of Esperance. As the bushfire approached, and the owners and workers on the farm prepared to defend the property, one of the workers decided to leave in order to try to take a horse to safety in Esperance. Shortly before he left, two other farm workers decided to go with him.
- 3. The workers who left the farm were Thomas Butcher (Tom), Julia Kohrs-Lichte (Julia) and Anna Winther (Anna). All of them were visitors to Australia to an extent. Tom was from the United Kingdom and had been living and working in Australia since 2011. Tom could be said to have made Australia his home. Anna had also first come to Australia from Norway¹ in 2011 to study and had returned to work in Australia in 2014. Julia had come to Australia from Germany only the month before, with a plan to do farming work in Australia for six months while she took a break from her studies.
- 4. A local farmer and volunteer firefighter, Mr Kym Curnow (Kym Curnow), was also at Karingal. He had been performing the role of a fire scout that afternoon and had been speaking to farmers in the area and advising them to evacuate. His last stop was Karingal, where he spoke to the owners and workers, who indicated they intended to stay and defend the property.
- 5. It is not clear at exactly what time, or in what order, Tom's car and Kym Curnow's car left the farm, but it appears they drove away close in time. When they left the farm they both turned left, heading east, and drove along Grigg Road in the direction of the Coolgardie-Esperance Highway (Highway). It is likely they were unaware the route took them directly into the path of the approaching fire front, which was raging out of control despite the best efforts of local volunteer firefighters.
- 6. Both vehicles travelled between three and three and a half kilometres before they both left the road as the fire front ran through. There is a strong inference that the two drivers deliberately left the road to try to drive behind the fire front, onto the relative safety of burnt ground, but their passage was hindered by the conditions. Sadly, both vehicles crashed into trees on the road verge. The cars came to rest only a few hundred metres apart.
- 7. The car carrying Tom, Julia and Anna and towing the horse trailer appears to have rolled when it crashed while Kym Curnow's car remained upright.

¹ Although Anna was actually born in the Ukraine, she had lived in Norway since 1998.

There was nowhere for any of them to run to escape the fire. It is possible some of them may have died from injuries sustained in the crash, but all would certainly have died from the thermal effects of the fire if they were still alive when the fire front hit. Their bodies were found later that night in, or close to, the cars, as was the horse Cougar that Tom was trying to save.

- 8. As of 2016, this was one of the worst bushfires in Western Australian history in terms of human fatalities. Many other people risked their lives to contain the fire and protect property. There was a total of 10 fires around Esperance that burnt for a total of 11 days. In addition to the tragic loss of life, a huge amount property, crops, livestock, native animals and bushland were lost.²
- 9. After the event an investigation was undertaken into the deaths by officers from the WA Police Arson Squad and a report, including statements from relevant witnesses, was provided to the State Coroner. In addition, a Major Incident Review was commissioned by the Department of Fire and Emergency Services (DFES) independent of the police investigation, with that report also provided to the State Coroner. Further, a group of concerned farmers, including the owners of Karingal, funded a private investigation into the fire undertaken by Pacer Legal. The report from this investigation made a number of recommendations.³ The report was tabled in Parliament in November 2016 and a copy was also provided to the Coroner's Court.⁴
- 10. The information provided in these reports raised concerns about issues relevant to public safety. These included how the bushfire risk prior to the fires was managed, in terms of matters such as firebreaks and reducing fuel loads, as well as how the bushfire suppression was managed, such as why water bombers (also known as aerial bombers or fire bombers)⁵ were not deployed. There were also unanswered questions as to why the four deceased persons left the relative safety of the farm shortly before the fire front struck, and why they drove into the path of the fire. Some of the families of the deceased raised their own questions about these concerns and others. To explore these issues further, I held an inquest at the Esperance Courthouse on 25 to 29 March 2019.
- 11. I heard evidence from many witnesses who were involved in the events leading up to the 17 November 2015, as well as those involved in dealing with the aftermath and the subsequent investigations. A large volume of documentation was also tendered to assist me in my inquiry. Photographs, videos and maps and plans were also included to help present a full picture of what the firefighters faced.⁶
- 12. It was apparent during the inquest that, even though several years had passed, the impact of the fires, and particularly these four deaths, remains very fresh in the memories of many people. The relatively small courtroom in Esperance was at capacity every day. Some family members of the deceased

² Exhibit 1, Tab 2.

³ Exhibit 7, Tab 5, pp. 103~104.

⁴ Exhibit 7, Tab 5.

⁵ T 105.

⁶ Exhibits 1 to 9.

had flown a long way to be there, and there were also many local family members and friends in attendance, as well as people who were involved in fighting the fire. Further, senior staff from the various agencies involved were all there to provide evidence, general information and support. I'm told that at the end of the inquest many of these people came together to talk and provide support to the international and interstate family members. I hope that this inquest has provided an opportunity to continue the healing process for the people in the town and the family and friends of the deceased.

13. I formed the impression that everyone involved in the inquest genuinely wanted to find answers to how this happened, and solutions to prevent it happening again. The threat of bushfires in the Esperance region remains ever present, and another bushfire season is about to commence. At the conclusion of the inquest I invited the parties, and those others who attended the inquest every day faithfully, to provide submissions to me if they felt they could assist me to make recommendations that will be practical and helpful in dealing with something that affects so many Australians. I received a number of written submissions, and I have carefully considered all of them in reaching my findings and making my recommendations.

THE DECEASED

- 14. As mentioned above, three of the deceased had come to Australia in the years, or months, prior to their deaths to work and study. The other death was a local Scaddan man. They were four people from different countries, at different stages in their lives, and they all had differing levels of experience with Australian bushfires. Nevertheless, they tragically died at the same place and at the same time in what would appear to be the same manner.
- 15. The way they died has meant that their stories are told together and remembered as a collective loss to the Western Australian community arising from one catastrophic event. Although the focus of this inquest is on the events of the fire, it is important to remember that they were all individuals who had their own hopes and dreams and they are each mourned by their family and friends. Once I have described them below, I will refer to each of the three younger deceased by their first names. I mean no disrespect by this. It was how the witnesses generally referred to them and it helps to distinguish them from the witnesses and to make it clear that this is their story. Kym Curnow was generally known by the nickname Fred or Freddy, but I will refer to him as Kym as that was his legal name. I will refer to him as Kym Curnow generally, which helps to distinguish him from other family members who are mentioned in the evidence.

Thomas (Tom) Leslie Butcher

- 16. Tom was born in Sheffield in the United Kingdom. He grew up with his parents and two sisters in the United Kingdom before he moved to Australia in 2011. He initially lived for a time with his sister in Gladstone, Queensland. Tom worked as a diesel mechanic and about a year prior to his death Tom moved to Esperance and obtained work as a mechanic on the Karingal farm in Scaddan. Tom was said to love hunting, fishing and horses and he embraced the Australian bush lifestyle with enthusiasm.⁷
- 17. After moving to Scaddan Tom met Lelia Vadnjal in Esperance and they became friends and then began dating. Ms Vadnjal had a horse named Cougar. Tom had formed a special bond with Cougar and looked after him at the Karingal farm where he lived. Ms Vadnjal did not live at Karingal but they spoke to each other every day.⁸
- 18. At the time of his death, Tom was 31 years old, in a good relationship, doing a job he enjoyed and generally living a happy and productive life here in Australia. His employer, Mr David Campbell (Mr Campbell), said that prior to his death Tom had decided that Australia, and in particular Esperance, was now his home and he was fast becoming a local.⁹
- 19. Tom had joined the local volunteer Bush Fire Brigade when he first arrived on the farm, approximately 12 months before, and he had attended one training school about a month before his death. Mr Campbell described Tom's understanding of bushfire behaviour as still very rudimentary, although he had shown an enthusiasm to learn.¹⁰

Julia Kohrs-Lichte

- 20. Julia was born in Dannenberg, Germany. She grew up on a farm in a small village with her parents and older sister and developed an interest in farming and agriculture from a young age. When Julia became an adult she wanted to travel and decided she wanted to learn about Australian farming, based on stories told to her by her father and aunt. Her father knew a man who worked on a farm in Australia, so he contacted his associate to see if he could arrange work for his daughter in Australia. An arrangement was made with Mr Campbell through a family friend for Julia to work at Karingal in Esperance. She was 19 years old when she left Germany for Australia on 3 October 2015 and was described by her family as a solution-oriented and life-affirming person, who was looking forward to new experiences in a new country.
- 21. Julia planned to stay in Australia for six months on a working holiday, before returning to Germany to start her university studies. She had only been working at Karingal as a bin chaser operator for just over a month

⁷ Exhibit 1, Tab 23.

⁸ Exhibit 1, Tab 26.

⁹ T 419.

¹⁰ T 419~420.

before her death, but she reportedly felt comfortable on the farm and had already made new friends.

Anna Sushchova Winther

- 22. Anna was 29 years old at the time of her death. She was born in Odessa in the Ukraine and moved with her family to Norway in 1998. Anna studied journalism in Norway and after finishing her studies she wanted to work and study abroad. She was offered work in Singapore, so she decided to finish her studies in Australia, which was close to Singapore. Anna moved to Australia in 2012, where she then completed her university degree. In 2013 Anna returned to Norway for a year.
- 23. In 2014 Anna decided to return to Australia to complete a master's degree in human rights. Anna was said to have loved Australia and she decided she wanted to stay in the country longer. After making some enquiries, she found out that if she worked on a farm for 88 days she could obtain another visa to stay in Australia for another year. She was hoping to go back to university eventually and complete her PhD.¹¹
- 24. Anna found work at Karingal in the Esperance region as a cook. She started working at Karingal approximately six weeks prior to her death. Anna reportedly loved working on the farm and was very happy in the weeks she was there. ¹² Mr Campbell believed for all intents and purposes she was intending to be an Australian in the future and had clearly embraced the Australian lifestyle. ¹³

Kym (Fred) Brett Curnow

- 25. Kym Curnow, who was also known by the nickname Fred, was born in South Australia and moved to Western Australia with his family in 1979. He was the youngest of six children. As an adult Kym Curnow owned and managed a farm in the Scaddan region with his family. He was married, with twin sons and a daughter. Other extended family also lived and farmed locally.¹⁴
- **26.** Kym Curnow was a keen footballer and passionate member of the Gibson Football Club. He also enjoyed spending time with his family, fishing and travelling. He was well known for his kindness, sense of humour and willingness to help others.¹⁵
- 27. Like many farmers in regional Australia, Kym Curnow was a member of the volunteer fire brigade. He was associated with the Scaddan Bush Fire Brigade. Kym Curnow was one of the local Fire Control Officers and he had many years of experience and training regarding bushfires. ¹⁶ Sadly, he died

¹¹ T 419.

¹² Exhibit 1, Tab 24.

¹³ T 419.

¹⁴ Exhibit 1, Tabs 19 and 20.

¹⁵ https://www.news.com.au/national/western-australia/esperance-farewell-fire-hero-kym-freddy-curnow/news-story.

¹⁶ Exhibit 1, Tab 20

while actively performing these duties, but it was entirely in keeping with his reputation for always trying to help others, even when it put his own life in danger.

28. At his funeral, Kym Curnow was remembered as "a successful farmer, a devoted husband and father, and an all-round good bloke."¹⁷

BACKGROUND INFORMATION

- 29. The Esperance region had an above average winter rainfall in 2015, prompting the growth of large quantities of crops and other plant material. The 2015 harvest was predicted to be far above the five year average, and at the time the fires started, only around 50% had been harvested. The winter rains were followed by an unusually dry and warm spring, which rapidly dried out the unharvested crop and other plant material.¹⁸
- **30.** State-wide average temperatures in Western Australia during October 2015 were the highest on record and rainfalls were generally light. Temperatures were similarly elevated in November. Other known weather patterns, such as a strengthening El Nino southern oscillation event across the Pacific Region, was expected to increase the severity and duration of the 2015 to 2016 fire season in Western Australia. The Goldfields Esperance region, in particular, was expected to carry above normal fire potential due to the high fuel load. This was a known concern to DFES, who issued a press release in relation to this concern on 1 September 2015.¹⁹
- 31. By November 2015 there was a known major bushfire risk in the Esperance region, even though the official bushfire season would not commence until the following month. Over the weekend of 14 to 15 November 2015, a trough system consisting of numerous thunderstorms moved in an easterly direction across southern Western Australia. Thunderstorms carry an increased risk of bushfires due to lightning strikes. Lightning ignited fires across a large area of the South West, Great Southern and Goldfields/Esperance regions. At least 40 fires were recorded by DFES on 15 November 2015, including what were later to be known as the Cascades fire, the Merivale fire and the Cape Arid Complex fire. They constituted three of the 10 incidents recorded by DFES in the Shire of Esperance.²⁰
- **32.** It is important to understand that in regional Western Australia the responsibility for fighting fires varies depending on the location, the size and the complexity of the fire.
- **33.** In the regions, the lead combat authority for initial fire suppression where a fire occurs on unallocated Crown land (UCL) is the local government, which in this case was the Shire of Esperance.²¹ To give this some context, it is

¹⁷ https://www.news.com.au/national/western-australia/esperance-farewell-fire-hero-kym-freddy-curnow/news-story.

¹⁸ T 4.

¹⁹ T 4~5.

²⁰ T 4~5.

²¹ T 72; Exhibit 4, Tab 3.

worth noting there is approximately 2 million hectares of UCL in the Esperance Shire. The Shire of Esperance itself is 45,000 km², so it covers a vast area.²²

- 34. The local government rely on volunteer Bush Fire Brigades to conduct fire suppression. There are 17 Bush Fire Brigades divided into six fire zones across the district. DFES has an overriding management role of fires in Western Australia but when the fire is in the control of the Shire, DFES plays a support role, providing information, resources and advice at an early stage. When the fire escalates to a certain classification level, DFES may take over management of the fire. The Bush Fire Brigades are made up of unpaid volunteers, who will generally be local farmers and residents. They use brigade equipment (usually funded by DFES) supplemented by their own private equipment. They give up their time, and put themselves in danger, to save the lives and property of their family and friends and the wider local community. 24
- **35.** The lead authority to combat fires in National Parks and State Reserves, such as the Cape Arid National Park, falls with the Department of Biodiversity, Conservation and Attractions, and specifically the Parks and Wildlife Service. I will refer to them as the Department of Parks and Wildlife (DPaW) for convenience. DPaW staff are trained in firefighting and provided with equipment by the agency for that task. They also play a major role in fire prevention and risk management, as they have the responsibility for fire mitigation works on UCL.²⁵
- **36.** As noted above, DFES assists the local government in Esperance with their firefighting role, by providing equipment, training and support, and also provides some support for DPaW. DFES also is the controlling agency for fires which occur in gazetted fire district town sites, such as the Esperance town site. When a fire escalates in size and complexity, DFES can take over management of the fire, either of its own volition or at the request of local government or DPaW.
- 37. In 2015, Mr Gavin Wornes (Mr Wornes) was employed by DFES as the Area Officer for the Esperance and Ravensthorpe Shires. Mr Wornes had occupied that role since 2008, after a long career as a fire fighter and management officer with the predecessors of DPaW and the Forest Products Commission. In performing those various roles, Mr Wornes had gained extensive experience in managing bushfire and emergency response in and around the Esperance region since 1996.²⁷ In his role as the DFES Area Officer, Mr Wornes was the direct line manager for the local Volunteer Fire Rescue Services (which are different to the volunteer Bush Fire Brigades) and also, relevantly to this matter, was required to contribute and respond to

²² T 266, 350.

²³ T 350.

²⁴ T 5; Exhibit 1, Tab 2.

²⁵ T 5.

²⁶ Exhibit 4, Tab 3.

²⁷ Exhibit 5, Tab 3.

- emergency operations as part of an Incident Management Team (IMT) and to provide support and advice for any fires within the Great Southern District.²⁸
- **38.** The DFES Regional Operations Centre is based in Albany, and they had (and have) a larger complement of staff and resources, which could be diverted to Esperance upon request, subject to availability.
- 39. William Carmody (Mr Carmody) is a farmer at Cascades and an experienced volunteer Bush Fire Brigade member. Mr Carmody attended his first bushfire when he was 10 years old and he has been fighting fires for approximately four decades. Mr Carmody is, and was at the time of the fires, the Captain of the Cascades Volunteer Bush Fire Brigade and the Deputy Senior Fire Control Officer (FCO) for the West Fire Zone in the Shire of Esperance. When the Cascades fire started in Esperance in November 2015, Mr Carmody as the Deputy Senior FCO was effectively in charge of the initial fire suppression and management. Throughout the Cascades fire he played a major role, even after DFES formally took over control of the fire.²⁹
- 40. Mr Carmody gave evidence that he had a very good working relationship with Mr Wornes, not only when fighting fires but also in relation to ongoing fire training of volunteers.³⁰ Together, they had taken the initiative and developed a fire awareness training course for seasonal staff, many of whom come to the region from overseas, to help them understand what to do if they are present when a fire starts on a property where they are working. Mr Carmody explained that fires can be ignited by machinery during harvesting, and farms are required to have their own firefighting equipment, so it is important for the workers to have an understanding of the equipment and basic firefighting techniques. The program had been running for more than 10 years in November 2015.³¹ This was separate to the usual training provided to Bush Fire Brigade members.
- 41. Many other people played a role in the suppression of the fires, and I will deal with them individually in this finding, but it is fair to say that Mr Carmody and Mr Wornes were two of the key players in the events, and it is important to note that they knew each other well and were supportive of the roles each person played.

HOW THE FIRES STARTED

42. The fires started in mid-November 2015, which is harvesting season in the Esperance region. On the evening of Saturday, 14 November 2015, the weather forecast indicated likely thunderstorms. Many farmers were out early the next morning harvesting and they heard loud thunderclaps but noted there was very little rain. Mr Carmody indicated he and his staff were

²⁸ Exhibit 5, Tab 3.

²⁹ T 114 ~ 115; Exhibit 4, Tab 1.

³⁰ T 115.

³¹ T 117; Exhibit 4, Tab 1.

concerned as they were aware fires can be started by lightning strikes and the rain was too light to extinguish anything.³²

- 43. One of Mr Carmody's workers went out to have a look around and see if he could see anything of concern. The worker rang Mr Carmody on the Sunday morning at about 6.00 am and told him he could smell smoke on West Point Road. They agreed to go and investigate but first, Mr Carmody made a number of calls to family, neighbours, brigade members and neighbouring brigade members to arrange for people and equipment to mobilise to the area to assist.³³
- 44. After going to investigate, they established the fire was in bush on UCL. It was a small fire, approximately 200 metres in from the edge of the bushland and a paddock. Mr Carmody, his brother Paul Carmody, and some others took some machinery to the area and Paul Carmody used a loader to cut a track in. They then put in a mineral earth break around the edge of the burnt area and the bush. Some Brigade trucks attended and extinguished the fire after approximately an hour.³⁴ They all then returned to their farms to continue harvesting, satisfied that the fire threat had been addressed, and DPaW staff were asked to monitor it to make sure it didn't flare-up again.³⁵
- **45.** However, shortly after Mr Carmody had made it back to his property he received a phone call from another local informing him that there was some smoke in bushland in the remote Lake Mends area, north of Esperance. An investigation later found that the fire started due to natural lightning strikes from the storm.³⁶ I refer to the investigation into the origin of the fire later in this finding.
- **46.** This was to become the Cascades fire that ran out of control and took the lives of the four deceased, but at this stage it was a relatively small fire in UCL. Mr Carmody initially believed (incorrectly) that it was the primary responsibility of DPaW and he would be assisting them. It doesn't really matter as in any event, Mr Carmody was told that DPaW resources were stretched and they were not in a position to operationally control the fire, so Mr Carmody took control of the fire suppression plan.³⁷
- 47. After reading the materials and seeing and hearing Mr Carmody in court, I can say that the community is fortunate to have had someone like him in charge when a serious bushfire like this started. Mr Carmody clearly demonstrated his knowledge, skills, initiative and cool head in a crisis, but unfortunately, as will be seen in this finding, his best laid plans were not sufficiently resourced and actioned to avert disaster.

³² T 119~120.

 $^{^{33}}$ T 120 ~ 121.

³⁴ T 121.

³⁵ T 122~123; Exhibit 4, Tab 1.

³⁶ Exhibit 1, Tab 2.

³⁷ Exhibit 4, Tab 1.

INITIAL PLAN FOR THE FIRE SUPPRESSION

- 48. After receiving the call alerting him to the second fire, Mr Carmody took one of his workers up in his own Cessna airplane and flew around the area to see if there was another fire that needed to be dealt with. From the air, they could see a fire in between the salt lakes. Although the location was less accessible than the earlier fire, Mr Carmody initially thought they would have some good success with being able to get around the fire, given its location in the salt lakes, which would restrict the fire growth.³⁸
- 49. Mr Carmody had informed Mr Wornes of the first fire in the Cascades area and Mr Wornes had assisted by notifying DPaW and obtaining resources from them to assist in suppressing the fire. Mr Carmody had rung Mr Wornes back at 9.30 am to tell him he was going to use his plane to fly up and check a report of more smoke in the Lake Mends area. Mr Carmody rang Mr Wornes from the air at 9.51 am and confirmed there was a second fire. It was in UCL, so Mr Wornes understood the local government was the controlling agency. The fire was initially known as the Lake Mends fire, and later became known as the Cascades fire.³⁹
- 50. Mr Wornes contacted Mick Rose (Mr Rose), the DPaW Principal Point of Contact, and Lonica Collins (Ms Collins),⁴⁰ the Shire's Community Emergency Services Co-ordinator (a position paid jointly by the Shire and DFES), and they agreed to meet and commence planning for an extended fire response campaign as it was immediately apparent the fire would take several days to contain given its location (Mr Wornes estimated it would normally take about 7 days to get it contained).⁴¹ Mr Wornes saw himself as playing a support role for the local government at this stage as the fire was a Level 1 fire under their control.⁴² Mr Wornes notified the DFES Regional Duty Coordinator District Officer, Kevin Parsons (Mr Parsons), who was based in Albany, to advise him of the situation and to let him know that Mr Wornes was returning to work to support the Shire of Esperance.⁴³
- 51. Mr Carmody developed a strategy to contain the fire, in consultation with Mr Rose and Mr Wornes. The plan involved getting two bulldozers to push an access track into the fire and then create a 'chain break' around the fire area. Some 'back burn' could hopefully then be conducted along the new firebreak, if conditions allowed.⁴⁴
- 52. Mr Carmody told Mr Wornes they were going to need some heavy equipment to get around the fire and indicated his hope that they could get started a bit later that day, acknowledging there would be a time lag to mobilise the machinery. By putting a firebreak in, it was hoped it would prevent the fire from getting any larger. This is only possible when the conditions allow and

³⁸ T 123 ~ 124.

³⁹ Exhibit 4, Tab 3.

⁴⁰ Ms Collins has since married and changed her name, but I will refer to her by her maiden name as she was then known.

⁴¹ T 274.

⁴² Exhibit 4, Tab 3.

⁴³ Exhibit 4, Tab 3.

⁴⁴ Exhibit 4, Tab 1 and Tab 3.

it is safe enough for an operator and safety crew to get in there. Mr Carmody said he expected they would probably be working into the night to be able to get around the fire, but noted this would be the safer time to be working in any event. Mr Wornes agreed DFES would finance the machinery and private contractors were to be engaged.⁴⁵

- was "certainly doable" as the conditions were good and they had already easily executed a similar plan that morning. Mr Carmody was comfortable with the fire being described as a Level 1 fire that his local brigade were capable of managing, although Mr Carmody did explain that he had a misunderstanding at that stage that a fire in UCL technically came under a DFES jurisdiction as the hazard management agency, and as noted above, he had also thought perhaps DPaW had a role. However, he did not discuss this with Mr Wornes and it did not affect his planning or decision-making. Mr Carmody explained that, in his view, the Brigades, DFES and DPaW "work as one team" in the region and it really didn't matter who was "wearing the chief's hat" at the time. 48
- 54. I note the Chief Bush Fire Control Officer for the Esperance volunteers, Mr Thomas Brown, also believed that a fire in vacant Crown land came under DFES, and he expected that DFES would become actively involved in the suppression of such a fire, although the volunteers offer a support role and do go in and try and control fires in these areas for their own interests, as they may impact on the local farmers. ⁴⁹ I will come back to this later, as it has some relevance to how communication can be improved moving forward. I note that Mr Brown is married to the Shire President, Mrs Victoria Brown.
- **55.** Given the low level of the fire at that stage, Mr Carmody was comfortable as the Captain of the local Brigade to take on the role of devising the strategy and tasking crews to follow the plan. In the meantime, Mr Wornes was to set about organising the required heavy equipment.⁵⁰
- 56. While speaking to Mr Wornes, Mr Carmody also sent him some photos of the fire taken from the air. Mr Wornes told him that they would be able to have a helicopter from Esperance to assist in reconnaissance, as helicopters are able to fly lower and get a better view of the ground.⁵¹ They discussed the availability of aerial water bombers as well, but Mr Wornes indicated he didn't think they would be available due to the other incidents in the South West. Local agricultural aircraft that were available and capable of doing water bombing were not permitted to take on the task for various reasons. I will come back to this issue later.⁵²

⁴⁵ T 125-126; Exhibit 4, Tab 1 and Tab 3.

⁴⁶ T 126.

⁴⁷ T 126.

⁴⁸ T 125 ~ 126.

⁴⁹ Exhibit 3, Tab 1.

⁵⁰ T 126; Exhibit 4, Tab 1.

⁵¹ T 127.

⁵² T 126; Exhibit 4, Tab 1.

- 57. Mr Carmody was able to source a bulldozer from Smalley's Contracting, which was at a farm fairly close to the area. They also had a grader that could be used. The heavy machines and a crew of Cascades Bush Fire Brigade volunteers were there quickly and commenced bulldozing, working until about 9.30 pm on the Sunday night before they were sent home with a plan to recommence at 8.00 am on the Monday. Mr Carmody confirmed with Mr Wornes that night that he would be needing extra bulldozers the following day.⁵³
- 58. Mr Carmody and Mr Wornes had discussed adding two additional strategies over the course of the day. First of all, additional bulldozer contractors would be brought in to re-treat old chaining in the area to improve the existing firebreaks.⁵⁴ Mr Wornes explained that the idea of chaining is fuel modification. It changes the fuel structure by laying it down on the ground. Ideally, the vegetation will be left on the grown to cure before putting a match to it, in order to get a clean burn. However, they needed to burn within the window before the weather changed, or it would become extremely dangerous.⁵⁵
- **59.** In addition, a third strategy had been discussed to involve local farmers creating fire breaks in the adjacent farmland by harvesting their crop to leave just the stubble, then ploughing the stubble. This would create mineral earth breaks/containment lines, if the fire broke through the tracking and chained firebreak.⁵⁶
- 60. In the meantime, there had been more storms in the Esperance region on Sunday afternoon, which had sparked at least nine more bushfires in the Esperance District. Neighbouring shires were also affected. Local Bush Fire Brigades were attending to the fires, and eight of them were controlled or extinguished quite quickly. However, a fire in the Lake Doombup area (which later became known as the Merivale fire) was not able to be brought under control. This fire was also in an area that fell under the local government and was difficult to access. A helicopter flew over the Merivale fire in the afternoon and it became apparent that it had the potential to threaten properties to the north. The properties under threat were notified and a strategy was developed to construct containment lines between the private property and UCL.⁵⁷
- 61. Mr Wornes spoke to his supervisor, Mr Parsons, in Albany and obtained approval to provide financial assistance to suppress the Merivale fire, and he also requested that a further two DFES personnel be provided to assist. He was told one Area Officer would come the following day and further personnel would be requested to come from Perth.⁵⁸

⁵³ T 130.

⁵⁴ T 126; Exhibit 4, Tab 1 and Tab 3.

⁵⁵ T 278.

⁵⁶ Exhibit 4, Tab 1 and Tab 3.

⁵⁷ Exhibit 4, Tab 3.

⁵⁸ Exhibit 4, Tab 3.

- **62.** By Sunday evening the fire crews had stopped the Merivale fire from travelling further north.⁵⁹
- **63.** Both the Cascades fire and the Merivale fire were still under the control of the local government at this stage, with DFES and DPaW staff providing support and guidance. They had moved to the DFES office at this stage to provide logistics and planning support.⁶⁰
- 64. Looking more specifically at the DPaW role up until this time, I turn to the evidence of Gregory Mair (Mr Mair). Mr Mair is the Regional Manager for the South Coast region of the Department of Biodiversity, Conservation and Attractions. Mr Mair was the Regional Duty Officer for the South Coast region at the time of the Esperance fires in November 2015, a role undertaken by different officers on a rolling weekly basis during the fire season. He was based in Albany. Mr Mair had received a report of a lightning strike fire in Two Peoples Bay Nature Reserve on 14 November 2015 and he dispatched a DPaW officer to investigate. Some smoke was seen in the area and then it appeared the fire was extinguished by rain.⁶¹
- The following day, being Sunday, 15 November 2015, Mr Mair made arrangements with the DPaW Albany based fires spotter aircraft to take a flight to see if any other fires had arisen from the electrical storm. At about that time, there was notice given that a fire had started in Torndirrup National Park, so Mr Mair had to start mobilising resources to respond to that fire. Mr Rose was the principal DPaW Esperance point of contact, so Mr Mair was working with him to make the appropriate arrangements. Mr Rose advised that there was a report of a fire in the West Cascades area and DPaW were then asked to send a light unit to help out, which was done. This was not the fire that became the Cascades fire, but either the earlier fire Mr Carmody dealt with, or another one in the same area. 62 More fires continued to be identified over the next day or so and DPaW staff began to assist. Some of them were fires near Albany and some were in the Esperance region. In the Esperance area, DPaW staff were in effect providing support to the Shire volunteers and DFES staff. In particular, as noted above, DPaW staff were helping on the ground with the Merivale fire.
- 66. Over this time, the DPaW water bombers based in Albany were used constantly to assist in the containment of the bushfires near Albany. Interestingly, they were apparently not supposed to have started fire duties in Albany until 1 December 2015, but they were in the area for a royal visit, and were therefore available for use. 4 Mr Mair did not recall receiving any request for water bombers from DFES in Esperance over this time, and enquiries he made after the event established that, according to DPaW records, the first request came through on the morning of Wednesday,

⁵⁹ Exhibit 4, Tab 3.

⁶⁰ Exhibit 4, Tab 3.

⁶¹ T 446~447.

⁶² T 448~449.

⁶³ Exhibit 6, Tab 2 [23].

 $^{^{64}}$ T 452

18 November 2015, after which the water bombers were subsequently deployed to Esperance.⁶⁵

MONDAY, 16 NOVEMBER 2015

- Operations Centre, was a total of 15 'fires of note' burning by Monday, 16 November 2015, 8 of which were in the Great Southern, and in particular, 2 of which were burning in Esperance. There were also a large number of less significant fires burning, bringing it to a total of about 91 fires of some level burning. This was all occurring prior to the recognised bushfire season. Because the weather forecast predicted adverse fire weather conditions, DFES had put in place 41 total fire bans throughout local government districts in the South West Land Division, and had established strike teams in the Perth metropolitan area in anticipation that they would be needed to go out to country regions.
- 68. Mr Carmody went back up in the air in his plane at 7.00 am on Monday, 16 November 2015. He took photos of the Cascades fire and it appeared almost completely subdued, with just one remaining spot fire. Mr Carmody said he felt relieved and believed it would be possible to contain the remaining fire by continuing with the original plan and adding to it the additional two strategies.⁶⁹



This photograph taken by Mr Carmody from his plane at 7.00 am on Monday, 16 November 2015, depicts the Cascades fire

⁶⁵ Exhibit 6, Tab 2.

⁶⁶ T 507.

⁶⁷ T 508.

⁶⁸ T 508.

⁶⁹ T 126; Exhibit 4, Tab 1.

- 69. He intended to send out Smalley's bulldozer to track close to the fire, cutting off its fuel. The difficulty with implementing the plan to track the fire, was that there are no access roads into the area, so a bulldozer had to make a long track, between 15 km to 18 km, after leaving the end of the road. Mr Carmody noted bulldozers are slow machines that can travel as little as one km an hour in very heavy timber, so it was obvious it would take many hours for a bulldozer to get there. The area around the salt lakes is also boggy and treacherous, so the bulldozer was not going to be able to take a straight path, which could cause further delay.⁷⁰ In addition, Mr Carmody was very aware that he would be sending people and machinery out into what is known as the 'dead man zone' as there is no escape route, so he was still hoping for some aerial support in the form of water bombers, for their safety.⁷¹
- **70.** To implement the second strategy, Mr Carmody was expecting two more bulldozers and a chain, organised by Mr Wornes, to be delivered to the fire scene that morning at around 8.00 am, so he sent Smalley's bulldozer out to track the fire. However, although Mr Wornes had organised the chain to be delivered at 8.00 am, he was not expecting the dozers and operators until the early afternoon (although he asked them to start as early as possible).⁷²
- 71. Lindsay Burnett (Mr Burnett) owns a local bulldozing company in Esperance and has two decades of experience fighting fires with heavy machinery. Mr Burnett had received a call from Mr Wornes on the morning of Sunday, 15 November 2015, informing him of the Cascades fire and asking if he was available with his bulldozer if needed. Mr Burnett indicated he was, and his father also had a bulldozer available if needed. Mr Wornes rang him back that afternoon to confirm they would need his assistance with the fire the following day. Mr Burnett advised he had a mechanical problem with the fuel transfer pump but was having a part couriered down that night, so he was hopeful he'd be ready to go on Monday morning.⁷³
- 72. The pump was couriered on time and fitted and Mr Burnett was ready to go, as planned, on the Monday morning. He received a call from Mr Wornes that morning and Mr Burnett told him he was ready to go. Mr Burnett was informed he would be hooking onto a chain and reworking firebreaks with Smalley's bulldozer. Mr Burnett suggested that Smalley's machine be utilised to track the fire and his father could bring his bulldozer so they could execute the chaining together. Mr Wornes agreed and, although no timeframe was discussed, Mr Burnett understood they were required as soon as possible. However, there was clearly a misunderstanding as to Mr Carmody's expectations and Mr Wornes and Mr Burnett's understanding as to what had been arranged, as Mr Carmody was expecting them to arrive hours before they eventually did.⁷⁴

⁷⁰ T 124~125.

⁷¹ T 130~131.

⁷² Exhibit 4, Tab 3.

⁷³ Exhibit 3, Tab 4.

⁷⁴ Exhibit 3, Tab 4; Exhibit 4, Tab 1.

- 73. During the morning, Mr Carmody was feeling disappointed and frustrated as things were "just not happening". The did his best to source alternative resources, such as getting an anchor chain from his own property. However, there was no sign of the additional bulldozers. Mr Carmody requested an estimated time for the additional bulldozers' arrival. It was at this time he was told they would not arrive until approximately 1.00 pm to 2.00 pm. After receiving this information, Mr Carmody sourced private machinery from local farmers, obtaining a loader and a tractor. They were not as suitable for clearing bush as they did not have protective shields, but Mr Carmody was mindful of the delay and wanted to make some progress in case conditions deteriorated. The two alternative machines began pulling the chain not long after 11.00 am on farmland at the corner of Ned's Corner Road, tracking along Pyramid Road. Mr Carmody was satisfied now that things were happening, even if it was not ideal. The weather conditions were still relatively mild at this time. The weather conditions were still relatively mild at this time.
- 74. It was apparent to everyone that it was imperative that the Cascades fire and Merivale fire be contained before the weather change predicted for the following day. During the morning, Mr Wornes said he requested additional resources and water bombers from Mr Parsons in Albany, who said he would make enquiries.⁷⁷
- 75. Mr Parsons explained that this request was relayed to the State Operations Centre where several staff from DFES and DPaW operate the 'air desk' where decisions on where aircraft are tasked are made. Fixed wing aircraft are managed by DPaW, who have two aeroplanes stationed in Albany, so he also contacted the local DPaW office. Mr Parsons made this request several times and on every occasion the response was that every asset they had was already being used or utilised and there was no aircraft that could be sent to Esperance. The two planes that were stationed in Albany were working for DPaW at two fires that had started at the same time.
- 76. There was a discussion at the DFES office about the possibility that the fires might become a Level 2 incident, with DFES or DPaW taking over from the Shire, and Mr Wornes drew up on a whiteboard a plan of what the IMT would look like if that occurred. It included Mr Wornes as the Incident Controller.⁸⁰ It appears from other evidence that this led to some confusion as some people who came to the DFES office saw this and assumed it was already activated.
- 77. In the meantime, Mr Burnett was trying to bring over his bulldozers, but only one bulldozer could be transported at a time, so it took some time to get them there. They delivered the first machine to Pyramid Road, Cascades at about 1.00 pm. One of the earlier machines had broken by this time, after a stick flicked up and broke the hydraulic line, so the chaining had stopped. There was some discussion about someone using Mr Burnett's machine

⁷⁵ T 135.

⁷⁶ T 135; Exhibit 3, Tab 4.

⁷⁷ Exhibit 4, Tab 3.

⁷⁸ T 341.

⁷⁹ T 346.

⁸⁰ Exhibit 4, Tab 3.

while he went to get the other bulldozer, but he was not comfortable with this option as he had only just replaced a part. Therefore, all chaining had to stop until Mr Burnett collected the other bulldozer. Mr Burnett and his father then left to collect the second bulldozer, not returning until after 4.00 pm.⁸¹

- 78. As far as Mr Carmody was concerned, this plan had now failed as a result of the delays, because they had not been able to conduct the back burning that he had been hoping to complete. "Logistically [they] had run out of time."82 In Mr Carmody's mind, this is when the need for water bombers became greater. They would not be able to extinguish the fire, but might have been able to subdue and delay it and slow the run of the fire, which would have bought them some time until the evening cool change came.⁸³
- 79. As the Deputy Senior FCO Mr Carmody was monitoring the predicted weather and was aware that there was a predicted wind change and that Tuesday was going to be a bad day with a high Fire Danger Index. At this stage, Mr Carmody considered that the plan to track the fire had become critical to reduce the size of the fire that they were now expecting.
- **80.** In addition, the third strategy had been implemented, involving creating the containment lines on farmland. With the failure of the strategy of creating a chained firebreak, this strategy of harvesting and ploughing the fields was also now critical, given the chained firebreak wasn't going to be completed.⁸⁴
- 81. At about midday, Mr Carmody decided he needed to go up and conduct further aerial reconnaissance. The helicopter had not yet arrived, so he went up in a private aircraft flown by another farmer so that he could concentrate. From the air, Mr Carmody could see that the plan to track the fire was also now under threat because the fire activity had increased and there were numerous different hotspots. Mr Carmody could see with the wind blowing towards Lake Mends that it would have been an ideal time to back burn, but unfortunately due to the issues with the bulldozers they had not reached the stage where that was possible. They were aware that the wind direction was going to change and increase in strength the following day, but Mr Carmody still didn't feel that the situation was hopeless as they had fought fires in the past in strong winds and been able to control it on farmland. He also still had some hope that water bombers might come in to assist. 87
- 82. While in the air, Mr Carmody was told the helicopter was on the way with Dave Turnbull, a DPaW officer, on-board, so he transferred into the helicopter in the early afternoon and returned to the fire site at about 2.00 pm.⁸⁸ Mr Carmody could see the tracking crew, comprising a dozer,

⁸¹ T 136, 139; Exhibit 3, Tab 4; Exhibit 4, Tab 1.

⁸² Exhibit 4, Tab 1 [154].

⁸³ T 137.

⁸⁴ Exhibit 4, Tab 1 and Tab 3.

⁸⁵ T 136.

⁸⁶ T 136~137.

⁸⁷ T 137.

⁸⁸ Exhibit 4, Tab 1.

grader and two fire safety crews, were deep into the bush, but they had not made as much progress as he needed. They were about five hours short of their target location at that stage. Mr Carmody could also see from the air that they had overshot one of their target tracks to get them into the fire. Mr Carmody spoke to Mr Turnbull and they discussed the operations in progress. Mr Carmody mentioned at that stage that he wanted a 'harvest ban' initiated from midnight. Mr Carmody explained that he wanted to make sure that they had crews that would be available in the area to help them and if people weren't harvesting, they were more likely to be available.⁸⁹

- 83. Mr Carmody returned to the ground and then drove in one of his own vehicles to get to the tracking crew and directed them to turn around and head back to the correct turning point, which obviously slowed them down further. 90 As Mr Carmody put it, "we were just running out of luck in every sort of single spot that we had." 91
- At 2.40 pm on the Monday afternoon Mr Wornes was advised that water bombers were not available as they were being used in Albany. About an hour earlier, Area Officer Damien Buswell (Mr Buswell), had arrived at the DFES office. He was the only additional resource Mr Wornes received on that day in response to his request. 92 Mr Parsons explained that there were approximately 40 fires burning across the state at the time and the DFES resources were well and truly stretched at the time. On the Sunday night he had already agreed to send some staff to Narrogin to assist in forming a Level 2 incident IMT to manage a large fire burning in Boddington. Mr Parsons said there wasn't a lot of good information coming from that area, and there were a lot of other fires burning in the area, so sending staff there to help was considered a priority. Those staff left for Narrogin on the Monday morning, with the hope they might return in time to go to Esperance and assist on the Tuesday when the weather was predicted to deteriorate. The only available staff member who could then be sent immediately, was Mr Buswell.93
- **85.** In the meantime, Mr Burnett and his father unloaded their second vehicle at about 4.00 pm and then commenced chaining. They noted that all the firebreaks they chained over the next few days appeared to not have been maintained for a few years as there was a large amount of growth.⁹⁴
- 86. Mr Carmody went back up in the helicopter with Tom Brown (Mr Brown), the Chief Bushfire Control Officer and another Deputy FCO later in the afternoon. They flew over the Cascades fire and saw that the tracking crew had not made great progress down the track. They landed on the edge of the salt lake and then the driver of the bulldozer, Paul Carmody, went up with his brother Mr Carmody in the helicopter to try and get a good

⁸⁹ T 141; Exhibit 4, Tab 1.

⁹⁰ Exhibit 4, Tab 1.

⁹¹ T 140.

⁹² Exhibit 4, Tab 3 [170], [184].

⁹³ T 341~343.

⁹⁴ Exhibit 3, Tab 4.

understanding of the location and what needed to be done to try and tie the fire in. Brian Welke also went up with them.⁹⁵

- 87. After they landed, they discussed the plan further with Mr Brown and indicated they believed they would be able to round up the south western side of the fire but didn't think they could get to the south eastern side as it was too far and there was not enough daylight left. They then left Paul Carmody to go about his work and returned to the Forward Control point. Mr Brown discussed with Mr Carmody the other aspect of the plan, with the two bulldozers chaining down the strip of bush between the vacant crown land and the farmland to reduce the fuel loading and flame height and prevent "hop overs." 96
- 88. At this stage, Mr Carmody was suggesting that the West Zones One and Two should be put under a harvest and machinery vehicle movement ban for the morning of Tuesday, 17 November 2015. This would limit any extra risk to persons within that zone and free up people to come help fight the fire. After further discussion, Mr Carmody eventually agreed to wait and reassess the need for a ban at 7.00 am the next morning.⁹⁷
- **89.** Mr Brown then left Mr Carmody and flew over to the Merivale fire at about 4.30 pm. The helicopter pilot mapped the area of the fire so that the DFES office would have an update on the size of it in order to determine whether it had grown significantly. They could see from the air that an enormous amount of work had been done to construct containment lines but noted the terrain they were dealing with was very difficult to traverse. The helicopter then returned to town and Mr Brown returned to the DFES Office.
- 90. Back at the DFES Office, Mr Brown and Mr Wornes discussed the next day's forecast and noted that catastrophic fire conditions were forecast. They understood that, based on the forecast, "if a person was out in open space area and the fire and flames progressed at speed in the conditions given, they would not survive." They discussed the validity of the forecast, as it was not the normal weather pattern for the Shire, but acknowledged that the weather that year had been so unusual that reliance on local knowledge was unlikely to be helpful. 100
- 91. They discussed how to contain the two main fires and noted that it would be impossible to track the edge of the Merivale fire due to the terrain and associated risk to firefighters going into these areas. It was felt the only effective way to handle this area was by using water bombers. Mr Wornes advised he had tried to source water bombers but they were unavailable as they were being used elsewhere. 101 There was a concern that under the predicted weather conditions the fire would push towards the Stockyard Creek Community and then on towards Cape Le Grand National Park. This

⁹⁵ Exhibit 3, Tab 1.

⁹⁶ Exhibit 3, Tab 1 [121]~[122].

⁹⁷ Exhibit 3, Tab 1.

⁹⁸ Exhibit 3, Tab 1.

⁹⁹ Exhibit 1, Tab 1 [141].

¹⁰⁰ Exhibit 3, Tab 1.

¹⁰¹ Exhibit 3, Tab 1.

had led to a decision to close the beach from Wylie Bay to Cape Le Grand that afternoon.¹⁰²

- control of the fire. Both fires were still Level 1 at this stage, so would ordinarily be Shire controlled and the Shire would utilise its own resources and then could be reimbursed by DFES. Mr Wornes suggested that if the State took control, they would be able to cover the cost more easily. Mr Brown was not unhappy with this proposal. There was a discussion about the necessary paperwork to complete a Section 13 *Bush Fires Act 1954* Notice to allow DFES had taken control, and Mr Brown then left it with Mr Wornes. Mr Brown understood his primary role was then to consider a harvest ban being issued the following day. When he left the office, Mr Brown was under the belief he had handed over the role of Incident Controller to DFES on behalf of the Shire, although he had not signed any paperwork to this effect. This was not Mr Wornes' understanding, as he knew it was still a local government managed fire.
- 93. Mr Wornes also indicated that he and Mr Brown had different views in relation to the priority of the fires at that time. Mr Wornes believed that the Merivale Fire was the priority as it had the potential to threaten more lives due to its proximity to the Esperance town site (roughly 20 km away)¹⁰⁵ and private property, the higher population in the area, and the possibility it could involve tourists. Whereas at that time, Mr Wornes thought if the Cascades fire broke out, it would be more of a threat to pastoral lands and crops, although he still had concerns in relation to both fires if they broke containment lines. Mr Brown, on the other hand, was of the view that the Cascades fire was the greater risk. ¹⁰⁶ Mr Wornes indicated in his evidence that he thought this difference of opinion was "quite healthy" because it helped them to weigh up the elements of risk of both fires.
- **94.** After Mr Brown left the DFES office, Mr Wornes rang his superior, Mr Parsons. Mr Wornes had been ringing Mr Parsons throughout the day requesting aerial water bombers and support personnel to assist with mapping, air intelligence, planning, logistics and administration. In this call, Mr Wornes raised his concerns about the fire continuing to be a local government fire, and the need for a harvest, machinery and vehicle movement ban the following day. In Internation 109
- **95.** Doorknocking had begun in the Merivale area on the Monday to talk to people early about possible evacuations.¹¹⁰

¹⁰² Exhibit 4, Tab 3.

¹⁰³ Exhibit 3, Tab 1.

¹⁰⁴ Exhibit 3, Tab 1 [178].

¹⁰⁵ T 360.

¹⁰⁶ Exhibit 4, Tab 3.

¹⁰⁷ T 300.

¹⁰⁸ T 302.

¹⁰⁹ Exhibit 4, Tab 3.

¹¹⁰ T 249

- 96. At between 5.00 pm and 6.00 pm on Monday, 16 November 2015 a bushfire developed in the Cape Arid National Park and there was also a threat that fire would enter the Cape Le Grand National Park. As these fires became larger and required a response, Mr Mair explained that DPaW staff and resources had to be diverted from the Cascades and Merivale fires to the fires in the national parks.¹¹¹
- 97. Mr Robert Blok, the DPaW District Manager of the Esperance District, was involved in the decision to withdraw DPaW staff and resources from fighting the Cascades and Merivale fires on the afternoon of Monday, 16 November 2015, after they received notification there were hotspots in the Cape Arid National Park near Mount Ragged and also in the Dundas zone Nature Reserve. In total, he advised there were four DPaW staff withdrawn and one heavy duty tanker.¹¹²
- 98. At 6.00 pm Ms Collins sent out a text message to arrange a scheduled radio call for all fire control officers and pastoralists the following morning at 7.00 am so Mr Brown could discuss the fires and implementing a harvest ban. Mr Brown did have a discussion with Mr Wornes around this time about paperwork, but Mr Wornes didn't understand that Mr Brown was asking about the s 13 Notice paperwork.¹¹³
- **99.** The local Scaddan Bush Fire Brigade were put on notice to be on standby, in case they were needed the following day. The members included Kym Curnow, who was put on notice by their local Senior FCO, Mr Gavin Egan. They were called into action the following morning, as anticipated. 114
- **100.** By 7.00 pm Mr Burnett and his father had chained a firebreak approximately 100 metres wide in the designated area. They stopped at 7.00 pm due to low light and planned to return at 7.00 am the following day to recommence work. They rang Mr Wornes on the way home and made a plan for the following day. 115
- 101. Very late in the evening, at around 11.00 pm, Mr Carmody delivered some refreshments to the tracking crew. They had reached as far as they could that day. They reported experiencing several issues, including getting severely bogged with the grader in the salt lake and the increasingly poor visibility had almost led the bulldozer to fall off a drop-off. Nevertheless, they had made good progress and had successfully got around a fair portion of the fire. They decided to conclude for the evening and made a plan to return at 8.00 am the following day. The left the heavy machinery there and drove out in the fire trucks. Mr Carmody again went home around midnight. 117

¹¹¹ T 451.

¹¹² T 469~470.

¹¹³ Exhibit 4, Tab 3.

¹¹⁴ Exhibit 3, Tab 5.

¹¹⁵ Exhibit 3, Tab 4.

¹¹⁶ T 145.

¹¹⁷ Exhibit 4, Tab 1.



This photo shows the fire in the distance on Monday, 16 November 2015

THE MORNING OF TUESDAY, 17 NOVEMBER 2015

102. At about 6.15 am on the morning of Tuesday, 17 November 2015, Mr Brown rang Mr Carmody. Mr Carmody was again in the process of flying his own plane in the air at that time in order to check on the progress of the bulldozers. Mr Carmody believed the bulldozers had done an amazing job but noted that they had to backtrack to pick up two hot spots that remained.



This photo taken by Mr Carmody as he flew over on Tuesday, 17 November 2015 in the morning

- 103. Mr Carmody was intending to send the bulldozers on to do a frontal attack on the uncontrolled south eastern edge of the Cascades fire when they had completed their mitigation work. The weather was still mild and fire activity was pretty low at this time and Mr Carmody was optimistic that there was still time to complete this before the weather changed. Mr Carmody noted that it would have been an ideal time to complete water bombing, if they had had that resource available, as they could perhaps have dropped some sort of fire retardant on the spot fires to delay their growth. Nevertheless, Mr Carmody understood from his conversations with Mr Wornes that there was a low likelihood they would get aircraft, so he continued to plan on the basis they would not be getting aerial support¹¹⁸
- **104.** Mr Carmody noted that at this stage the fire was still classified as a Level 1, although he believed it properly met the criteria for a Level 2 classification from Sunday night as it was protracted, involved multiple agencies and was going to affect infrastructure and million dollar crops. 119
- 105. Mr Carmody asked that a harvest and vehicle/machinery movement ban be instigated again. Mr Brown (who makes the ultimate decision about a harvest ban as the Chief FCO)¹²⁰ agreed, and it was put in place in the West Zone by 8.00 am, although not in other parts of the Shire. The information is distributed by text message via a Shire software programme.¹²¹ The weather around this time was 22 degrees, with a relative humidity of 52% and wind 10km/hr from the East/North East. During the morning the weather conditions remained mild, although the temperature began to increase, and the fire activity was low. Mr Carmody hoped that perhaps the bad forecast weather might not even turn up, although he was keeping it closely monitored.¹²²
- 106. Mr Carmody had already sent the tracking crew, including his brother Paul Carmody, back to continue their task out at the fire front. Mr Carmody gave evidence that he had told the crew they were going out into a very dangerous area and there was no way they could be rescued or extracted so if they were uncomfortable, they could choose not to go, but they agreed to go in the full awareness of the risk they were taking in the hope of making the fire front smaller when it came out onto farmland. This might give them some chance of getting around the fire when the weather was at its worst in the afternoon. 123
- 107. The Burnetts had returned to their site at about 7.00 am to continue chaining. They received a briefing from Will Carmody at about 8.00 am. He traced a route on a map that he thought the fire would take, which Mr Burnett recalled was exactly the route the fire eventually took later that day. The Burnetts continued chaining and were then moved by Mr Carmody to chain a different area on the east side of Ned's Corner Road in the 'Top Block' farmland. They were aware from radio calls that the fire was starting

¹¹⁸ T 147; Exhibit 3, Tab 1; Exhibit 4, Tab 1.

¹¹⁹ T 148~149.

¹²⁰ T 359.

¹²¹ Exhibit 3, Tab 1 [192].

¹²² T 1551; Exhibit 3, Tab 1; Exhibit 4, Tab 1.

¹²³ T 150~151.

to move at this stage. Other bulldozers were also working to clear sections by harvesting and ploughing in the stubble. 124

- 108. Also that morning, Mr Wornes, Ms Collins and Mr Buswell had attended the DFES office, and on this day they were joined by the Officer in Charge of the Esperance Police Station, Senior Sergeant Richard Moore. Mr Wornes indicated that at this point he felt they had become an IMT, although the fire remained run by the Shire and Mr Brown was therefore the Incident Controller, although he was not in the office. This does not seem to have been raised with Mr Brown, who thought he had already handed over control to DFES the night before. This became clearer later in the morning when the Shire of Esperance CEO, William Scott, arrived at the DFES office.
- 109. It became apparent early in the morning that the strategies in place for the Merivale fire were not working, the fire breaks had not been consolidated and it was too late to back burn. This was confirmed with Mr Wornes at just before 10.00 am and he decided to notify all people living east of the Merivale fire to evacuate their properties. DFES alerts were issued. 126 DPaW officers were busy evacuating the Cape Le Grand campsite due to the fire over there. 127
- 110. Also at around 10.00 am, Paul Carmody, who was out tracking the Cascades fire, made a radio call to his brother Mr Carmody. From the conversation, Mr Carmody interpreted that the wind had picked up dramatically and the fire had escalated. They had to make a decision to stop what they were doing and clear a patch to create a safe area for themselves from the fire and take refuge in the truck. It was apparent they were marooned and were going to be unable to continue their work. Paul Carmody advised that the fire was now 'crowning' the trees, which means the fire was jumping across the top of the trees rather than being low on the ground in the bush.
- 111. When a fire starts to crown it can result in fireballs sitting at 6 to 10 metres in the air and the embers can be blown and carried by the wind up to a kilometre away, so Mr Carmody was very concerned. 128 It was later indicated that Paul Carmody and the rest of the tracking crew had to spend 90 minutes sheltering in the relative safety of the fire truck before they could evacuate out because of the intensity of the fire. 129

¹²⁴ Exhibit 3, Tab 4; Exhibit 4, Tab 1.

¹²⁵ Exhibit 4, Tab 3.

¹²⁶ Exhibit 4, Tab 3.

¹²⁷ Exhibit 4, Tab 3.

¹²⁸ T 155~156.

¹²⁹ T 157~159.



The above photo depicts the grader clearing the bush with the fire in the background as explained in Mr Carmody's evidence

- 112. This change in the weather had not yet reached the command post and the information caused Mr Carmody to become worried. He rang Mr Wornes and asked him to check the radar and look at the wind as normally, if they were going to have a catastrophic day, the strong wind would come early in the morning. Instead, on this day they had an extremely unusual weather pattern, and Mr Carmody said there was something 'eerie' about it, so he was feeling pretty nervous. 130 Mr Wornes made enquiries and established that weather conditions were changing in other areas, indicating the wind would soon affect the Lake Mends area. 131
- 113. Nevertheless, the other firebreaks had been progressing, so Mr Carmody was still optimistic that their strategies might be effective and they could defend the farmland and stop the fire. The general understanding from the weather forecast was that the worst weather conditions were going to be at 3.00 pm. Mr Carmody anticipated the fire would come out to the firebreak and they could fight it there. However, in the meantime, Mr Carmody took steps to prepare an evacuation plan and signpost evacuation points around the command post. 132
- 114. Mr Brown, who was harvesting on his farm, asked Ms Collins to inform him when the predicted wind change occurred at the Lake King automatic weather station. She telephoned him at about 11.20 am when this occurred and also told him that the DFES Office wanted to put in place a harvest ban.

¹³⁰ T 151~154.

¹³¹ Exhibit 4, Tab 3.

¹³² T 152, 159; Exhibit 4, Tab 1.

The weather conditions were worsening at this stage. Mr Brown agreed and asked Ms Collins to send out a text message to initiate the ban from 11.45 am, which would give people a small amount of time to get out of the paddocks. The Esperance Shire issued a total harvest vehicle movement ban for the Shire at 11.45 am on Tuesday, 17 November 2015. The Esperance Shire issued a total harvest vehicle movement ban for the Shire at 11.45 am on Tuesday, 17 November 2015.

- 115. As mentioned earlier, there was some confusion about who was in charge of the fire at this stage. The Shire CEO, Mr Scott, gave evidence that, in his experience, the Shire manages Level 1 fires quite well, but when it starts escalating to a Level 2 or 3 fire, the Shire staff will usually try to look at handing it over to one of the other agencies that have better resources. 135 As the Cascades and Merivale fires were becoming larger, he had formed a major concern about the capacity of the Shire to manage the fires. 136
- 116. After attending what he described as "a fairly bleak briefing" 137 at the DFES office at about 11.00 am, Mr Scott said he had pulled Mr Wornes aside to have a discussion about who was in control of the fire. Mr Scott indicated Mr Brown had given him the impression that Mr Brown had handed control of the fire over to DFES the night before. Mr Wornes said this was not his understanding. 138
- 117. Mr Scott than rang Mr Brown to ask about whether there had been a formal handover of the fire to DFES. He told Mr Brown he had received information at the DFES office to suggest otherwise. Mr Brown was surprised by the question as he thought this had occurred the previous afternoon. He advised Mr Scott of his belief DFES was managing the fire. Mr Brown returned to his shed and rang Mr Wornes at the DFES Office while Mr Scott also approached Mr Wornes. Mr Wornes advised that management of the fire had not been handed over to DFES, so Mr Scott asked what he needed to do to make this happen. Mr Wornes advised Mr Scott the verbal request was sufficient and he would make the necessary arrangements. 140
- 118. At about midday on 17 November 2015 a meeting was held at the Esperance DFES office, which was now the Incident Control Centre, and Mr Wornes advised those attending that the fires were now declared a Level 2 and he was the Incident Controller. At 12.30 pm a Section 13 Bush Fires Act 1954 form was signed which allowed DFES to become the Controlling Fire Agency. The Shire was still actively assisting, but the overall management of the fire now rested with DFES. The IMT changed at this time and Mr Wornes became the Incident Controller, with other people taking on various roles. Mr Carmody was designated the Divisional Commander for the Cascades Fire, but in a practical sense his role didn't really change. 143

¹³³ Exhibit 3, Tab 1.

¹³⁴ Exhibit 3, Tab 1.

¹³⁵ T 354.

¹³⁶ T 361.

¹³⁷ T 361.

¹³⁸ T 361-362; Exhibit 4, Tab 3.

¹³⁹ Exhibit 3, Tab 2A.

¹⁴⁰ Exhibit 3, Tab 2A.

¹⁴¹ Exhibit 2, Tab 16 [10].

¹⁴² Exhibit 1, Tab 2; Exhibit 4, Tab 3.

¹⁴³ Exhibit 4, Tab 3.

- 11.52 am and took a series of photographs until 12.14 pm. Mr Carmody could see that the fire area had now "gone extreme" and the wind had picked up dramatically and was buffeting the helicopter, consistent with Paul Carmody's earlier observations. Mr Carmody could not ascertain where the wind had come from, but said it was as if it "just fell out of the sky." Flames were blasting the bush and Mr Carmody could see the fire was "coming out very hard." 146
- **120.** Mr Carmody flew over the group tracking the fire and saw how they had bulldozed a 'pad' to create a safe zone for themselves. They appeared to Mr Carmody to be safe, but effectively cut off. He considered in the worst case scenario, they should be able to helicopter the people out to safety, leaving the equipment behind.¹⁴⁷
- 121. Mr Carmody could see near the tracking crew where the fire had jumped a salt lake of approximately 250 metres in length, dashing his hopes that the natural layout of the land might contain some of the fire. As it was jumping over lakes 250 metres wide, it was apparent the 200 metre firebreaks that had been chained weren't going to stop the fire. Hr Carmody said he could tell at the time that, "Nothing on earth is going to stop it." The fire by this stage was estimated to be travelling at between 11 to 12 km/hr as it was coming out of the bush and there were flames reaching 40 metres high. Hr Carmody explained that when the fire hit the farmland, its speed would increase further as it burned through the crops. He fire hit the farmland, its speed would increase further as it burned through the crops.
- **122.** Mr Carmody radioed this information back to the Command Post and ordered an immediate evacuation of the Incident Control Van (ICV) and all staff to a prearranged fall back point near a dam.¹⁵²
- **123.** Mr Carmody directed all the bulldozers on the farmland to stop chaining and retreat to the fall back evacuation point also. Mr Carmody then landed at that fall back site and noted you could now see the flames from the ICV in this new location, so Mr Carmody directed a further evacuation to Fields Road. 153

¹⁴⁴ Exhibit 4, Tab 1 [234].

¹⁴⁵ T 161.

¹⁴⁶ T 161.

¹⁴⁷ Exhibit 4, Tab 1.

¹⁴⁸ T 163.

¹⁴⁹ T 162.

¹⁵⁰ T 163.

¹⁵¹ T 164.

¹⁵² Exhibit 4, Tab 1.

¹⁵³ Exhibit 4, Tab 1.



The above photo depicts the fire in the background as bulldozers clear fire breaks

- **124.** At this time the helicopter was withdrawn from assisting them and sent to help with the Merivale fire.¹⁵⁴
- 125. At 12.37 pm Mr Wornes received updated weather information from the Bureau of Meteorology indicating they could expect 90 km/hr winds until 5.00 pm. This indicated that containment of the fires would be extremely difficult. Mr Wornes stated that as a result of this information, his objectives changed to protection of life only, including the welfare of the fire fighters and public. 155
- 126. Mr Carmody was experiencing communication issues due to problems with the radio network and an inability to get the satellite phone in the ICV to work, but he received a radio call from Ms Collins at 12.45 pm. She advised that the spot weather forecast had changed and what was initially predicted to be, at most, 60 km/hr winds, were now forecast to be 90 to 100 km/hr wind gusts. This information matched what Mr Carmody could see with his own eyes. It was apparent the wind had escalated dramatically and the conditions were like a "blowtorch." Mr Carmody gave evidence he had never seen a fire like it and knew they had no chance of being able to fight it. 157
- 127. Mr Carmody told Ms Collins they had lost control of the fire and were going to evacuate to Neds Corner Road or Grass Patch Road. They left at about 1.00 pm in a convoy of 20 vehicles, with scouts going ahead to make sure the way was safe. They stopped on the way at various properties to ensure local residents had evacuated. 158

¹⁵⁴ Exhibit 4, Tab 1.

¹⁵⁵ Exhibit 4, Tab 3 [280].

¹⁵⁶ T 168.

¹⁵⁷ T 168.

¹⁵⁸ T 167 ~ 169; Exhibit 4, Tab 1.

- 128. At the same time, the Merivale fire had broken its containment lines on the eastern boundary and this impacted the Stockyard Creek settlement and Cape Le Grand National Park. It was believed the areas had largely been evacuated, so Mr Wornes advised the Divisional Commander, Tom Parkins, to pull out all crews and protect firefighters' lives. There were issues with tourist buses trying to get in to the National Park at this time, as a cruise ship had docked in town, so steps had to be taken to impose road closures. 159
- 1.03 pm showing that the fire was in the 'Top Block' farmland and had broken the containment lines. Mr Burnett could see that the fire head had gone at this point and with the weather conditions, none of the work they had done would stop it.¹⁶⁰



The above aerial photograph depicts the front of the fire having broken the containment lines

130. Weather conditions recorded around this time showed a wind velocity of 101 km/hr, temperature of 43.2°C and 0.8% relative humidity. In Mr Carmody's experience, he had never seen conditions like this with a fire raging, and after the fact he came to understand that they were the most extreme fire conditions recorded in Australia to this date. The prediction for catastrophic fire conditions had been fulfilled. Mr Carmody described it as an "absolute disaster," which had led to the command post team now being in a fleeing situation.

¹⁵⁹ Exhibit 4, Tab 3.

¹⁶⁰ Exhibit 3, Tab 4.

¹⁶¹ Exhibit 4, Tab 1.

¹⁶² T 170.

- evacuating, and were told about others who had remained to defend property and had probably become trapped. The sole focus of the firefighters at this time was to protect lives rather than try to stop and defend property. Mr Carmody had calculated that the fire front was now moving at up to 15 km/hr and they were trying to stay in front of the fire. Mr Carmody had grave concerns for anyone who had not evacuated, but it was not safe to send any of the fire crews back to help them. They advised members of the public not to attempt it themselves or they would be killed. It was obvious when Mr Carmody gave evidence in court how distressing this must have been for all the firefighters, who desperately wanted to go and help people but knew that there was no way they could safely get to them.
- **132.** Eventually the convoy made its way to its new location at the intersection of Grass Patch Road and Ned's Corner Road, after taking the long way round due to the possibility the fire might block their path. The new location was selected in part for its communication suitability, but even there they experienced intermittent phone reception. ¹⁶⁵
- 133. Mr Brown had driven in to the DFES Office at about 1.30 pm. Mr Brown was asked to go out in a helicopter and carry out observations on the Merivale fire. He went up in the air with the pilot for about 45 minutes and noted that the temperatures gauge recorded 39 degrees, although it felt much hotter inside the cabin. The head of the fire was running at a very fast rate at that time and Mr Brown could see people actively engaged in trying to save their houses. They could also see the evacuation of the Cape Le Grand National Park. 166
- **134.** They flew on to the Merivale fire to locate the bulldozer and found it bogged near the containment line on the western end of the fire. Volunteer fire fighters rescued the driver just in time, but couldn't save the bulldozer, which was overrun by fire. ¹⁶⁷
- 135. Mr Brown received a call while up in the helicopter telling him the fire had come out of the Cascades area and was travelling at astonishing speed, heading across the highway. Mr Brown could see the grey ball of smoke being generated by the fire whilst up in the helicopter, so he was not surprised by the call. After seeing the ball of smoke, Mr Brown "had a dreadful fear for all the people in the path of the fire." 168
- 136. The fire had run into farm land that contained mostly unharvested, cured crops, which were immediately ablaze. The fire front was estimated to be 5 km wide at its largest. As the bushfire travelled across the crops it was unstoppable, burning everything in its wake. The speed of the fire was amongst the highest ever recorded. The fire jumped all of the mitigation work

¹⁶³ T 169~172; Exhibit 4, Tab 1.

¹⁶⁴ T 171.

¹⁶⁵ T 169~170; Exhibit 4, Tab 1.

¹⁶⁶ Exhibit 3, Tab 1.

¹⁶⁷ Exhibit 3, Tab 1.

¹⁶⁸ Exhibit 3, Tab 1 [260].

and firebreaks, despite the efforts that had been put in to trying to contain the fire. The fire was also circling around and restarting after fire crews had doused it, which was unusual and made it even harder to fight.¹⁶⁹

- 137. At 2.15 pm Mr Wornes contacted Mr Parsons and again requested water bombers for the fires and additional personnel to assist with the IMT. Mr Parsons advised that four DFES personnel would fly from Perth to Esperance that evening. 170 There were still no water bombers available.
- 138. At 2.40 pm Mr Carmody received a 'WhatsApp' message from Mr Carmody containing two maps that indicated what he thought was the fire shape. Various methods were used to notify other people in the local area between Cascades and Scaddan to let them know they needed to evacuate as they were going to be in the fire's path.¹⁷¹ Mr Scott gave evidence that the Shire staff were concerned that some people may have not received the usual alerts on the radio and via websites and social media, so Shire staff went through the Shire's resident database and made attempts to personally telephone all residents in the relevant area as it was now too dangerous to conduct door knocking. The Shire President and Deputy Shire President were also using their own networks to get the information out into the community.¹⁷²
- **139.** That afternoon the town of Scaddan was evacuated. The bushfire travelled in a South-East direction approximately 66 km from the area of origin until it crossed Grigg Road in Scaddan, which is where the two vehicles came into its path. The fire later burnt through the Scaddan town site.¹⁷³
- 140. At about 3.00 pm the fire tracking crew that had been stuck called and advised the command post they had got out and were safe. They later made their way to the command post.¹⁷⁴ There was still no air support, so it was hard to have a clear picture of the fire, but Mr Carmody decided that on the basis of the information they had, they needed to try to 'shape' or 'slow' the fire, as it was too dangerous to try to directly attack it.¹⁷⁵ Mr Carmody was getting information from various sources in different areas, but could not get any intelligence about the north side of the fire. The fire was moving so fast in such a short time that he did not feel he had a good idea of the fire's location.¹⁷⁶
- 141. Between 3.00 pm and 4.00 pm Mr Campbell and Kym Curnow came to the ICV. Both were in their firefighting clothes. Mr Carmody decided to use them as fire scouts due to his limited communications and inability to ascertain the full shape of the fire. He gave them a general briefing and listened to their recommendations, as well as from other experienced volunteers, relying on their specific local knowledge. Kym Curnow and some others were

¹⁶⁹ T 181.

¹⁷⁰ Exhibit 4, Tab 3.

¹⁷¹ Exhibit 3, Tab 2A.

¹⁷² T 365, 368.

¹⁷³ Exhibit 1, Tab 2 and Exhibit 3, Tab 2A.

¹⁷⁴ T 179; Exhibit 4, Tab 1.

¹⁷⁵ Exhibit 1, Tab 4.

¹⁷⁶ Exhibit 1, Tab 4.

despatched towards their home station of Scaddan.¹⁷⁷ Mr Campbell realised that the best thing he could do was to go home and try to protect his property.¹⁷⁸

- by usual firefighting tactics, including with aircraft, and would only be slowed by a significant weather event. 179 Even with the limited information available due to the poor communications, Mr Carmody could see the scale of the fire was massive. It was difficult to establish a strategy to try to deal with all the issues and the danger areas that were arising. As well as the town of Scaddan being under threat, it became apparent that the towns of Salmon Gums and Grass Patch were also in imminent danger. Mr Carmody had to trust the Sector Commanders in the various areas were able to coordinate their particular vicinity as he was unable to communicate with them effectively and they had lost track of the location of the fire front. Mr Carmody described the radio communications at this stage as having fallen into 'disarray'. The only way he was able to get information was to send scouting vehicles forward, such as Kym Curnow's. 180
- **143.** Mr Carmody said his recollection of what was said was vague, but he believed he told Mr Curnow the fire was going into his territory and asked him to make sure it was clear and everyone in the area was safe. That was the last time Mr Carmody saw him. ¹⁸¹
- 144. By 4.00 to 5.00 pm Mr Carmody believed the fire was travelling at a rate of approximately 36 km/hr, and it was gaining pace at an extraordinary rate. He believes its speed may have reached close to 50 km/hr, which is 'unheard of'. Mr Carmody on the ground, and Mr Wornes back at the DFES office, were struggling to map the fire movement and predict where the fire would go due to its unprecedented speed and magnitude. Mr Wornes said the fire nearly tripled anything he had anticipated in terms of the distance it travelled and he was in disbelief and awe at its ferocity. The Cascades fire had jumped the Highway and the Merivale fire had crossed Cape Le Grand Road by this stage, and both fires were out of control. The Incident Control Centre was overloaded and the firefighters on the ground were trying to outrun the fire.
- 145. At this time, Mr Carmody said he was "in fear for my community, my friends." ¹⁸⁴ He believed at the time that up to three members of one local family may have died near Rollond Road and feared more lives could be lost. He was relieved to find out a bit later that the family had escaped the fire, but then found out the terrible news later that evening that Kym Curnow

¹⁷⁷ Exhibit 1, Tab 4.

¹⁷⁸ T 185.

¹⁷⁹ Exhibit 1, Tab 4 [340].

¹⁸⁰ T 183; Exhibit 1, Tab 4.

¹⁸¹ T 187.

¹⁸² T 193.

¹⁸³ T 316.

¹⁸⁴ T 184

was believed to have died. 185 He didn't hear about the other lives lost until the following day. 186

- 146. Mr Carmody said in evidence that he was deeply saddened that there had been four deaths. He expressed his condolences to the families of the deceased, acknowledging their loss, and said the deaths also continued to affect him. However, he also said he was grateful there had not been more deaths, as after the fire he has spoken to 40 other people who have identified themselves as being within seconds of death themselves. Mr Carmody noted that people had to be rescued from burning tractors and burnt firetrucks. Mr Carmody expressed his gratitude for the "absolute courage and bravery of all the firefighters on that day" 187 and he clearly believed that without their actions, many more lives may have been lost.
- 147. Mr Wornes found out about Kym Curnow's death, and the belief there had been up a number of fatalities, just before 8.00 pm. He was due to hold another incident support group meeting shortly after. He began the meeting with a report of the suspected fatalities and then was too distraught to continue and another DFES officer had to take over the meeting and as Incident Controller.¹⁸⁸
- 148. Like Mr Carmody, Mr Wornes also referred to his great sadness at the loss of lives in the Cascades fire, indicating that it "totally and utterly flattened" leave him. As Mr Wornes explained in his evidence, he had been involved in emergency services in Esperance for close to 20 years and felt that he had given his all to make the community safe with the primary object of preserving life; so to hear lives had been lost was devastating. He had actually heard initially that there were seven fatalities, and was too devastated at first to find out the details, so he lived with the belief even more lives had been lost for some time after. 190 It was apparent at the inquest that the four deaths still weighed heavily on Mr Wornes. At the end of his evidence he expressed his sincere personal condolences to the four families who lost their loved ones in the fire, as well as to all those affected directly and indirectly by the fires. Mr Wornes also expressed his personal thanks to the volunteers and everyone else he worked with over those fateful days to try to contain the spread of the fires. 191
- 149. I noted in questioning that it would have been a lonely job being the only full-time DFES staff member based in Esperance, and Mr Wornes agreed. He indicated that his two predecessors had both left due to being burnt out performing the role, which in effect requires the person to be on call 365 days a year. ¹⁹² I know that after these events Mr Wornes himself left the Esperance community to move to another state, no doubt in large part to the personal effect on him of these tragic events.

¹⁸⁵ T 195.

¹⁸⁶ T 199.

¹⁸⁷ T 236.

¹⁸⁸ Exhibit 4, Tab 3

¹⁸⁹ T 320.

¹⁹⁰ T 320.

¹⁹¹ T 339.

¹⁹² T 330

- **150.** Mr Parsons gave evidence that the possibility of having two full-time DFES staff based in Esperance had "been discussed across the region and the organisation for a long time" but was not in a position to comment on why it had not been implemented.
- 151. In submissions filed on behalf of DFES after the inquest, it was apparent that my comments had been considered by DFES and it was suggested that there was evidence to support an adjustment of the minimum fire operations personnel located within the DFES Esperance office from a single Area Officer to a minimum of:
 - one District Officer;
 - one Area Officer; and
 - one Bushfire Risk Management Officer. 194
- **152.** It was submitted that this change was justified on the basis of:
 - the geographical isolation of what is identified as moderate risk area, with the closest DFES staff four hours drive away in Kalgoorlie (assuming there is no bushfire crossing the Highway, as confronted DFES Superintendent Trevor Tasker (Superintendent Tasker) and which I address below from paragraph [190]);
 - the ratio of local government and Brigade groups and units per officer, which exceeds those of other areas in the South West region that cover a smaller geographical area; and
 - the need to manage the UCL risk in and around Esperance, which is the function that a Bushfire Risk Management Officer could specifically address.¹⁹⁵
- 153. I am appreciative of the fact that DFES management were willing to consider a concern I had raised so promptly, and show they were open to considering change for the better. I am satisfied that the change they have proposed is appropriate, and would go a long way to providing enhanced operational and training support to the volunteer Bush Fire Brigade members throughout the year, as well as critical immediate 'on the ground' local knowledge and support when a fire is burning in the Esperance region.
- 154. I note the DFES proposal is very similar to the proposed recommendation submitted on behalf of the United Professional Firefighters Union of Western Australia (Union), who suggested a Fire and Rescue District Officer, Fire and Rescue Area Officer and a Rural Area Officer would be appropriate. The Union highlighted personnel welfare and workloads all year round and emphasised the need for those positions to be fully relieved to ensure effective service delivery for the Esperance area 24 hours a day, 7 days a week. 196

¹⁹³ T 345

¹⁹⁴ Outline of Submissions on behalf of DFES, filed 15 May 2019 [14].

¹⁹⁵ Outline of Submissions on behalf of DFES, filed 15 May 2019 [14].

¹⁹⁶ United Professional Firefighters Union of Western Australia Closing Submissions and Recommendations, filed 14 May 2019.

- 155. In supplementary submissions, the Union confirmed that the proposal is not dissimilar to the proposal put forward by DFES, but explained that they believe there is an important difference between a Bushfire Risk Management Officer (BRMO) and an Area Officer with Rural Competencies. The Union explained that the BRMO position is a relatively new role that focusses on promotion, development and implementation of Bushfire Risk Management Plans. The Union submits this role is of more limited utility than an Area Officer with Rural Competencies role, as proposed by the Union. The Union noted that having two Area Officers would enable some relief for personnel in these positions and would provide more personnel with Level 2 Incident Controller qualifications to the region. Therefore, the Union suggested that a more appropriate recommendation would be to recommend both roles be added, with the emphasis on the additional Area Officer role if there is insufficient funding for both. In my view, there is utility in both roles being added, so I will make the recommendation as suggested. The Union's qualification as to the importance of one role over the other is duly noted here, for the benefit of the decision-makers.
- **156.** Although I cover a range of recommendations arising from the inquest at the conclusion of this finding, it is convenient to address this one here.

Recommendation No. 1

I recommend that DFES immediately take steps to create and fill the additional positions of a District Officer, Area Officer (Rural Competencies) and Bushfire Risk Management Officer to supplement the current Area Officer in Esperance. If these changes requires additional funding, I recommend that the Honourable Minister for Emergency Services give priority to considering how funding can be allocated for these additional positions and then arranging for that funding to be made available.

157. In addition, the Union submitted that DFES should commence planning and fund allocation for a Career Fire and Rescue Station to service the Esperance community all year round. They suggest the station would need to be staffed with one Station Officer and four platoons comprised of five firefighters each (so 20 firefighters on my calculation). The Union submits the creation of a Career Fire and Rescue Service (CFRS) station would expand the response to the Esperance community in relation to all hazards, not just bushfire fighting, and would encompass Hazardous Material Incidents, Road Crash Rescue, Structural Firefighting and the protection of critical and significant infrastructure such as the Esperance Port and railways. These significant infrastructure issues were also referred to by DFES in relation to the staff additions they supported.

- expand the number of persons trained and experienced in Incident Control and able to train and support volunteers, and would enable a local Level 2 IMT to be formed, with essential local knowledge, almost immediately. The Union advised that it has been submitting to the State Government for over a decade that an enhanced DFES CFRS presence in the Esperance region is overdue and that the region has special risks and factors which make such measures reasonable and prudent, particularly given its isolation. The Union submitted that the "WA Government cannot abuse the goodwill of the volunteers, and it is incumbent on the State Government to provide enough resources to support and provide consistent and regular volunteer training," 197 a theme which was raised by Mr Main from DPaW during the inquest.
- 159. I understand there are DFES CFRS stations based in Kalgoorlie and Albany, but as noted in the DFES submissions, they are four and four and a half hours away respectively, and when fires are raging, they are likely to be occupied elsewhere. In my opinion, the submission of the Union is a realistic and sensible one, which would alleviate a lot of the issues that have been raised here about lack of training and resources. It would never replace the role of the volunteers in bush firefighting on the front line, given the vast areas involved, but it would certainly assist with formation of an IMT and would allow DFES staff to go out to the fire ground to assist. This was something raised by Mr Carmody, who indicated that no one from DFES came out to see him at the ICV until sometime late in the evening of Tuesday, 17 November 2015.

Recommendation No. 2

I recommend that DFES commence planning and fund allocation for a Career Fire and Rescue Service Station to service the Esperance – Ravensthorpe Community all year round, and to respond quickly to provide support to the local volunteer Bush Fire Brigades in the event of a bushfire. If that change requires additional funding, I recommend that the Honourable Minister of Emergency Services give priority to considering how funding can be allocated for the creation and staffing of such a station and then arranging for that funding to be made available.

¹⁹⁷ United Professional Firefighters Union of Western Australia Closing Submissions and Recommendations, filed 14 May 2019, p. 20.

WHEN AND WHY THE FOUR DECEASED LEFT KARINGAL

- 160. Kym Curnow's brother Daren Curnow had been in contact with Kym Curnow throughout the day of 17 November 2015. Kym Curnow had been harvesting in the morning, as had Daren Curnow, but they both eventually had to stop when the fire ban came on and they had to go and help fight the fires. 198
- 161. Kym Curnow and his son, Tom Curnow, drove in his Toyota Prado out at about midday to the fire Control Centre at the corner of Grass Patch West and Fields Roads. Kym Curnow went into the Control Centre for about an hour and when he came back he told Tom Curnow he was asked to tell people to evacuate. They drove together to Grigg Road and then to Belgian Road and headed out to various properties to speak to the residents and ask them to leave. They spoke to Kym Curnow's friend David Vandenberghe (Mr Vandenberghe,) during this time, which is relevant later.
- 162. In the afternoon, Daren Curnow went to Kym Curnow's farm to help prepare all the firefighting equipment as the farm workers had all gone to fight the fires. Daren Curnow then returned to his own farm, which was approximately 7 km away, and prepared with his wife to evacuate. Around this time, Daren Curnow had a telephone conversation with his brother Kym Curnow. Kym Curnow said the fire had jumped Belgian Road and he said words similar to, "Get out of its way, you won't be able to stop it." 199
- **163.** As noted above, at about 3.00 pm Mr Carmody asked Kym Curnow to be a 'fire scout' to assist in determining the location of the fire, as communications were limited and the location of the head fire was unknown by this stage.²⁰⁰ Kym Curnow was also going to evacuate people from their homes as he went.²⁰¹
- 164. Mr Campbell is the owner of the Karingal Pastoral Company, which employed Tom, Anna and Julia at the time of their deaths. Mr Campbell was present on his property at the time of the fires with his family and workers. Mr Campbell said that they had stopped harvesting of their own volition at about 9.30 am on the morning of 17 November 2015 as they felt the conditions were bad enough to impose their own ban, prior to any action by the Shire. They had the Scaddan BFB 4x4 truck parked at the farm, so Mr Campbell had already made sure that morning it was ready and prepared to go as he was expecting to get a call to go to the fire. At that stage, Mr Campbell said there was no way he was expecting the fire to get to them at Karingal.²⁰²
- **165.** Mr Campbell recalled receiving a text message from Kym Curnow, his neighbour, at 11.38 am telling him that the fire ban would be in place from 11.45 am.²⁰³ Just after 12.30 pm Mr Campbell received a call to go to

¹⁹⁸ Exhibit 1, Tab 20 and Tab 22.

¹⁹⁹ Exhibit 1, Tab 20 [58].

²⁰⁰ Exhibit 1, Tab 2.

²⁰¹ Exhibit 3, Tab 6 [27].

²⁰² T 420~421.

²⁰³ Exhibit 3, Tab 6 [16].

Cascade. One of Mr Campbell's sons left with some others in the Scaddan fire truck and Mr Campbell and Tom also drove out in a four wheel drive with a water tanker on the back. They could see how big the fire was as they drove and Mr Campbell said driving toward it was "pretty scary." On arrival they went to the Control Centre. While there, Mr Campbell saw Kym Curnow and helped him replace a broken aerial on his car so that he would have good communications to go out and do his job. 205

- **166.** Mr Campbell said he realised after a while there was nothing they could do to help, and the fire was heading in the direction of their home, so he and Tom decided to leave and go back home. It would seem they were relatively closely followed by Kym Curnow.²⁰⁶
- **167.** As Mr Campbell and Tom returned towards Karingal, Mr Campbell contacted his wife Linda Campbell (Mrs Campbell) and son Greg Campbell to tell them to prepare for the fire. Mrs Campbell had already got out the fire plan for the farm and started implementing it by this stage.²⁰⁷
- 168. Mr Campbell said he caught up to the fire on the way and it was then a race to get home, as he knew the direction it was heading. He had to drive home at speed to try to beat the fire, as it was the fastest moving fire he had ever seen. Mr Campbell remembered talking to Tom during the journey home and telling him that the fire was heading right for their farm and he needed to prepare for it. Tom mentioned he was anxious about his girlfriend's horse, Cougar, and said he wanted to leave with the horse. Calling his girlfriend to collect the horse was not an option at that stage. Tom's plan was to take the horse to Esperance and then return to Karingal to help fight the fire. Mr Campbell told Tom that he would need to load up his car and take the horse straight away if that was his plan.²⁰⁸
- 169. They arrived back at Karingal at about 3.15 pm. Mr Campbell's son, Greg Campbell, arrived at about the same time. Tom went straight away to load Cougar into the horse float, after calling Anna over the two way radio to come and help him and keep the horse calm. Mr Campbell got the rest of the staff together and did a briefing at about 3.30 pm, then began trying to get some firefighting equipment set up. They were having problems with the hydraulics on their big water tanker, which was needed to help protect the farm from the fire, so Tom came over to help. This delayed Tom's departure for a short time. Mr Campbell was concerned that Tom hadn't left yet, but was also grateful for his assistance.²⁰⁹
- 170. Anna had been to Esperance shopping earlier in the day while Julia had been working on the farm.²¹⁰ Anna returned to the farm at about 2.30 pm. Greg Campbell spoke to Anna on her return and told her that there was a fire coming and it could be dangerous. Anna and Julia began unpacking

²⁰⁴ T 422.

²⁰⁵ Exhibit 3, Tab 6.

²⁰⁶ Exhibit 3, Tab 6.

²⁰⁷ Exhibit 3, Tab 6 and Tab 7.

²⁰⁸ T 423-424; Exhibit 1, Tab 2; Exhibit 3, Tab 6.

²⁰⁹ Exhibit 1, Tab 2; Exhibit 3, Tab 6.

²¹⁰ T 438

groceries from the car and Greg Campbell spoke to them both and said they could either stay at the farm or else they should leave now. He recalled there was an issue starting Anna's car, but they then managed to get it started, before turning the engine off again. Mrs Campbell also came and spoke to them while they were unloading the groceries. She told both girls they needed to get ready for the fire. Mrs Campbell spoke to them about what to expect and told them to change into appropriate clothes, as well as what they could do to help prepare for what was to come. Mrs Campbell thought Anna and Julia were going to remain at Karingal, so she arranged that they would stay in the bathroom during the fire.²¹¹

- 171. Greg Campbell recalled that Kym Curnow and Tom Curnow arrived at the house while Anna and Julia were still unloading groceries from the car. Greg Campbell said that Kym Curnow came to tell them that the fire was heading towards them and asked if they had a plan. Greg indicated that they intended to stay and look after the house.²¹²
- 172. Mrs Campbell left them in the pool house for a while after giving them some instructions, and when she returned she told the two girls that they fire was about 10 km away and to make sure they were ready. Anna was searching for her passport at this time and was anxious because she couldn't find it. Julia was already waiting in the bathroom. Mrs Campbell sought to calm them both and went through again what she thought was going to happen. She thought they seemed a little scared but alright.²¹³
- 173. At 4.06 pm, Mrs Campbell walked out of the office and saw Anna and Julia outside the pool house. Anna told Mrs Campbell they had decided to go. Mrs Campbell said it was alright but emphasised that if they wanted to leave, they had to leave now. She told them to go to Gibson. Mrs Campbell walked them to Anna's car and then walked back to the house. Mrs Campbell saw one of the girls about 5 minutes later and was surprised to see that they hadn't left yet, but then continued on with her tasks. Mrs Campbell did not see the two girls again.²¹⁴
- 174. According to some of the family of the deceased, a few weeks after the deaths they spoke to Mrs Campbell, who told them she initially thought she had convinced Anna and Julia to stay but they then started to panic and tried to leave the farm in Anna's car. The car wouldn't start, so they asked Tom to look at it. He didn't have time as he was readying to leave himself, but he indicated they could come with him if they wished, which they did. He then told Mr Campbell that Anna and Julia were going to go with him.²¹⁵
- 175. Mr Campbell was uncertain what time Tom, Anna and Julia left, as he was focussed on the approaching fire, and he didn't see them leave, so he did not know which way they went. Greg Campbell had spoken to Tom and knew he was all packed and ready to go, but he also didn't see him leave.²¹⁶

²¹¹ T 439 – 440; Exhibit 1, Tab 2; Exhibit 3, Tab 7 and Tab 11.

²¹² Exhibit 3, Tab 11.

²¹³ Exhibit 3, Tab 7.

²¹⁴ Exhibit 3, Tab 7.

²¹⁵ Exhibit 3, Tab 6; Handwritten letter from family to Court provided 29.3.2019.

²¹⁶ Exhibit 1, Tab 2; Exhibit 3, Tab 6 and Tab 11.

- 176. Kym Curnow had been estimated to be at Karingal for only about five minutes before he left alone in his ute.²¹⁷ Greg Campbell recalled that Kym Curnow said he was "going west to have a look at the fire."²¹⁸ Greg Campbell also thought Kym Curnow may have been and gone before Tom even arrived back at the farm with Mr Campbell.²¹⁹
- 177. It was known that Tom usually travelled east on Grigg Road to reach Esperance and Greg Campbell thought in a stressful situation that would be the instinctive thing for him to do.²²⁰ Tom obviously did turn east, and the evidence shows Kym Curnow also did, despite what he had said to Greg Campbell.
- 178. The main fire front passed about 500 metres to the north of the property at about 4.30 pm and the flank of the fire hit Karingal. They were hit with wave after wave of fire for the next couple of hours, which Mr Campbell described as "two hours of hell." The fire caused extensive damage to the property and many of their livestock perished, although they managed to keep the house secure. All the people who stayed at Karingal survived the fire. 222

LAST CONTACT

- 179. After leaving Karingal Tom Curnow had continued up the road, stopping at various homes to advise people to evacuate, then moved onto the Highway to do the same. Tom Curnow spoke to his Uncle Daren Curnow and asked him if he knew where his father Kym Curnow was. He said he didn't know because the phone reception was bad.
- 180. Daren Curnow had had his last conversation with his brother at a time he estimated as between 3.30 pm and 4.00 pm, but telephone records indicate it was at 4.28 pm. They spoke on the telephone briefly. At that time, Kym Curnow said to Daren words to the effect of "I am at the Super Shed"²²³ and then he swore and the call ended. The Super Shed is located approximately 500 metres north of Grigg Road, to the east of Karingal, almost directly north of where the four deceased were later located. Daren Curnow had tried to call Kym Curnow again after this time but he was unable to reach him. Tom Curnow also tried unsuccessfully to call his father but there was no phone reception. ²²⁵
- **181.** The last contact with Tom, Anna and Julia seems to be have been with one of the Campbell family members, shortly before the fire came through, although none of them saw them leave the farm.

²¹⁷ Exhibit 3, Tab 8.

²¹⁸ Exhibit 3, Tab 11 [21].

²¹⁹ T 440.

²²⁰ T 444; Exhibit 3, Tab 11 [39].

²²¹ T 427.

²²² Exhibit 3, Tab 6.

²²³ Exhibit 1, Tab 20 [81].

²²⁴ Exhibit 1, Tab 2.

²²⁵ Exhibit 1, Tab 2, Tab 20 and Tab 22.

OTHER WITNESS ACCOUNTS

- **182.** While we can never know exactly what happened, the accounts of other people who were close to that area at the time, helps with the reconstruction of events.
- 183. Blake Halford (Mr Halford), the Captain of the Gibson Volunteer Bush Fire Brigade (BFB), had returned to the Cascades area during the afternoon after fighting the Merivale fire earlier in the day. After returning to Gibson to refuel, let their trucks cool down and obtain more information about the fire, Mr Halford and other members of the Gibson BFB left Gibson and headed north towards Scaddan. They were planning to turn down Grigg Road and follow that along. Mr Halford was in a light tanker and there were two other vehicles with him.²²⁶
- **184.** Driving north on the Highway, Mr Halford could see the smoke created by the Cascades fire covered the entire horizon (he estimated 200 km wide) and was low on the ground due to the strong winds. Mr Halford said it looked more like a massive thunderhead than smoke. There was no way to tell definitively where the fire was at that stage but they had assumed it was perhaps 20 km away as they turned onto Grigg Road somewhere between 3.45 pm and 4.15 pm. As they drove onto Grigg Road, they went under the column of smoke and "it went from day to night". 227 Mr Halford said visibility was minimal, stretching no further than the car's bonnet. He knew there was another Gibson BFB vehicle ahead of him and behind him, but he couldn't see them. They had driven for several minutes down Grigg Road when the lead fire truck came out of the smoke and realised they had stumbled upon the fire front. At that stage, the fire hadn't actually jumped Grigg Road, but was only about 300 metres off. The lead fire truck, occupied by David Mills (Mr Mills), Brett Whittfield (Mr Whittfield) and Cody Governs (Mr Governs), made the quick decision to turn around and communicated that to the others. Mr Mills believed it was 4.13 pm at this time.²²⁸
- 185. The radio communications had gone crackly due to the smoke but Mr Halford still heard a radio transmission from Mr Mills in the Gibson truck ahead of him, saying "Turn around. Turn around. Turn around." Mr Halford recalled the message was calm, but he "could hear the fear in their voice." ²²⁹
- 186. Mr Halford was told later that the lead fire truck turned around and then struggled to make progress as the fire was starving the truck of oxygen and they were taking time to get up speed. Mr Governs in the passenger seat could feel the door getting hot and they realised the fire front was only about 30 metres from the road. They didn't start to break away from the fire front until the truck reached speeds of around 50 to 60 km/hr, indicating the fire was probably travelling at around 45 km/hr or more at that stage. Working back through events later, it was estimated that this fire truck had probably

²²⁶ T 406~407.

²²⁷ T 408.

²²⁸ Exhibit 5, Tab 1 [80].

²²⁹ T 408.

come within 500 metres to 2 kilometres of where Tom's vehicle was eventually found, and they could have been separated in time by as little as 5 minutes and up to 15 minutes.²³⁰ With that in mind, whilst of course acknowledging the tragedy that even four lives were lost, Mr Halford gave similar evidence to Mr Carmody that he was surprised even more lives weren't lost, including his own and the BFB members he was with that day.²³¹

- **187.** Mr Halford and the other Gibson fire trucks made their way back quickly along Grigg Road. They were aware the lead fire truck had come within seconds of being caught by the fire, so they were in pure survival mode at that time. As they came out onto the Highway they decided to head south towards the Scaddan townsite. Mr Halford was leading the three vehicles.²³²
- 188. As they passed Scaddan, Mr Halford contacted the Esperance IMT and advised that the Scaddan area needed to be evacuated immediately. They came over the radio to ask him to repeat his communication, and when he did he said they appeared to respond in disbelief as they hadn't anticipated the fire would travel that fast, given it was so far out of the ordinary experience. All Mr Halford made some quick enquiries to find out who might be in Scaddan and he was told there was probably only one schoolteacher living in the townsite. Because Mr Halford's vehicle was the most quick and nimble vehicle, he told the other fire trucks to keep heading to safety and then he turned around his vehicle and headed back towards Scaddan.
- 189. When they reached Scaddan, they found the school teacher still there and the fire front was quickly approaching. Mr Halford said this was the first time he had got out of his vehicle since Gibson, and when he opened his door the wind nearly tore the door of his car and he was being hit by projectiles. The sound was deafening and Mr Halford had to yell to speak to the teacher. There was no room in the Gibson vehicle, so he told the teacher to grab her car keys and follow them. By the time she had got in her car, it was pitch black and they could see the glow of the flames approaching. They started driving away and could see the fire had now jumped the Highway. The fire was right behind them but they had a tailwind of an estimated 100 km/hr pushing them along. They headed east in a convoy with the teacher until they were a decent way in front of the fire, then directed her to a route that would take her safely to Esperance. Mr Halford and his partner then spent their time going from house to house in the area advising people to evacuate. He gave evidence that it was the first time in his experience fighting fires that he spent the whole time running, rather than trying to stop and defend. It was only after the wind change that they were able to commence normal duties and start to help with mopping up and making areas secure.²³⁴

²³⁰ T 416; Exhibit 5, Tab 1.

²³¹ T 416~417.

²³² T 408~409.

²³³ T 409~410.

²³⁴ T 410~413.

- 190. Superintendent Tasker, who is recently retired, was the Superintendent of the Goldfield/Midlands District at the time of the fires in November 2015. On Monday, 16 November 2015 he had been asked to go to Esperance the following day to facilitate a regional bushfire workshop exercise as part of the state bushfire risk analysis. This was because the local DFES Manager, Mr Wornes, was busy managing the fires and they were expecting deteriorating weather.²³⁵
- 191. Superintendent Tasker left Kalgoorlie at approximately 10.00 am on the morning of Tuesday, 17 November 2015. He was aware that there were fires occurring in the Esperance region, but he had not been informed that things were escalating. At about midday, while he was driving across the causeway over the salt lake outside of Norseman, Superintendent Tasker noticed what appeared to be a wildfire to the west. He contacted the Regional Duty Coordinator in Northam to see if anything had been reported, but no report had been received. Superintendent Tasker stopped in Norseman for lunch then continued on his journey towards Esperance at approximately 1.00 pm.²³⁶
- 192. When he had travelled about 20 km south of Norseman, Superintendent Tasker noticed the wind picking up and observed what appeared to be smoke crossing the Highway from the north. The smoke was very dark in colour, which indicated to him it was a very hot fire and the wind had picked up, so he was concerned for his safety. He stopped the car, got out and stood on the car bonnet to see if he could observe any fire behaviour. Superintendent Tasker could see a fire encroaching onto the road and said the wind gusts were so strong at the time that the wind actually blew him off the car bonnet. He became very concerned and used his vehicle to block any entry to the road as he believed it was unsafe for road users to pass. As cars approached, he directed them to either fall back and wait or head back towards Esperance.²³⁷
- 193. While manning the roadblock, Superintendent Tasker was approached by two beekeepers who came out of the bush from the north. They told him there was a huge wildfire heading that way. They were of the belief the fire had been reported to DPaW earlier that day, although DPaW does not appear to have had a record of the call.²³⁸ Within a very short time Superintendent Tasker could see plumes of smoke appearing not too far north of the Highway. He immediately rang his Kalgoorlie District Manager to organise local government to close the road to the north of the fire. He also notified Volunteer Fire and Rescue to prepare to fight the fire and local police to ask them to attend to close the road as soon as possible. Superintendent Tasker then moved his vehicle to block the road to the south of the Highway. Within minutes fire was impacting the Highway, so it was fortunate both sides of the fire had been isolated from road users.²³⁹

²³⁵ Exhibit 2, Tab 15.

²³⁶ Exhibit 2, Tab 15.

²³⁷ T 478-481; Exhibit 2, Tab 15.

²³⁸ T 470~471.

²³⁹ Exhibit 2, Tab 15.

- 194. For the next few hours Superintendent Tasker kept the road closed, turning vehicles around and sending them back to Salmon Gums. The head of the fire eventually crossed the Highway and the fire moved off into the salt lakes. Fire activity on the road subsided at approximately 3.30 pm. Traffic management had arrived from Esperance by this stage and Superintendent Tasker elected to continue his journey to Esperance, wrongly assuming the worst part of the day was over for him.²⁴⁰
- 195. At about 5.20 pm Superintendent Tasker arrived at a road block just south of the township of Grass Patch. The road block had been set up by local bush fire volunteers. Superintendent Tasker could see a large plume of smoke heading towards Grass Patch on a strong southerly wind and the volunteers' had been informed the fire was going to reach where they were positioned in a short space of time, so they were intending to fall back to Grass Patch.²⁴¹
- 196. Superintendent Tasker called the Incident Controller, Mr Wornes in Esperance, to let him know of the situation. Until that call, Mr Wornes was unaware that the fire had travelled that far north. Mr Wornes said the news seriously impacted on the IMT's theories of getting an evacuation back through to Norseman, as there were now two fires across the main route and there was not only local traffic but also tourists stuck between the two of them.²⁴²
- changing circumstances. Superintendent Tasker to keep him updated on any changing circumstances. Superintendent Tasker returned to Grass Patch and began to advise people in the town to relocate to Salmon Gums for their own safety. Superintendent Tasker could recall that it was very dark and embers were blowing up the Highway and the wind was swirling and he felt the conditions were very unpredictable. He left for Salmon Gums with those people who had followed his advice. However, when Superintendent Tasker reached Salmon Gums, he encountered approximately 100 vehicles on the town oval, many of them camper vans and caravans with elderly occupants, colloquially referred to in WA as 'grey nomads'. With the roads shut in both directions, they had nowhere to go. The town of Salmon Gums was engulfed in ash and smoke and many of the elderly people were walking around with their mouths covered with wet handkerchiefs.²⁴³
- 198. People naturally turned to Superintendent Tasker for advice and information as he was in his DFES uniform and in a marked DFES vehicle. He could sense that panic was beginning to set in for many of them. Superintendent Tasker took charge of the situation and established there was one paramedic in town and one oxy viva machine. He became very concerned that if the conditions continued to deteriorate they could have a very serious medical situation emerge. With the aid of locals, Superintendent Tasker tried to come

²⁴⁰ T 483~484; Exhibit 2, Tab 15.

²⁴¹ Exhibit 2, Tab 15.

²⁴² T 315.

²⁴³ T 487-488; Exhibit 2, Tab 15.

up with alternative places where he could put these people to safely wait out the fires, but the options were limited.²⁴⁴

- 199. Superintendent Tasker made some calls, although communication was limited, and ascertained that it was possible to get a convoy of vehicles through to Norseman. Superintendent Tasker gave evidence that he was in a situation he had rarely experienced but he knew he had to do something to ensure the safety of the people who were looking to him for help. There were a few volunteer Bush Fire Brigade trucks that had sought refuge in Salmon Gums, so Superintendent Tasker got them to assist him in getting all of the stranded vehicles lined up on the Highway, with the trucks spaced intermittently in the convoy as there were still embers blowing over the Highway and there was potential for the soft camper roofs to catch fire. With the assistance of some DFES staff, Superintendent Tasker successfully moved the convoy safely to Norseman to an evacuation point on the town oval, although he found out once they got there that the volunteer trucks had not accompanied them due to receiving other orders from their Captain.²⁴⁵ Superintendent Tasker estimated he moved approximately 150 people to safety.²⁴⁶
- **200.** Superintendent Tasker remained in Norseman overnight then continued his journey to Esperance on Wednesday, 18 November 2015, where he became aware of the full scale of the fires around Esperance and became part of the Operations Area Management Group and assisted in planning.²⁴⁷
- **201.** Superintendent Tasker was asked at the inquest whether, looking back, he believed he made the right decision and saved lives by taking the convoy through to Norseman. He was certain that he did.²⁴⁸ In my view, the many people he helped were very fortunate to have a senior firefighter fortuitously turn up at the time that he did, and I have no doubt Superintendent Tasker's bravery and leadership saved lives that day.

DISCOVERY OF THE BODIES

- 202. Kym Curnow's body was found first. His burnt out vehicle was discovered in the early evening by another farmer and volunteer firefighter, Mr Vandenberghe. Mr Vandenberghe was a good friend of Kym Curnow. Mr Vandenberghe had spoken to Kym Curnow earlier that day when he was evacuating people in the area of Mr Vandenberghe's farm. Kym Curnow had assisted Mr Vandenberghe when he was evacuating his own property and waited at his front gate until he had left for a safe area.²⁴⁹
- **203.** That afternoon, while mopping up on his property, Mr Vandenberghe found a phone signal so he started making phone calls. He spoke to one of his staff

²⁴⁴ T 488; Exhibit 2, Tab 15.

²⁴⁵ T 489; Exhibit 2, Tab 15.

²⁴⁶ T 496.

²⁴⁷ Exhibit 2, Tab 15.

²⁴⁸ T 500.

²⁴⁹ T 391

members, who mentioned he had heard a report from the Scaddan fire truck that Kym Curnow's ute had been seen crashed and burnt. Mr Vandenberghe immediately rang Kym Curnow's son and brother and when they told Mr Vandenberghe they hadn't seen Kym Curnow, Mr Vandenberghe dropped his fire unit and went looking for him.²⁵⁰

- 204. Mr Vandenberghe initially presumed he would find Kym Curnow in a paddock, and started looking in that area. As the light started to fade he moved onto Grigg Road and immediately found Kym Curnow's car. It was dark when Mr Vandenberghe approached the car and his only light was from his mobile telephone, which made it difficult to see, but he could make out that Kym Curnow's body was in the backseat of the car. Other people had joined Mr Vanderberghe by this time and another person rang emergency services to request assistance.
- **205.** Tom's burnt out vehicle was found about an hour later by Mr Mills and others in one of the Gibson fire trucks.²⁵¹ Volunteer firefighters and locals assisted to keep guard over that vehicle until police could arrive. The occupants of the vehicle were not immediately identified so some calls were made to try to work out who was missing in the local area.²⁵²
- 206. It was not apparent from the original materials in the brief of evidence, but many of the witnesses who waited with Kym Curnow's body were very distressed at how long it took for police officers to attend, and their behaviour when they did arrive. A few of the witnesses specifically asked to give evidence in court as their concerns were not included in their witness statements and they wished to draw their concerns to my attention.
- 207. A statement from the Officer in Charge of the Esperance Police Station at the time indicated that the police had been advised two people had been found deceased on the side of Grigg Road in Scaddan at approximately 6.00 pm that evening, with a report of two separate vehicles being involved. He telephoned the Officer in Charge of the Esperance Detectives, Detective Sergeant Noye, and asked him if his detectives could attend the scene as he had no uniformed officers available. Detective Sergeant Noye agreed and said he would arrange their attendance. At about 7.00 pm the OIC indicated he received the report confirming there was another vehicle with three deceased inside, and this information was passed on to Detective Sergeant Noye, who indicated he was intending to attend with his detectives.²⁵³
- **208.** A police briefing note provided to the Court after the inquest indicated police were notified at 8.00 pm of the first body being discovered, so it seems the first notification to police was perhaps a bit later than the OIC first thought when preparing his statement.²⁵⁴ The briefing note provides information that detectives had to be recalled from duty, which was done at 8.15 pm, and they arrived at the IMT at 9.15 pm, at which time they were advised of the

²⁵⁰ T 391~392.

²⁵¹ Exhibit 5, Tab 1.

²⁵² T 394.

²⁵³ Exhibit 2, Tab 16.

²⁵⁴ Briefing Note 28 May 2019.

additional deaths. The police officers sought an escort to get out to the relevant area due to the dangerous conditions, but no fire escort could be provided. They were eventually told by a local the fire front had passed through and it would be safe to travel out there. The first police officers eventually reached the scene at 9.33 pm.²⁵⁵

- 209. Mr Vandenberghe gave evidence that he had tried to include some of his concerns in his statement but claimed they had "been edited out." He recalled he waited for at least two and a half hours, with repeated efforts to call '000' and police, before eventually ringing the local Member of Parliament, who he understood then contacted the Minister of Police. Mr Vandenberghe believed this prompted some action by the police and eventually, at around 11.00 pm (several hours after making the first report) the first police officers arrived at the scene. 257
- 210. Mr Campbell's sister, Jennifer Campbell (Ms Campbell), who is also a local farmer, said that she had also been making calls trying to find out where the police were. She received a voicemail message from police at 8.46 pm from a police officer at Kalgoorlie police station advising that police had left Esperance and two detectives were on their way. A lengthy time period still elapsed before the detectives arrived. Ms Campbell said it "felt like an eternity." 258 Ms Campbell said that she felt very let down that night on Griggs Road because they didn't receive a lot of support from the police, both in terms of the time they spent waiting for help to arrive, and even when the police arrived due to their manner. 259
- **211.** Ms Campbell's partner, Greg Raszyk (Mr Raszyk), similarly expressed concern about the delay in police arriving, as well as their attitude upon arrival. Mr Raszyk described the police as having "a real attitude." ²⁶⁰
- **212.** It was left to local people in the intervening period to go about the difficult task of notifying Kym Curnow's family of the finding of his body, as they didn't want his family to hear it from other sources, such as social media.
- 213. It is confirmed that the three detectives from the Esperance Detectives Office attended Grigg Road at 9.35 pm. It seems they first went to the Nissan Patrol and certified all three persons as life extinct, although their identities were still unknown, and secured the scene. They then went to the location of Kym Curnow in the Toyota Prado and certified him life extinct at 10.55 pm. ²⁶¹ This matches Mr Vandenberghe's recollection that they arrived at his location at about 11.00 pm.
- **214.** Mr Vandenberghe and Mr Halford, as well as other volunteer firefighters on the scene, expressed concern about the behaviour of police on the night. Mr Vandenberghe said a police sergeant who was first at the scene of

²⁵⁵ Briefing Note 28 May 2019.

²⁵⁶ T 393~394.

²⁵⁷ T 394.

²⁵⁸ Exhibit 3, Tab 9 [118].

²⁵⁹ T 436.

²⁶⁰ Exhibit 3, Tab 10 [91].

²⁶¹ Exhibit 1, Tab 2 and Tabs 7~10.

Kym Curnow's death was "incredibly rude," ²⁶² and Mr Vandenberghe felt he treated those at the scene "like criminals." ²⁶³ Mr Vandenberghe noted that all of the people there were either related to Kym Curnow or were his good friend, so the lack of empathy towards them by the police officer surprised him. Mr Vandenberghe also expressed surprise and dismay at the fact that the attending police officers would not let anyone leave the scene, even though there were volunteer firefighters amongst them who needed to go and keep fighting the fires. ²⁶⁴

- 215. Two of Mr Halford's Gibson fire trucks and their crew had been held at the scene. Everyone was obviously affected by the four deaths, and at least two of the Gibson crew were very close friends of Kym Curnow, so they were particularly devastated at the loss of their friend. Mr Halford said he eventually lost patience with the police as he needed the trucks and crew to keep fighting the fire. Although they had been given strict instructions to keep the trucks and all crew there, he came and arranged to remove the trucks and most of the crew, leaving one person from each truck at the scene only. Mr Halford pointed out that "you do not need 10 firefighters and two heavy trucks sitting on their hands while a fire is raging." He replaced the crews with fresh staff and sent the fire trucks off to start extinguishing the fire on its northern boundary. Like Mr Vandenberghe, Mr Halford expressed disappointment with the police behaviour at the scene and the length of time it took them to attend and to release the people at the scene.
- 216. At about 12.30 am, Mr Vandenberghe and others began asking to go home. He noted that many of those present had been up since 5.00 am the previous day and most of them had not eaten for 12 hours, so they were tired and hungry at that stage, as well as emotionally drained. Mr Vandenberghe recalled they were eventually allowed to leave at about 1.00 am, although some people, including the Gibson BFB, managed to leave earlier. 268
- 217. The delay also had possible implications as Mr Vandenberghe explained that Kym Curnow's brothers had suggested that they pick up Kym Curnow's body and take it somewhere, which would obviously be undesirable in terms of preserving the scene for a proper coronial investigation.²⁶⁹
- 218. The WA Police, as an organisation, was put in a difficult position when these concerns were aired at the inquest, as the Court had been unable to alert them to a possibility of adverse evidence since the information had not been included in the witnesses' statements. Sergeant Housiaux alerted the Officer in Charge of Esperance Police Station when the evidence became known, and Ms Hartley indicated she would seek instructions from the WA Police on

²⁶² T 394.

²⁶³ T 395.

²⁶⁴ T 394~395.

²⁶⁵ Exhibit 5, Tab 9 [134].

²⁶⁶ T 414~415.

²⁶⁷ T 415.

²⁶⁸ T 395.

²⁶⁹ T 205

the issue. I do note that in the brief were included some materials from the WA Police that showed Mr Vandenberghe and Mr Raszyk had called asking about police attendance and had been told that police had experienced difficulty accessing Griggs Road as entry from the Highway was dangerous, so they had had to find alternate entry to the area.²⁷⁰

- 219. As I've noted above, a briefing note was provided to the Court by the WA Police after the inquest had concluded. It was suggested that the timelines indicated were appropriate for police attendance, given they had to be recalled to duty and had to travel out in dangerous conditions. The briefing note also indicated that the three detectives who attended were all spoken to about the allegations about the conduct of at least the lead detective upon attendance. The allegations of rudeness were denied by the lead detective and one of his colleagues. The other detective recalled overhearing conversations at the scene and noting the volunteer firefighters were very emotional and upset at the time. It was noted that none of the firefighters later made an official complaint to the police that would have prompted a full investigation into the matter. However, enquiry with the then Member of the WA Legislative Assembly for the Esperance Area, the Honourable Dr Graham Jacobs, confirmed that Dr Jacobs did speak to Mr Vandenberghe on the night and this prompted Dr Jacobs to speak directly to the then Police Minister, the Honourable Liza Harvey, to request her assistance and leaving the matter with her to resolve.²⁷¹
- 220. It was acknowledged by the Acting Superintendent of the Kalgoorlie-Esperance District, who prepared the briefing note, that the evidence given by Mr Vandenberghe was fundamentally correct, although there was nothing to support his assertion that it was the Minister's involvement that caused the lead detective to possibly be rude at the scene. The lead detective admitted being forthright and direct, but denied rudeness. It was felt his manner may well have presented, in an emotionally charged scene, as lacking empathy. Suggestions for the need to demonstrate empathy when required, while still performing the duties of a police officer and prioritising the safety and welfare of individuals, was discussed with the detective involved.²⁷²
- 221. Hopefully, lessons can be learnt from this event, so that police officers will have at the forefront of their mind the need to be courteous and compassionate, as well as practical, when attending coronial scenes where the family and friends of the deceased are present. The need to prevent further deaths, when fires are still raging, does change the priority for holding all witnesses at a scene. I would hope that, in hindsight, this would be acknowledged by the officers who attended. I am satisfied that the individual police officers involved have been spoken to, and reminded of the need to demonstrate empathy when investigating a coronial matter, and also consideration to how balance priorities. to Mr Vandenberghe and all the other people who felt they were treated with

²⁷⁰ Exhibit 2, Tab 16A, pp.82-84 and Tab 16B, p. 6.

²⁷¹ Briefing Note, 28 May 2019.

²⁷² Briefing Note, 28 May 2019.

insufficient courtesy and kindness at the scene, will take comfort from that knowledge.

222. As to the delay in attending the scene, I acknowledge the great distress it must have caused all of the people who had to stand guard at the scene and protect the bodies of people they knew as loved ones and/or friends while waiting for police to arrive. It is also not ideal, from a coronial perspective in terms of preserving the scene, as there was some risk people would inadvertently contaminate the scene out of a desire to protect the dignity of the deceased. An explanation has been given that police had to be recalled to duty and then they were uncertain whether they could safely attend the scene due to the ongoing fire. It would have been better if some of those issues had been communicated to the people waiting at the scene, so they could have understood the reason for the delay. It would also, perhaps, have been better for at least one police officer to go on to the next scene when they first arrived on Gibb Road, so that people were aware when the police had first arrived. All of these actions are simple things, but a little extra courtesy can make the difference between people feeling frustrated or being understanding that delays can occur.

RECONSTRUCTION OF THE SCENE

- 223. Detective Sergeant Kevin Wisbey (Detective Wisbey) was the lead coronial investigator in relation to this matter. Detective Wisbey was attached to the Arson Squad at the time of these events and later moved to the Major Crash Investigation Unit. He therefore has relevant expertise in both fire investigation and vehicle crash investigation.
- 224. Detective Wisbey flew from Perth to Esperance on 18 November 2015 and went out to the scene at Grigg Road. Senior Constable Adrian Callaghan, a qualified Major Crash Investigator with the WA Police, also attended the scene on 18 November 2015. Senior Constable Callaghan was unable to give evidence at the inquest as he was on extended personal leave, so I read out some of the contents of his initial crash report.²⁷³ In addition, the information from his report informed the opinion of Detective Wisbey, who did give evidence at the inquest.
- 225. The two vehicles were located approximately 6 km from the Highway and about 3 km from Karingal.²⁷⁴ Detective Wisbey noted that Tom's Nissan Patrol had been travelling east along Grigg Road when it left the road and collided with a tree on the northern boundary and overturned. The Nissan Patrol came to rest lying on the driver's side. The horse float was still attached. Detective Wisbey noted the ute had significant frontal damage consistent with hitting the tree front on before it tipped over onto its side. There was a clean area indicating the path the Nissan had taken through the bush and gravel verge from Grigg Road, and the tyre marks on Grigg Road were consistent with the Nissan veering left onto that gravel verge. The tyre

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²⁷³ Exhibit 2, Tab 1.

²⁷⁴ Exhibit 1, Tab 2.

marks were not considered consistent with skid marks, but rather were attributed to the heat of the road/tyres at the time. Detective Wisbey could not form an opinion as to the speed of the Nissan from the physical evidence.²⁷⁵

- 226. Tom and Julia's bodies were found inside the Nissan Patrol. Anna's body was found outside the car, at the base of a tree a short distance from the car. The body of Cougar the horse was found in the horse trailer. It was clear that all of them had been exposed to the full intensity of the fire. Detective Wisbey pointed to the fact the tyres and interior of the Nissan and the panelling of the horse trailer had all been consumed by fire, as further evidence of this.²⁷⁶
- 227. It was observed in a later crash report by the police vehicle examiners that it was impossible to say whether seatbelts had been worn by the occupants of the Nissan at the time of the crash.²⁷⁷ I do note that only the passenger side door could have been opened given how the car came to rest, and it is obviously closed shut in the scene photographs. The window winders were also fully raised, so no one had deliberately opened a window²⁷⁸ This information, together with other evidence at the scene, prompted Senior Constable Callaghan to conclude that it appeared that Anna's body had been ejected from the Nissan Patrol as the vehicle rolled and did not suggest Anna had exited the vehicle of her own accord.²⁷⁹
- 228. Kym Curnow's Toyota Prado had been travelling in the same direction but was located between 100 and 300 metres behind the Nissan Patrol. Unlike the Nissan, the Toyota had not rolled and had less impact damage overall than the Nissan Patrol, but it was apparent it had struck a tree and the tree and car had come to rest near the paddock fence-line.²⁸⁰ The crashes were believed to be entirely separate.
- 229. Like the Nissan, the full interior of the Toyota had been consumed by fire although the back of the vehicle had less damage. As Mr Vandenberghe had observed when he first found the car, Kym Curnow's body was located in the rear of the Prado. Detective Wisbey formed the impression Kym Curnow had been attempting to shield himself from the fire by getting into the back seat.²⁸¹ Sadly, he might have come close to achieving that goal, as the pictures of his vehicle show that the front dual cab was passed over by fire, but the rear tray and rear tyres were unburnt. Nevertheless, the radiant heat and smoke in the air would have posed their own risks even without direct fire impact.²⁸²
- **230.** Senior Constable Callaghan noted that the tyre imprint marks made by Tom's Nissan Patrol and Kym Curnow's Toyota Prado showed steering input

²⁷⁵ T 15, 19.

²⁷⁶ T 18, 20; Exhibit 2, Tab 1.

²⁷⁷ Exhibit 2, Tab 3.

²⁷⁸ T 16-17; Exhibit 1, Tab 1A.

²⁷⁹ Exhibit 2, Tab 1I.

²⁸⁰ T 20-21; Exhibit 1, Tab 2; Exhibit 2, Tab 1E and 1I.

²⁸¹ T 20~21; Exhibit 1, Tab 2.

²⁸² Exhibit 2, Tab 1E.

as they left the carriageway, showing they had not simply lost control but rather they had been travelling east on the road when the drivers changed the direction of the vehicles to enter onto the northern verge. The tyre marks from the Toyota Prado suggested Kym Curnow had initially been successfully negotiating a path through the trees before the car hit one tree and came to a stop.²⁸³

- 231. Detective Wisbey and Senior Constable Callaghan both formed the view from their observations of the scene that it was likely that Tom and Kym Curnow had been trying to drive into a burnt paddock to escape the fire and gain refuge when their cars crashed into trees. Visibility would have been down to almost zero at that time, so it would have been very difficult for them to see and avoid hazards.²⁸⁴
- 232. It was noted that Kym Curnow had been travelling in the direction of his own property, which was a little further down the road on the right, and he had been near the crash site at the Super Shed when he last spoke to his brother. He had also been driving not far behind Tom, although given the conditions they probably wouldn't have been able to see each other.²⁸⁵
- 233. The evidence raised the possibility that Kym Curnow was attempting to return to his own property when he was hit by the fire. An alternative theory was that he had seen Tom turn left towards the fire front, and had been following him to try and stop him.
- 234. Mr Vandenberghe had been asked his opinion as he had been first on the scene and knew the area and Kym Curnow well. It did not appear to Mr Vandenberghe that Kym Curnow "had [run] off the road in a hurry." From what he could see, Mr Vandenberghe formed the opinion the car had left the road and veered off into the bush at slow speed and then hit the trees at slow speed, as there was minimal damage to the car and the trees. Mr Vandenberghe gave evidence that he had spent some time thinking about what might have caused Kym Curnow to end up in that spot, and he suggested Mr Curnow would have known he had left the road and speculated that the car might have run out of oxygen due to the fire and stopped. 288
- 235. Mr Vandenberghe also spoke of his knowledge of Kym Curnow as a person who would never take a risk when it came to farming and fires. He noted Kym Curnow had spent the day getting people to safety and keeping them informed and he was very aware of where the fire front was. Mr Vandenberghe said he knew Kym Curnow would not take a risk to go into the fire front without a very good reason. Putting all this together with what he had found at the scene, Mr Vandenberghe surmised that it was very possible Kym Curnow had been following the other vehicle containing Tom,

²⁸³ Exhibit 2, Tab 1I.

²⁸⁴ T 19; Exhibit 2, Tab 1I.

²⁸⁵ T 21.

²⁸⁶ T 392.

²⁸⁷ T 392.

²⁸⁸ T 393

Anna and Julia to try to stop them from unknowingly driving into the fire front. ²⁸⁹

- 236. Tom's family travelled to Esperance for the inquest and they raised some concerns in writing with the Court on the last day, after hearing most of the evidence. They were concerned about the suggestion in the evidence that Kym Curnow had possibly been trying to follow the other car and stop them. They had been told by some witnesses from the farm, not long after the deaths, that Kym Curnow had left the farm first.
- 237. As I have noted in this finding, and at the inquest, there is scant evidence before me as to what exactly happened in the time from when Kym Curnow, Tom, Anna and Julia left Karingal until they were consumed by the fire. The evidence most strongly supports the conclusion Kym Curnow left first and went to check on some buildings nearby before returning to Grigg Road, which would explain how he ultimately ended up behind the vehicle driven by Tom. It is open on the evidence for me to conclude that as Kym Curnow came back out he saw Tom, Julia and Anna in the car driving east and decided to follow them to stop them, as he would have been aware the fire front was approaching, although he was probably not aware of its speed. However, it is also entirely possible that they did not see each other due to the conditions, and it is just coincidence that Mr Curnow ended up so close behind them. Accordingly, I make no finding of fact on this issue.

CAUSE AND MANNER OF DEATH

- 238. On 25 November 2015 and 27 November 2015 a Forensic Pathologist, Dr Gerard Cadden (Dr Cadden), and a Forensic Anthropologist, Dr Alannah Buck (Dr Buck), performed post-mortem examinations on the remains of Tom, Kym Curnow, Anna and Julia. Sadly, their remains were severely fragmented and extensively incinerated and showing signs of severe thermal damage. The remains were so damaged that they had to be identified by way of forensic odontology and DNA analysis, rather than visual identification.²⁹⁰
- **239.** Given the state of the remains, Dr Cadden and Dr Buck were unable to postulate a cause of death for any of the deceased and the causes of death remain unascertained.²⁹¹
- 240. Given the circumstances in which all of the deceased's remains were found, in or near vehicles that had been involved in collisions, it is impossible to say whether they sustained fatal injuries in the crashes that resulted in their deaths prior to the full effects of the fire reaching them. Certainly, in the case of Tom, Julia and Anna, they would have been likely to have sustained severe injury given the vehicle rolled over and landed on its side. The evidence in relation to Kym Curnow suggests he may not have been so

²⁸⁹ T 398 ~ 399.

²⁹⁰ Exhibit 1, Tabs 3-6.

²⁹¹ Exhibit 1, Tabs 11-14.

injured as to prevent movement, as he was found in the rear of the vehicle.²⁹²

- **241.** However, putting to one side what injuries they may have sustained in the vehicle collisions, it is certain that they would not have survived the intensity of the fire if they were alive at the time the fire reached them.
- **242.** I am not in a position, on the basis of the evidence before me to make a finding as to the exact cause of death of any of the deceased, and for each person the cause of death must remain unascertained.
- 243. However, both death from injury arising from a motor vehicle crash, and death arising from a bushfire, in the circumstances as they occurred here, would result in a manner of death by accident. Accordingly, although I am unable to find a cause of death for any of the deceased, I find that in the case of Tom, Kym, Anna and Julia, the manner of death in each case was by way of accident.

ORIGIN AND SPAN OF THE FIRE

- **244.** A number of people from the various agencies were involved in an investigation to identify the origin and cause of the fire.
- 245. On Thursday, 19 November 2015 Mr Carmody flew out with Arson Squad officers and DFES Arson Investigator, Mr Andrew Duckworth (Mr Duckworth), to where Mr Carmody believed the fire had originally started. They used photographs Mr Carmody had taken on the previous Sunday to identify the area. They landed in the area and found a tree that looked like it had been recently struck by lightning. There are no bush tracks in this area and no power lines anywhere near, which made a deliberate lighting by arson and/or an accidental lighting through an electrical fault, unlikely.²⁹³
- 246. Mr Duckworth, who has 24 years' experience with DFES as a firefighter and now fire investigator, prepared a comprehensive report indicating his conclusion that the Cascades fire ignited on Sunday, 15 November 2015 during a dry (no rain) lightning thunderstorm event at approximately 9.30 am on Sunday, 15 November 2015 as a result of a lightning strike. Mr Duckworth gave evidence that lightning is a very common occurrence across the world, but it becomes significant for fires in dry conditions when it can ignite fuel, as it did in this case.²⁹⁴ In this case, he believed there was probably more than one lightning strike in the area.²⁹⁵
- 247. Mr Duckworth discussed the prevailing weather conditions over the following days, with the initial benign conditions keeping the fire contained within the Mallee open woodland in and around the Lake Mends system, before it

²⁹² T 538~539.

²⁹³ T 73; Exhibit 4, Tab 1.

²⁹⁴ T 76.

²⁹⁵ T 81

eventually broke out in catastrophic weather conditions into the adjacent farmland. Mr Duckworth noted the farmland contained a standing wheat crop ready to be harvested, which is "about as perfect a fuel as you could get"²⁹⁶ for a fire. He agreed the fire was "unstoppable"²⁹⁷ at this stage and beyond anything he had previous experienced in terms of fires he had previously investigated. Mr Duckworth commented that in his opinion "all the crews on that Tuesday that attempted to extinguish that fire were extremely brave and ... definitely putting their lives on the line in doing so."²⁹⁸

- 248. Dr Neil Burrows (Dr Burrows) is a Bushfire Research Scientist who was working with DPaW in 2015. Dr Burrows has published in excess of 100-odd scientific publications on the subject of bushfire science and has been involved in a number of bushfire investigations, with a particular role in reconstructing the path and behaviour of bushfires. Dr Burrows is now retired from the Department, but is still active as a consultant.²⁹⁹
- **249.** Dr Burrows was not with the other fire investigators when they flew to the likely area of origin of the fire, but he did come to Esperance and joined the fire investigation team later on 18 November 2015, to form part of a triagency investigation team.
- **250.** Dr Burrows also prepared a report and in his report, he referred to the same conclusion as Mr Duckworth that the fire was caused by a lightning strike at about 9.30 am on 15 November 2015 in UCL some 4.5 km from the nearest track or road. The fire moved in and around the salt lakes for the first couple of days while weather conditions were mild to moderate, before it broke out onto farmland at about 11.45 am on 17 November 2015, powered by severe weather conditions.³⁰⁰
- 251. As described by eye witnesses, Dr Burrows described the weather conditions experienced in Esperance at the time of these fires as some of, if not the most, "severe fire weather conditions we have on record."³⁰¹ Dr Burrows explained that the weather conditions were unusual due to the high temperature, extremely low humidity and strong winds, that were sustained at wind speeds of between 50 and 60 km/hr, gusting up to 90 km/hr.³⁰² These extreme weather events enabled the fire, particularly when it hit the farmland, to travel at very high speed, with a spread in the 99th percentile, meaning it was in the top 1% of fastest spreading fires.³⁰³
- **252.** Dr Burrows noted that DPaW had been putting into place fuel reduced buffers/fire breaks by scrub rolling or chaining the vegetation to change its structure then burning it at a later date. That had been done for quite a few

²⁹⁶ T 83; Exhibit 7, Tab 2.

²⁹⁷ T 83.

²⁹⁸ T 84.

²⁹⁹ T 33.

³⁰⁰ T 38 ~ 39.

³⁰¹ T 34.

³⁰² T 33~34.

³⁰³ T 34; Exhibit 7, Tab 3.

kilometres at the interface leading up to the fire, as well as in the last days under the instruction of Mr Carmody.³⁰⁴

- 253. Dr Burrows agreed with Mr Carmody's belief that the buffers put in place would have been able to stand up to fires under less severe conditions. However, under these catastrophic conditions, the scrub roll buffers that had been put in place could not hold up and the fire entered the farmland. Once the fire was in the farmland, which was predominantly matured wheat crop with relatively high fuel loads, it ran out of control. When it crossed into farmland the fire was somewhere around 5 km across its front, which had developed in the two previous days while it was burning in UCL. This was a very wide front, which together with those hot, dry, strong winds, allowed it to spread rapidly through the wheat paddocks. Dr Burrows agreed that it exceeded firefighters' capacity to put out fires, not only due to its speed, but also its width.305 The intensity of the fire was estimated at about 30,000 kilowatts, which also far exceeds firefighters' capacity to control.³⁰⁶ At this stage and scale, Dr Burrows advised that even water bombing would have been ineffective, as well as incredibly dangerous to attempt, and any other fire suppression attempt would also have been extremely dangerous and futile.307
- **254.** Dr Burrows noted that some of the chaining had helped to pull up the fire, but unfortunately the total area that had been completed at that time was only approximately 1 km, and given the fire front was 5 km in width, the chained areas only covered a small proportion of it.³⁰⁸
- about 3.50 to 4.20 pm.³⁰⁹ At that time, it was averaging 14 km/hr and was probably travelling faster than that due to wind gusts. The fuel loads along the road verge would have been significantly higher than in the adjoining paddocks, so the intensity would have escalated as the fire hit the heavier fuel loads on the road verge and the flame heights were in the order of two and a half metres. The carbon stains on the road opposite where the cars were found indicated a very high intensity fire.³¹⁰ At the point where Tom, Anna, Julia and Kym Curnow lost their lives, the fire had travelled approximately 66 km from its point of origin. In total, it eventually travelled 100 km before it was deemed to be under control.³¹¹
- 256. In summary, the expert evidence before me indicated that the Cascades fire started due to a lightning strike (rather than any human action) in UCL on the morning of Sunday, 15 November 2017. It remained relatively contained until predicted catastrophic weather conditions arrived on the morning of the morning of Tuesday, 17 November 2015, at which time it broke out onto adjacent farmland. From that time, the fire raged through the farmland at an

³⁰⁴ T 39.

³⁰⁵ T 35~36.

³⁰⁶ T 36.

³⁰⁷ T 36.

³⁰⁸ T 41.

³⁰⁹ T 41, 44~45; Exhibit 7, Tab 3, p. 12.

³¹⁰ T 42~43, 48.

³¹¹ T 37

- unprecedented level of ferocity and scope, until it impacted Grigg Road in Scaddan at about 4.00 pm, consuming the two vehicles that were in its path.
- 257. The experts also agreed that the opportunity to prevent the fire was on the Sunday and Monday leading up to the catastrophic weather change on Tuesday, although it was always going to be challenging with the fire originating in its remote location. The attempts made to contain the fire were reasonable, but were limited by a lack of time and resources. Once the catastrophic weather conditions emerged late in the morning of Tuesday, 17 November 2015, the fire was unstoppable.

OTHER DAMAGE CAUSED BY THE FIRES

- 258. Although this inquest is properly focussed on the deaths of Tom, Anna, Julia and Kym Curnow, it is worth noting that there was also mass destruction and devastation caused by the fires throughout the Esperance region. The huge extent of the fires explains why resources were so stretched. Mr Carmody went up in the air on Wednesday, 18 November 2015, and said he was "amazed by the size and devastation" of the fire scar.
- 259. In addition to the tragic loss of these four people's lives, there was enormous damage to buildings, farmlands, livestock and native wildlife. I have already mentioned that the horse Cougar died in the horse float along with the others. The Cascades fire also burnt 128,000 hectares and destroyed the Scaddan town hall, a house, 16 non-residential structures and dozens of vehicles in the communities of Grass Patch, Seven Gums and Scaddan. Approximately 4,500 livestock died and 30,000 hectares of crop (equating to 500,000 tonnes of grain) was burnt.³¹³
- **260.** The Merivale fire burnt 18,000 hectares and destroyed two houses in Stockyard Creek.³¹⁴
- **261.** The Cape Arid complex fires destroyed 164,000 hectares of bushland, including approximately 90% of the Western Ground Parrot habitat. This native parrot is critically endangered and the loss of its habitat prompted concerns that it could become the first bird in at least 200 years to become extinct in Western Australia.³¹⁵ Efforts are being made to manage predators and create a successful breeding program, but it remains critically endangered.
- **262.** The financial cost of these fires ran into the millions.³¹⁶ As a simple example of the types of losses sustained by individuals, Mr Vandenberghe spoke of having four properties impacted, with two of them "completely erased. Not a square metre left" of crop, as well as 720 sheep lost and kilometres of fencing

³¹² Exhibit 1, Tab 4 [400].

³¹³ T 3~4.

³¹⁴ T 3~4.

³¹⁵ T 3~4.

 $^{^{316}} T 37$

- and buildings and vehicles.³¹⁷ Still, as he noted, it "was all incidental" compared to the lives lost.
- 263. There was also evidence that many, many more lives might have been lost, if not for the bravery of the firefighters, many of whom sacrificed their livelihood in the form of their crops and livestock, to leave their farms at harvest time and go out to fight the fires. The professional firefighters from DFES and DPaW also went above and beyond anything that could be considered their usual duties to try to bring the fires under control.

ANALYSIS

- 264. Despite the rhetoric of many politicians today, who would have us believe that climate change is not the cause of increasing bushfires in Australia, I am satisfied from the evidence before me that the climate is changing and the timing, number, duration and severity of fires in this country is increasing, in part as a result of climate change.
- 265. I will generally restrict my remarks and recommendations to the Esperance region, as that is where the death occurred and it is the focus of this inquest. However, I note that the Bureau of Meteorology (BOM) and CSIRO released the fifth biennial State of the Climate report for Australia in 2018, which confirmed that "[o]bservations and climate modelling paint a consistent picture of ongoing, long term climate change interacting with underlying natural variability." These changes are associated with increases in the frequency or intensity of heat events, fire weather and drought. For fire weather in particular, the report notes that there has been a long-term increase in extreme fire weather, and in the length of the fire season, across large parts of Australia, particularly for southern and eastern Australia. 319
- 266. The recent devastating bushfires in Queensland and New South Wales, that have already caused a number of deaths and destroyed vast areas of land, livestock and native animals, are a telling example of the accuracy of the BOM and CSIRO predictions. These events are occurring earlier and earlier in the fire season.
- **267.** This is acknowledged by our State's Fire Commissioner Darren Klemm (Commissioner Klemm). While the fires were raging in the eastern states, Commissioner Klemm was reported as expressing his concern that early indicators for this coming fire season in Western Australia bore comparison to the conditions in 2015 and 2016, that led to the deaths in Esperance and Yarloop.³²⁰

³¹⁷ T 395

^{318 &}lt;u>www.bom.gov.au/state-of-the-climate</u>, Report at a glance, p. 1.

www.bom.gov.au/state-of-the-climate, Report at a glance and Future climate and further information.

https://thewest.com.au/news/disaster-and-emergency/fire-commissioner-darren-klemm-says-weather-and-ground-conditions-similar-to-2015-and-2016-could-bring-severe-fire-season-to-wa-ng-b881378366z.

- 268. The locals in Esperance will tell you that this is the reality of life in the Esperance region now. They are well aware that the fire season is starting earlier and the weather and dry ground conditions are leaving them vulnerable to catastrophic fire conditions. Improvements in farming practices in the region have also meant that there are better crops, which also increases the fire risk.³²¹ There is no doubt that more fires will come. The question that arose in this inquest is what, if anything, can be done to reduce the number and severity of these fires, and to help those involved in trying to subdue them to keep them safe?
- **269.** I extended an open invitation at the conclusion of the inquest to the parties represented by counsel at the hearing, but also to those interested persons in the courtroom gallery, to put practical solutions to me for my consideration in reaching my finding and looking forward to considering prevention of future deaths. I received a number of submissions, and most of them raised very similar issues.
- 270. I note at this stage that a number of local people joined together after the fire to form Cascade Scaddan Fire Review Limited, which engaged Pacer Legal to undertake an investigation of the Cascades fire and provide a written report, which became the Cascade Scaddan Fire Report, dated 21 October 2016. Mr and Mrs Campbell were actively involved in this process. As I have mentioned earlier, the final report was provided to Parliament. After the inquest, Pacer Legal provided to the Court a summary of recommendations that their client submitted I should make based upon the evidence before me.³²² I will refer to their submissions as the Pacer Legal submissions, simply for ease of reference, noting they are effectively submissions made on behalf of many members of the local community in Esperance. I also received submissions from the Shire of Esperance, DPaW, DFES, the Union, WA Farmers Esperance Ravensthorpe Zone and the Deputy FCO and Bushfire Brigade Captain for the Scaddan area, Ashley Stewart and Gavin Egan. Some witnesses also made suggestions for improvements during their evidence at the inquest, which I have also taken into account.
- 271. There was a recurring theme throughout the inquest, and in the many submissions provided to the Court, focussing on the State and Federal Governments tendency to overinvest in post-disaster support and underinvest in mitigation and prevention strategies. In the context of this inquest, the concern expressed is that the focus on fighting bushfires and the post fire recovery process, is false economy when an investment in fire mitigation works could prevent, or at least dramatically reduce, the impact of these fires. One submission referred to an Australian Productivity Commission Inquiry Report into Natural Disaster Funding, publicly released on 1 May 2015, which highlighted a saving of \$11 in emergency management for every \$1 spent in mitigation.³²³
- **272.** There was also an emphasis on the need for Esperance to be self-sufficient during the fire season as often help will not arrive for some time due to the

³²¹ T 339

³²² Letter to Sgt Housiaux from Pacer Legal Pty Ltd, dated 14 May 2019, Suggested Recommendations.

³²³ Letter to Court from President WAFarmers Esperance Ravensthorpe Zone, dated 4 April 2019

distances involved and the likelihood that the weather patterns will already have led to fires in the South West.

- 273. Other areas raised were training, particularly relating to the Aurora simulator programme and the handover process for management of a fire, communications and road closures, as well as the function and management of IMTs.
- **274.** The Shire President, Mrs Brown, spoke at the conclusion of the inquest on behalf of the community of the Shire of Esperance. Mrs Brown acknowledged and thanked every person who was involved in fighting the fires back in November 2015, as well as those who gave evidence at the inquest so many years after. Mrs Brown expressed her condolences to all of the family and friends of Kym Curnow, Tom, Anna and Julia, including those who were able to come to Esperance and to those in faraway countries who were unable to attend but whom were still in the thoughts of everyone at the inquest. Mrs Brown emphasised to me, as I went to my deliberations,³²⁴

the vital importance in an isolated community such as [Esperance] of the good working relationship and communication between the agencies and organisations when we have to fight events like this.

- 275. Mrs Brown expressed the hope that after this inquest those relationships will be strengthened. Mrs Brown also emphasised the vital importance of mitigation and resources so that the community is in the best position in the future to face the next, inevitable, event. She also highlighted the hope of the community that any recommendations that arise out of this inquest, to which so many members of the Esperance community contributed, will be seriously considered and acted on, in acknowledgement of the loss of the lives of Kym Curnow, Tom, Anna and Julia. 325
- 276. Having considered all of the submissions, and carefully reviewed the evidence myself, both oral and documentary, I propose to make a number of recommendations focussed on the key areas arising from the inquest. In making these recommendations, I have taken account of the time that has elapsed since these deaths, and the improvements that have been made in the interim. I heard evidence that during the recovery process after the November 2015 fires the Shire made a number of changes. In addition, I heard evidence from witnesses that during the recent fires in March 2019, there had been noticeable improvements to the functioning of the IMT and air support, as a result of changes implemented by DFES and DPaW and the Shire working together. However, I also heard evidence that many of the problems experienced in November 2015 still remain, so the focus of my recommendations is on those areas that still require improvement.

³²⁴ T 541.

Section 13 Handover and Controlling Agencies for Fires

- 277. I have already outlined at the start of this finding the various agencies who have initial responsibility for a fire, depending on where it starts, in the Esperance region. Section 13(4) of the *Bush Fires Act 1954* allows the DFES Commissioner to appoint a person to take control of all operations in relation to a fire, either at the request of local government or because the Commissioner considers it appropriate due to the nature or extent of the bush fire. The evidence indicates that, where the request is made, it is usually done verbally and then the formal process of taking over management is done in writing through DFES.
- 278. The responsibility for the initial management of fires, and the process for handover, does not appear to have been well understood by the volunteers managing the Cascades fire. Mr Carmody indicated to police that throughout the whole operation he had been working under the belief that he was the Fire Control Officer, but that there was always someone from DFES that had overall responsibility for the fire. He assumed this would be someone in Perth, as he thought Mr Wornes was managing the Merivale Fire and he did not think it was possible for Mr Wornes to effectively be incident controller for both that fire and this one.³²⁶ Therefore, Mr Carmody assumed Mr Wornes would be receiving support for that role from the Perth based DFES Head Office.³²⁷
- **279.** Mr Carmody also admitted he had little understanding of the lines of responsibility for fires in UCL, and assumed his responsibility stopped at the edge of farm land, and anything he did outside of there was voluntary to assist DPaW as the managing agency, rather than his direct responsibility as the primary responding agency.³²⁸
- 280. Nevertheless, Mr Carmody described the relationship between the various firefighting agencies in Esperance as "seamless," ³²⁹ stating they work as one team. Mr Carmody gave evidence he had a strong relationship with Mr Wornes, the DFES area officer, which had been established by working together over a number of years. ³³⁰ During this event, they continued to work well together and were in agreement about the plan of attack. ³³¹
- 281. There was also evidence of confusion as to when the management of the fire was handed over to DFES. I have detailed this above in the chronology of events, but it is apparent that Mr Brown and Mr Wornes had a misunderstanding about whether a request had been made to DFES to take over the fire, which was eventually resolved by Mr Scott, the Shire's CEO, and formal handover was effected around midday on 17 November 2015. Like Mr Carmody, Mr Scott's evidence was that the three agencies (including

³²⁶ Exhibit 4, Tab 1 [425].

³²⁷ Exhibit 4, Tab 1.

³²⁸ Exhibit 4, Tab 1.

³²⁹ T 219.

³³⁰ T 220.

³³¹ T 221

DPaW) working together was still a "very effective model,"³³² and it was not felt that the confusion negatively affected how the fire was managed.

- 282. Nevertheless, the Shire submitted that the handover process should be transparent and there should be documentation shown to, and signed by, an agent of the Shire to remove the possibility of confusion. Following handover, the identity of the Incident Controller and the controlling agency should then be publicised broadly, not just within the IMT. I agree with that submission. This is not the first inquest involving a fire I have presided over where there has been confusion over the handover process.
- 283. The Shire of Esperance advised that it has now developed and adopted a new handover procedure with DFES, whereby there is discussion about the likelihood of the handover of a fire well before the incident escalates and a list of 'triggers' are used as a guide by Shire staff and the Brigades to assess whether a handover may be required. All communications between the Shire and DFES as to the handover process are to be documented and in writing. Nevertheless, the Shire advised that DFES still requires a local government Incident Controller to make a verbal request (via telephone) to the DFES Regional Coordinator in Albany.
- 284. In my view, the best way to avoid confusion in these circumstances is for there to be a requirement for DFES to provide written confirmation to the Shire (or DPaW if that situation arises) when a handover of control of a fire is effected under s 13 of the *Bush Fires Act 1954*. If that is the standard process, then it will reduce the opportunity for confusion. Verbal requests are no doubt sometimes easier, in a dynamic situation, and there is no reason why the process shouldn't be started by a verbal request, but there needs to be formal documentation confirming when it is done to ensure that everyone knows that the handover has occurred.

Recommendation No. 3

I recommend that DFES adopt a policy by which: (i) any authorisation under s 13 which is initiated verbally be made in writing (as required by the Act) as soon as practicable; (ii) a copy of the written authorisation be given to the local government or DPaW as soon as practicable; and (iii) the fact of any authorisation, once completed, be (where possible) communicated to those in the ICV and on the fireground as soon as practicable.

285. In the Pacer Legal submission it was suggested that there might also be some benefit in DFES creating simple fact sheets that can be made publically available outlining the roles, responsibilities and authorities of the various agencies and officer holders.³³³ This is a sensible suggestion and I

³³² T 352

³³³ Letter to Sgt Housiaux from Pacer Legal Pty Ltd, dated 14 May 2019, Suggested Recommendations.

don't think it really requires me to make a recommendation, as it is a simple thing for DFES to do and put up on its website and provide to the local governments, and I have no doubt DFES will take up the suggestion without much prompting.

- **286.** It was raised by both Mr Wornes during the inquest, and in submissions from the Union, that consideration should be given to having one controlling agency for all fires, such as DFES, rather than multiple fire agencies as is currently the case. Mr Wornes acknowledged that this would controversial, but also noted it has been done in other states in Australia.³³⁴
- 287. While acknowledging there can be benefits in consistency if one agency is responsible, Mr Scott on behalf of the Shire of Esperance, noted "there is a certain level of ownership locally" and in his view, it needs to be managed locally. Mr Scott commented that Esperance is a unique environment, and there are multiple generations of families who have lived in the region for 50 plus years and they know the land and the weather. Nevertheless, Mr Scott agreed the current model has problems, such as having one agency responsible for the UCL and the other responsible for any fire response on it.335
- 288. All of the evidence indicated the three agencies work well together in the local area during an incident. As Mr Scott put it, we "work well together with other agencies locally because we also play footy with them. We see them at the pub. We know them."336 On a wider scale, Acting Deputy Commissioner Gary Gifford gave evidence that the collaboration between DPaW and DFES is the strongest he has ever seen it in the 20 years he has been with the Department.337
- 289. I also note the South-East Fire Working Group, that I will refer to in more detail later, will perhaps go some way to resolving the tension between the managers, and responders, on UCL.
- 290. Further, if the local government is supportive, the option for DFES to take over fire management in that area already exists. A/Deputy Commissioner Gifford explained at the inquest that some local governments in the north of the State have chosen to sign a Memorandum of Understanding with DFES, which gives DFES the administration and management of the volunteer Bushfire Brigades in those areas. It is an option chosen by local government, and accepted by DFES, rather than being imposed on local government without its full support.³³⁸
- 291. DFES acknowledged that it "could not provide an emergency service in Western Australia without our volunteers,"339 and A/Deputy Commissioner Gifford expressed the opinion that the Rural Fire Division is a good mechanism to improve relationships and there is also to be established a

335 T 382.

³³⁴ T 339.

³³⁶ T 383.

³³⁷ T 511.

³³⁸ T 520.

State Bushfire Advisory Committee and Bushfire Operations Committee, the latter of which will give an opportunity for volunteers to discuss emerging issues and trends at a local level with the agencies.³⁴⁰

- 292. Given the Rural Fire Division of DFES has only recently been established, following an independent review into another catastrophic fire in this State,³⁴¹ and the Bushfire Centre of Excellence and other committees will flow out of this, in my view it is appropriate to allow these new changes an opportunity to demonstrate whether or not they are effective in resolving some of the issues that have been raised in the past. I talk more about what these changes involve below in relation to fire mitigation and resourcing.
- 293. On a similar, but slightly different note, submissions filed on behalf of DFES on 15 May 2019 advised that the legislation pertaining to fire and emergency services in Western Australia, known collectively as the emergency services Acts, are currently under review. DFES was involved in community consultation as part of the review, which is ostensibly looking at developing one comprehensive, consolidated piece of legislation. It appears it has taken a long time to progress.³⁴² In its submissions to the Court filed in May 2019, DFES advised the details of the review remain 'Cabinet in Confidence' and it was suggested I might recommend that the State Government prioritise this review and the amalgamation process.
- **294.** Since that time, Cabinet has approved the consolidation of the emergency services Acts into a single piece of legislation and a Bill is to be drafted, which will then be released for public consultation. I am advised the Bill has not been given a high drafting priority, so it is likely to be a number of years before the new legislation can be introduced.³⁴³
- **295.** It is important for the future for the legislation governing these emergency incidents to be concise, clear and current. Accordingly, in my view, it is important that the State Government prioritise this piece of legislation.

Recommendation No. 4

I recommend that the State Government give consideration to giving a higher drafting priority to the Consolidated Emergency Services Act.

https://www.treasury.wa.gov.au/uploadedFiles/Site-content/Economic Reform/RIA Program/Review-of-Emergency-Services-Acts-Concept-Paper-CRIS.pdf;

³⁴⁰ T 522.

³⁴¹ Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire, tabled in Parliament 23 June 2016.

³⁴² Outline of Submissions on behalf of DFES, filed 15 May 2019;

³⁴³ Email to Counsel Assisting from SSO, dated 7 November 2019.

Training

- **296.** The issue of training was raised in a number of submissions, in relation specifically to the Aurora fire simulator and other areas.
- 297. A/Deputy Commissioner Gifford explained that Aurora was developed as a collaborative approach between DFES and Landgate. He explained it is a cloud based predicted modelling system, which has a web interface, and provides simulation of fire direction, rate of spread and also intensity. It is intended as a tool to assist State and local government staff in decision-making, specifically when they identify community and/or assets at risk, in order to disseminate warnings and public information at an earlier stage.³⁴⁴
- 298. Dr Burrows explained Aurora has the capacity to use satellite hotspot detection of fire ignitions, and the four day weather forecasts, to predict and then rapidly map the potential spread of a bushfire in WA. He emphasised that it is a very useful tool to help and assist decision-making by firefighters, but still has limitations as it relies upon the accuracy of the information available. The Aurora simulator wasn't sufficiently developed to be used operationally at the time of these fires in 2015, but it is now in operation and it was used during the fires in Esperance in March 2019.³⁴⁵
- 299. Mr Carmody had experience with the use of the Aurora software in fighting the fires in early 2019. He gave evidence it was quite a useful tool, although he felt it did have some anomalies.³⁴⁶ It also has the disadvantage that it can only be accessed by a person with a government email address, so Mr Carmody can't use it himself out in the field as a Brigade leader.³⁴⁷
- **300.** A DFES witness, Mr Duckworth, indicated that, in his view, the primary downside for Aurora was that it doesn't factor in fire suppression straight away, which can lead to a tendency to overestimate the potential size of fires. However, as Mr Duckworth noted, it is probably better to overestimate, than to underestimate, in those circumstances, so it is still a useful tool, provided it is regarded as a simulation rather than relied upon as 'truth'.³⁴⁸
- 301. The evidence at the inquest indicated that the Shire's employees and volunteers have not yet been provided with access to the Aurora system as they do not have the necessary log-in to access the database and training. It was submitted by the Shire, and others, that at least the Bushfire Brigade FCO's should receive log-in access and training in the system. The Union submitted it should be given to those people who might be in decision-making positions during a fire.
- **302.** A/Deputy Commissioner Gifford advised that DFES established the Rural Fire Division in April 2018, which has given DFES a greater focus on bushfire risk management. There have been five 'champions' as A/Deputy

³⁴⁵ T 46~47.

³⁴⁴ T 511.

³⁴⁶ T 227.

³⁴⁷ T 230~231.

³⁴⁸ T 92~93.

Commissioner Gifford put it, who have been identified in training, and it is the intention for those five people to go out into the regions and start sharing their knowledge to train others in the use of Aurora.³⁴⁹ I assume that will also involve giving local government volunteers log-in access for when they are on the fire front. Given the steps that are being taken by DFES, there seems no need for me to make a recommendation in relation to the Aurora training.

- 303. I was also told that the Bushfire Centre of Excellence is focusing on specialist training in bushfire management and analysis, as well as policy and doctrine work.³⁵⁰ DFES advised in its submissions that the Centre aims to empower members of the public with the skills and information they need to mitigate bushfire risk, noting that it is only with the contribution and dedication of the more than 20,000 bushfire volunteers that DFES can manage bushfire prevention, preparedness, response and recovery across the State of Western Australia.³⁵¹ Initial training that has been provided so far this year includes training courses on the topics 'Fire Weather' and 'Fire Behaviour Analyst'. I am advised these highly specialist courses have not been offered in Western Australia previously, and by providing this training to staff from across state agencies and local governments, it is hoped it will directly enhance the State's rural fire capability.³⁵² The Aurora training is also anticipated, as noted above.
- **304.** In it submissions, DPaW has suggested that a training focus should be to provide senior FCO's with training to assist in understanding the functions and requirements of an IMT and to build capacity within the ranks for them to participate in an IMT, given the great benefits of incorporating local knowledge into bushfire response. This was also raised in other submissions from local volunteer Bushfire Brigade members.³⁵³ I have no doubt that this can be accommodated, and I mention it in this finding with the hope that it will be brought to the attention of those running the training programme.
- 305. The Union submits all firefighter training needs to be standardised, which should be enshrined in legislation and DFES should be better funded to regulate, administer and deliver this training. It is noted that the Shire of Esperance has made improvements to training offered to volunteers, but it is suggested this could be improved further. The Union suggests that the model used by Surf Life Saving Australia to ensure annual skills maintenance of volunteer life savers could be used for volunteers in Bushfire Brigades. This is a good suggestion. The Union also supports the expansion of the seasonal casual agricultural workers training across Western Australia, which I also support. I note that the newly formed Bush Fire Centre of Excellence is making changes to training, focussing on the needs of rural fire fighters, so it seems to me that this centre is best placed to consider the suggestions raised by the Union. Therefore, I suggest that DFES

³⁴⁹ T 512.

³⁵⁰ T 513.

³⁵¹ Outline of Submissions on behalf of DFES, filed 15 May 2019 [8].

³⁵² Outline of Submissions on behalf of DFES, filed 15 May 2019 [10].

³⁵³ Outline of Submissions on behalf of DPaW, filed 13 May 2019 [5].

³⁵⁴ United Professional Firefighters Union of Western Australia Closing Submissions and Recommendations, filed 14 May 2019.

put forward those specific recommendation suggestions in relation to training to the Centre.

306. I also note a submission from local bushfire volunteers that DFES provides little flexibility in planning training at times when volunteers are more readily available. They suggest a greater degree of flexibility will encourage more people to undertake the training. I note that the facts of this inquest certainly demonstrate that timing of training was problematic, given that is what Superintendent Tasker was coming to perform on the day he was caught in the fires. It is an important point, and something that I'm sure DFES management will take on board and communicate to those organising the training through the Bushfire Centre of Excellence.

Fire Mitigation and Resources year round

307. In submissions filed at the conclusion of the inquest, DPaW advised that responsibility for on-ground management of 89 million hectares of UCL and unmanaged reserves was transferred to its predecessor, the Department of Conservation and Land Management, in January 2003. Recurrent funding was provided at that time for fire mitigation and the control of pests and animals. I was told at the inquest the real operational amount of money available in Esperance to do the mitigation works is \$20,000 to \$25,000 per year, a sum one witness described as "grossly insufficient" for the task that is expected of DPaW. Nevertheless, local DPaW staff, in conjunction with DFES and local farmers, do their best to try and do as much as they can with it.

308. Mr Blok is the DPaW District Manager of the Esperance District, which runs from Starvation Bay Harbour in the west through to the South Australian border in the east, encompassing about 16 million hectares, including 6 million hectares of UAL and just under 2 million hectares of national parks and nature reserves. His role involves coordination of the works programs, which includes conservation, fire management and the parks and visitors services program. Mr Blok gave evidence that back in 2006 and 2008 there were two separate fires in the Lake Mends area, where the Cascades fire later started. Following these earlier fires, chain breaks to the width of about 100 metres were installed in 2009 to consolidate the fire effort. The chained fire breaks were then burned as part of the treatment process. In early 2010 there was further chaining completed, although this wasn't burnt as there was insufficient consumable fuel for a fire. In 2012 a major track in the area was upgraded and strategic fire exit tracks were also identified and upgraded in 2012. This evidence was provided to demonstrate that DPaW was not oblivious to the risk of fires in the area and did what it could to mitigate the risk within the limited resources available.356

309. Mr Blok agreed with others that the budget for mitigation works in the region is "highly insufficient," ³⁵⁷ so DPaW try to identify priority areas for the work to be done through consultation with the community. Following the

³⁵⁵ T 456.

³⁵⁶ T 471~472.

 $^{^{357}}$ T 473

2015 fires, Mr Blok indicated the Bushfire Brigade Captains and senior volunteers met with Mr Blok and other DPaW staff in a workshop in January 2016 to brainstorm and rethink the firebreak systems in that area. They agreed that the 100 metre wide chain break would suffice for about 95% of bushfires, and a rotation of around four to six years maintenance through either chaining or chaining and prescribed burning (depending on the age of the fuels) would be sufficient.³⁵⁸ To allow farmers with properties on the interface with the UCL to assist, DPaW agreed to also upgrade the firebreak tracks on either side of the chain break to minimal earth on both sides. This would allow farmers to use their rubber tyred machines, such as tractors, to do work to mitigate the edge without compromising their equipment.³⁵⁹

- 310. Mr Blok was also aware that while Mr Wornes was still working for DFES in Esperance, he drafted an MOU between DFES, DPaW and the Shire to engage farmers in a defined program of works. The intention was to drop the chain off in one end of a district and then move it from farm to farm as farmers completed the works. However, Mr Blok noted that it wasn't entirely successful, as not all farmers were willing to undertake voluntary mitigation work on behalf of DPaW. Nevertheless, DPaW is still engaged in the program in some way, as it drops off the chain where it is requested by individual farmers. Mr Blok acknowledged that this was well outside the scope of works a farmer should be expected to do, so DPaW staff are grateful and appreciative of the community spirit it demonstrates on the part of the farmers when they make the request.³⁶⁰
- 311. This leads in to a major problem with the current system that was highlighted during the inquest, namely the fact that DPaW have responsibility for managing the UCL, but the local farmers and other volunteers have the responsibility for the fire response on UCL. Mr Mair, the DPaW Regional Manager for the South Coast region, acknowledged that it can cause a bit of confusion having the distributed responsibilities. He also acknowledged that people living on the interface with Crown land want to protect their assets and are willing to help put out fires where the fire is in that area, but he questioned why they should be expected to go deeper into UCL, where it is really the government's responsibility.³⁶¹ Mr Mair expressed his personal belief (as opposed to the agency position) that "the expectations on local government and the volunteers are unreasonable"362 given the size of the area, and he believes a reassessment of the model is long overdue. Mr Mair did not suggest that the volunteers should not play a role as he acknowledged they are invested in it. However, he believes there should be a better involvement of government to improve the fairness of what is expected of the volunteers.³⁶³ Given the length of time that has now elapsed since DPaW took over responsibility for UCL management, DPaW submitted that the current arrangements for UCL management could benefit from a review.364

³⁵⁸ T 472.

³⁵⁹ T 474.

³⁶⁰ T 474~475.

³⁶¹ T 454~455.

³⁶² T 455.

³⁶³³⁶³ T 467.

³⁶⁴ Outline of Submissions on behalf of DPaW, filed 13 May 2019 [1].

- 312. As for what is being done towards mitigation currently, it was explained at the inquest that there are two other potential sources of money, separate to the recurrent small budget for mitigation. One is the Bushfire Mitigation Activity Fund, but Mr Mair explained it is a competitive bid process, which requires the regions to lobby for their share and put up a case on a 'needs and risk' basis. Esperance has received money out of that twice, in the region of \$200,000 \$300,000 each time, which Mr Mair acknowledged was very much appreciated. However, as Mr Mair pointed out, these issues that exist are there forever, and there is no security of funding arrangements because the competitive bid process is short-term money, so there is no way to make long term management plans.
- 313. The other potential parcel of money is a similar process of making representations to the newly formed DFES Rural Fire Division. The newly formed South-East Fire Working Group is involved in preparing a submission to the DFES Rural Fire Division in this regard. The group includes representatives from DFES, DPaW and the Shires of Esperance, Ravensthorpe and Jerramungup. They are looking to establish a long term fire mitigation strategy in the region and to ensure that any increased allocation of funding is directed most effectively. Mr Scott, the Shire of Esperance CEO, indicated that so far they have been able to access funding for creating some additional mitigation breaks to the west of Esperance, particularly around Cascades, but large areas still remain to be done. The three Shires are working together to identify the areas of greatest risk, and then collectively approaching the State Government on the basis that if these areas are not dealt with, it will potentially affect more than one Shire in the event of an uncontrollable fire.³⁶⁵
- 314. Mr Scott advised the Shire has received funding from DFES to second an officer to develop an understanding of fuel loads across the three Shires so they know what fuel loads present the biggest high risk areas that need to be tackled first when funding is obtained. Mr Scott noted that something has to be done, particularly in regards to the UCL, so he is hopeful the State Government will see the Working Group's requests as reasonable and will provide the necessary funding to have it implemented. Mr Scott stated, "I don't think we are asking too much. I think we are asking what we believe we need." He noted that the Esperance community "is desperate for mitigation" and it has been "the one single voice" he has heard since the November 2015 fires. "If you can prevent fires from getting into our community ... what price do you put on that?" 168
- 315. However, the funding being sought by the South-East Fire Working Group is again short-term funding and the submissions emphasised the need for much more security of funding for the work that is needed on an ongoing basis. It is submitted to me that it is very important for there to be some security of knowledge for people managing the Crown land and responding

³⁶⁵ T 378.

³⁶⁶ T 379.

³⁶⁷ T 380.

³⁶⁸ T 381

to bushfires on it, that there are lower levels of fuel so that fires can be contained.³⁶⁹ Mr Mair noted that the issues that arise from the land in terms of mitigation don't suddenly go away at the end of a funding cycle.³⁷⁰

- 316. Dr Burrows described scrub rolling treatment (chaining and burning) as an ideal risk-management strategy for the area but noted there is around 700 km of interface between bushland and farmland in the Esperance area, which is a large area to cover. Dr Burrows also noted that this type of treatment needs to be re-done every 8 10 years. Local witnesses suggested something more in the order of 4 years might even be appropriate.³⁷¹ It was suggested that it would take a significant injection of funds "to get the situation back to what [DPaW] would consider acceptable, and then a maintenance level of funds"³⁷² to continue maintaining the breaks. It involves a question of funding and allocation of resources by the government, when there is obvious competition for such funding.³⁷³
- 317. In his statement to police Mr Carmody noted that some of the firebreaks that were critical to control the Cascades fire were areas Mr Carmody had been unsuccessfully requesting be maintained by government agencies for the previous five years.³⁷⁴ The area where the fire originated, the Great Western Woodlands, is quite close to the location of some of Mr Carmody's farming property. He described it as a large tract of semi-temperate woodlands. They were old woodlands, with a heavy fuel load as they hadn't been burnt through in at least 50 years,³⁷⁵ and possibly up to 80 years. Mr Carmody understood there had been no fire mitigation carried out to reduce the fire load in the 44 years or so that he has lived there, other than creating fire breaks around it. Some of the firebreaks that ran up to the back fence of Mr Carmody's property were put in around 2003. Mr Carmody gave evidence he had sought permission from DPaW for a number of years to chain the breaks. It took several years to receive permission, which Mr Carmody said was frustrating but not unusual. Following these fires in 2015, Mr Carmody indicated the situation has improved and he was finally allowed to do some firebreaks with the cooperation of DPaW, in either 2016 or 2017.³⁷⁶
- **318.** Mr Blok explained that there are statutory obligations under a raft of legislation, including the *Biodiversity and Conservation Act 2016* and the *Aboriginal Heritage Act 1972* that DPaW have to abide by in agreeing to works being undertaken, to ensure that cognisance is taken of rare flora and fauna and Aboriginal cultural values that exist on the interface. However, he advised that DPaW is endeavouring to do this in an expeditious and practical way to ensure farmers can undertake works when they are willing.³⁷⁷

³⁶⁹ T 456.

³⁷⁰ T 468.

³⁷¹ Exhibit 3, Tab 5

³⁷² T 461.

³⁷³ T 56~57.

³⁷⁴ Exhibit 4, Tab 1 [434].

³⁷⁵ T 47.

³⁷⁶ T 223~225.

³⁷⁷ T 475

- 319. Mr Scott explained that the South-East Fire Working Group is also considering the environmental and cultural issues that must be addressed in fire mitigation strategies, and this is on the agenda of the working group. The aim is to enable farmers to create better protection along the interface with nature reserves, while respecting biodiversity and sites of cultural significance. Mr Scott acknowledged there is a responsibility to look after the environment as well as tackle fire mitigation and fire risk reduction, but there is also a need to reduce the red tape that Mr Carmody and others have struggled against.³⁷⁸
- **320.** Mr Halford, who as I have mentioned earlier was the Captain of the Gibson Brigade, also stated that he and other members of the Gibson Brigade had been trying to inform the local community and DFES officials for years that a fire like this was going to happen, but when he and others had raised their concerns in the past, they had been told they were being "paranoid and overreacting." Mr Halford expressed the opinion the volunteers were majorly under resourced with equipment and training, which puts volunteer firefighters and danger and limits their capabilities.
- 321. Mr Carmody spoke of how the volunteers work together in the Brigade to fight bush fires as their contribution to the community. They willingly invest in training and equipment, and they don't begrudge the time and money and energy it involves, as they know it benefits the whole community. Mr Carmody spoke personally of extra training courses he has done since these fires to try to learn more, including as a ground controller to provide aerial support, and he has also invested more than \$100,000 in heavy machinery to be able to get into the bush and start bushfire control more quickly.³⁸⁰ However, the local volunteers also welcome the expertise and resources that can be provided by government agencies such as DFES and DPAW.
- 322. The Shire also noted that many of the Shire's FCOs are forced to use their own private vehicles on the fire ground as there are an presently insufficient number of light tanker appliances (funded by the Emergency Services Levy (ESL)) available to the Brigades. Funded fire appliances are fitted with burn over safety equipment, including radios, automatic vehicle locators, dropdown curtains, re-breathers and fire blankets. Other inquests in the past have highlighted the crucial importance of this type of equipment in the event of a potentially fatal burn over and in this case, we have seen what can occur when people in unprotected vehicles are caught in a burn over situation. Therefore, when an FCO has to utilise their own private vehicle on the fire ground, they are exposing themselves to a greater level of risk. Further, it is emphasised by the Shire that when volunteers routinely use their own equipment, including aircraft and fire trucks, as well as giving up their time (and for many of the farmers the time of their staff), they do so without any reimbursement.

³⁷⁸ T 379.

³⁷⁹ Exhibit 5, Tab 9 [166].

³⁸⁰ T 207.

323. The Shire would like to see additional safety equipment made available to its FCOs, preferably in the form of funding of a number of additional ESL funded light tanker appliances, to be utilised across the volunteer brigades. At present, there are only three light tanker appliances available, which is clearly insufficient given the significant land area covered by the volunteer brigades. I am told that over the past two years (as at May 2019) the Shire has made repeated requests to DFES for 3 additional appliances (2 light tankers and one heavy duty appliance) to be made available to it during the peak of the fire season. Thus far, only two appliances have been made available each year, and the use of these appliances is not guaranteed in the upcoming fire season, which is effectively now upon us.³⁸¹ I agree with this submission. It is very important from a safety point of view as well as from the position of what is fair to expect the local people of Esperance to bear on an ongoing basis.

Recommendation No. 5

I recommend that DFES fund an additional two light tanker appliances and one heavy duty appliance to be used by the Esperance volunteer Bushfire Brigades, at their discretion. The appliances should be provided on a permanent basis, as the Brigades need to be able to learn how to use the appliances and train on them, and the fire seasons are becoming extended and unpredictable.

- 324. Better support for the Shire and local volunteers also requires DPaW and DFES to be sufficiently resourced to provide a better service to the community and to assist the volunteers. The Shire supports an increase in resourcing to the local DPaW and DFES agencies in the Esperance region, particularly in the form of heavy earth moving equipment to allow DPaW to conduct fire mitigation activities, as well as to respond to a fire within the municipality.
- 325. As it stands, there is only one full-time DPaW employee (or a 1.5 FTE) totally dedicated to managing fire, with the balance of other staff available to help make a contribution. They also don't own any of their own earth moving machinery to use on a day-to-day basis to undertake fire breaks and other mitigation works.³⁸² Mr Mair noted that for it to be meaningful, DPaW would need a funding package for an operator, machine and ongoing funding to keep it running.³⁸³

³⁸¹ Closing Submissions filed on behalf of the Shire of Esperance, dated 17 May 2019.

³⁸² T 457~459.

³⁸³ T 464

- **326.** This is also relevant to firefighting, as Mr Scott's understanding was that during the 2015 fires the Shire was utilising every bit of heavy equipment that they could find, such as graders, loaders, trucks etc.³⁸⁴ At Mr Wornes' request, DFES had approved the financing of heavy equipment, so the issue wasn't paying for it, just finding it, as well as the trained operators to operate it in the context of firefighting. Having another machine in the area, with a trained operator experienced in firefighting and able to work as a DPaW employee, would be of significant benefit during a fire.
- **327.** Mr Scott noted that this particular fire had shown them how time poor they were and the smallest thing, such as the breakdown of a bulldozer from a faulty part or a chain not arriving on time, created much bigger issues in delaying the implementation of fire mitigation tactics.³⁸⁵ "Anything that can slow down a wild bushfire gives the community time, and time helps prepare and strategise and actually get the ... line of defence ready."³⁸⁶ This applies to mitigation to be 'fire ready', and also to access to proper resources during a fire.
- **328.** I agree with the submission from DPaW and the Shire that there would be great benefit in DPaW having its own earth moving machine, with a full-time operator, in order to prioritise fire mitigation works as well as for use during fire suppression. It seems to me that it is a priority that DPaW have the independence and reliability of operating its own earthmoving equipment, and the funding should be done separate to any other mitigation proposals.

I recommend that the Department of Biodiversity, Conservation and Attractions allocate funding to the Esperance District Regional Office to purchase an item of earth moving equipment suitable for fire mitigation works, as well as for use during a fire, together with 1.0 FTE position for an operator of the machinery, on a permanent basis. If there is insufficient funding within the Department, I recommend the Honourable Minister for Environment support an increase of funding for the Department to allow this recommendation to be fulfilled.

329. As for what is required more generally to manage fire mitigation in the region, Mr Mair said that DPaW has identified the quantum of work that needs completion. It involves the chaining of 1200 kilometres of 100 metre wide chain breaks, every four to five years, and just over 2500 kilometres of strategic fire exit tracks to provide access into the fire ground in remote area. Mr Blok noted that it will require "a significant investment of finances and additional resources to get ourselves ahead of that program so we can get

³⁸⁴ T 356.

³⁸⁵ T 381.

³⁸⁶ T 381

into that maintenance phase,"³⁸⁷ and then ongoing funding for the maintenance program. Although it will require that significant investment, Mr Blok emphasised that the money will be saved in the long-term through fire prevention and minimisation. Mr Blok noted the complete imbalance between the money spent on bushfire response as compared to bushfire prevention work. DPaW spoke of getting the balance right, and pointed in its submissions to the significant funds expended in the last five years fighting fires in the Shire of Esperance. It submitted that this expenditure should be considered in the context of expenditure on mitigation. If more funds and resources are put into mitigation, they may contribute to reducing the size and impact of summer bushfires, and the investment will therefore be repaid in full.³⁸⁸

- **330.** After the inquest, the President of the WAFarmers Esperance Ravensthorpe Zone, Mr Matthew Hill, sought to draw to my attention the WAFarmers Fire Mitigation Policy, which originated in the Esperance Ravensthorpe Zone in February 2016, and has since escalated to become a State-wide policy from April 2016. The WAFarmers have urged the Western Australian Government to reform fire mitigation protocols and structures to limit the number of wild bushfires experienced in WA in the future, specifically focussing on a low fuel five-kilometre buffer zone, indefinitely funded and regulated with environmental and heritage clearances, so that these buffer zones can be established and maintained for future generations.³⁸⁹ It was emphasised that a simple clear firebreak is insufficient to prevent the kinds of ember lit fires that the farmers often face in the Esperance Ravensthorpe Zone, and a wide low-fuel buffer is instead essential to take the intensity out of a wildfire before it reaches the cleared break. The WAFarmers also urge the government to allow local fire brigades to take control of prioritisation and coordination of hazard reduction burning.
- 331. All of the above information provides a very helpful local perspective. Moving to DFES and resourcing for fire mitigation and suppression throughout the State, A/Deputy Commissioner Gifford spoke of the introduction of the Rural Fire Division, which has involved the amalgamation of the Bushfire Risk Management Service, and a newly established Bushfire Centre of Excellence, together with some new funding. In particular, \$15 million for the extension of bushfire risk management plans and \$35 million for mitigation activities. There has also been a review of the ESL and a grants advisory group has been established to provide independent oversight. DFES has also separated its Great Southern Region into two parts after recognising the size of the region and the impact that was having on DFES staff and service to the community. The Great Southern Region now covers less than half the number of local governments and Bush Fire Brigades. Esperance is still included in that region.
- **332.** A/Deputy Commissioner Gifford also advised that DFES, in conjunction with DPaW and local government, has established pre-formed IMTs in the metro area that can come in to manage an emergency, and noted that the Shire of

³⁸⁷ T 473.

³⁸⁸ Outline of Submissions on behalf of DPaW, filed 13 May 2019 [8].

³⁸⁹ Letter to Court from President WAFarmers Esperance Ravensthorpe Zone, dated 4 April 2019.

Esperance experienced the presence of one of these preformed IMTs in the recent fires in 2019.

- **333.** Turning to the response of DFES after the inquest, I note that in its submission filed after the inquest, DFES indicated that over 90% of the State of Western Australia is identified as bushfire prone and acknowledged that damaging bushfires are common. DFES also acknowledged that efforts to mitigate bushfire risk on Crown land has historically been driven by the availability of short-term or one-off funding. It was noted that a lot of UCL is often strategically important for bushfire mitigation activities as it is near or within town sites.³⁹⁰
- 334. DFES submitted that a 'whole of government' approach is needed to prioritise such areas for bushfire mitigation, in order to optimise State investment and the protection of Western Australia communities. DFES pointed to some recent action in the form of a range of rural fire reforms announced by the State Government on 13 April 2018, including enhancing the State's efforts in managing (and mitigating) bushfire risk. Prior to these reforms, a 'Mitigation Activity Fund' (MAF) had been established to manage Royalties for Regions funding acquired by the Department of Planning, Lands and Heritage totalling \$15 million over 4 years, commencing in 2016/17 and due to end in mid-2020.³⁹¹ The new reforms announced in April 2018 included:³⁹²
 - the establishment of an Interdepartmental Committee to provide advice and recommendations to the Fire and Emergency Services Commissioner on a whole of government, risk based approach to prioritising strategic bushfire mitigation activities on Crown land and an efficient governance mechanism for allocating funding to these activities. It is chaired by the Executive Director of the new Rural Fire Division of DFES, and includes representatives from many government agencies, including DPaW, DFES, Department of Treasury, Main Roads, etc;
 - \$35 million in ESL funding over 5 years to be made available to DFES for mitigation works on Crown land. For identified risks being managed through Bushfire Risk Management Plans, with a significant portion of this funding expended through the MAF; and
 - ongoing permanent support funding for the Bushfire Risk Management Planning program, delivered through local government and supported by DFES. This program provides the risk assessment and priority setting framework for the allocation of the mitigation activity fund. Local governments that have a Bushfire Risk Management Plan are eligible for MAF funding. As at the end of March 2019, 45 local governments were actively engaged in the program and of those, 25 had had their plans approved and were eligible for MAF funding.³⁹³

³⁹⁰ Outline of Submissions on behalf of DFES, filed 15 May 2019 [12].

³⁹¹ Outline of Submissions on behalf of DFES, filed 15 May 2019 [13].

³⁹² Outline of Submissions on behalf of DFES, filed 15 May 2019 [13].

³⁹³ Outline of Submissions on behalf of DFES, filed 15 May 2019 [13].

- 335. All of this information provides a helpful global insight into what is being done towards bushfire mitigation and management throughout the State of Western Australia. However, as I noted earlier, I am more focussed on the Esperance region in particular in this inquest, given this is where the deaths occurred and so the focus is properly more localised.
- 336. The evidence put before me in this inquest, and the recurring theme of the submissions, is that the lack of any long-term, appropriate funding for fire mitigation in the Esperance region has created a major bushfire risk by allowing fuel loads to increase dramatically and firebreak maintenance to fall behind. In order to rectify the problem, there needs to be security of funding at a level that allow for a long-term, meaningful fire mitigation strategy to be created and put into effect. It is apparent that the South-East Fire Working Group is best situated to come up with that long-term fire mitigation strategy. The important thing is for their strategy to be supported by government and funded appropriately. Accordingly, I do not propose to make specific recommendations about what should be done, but rather my aim is to support the South-East Fire Working Group's efforts.
- 337. The Union points to the principle, "if you own the land, you own the risk," and queries why the Government should be treated any differently to other land holders. On that principle, it submits the Government as the owner of UCL, should provide permanent and appropriate resources for mitigation and planning. The Union has raised concerns about the Government potentially turning to the ESL for this purpose, but I note that in other submissions it is urged upon me that the ESL should be used for this purpose. I do not see it as my role to identify the source of the funds for the changes I recommend. That is an appropriate matter for the various agencies and organisations, the relevant Minister and Treasury. Accordingly, I do not intend to make any recommendation about the source of any funding.

I recommend that the South-East Fire Working Group's final plan for a long-term fire mitigation strategy be fully supported and funded by DFES and the State Government. I suggest that at a minimum, the funding should cover a period of ten years to allow for the creation of firebreaks and strategic fire exit tracks on the vast area of UCL in the Esperance region, with a view to then formalising ongoing funding for maintenance after that time on a long-term basis.

I also recommend that consideration be given to reviewing the Memorandum of Understanding between DPaW and the Shire and, as part of that process, the MOU should include a more streamlined procedure to ensure that the best balance can be met between ensuring that cognisance is taken of rare flora and fauna and areas of cultural significance on the interface with farms and UCL, but which permits farmers to undertake mitigation works expeditiously to ensure fire risk is reduced on the borders.

Water Bombers and other aerial support

338. There was some conflict in the evidence before me as to when aerial support, particularly in the form of water bombers, was requested. Mr Carmody was very clear in his evidence that he asked Mr Wornes for them at an early stage, on Sunday, 15 November 2015, and was told by Mr Wornes that he didn't think they would be available but he would make enquiries. Mr Wornes' evidence was that he asked Mr Parsons on the morning of Monday, 16 November 2015, and Mr Parsons said he would then make further enquiries. Mr Parsons' agreed in his evidence at the inquest that he had received requests from Mr Wornes in the days leading up to 17 November 2015, which he then had to relay to the State Operations Centre and the local DPaW officer. Mr Parsons said in evidence,³⁹⁴

"on several occasions, when Gavin contacted me, I did all this verbally over the telephone both to the parks and wildlife and then the state air desk and on every occasion, the indication was that all the planes that they had[were] being used, or utilised and there was nothing that could be tasked or sent to Esperance at any of those times."

- 339. The formal advice from DFES, on the other hand, was that according to Mr Parsons' incident diary, the first request for fixed wing water bombers was made between 5.10 pm and 5.35 pm on 17 November 2015. Mr Mair, from DPaW, also gave evidence that he did not recall receiving calls asking about water bombers and his enquiries after the event found the first request came through on the morning of 18 November 2015.³⁹⁵
- **340.** I have no doubt, hearing the evidence of Mr Carmody, Mr Wornes and Mr Parsons, that requests were made for water bombers at an early stage in events, but the formal recording of those requests is missing. The evidence is clear that the water bombers were being used elsewhere, so they were not available, in any event.

³⁹⁵ T 452; Exhibit 6, Tab 2; Exhibit 8, DFES Response to Questions, dated 31 December 2018.

³⁹⁴ T 341

- **341.** It is relevant whether the requests for water bombers were made early, as the evidence before me was definitive that they could not have assisted by 17 November 2015, but may have been of some assistance in subduing and delaying the fire spread if done at an early stage, like Mr Carmody desired.
- **342.** Dr Burrows agreed that the plans that were implemented by Mr Carmody and others to contain the fire were reasonable and noted it had been effective, but they simply ran out of time and resources to complete it.³⁹⁶ Dr Burrows was in general agreement that water bombers would never have put out the fire completely, but noted they may have bought the firefighters on the ground a little more time by slowing the fire up, which would have given the firefighters more time to create the buffers.³⁹⁷
- 343. Similarly, Mr Carmody acknowledged that the fire conditions were catastrophic, and even with the benefit of extra resources in the early days when he was putting his plans into place, he didn't think it was likely they would have been able to put the fire out or even fully contain it. However, if the requested resources had been available in a timelier manner, and they had been assisted by water bombers, Mr Carmody believes they may have been able to reduce the fire and prevent it from being as wide-ranging as it ended up being.³⁹⁸ This could have made a difference to the outcome on Tuesday, 17 November 2015, by reducing the fire spread.
- 344. Dr Burrows raised the question of the operational logistics and feasibility of using water bombers out in that remote part of the country, where turnaround times for the aircraft could be quite long.³⁹⁹ It was explained in evidence that there are restrictions on how far water bombers can travel and the types of landing strips that can be utilised.
- 345. However, Mr Carmody gave evidence that a few days after 17 November 2015, aerial water bombers did go out and drop fire retardant material in the exact area that they had wanted it delivered, so it was finally done, but "four of five days too late."400 This demonstrated that it was physically possible for the task to be done. Mr Carmody said he "thought it rather ironic" 401 that they came and did it, so late in the piece.
- **346.** Mr Carmody felt that the lack of aerial support was a major issue in fighting these fires. He mentioned that when they could not get water bombers, he asked for an aerial platform, such as another helicopter, to be able to come down to try to support them in planning and implementing strategies, rather than Mr Carmody having to use his own aircraft. Like the water bombers, that sort of aerial support was also unavailable at the time, which Mr Carmody said he found "rather extraordinary." ⁴⁰² There was evidence helicopters came at some stages, but then had to be diverted to other fire suppression efforts.

³⁹⁶ T 50.

³⁹⁷ T 51.

³⁹⁸ T 206, 210-211.

³⁹⁹ T 51.

⁴⁰⁰ T 2015.

⁴⁰¹ T 206.

- **347.** A/Deputy Commissioner Gifford gave evidence that there were two rotary wing helicopters available to DFES from 1 November 2015, so they were utilised in the Great Southern during the fires, and in addition six water bombers were able to be brought in by DPaW, which were then supported by the helicopters. They were put over fires of note and were fully committed until they were all grounded at 2.30 pm on 17 November 2015.⁴⁰³
- 348. Mr Wornes gave evidence that aerial water bombing is one of the tools that can be utilised to hold back a fire rate of spread. They need to work in unison and be quite close to each other, so they need to be used in a location where they can turn around roughly in a 15-minute turnaround period from drop off to re-load and then get back and drop water again. Mr Wornes said he had been making requests for aerial water bombers on Monday, 16 November 2015, primarily for the Merivale fire, as it ticked the boxes as far as airstrip availability and water availability. He acknowledged their use on this fire would also have taken some of the pressure off having to worry about this fire, knowing it would receive some fire suppression assistance, which would have aided the Cascades fire management, but Mr Wornes was not seeking the water bombers to directly fight the Cascades fire.
- **349.** In terms of the confusion over requests for water bombers, I am advised by the Shire that, as part of its suite of updated emergency procedures, the Shire now has policies that deal with activating water bombers (via clear written and verbal requests to the DFES Regional Operations Centre in Albany) as well as safety procedures for Brigade members while operating in the vicinity of water bombers.
- 350. Mr Scott also mentioned in his evidence the Water Bomber Deployment Agreement between the Shire and DFES. 405 The agreement is that if there is a forecast of extreme weather in the four-day weather forecast for Esperance, there is an agreement that water bombers from Albany will be pre-deployed to either Ravensthorpe or Esperance, depending on their availability. This means they are hopefully available several days before an extreme weather event that could spark a catastrophic fire. 406 Mr Scott acknowledged that there are only a limited number of water bombers in the State, so the aircraft may not always be available, but it still allows for the possibility of earlier deployment, and the agreement has come into play a number of times since it was created. 407 Mr Parsons indicated that he had only experienced a few occasions where he did not have the water bombers available when requested. 408
- **351.** In relation to recommendations regarding the availability of water bombers, the Shire did not go so far in its submission as to press any particular

⁴⁰³ T 509.

⁴⁰⁴ T 303, 335.

⁴⁰⁵ Exhibit 3, Tab 2A and 2B.

⁴⁰⁶ T 375.

⁴⁰⁷ T 375.

⁴⁰⁸ T 346

recommendation in regard to water bombers, but did draw to the Court's attention to the following:

- At present there are only two recognised airstrips available for use by water bombers within the Shire.
- There are no recognised airstrips located in the northwest or northeast areas of the shire.
- The above is notwithstanding the various other airstrips that exist within the Shire are frequently utilised by private planes for activities such as agricultural spraying.
- The limited availability of recognised airstrips within the Shire directly impacts the effectiveness of water bombers whilst responding to an incident.
- The Shire would like the State Government to consider making available additional funding to allow the development of at least one additional recognised airstrip in the Esperance region.⁴⁰⁹
- **352.** The need for more airstrips suitable for water bombers was also mentioned in evidence during the inquest and other submissions filed.⁴¹⁰ It is a well supported proposal and I consider it is a reasonable, and important change that should be implemented.

Recommendation No. 9

I recommend that the WA Government, via DFES or whatever is the relevant agency, undertake an assessment of established airstrips in the north-western quadrant of the Esperance Shire, with a view to identifying airstrips that can be enhanced to permit operation by water bombers. Once a suitable site has been identified, priority should then be given to funding the necessary upgrades to make the airstrip(s) suitable for that purpose.

353. DFES addressed the issues of aerial suppression, via water bombers, and aerial intelligence, surveillance and reconnaissance separately in its submissions. As to the issue of water bombers, DFES does not support fixed wing water bombers being permanently based in Esperance as it notes that Esperance is not centrally located, which limits the water bombers' response to the rest of the State. Instead, DFES proposes a Wheatbelt based aerial fire suppression response, which could provide a response throughout the region, with the base moving with the change in risk, which is highest during peak grain harvest. This apparently normally commences in mid-October in the north of the Wheatbelt and ends in Esperance in mid-

⁴⁰⁹ Closing Submissions filed on behalf of the Shire of Esperance, dated 17 May 2019.

⁴¹⁰ T 454; Outline of Submissions on behalf of DPaW, filed 13 May 2019 [3].

December.⁴¹¹ It was suggested that there should be two fixed wing water bombers made available, similarly to those based at Bunbury, Manjimup and Albany. DFES reportedly tested the aircraft marked for Wheatbelt firebombing and air attack supervision, and the estimated cost was \$800,000, but there is currently no funding for this proposal.

Recommendation No. 10

I recommend that the Honourable Minister for Emergency Services and/or the Honourable Minister for Environment, depending upon whose portfolio water bombers actually falls, give priority to funding (at an estimated cost of approximately \$800,000) a Wheatbelt based aerial fire suppression response for the full fire season commencing in the Wheatbelt and concluding in Esperance.

- 354. In addition, Mr Mair from DPaW offered his opinion at the inquest that, given the earlier drying across the landscape due to climate change, they are seeing a more protracted fire season in the area, which creates the potential need for an earlier start to the water bombing period in the southern part of the state. At the time of the inquest Mr Mair advised there were discussions ongoing as they had had at least two extensions of the water bombing contracts. Following on from that evidence, the DPaW submissions also noted the tendency for fire seasons to be longer, with earlier seasonal starts and an extended tail end of the season. Therefore, DPaW suggested that an appropriate response would be for water bombers to be brought into service earlier than the start of December.
- 355. In a similar vein, the Union submitted that DFES needs to give consideration to updating the official fire season to reflect the lengthening fire seasons to ensure all relevant agencies and the community are ready for bushfires. This would assist in ensuring water bombing aircraft are in place when needed. It would also ensure that volunteer or community training is completed earlier (a very valid point, given Superintendent Tasker was coming down to complete such training as Mr Wornes was busy managing a fire, and then Superintendent Tasker got waylaid by another). I'm not sure if this really requires me to make a recommendation, as it seems like common sense, but just to be safe, I will make a recommendation to that effect.⁴¹³

⁴¹³ United Professional Firefighters Union of Western Australia Closing Submissions and Recommendations, filed 14 May 2019.

⁴¹¹ Outline of Submissions on behalf of DFES, filed 15 May 2019 [15].

⁴¹² T 453

I recommend that DFES consider updating the official bushfire season in the Esperance region to reflect the reality of the impact of climate change and other factors that have altered the start and duration of the fire season.

- **356.** There was some mention in the evidence about the possibility of using other local agricultural spray planes when the DPaW water bombers were not available, but they were not permitted to be utilised by DFES as they did not meet Civil Aviation Safety Authority (CASA) Regulations at the time to operate legally.⁴¹⁴
- **357.** Mr Carmody mentioned other jurisdictions, which utilise local aircraft on a 'call when needed' contractual basis, in the same way that local earth moving equipment was used in this case. At the time of the inquest Mr Carmody understood there may have been some changes implemented, which allows the use of private planes, but he also understood DFES will not fund it so the local Shire has to pay for it without scope for recovery of those funds.
- 358. I received in evidence a statement form a local pilot, Mr Scott Mackie (Mr Mackie), who said he could have converted his plane to do water bombing within three hours if he had been permitted to do so by CASA.⁴¹⁷ Mr Mackie suggested it would benefit the State if his company could be given training to do so for future fires and then be on a 'call when needed contract'.
- **359.** It was emphasised in the evidence that the way the weather systems usually work in the Great Southern, is that the trough bringing electrical storm activity moves from west to east, lighting up fires as it goes, like it did in 2015, which means that by the time fires hit Esperance, resources in the region are already stretched fighting fires in Albany and elsewhere. Therefore, unless Esperance has its own standalone resources, there will always be this competition for resources, with the other areas effectively getting in first.⁴¹⁸
- **360.** To that end, having local aircraft capable of being utilised in the event the unavailability of established resources, seems a reasonable and practical option, even in the event that a Wheatbelt-based aerial suppression operation is established.

⁴¹⁴ T 217; United Professional Firefighters Union of Western Australia Closing Submissions and Recommendations, filed 14 May 2019.

⁴¹⁵ T 217~218.

⁴¹⁶ T 218.

⁴¹⁷ Exhibit 3, Tab 3.

⁴¹⁸ T 366.

- 361. The Commissioner of DFES advised the Court in December 2018 that since the fires in November 2015, DFES has assisted a local business which operates firefighting aircraft in the Esperance area, South East Air Ag, to register on the National Aerial Firefighting Centre ARENA database that gives visibility of aircraft availability around Australia. Further, in November 2016, DFES wrote to a number of local aviation operators in the Esperance area to encourage them to also register on the database. Commissioner Klemm advised that when an operator is registered on the database, DFES is much better placed to assist the local government to identify and engage these service providers. It is then an option for local government to engage these aerial firefighting resources, although it was indicated that this would be at their own expense and risk.⁴¹⁹ The Commissioner did, however, indicate it may be possible for a local government to seek financial reimbursement for the costs.⁴²⁰
- **362.** These steps appear to be appropriate, and I do not propose to make any further recommendation in this regard.
- 363. As for aerial intelligence services. DFES advised that it is introducing a range of new aerial intelligence surveillance and reconnaissance remote sensing capabilities, including a multispectral line scanner sensor fitted to a Learjet 35A to perform wide area remote sensing of landscape bushfires and floods. Referred to as FIRESCAN 124, it operated from 6 January to 26 April 2019 and delivered 75 scans, which have been used for strategic decision making and to predict bushfire behaviour. DFES indicated it does not currently have the budget to secure the line scan service into the future, but a business case is being developed.⁴²¹

Communications

- **364.** The police coronial investigation found that due to the remoteness of the area where the Cascades fire started it caused communications issues.⁴²²
- 365. Mr Carmody gave evidence that the main issue that still remained problematic during the March 2019 fires was the issue of communications. Mr Carmody gave evidence about the huge problems they had with communications when fighting the fires in November 2015 and Mr Carmody gave evidence that those problems remain in 2019. He expressed the opinion that they need additional radio repeaters for the WAERN (Western Australian Emergency Radio Network) system in the area.⁴²³
- **366.** Mr Carmody's proposal for more repeaters was supported by others in evidence and in the submissions filed.
- **367.** Mr Scott indicated that after the fires the Shire had put in a lot of resources in updating the ICV to ensure that they are able to communicate from the

⁴¹⁹ Exhibit 8, DFES Response to Questions, dated 31 December 2019.

⁴²⁰ Exhibit 8, DFES Response to Questions, dated 31 December 2019, p. 9.

⁴²¹ Outline of Submissions on behalf of DFES, filed 15 May 2019 [16].

⁴²² Exhibit 1, Tab 2.

⁴²³ T 208~209.

van even with remote fires. To that end, they had installed different antennae to improve the connectivity of the van communications. The van was successfully deployed during the 2019 fires. They have also developed a new communications plan that indicates how different organisations, including DPaW, DFES and the Bush Fire Brigades, are going to communicate with each other during a fire.⁴²⁴ However, none of these changes have fixed the problem of limited communications, particularly in the north and north-western sector of the Shire.

- 368. In submissions, the Shire advised that poor and intermittent telephone reception is an ongoing issue within the Shire. In an emergency situation, volunteer Brigade members must be able to communicate with each other and the public need to be able to receive emergency alerts via telephone or text message. Since November 2015 the Shire's Bushfire Brigades have introduced the use of the WhatsApp messaging tool to communications on the fire ground between Brigade members. During the February 2019 fires, this network was said to be paramount communicating fire suppression plans and arrangements personnel. However, this tool is still reliant on at least some telephone reception is, accordingly, susceptible to issues and with infrastructure.
- 369. I am advised that since the 2015 fires a number of additional Telstra towers have been installed within the community, which have gone some way towards addressing the communications issues, but it is a very large Shire and problems remain. The Shire is currently working with Telstra to identify the issues and discuss possible solutions. The Shire suggests a short term solution to these telecommunication issues may be an increased availability of satellite phones for use by FCOs. In the long-term, the Shire submits that, as a priority, there should be installed at least one new repeater tower in the northwest sector of the Esperance region.
- **370.** Mr Mair gave evidence that DPaW had experienced similar issues in the north-eastern parts of the Shire and in response, DPaW installed a repeater on Mt Ragged recently, which has reportedly made significant improvement to the ability of DPaW staff to communicate in the region. He supported the similar installation of an additional repeater in the northwest sector.⁴²⁵
- **371.** Echoing Mr Mair's evidence, the DPaW submissions noted there is limited radio and mobile telephone communications in parts of the Shire of Esperance, especially in the north and north-western areas. It was submitted that a way forward would be to have an assessment undertaken to determine what improvements may be made to communications capacities in this area.⁴²⁶
- **372.** The Union also supports the WA Government investing in communications infrastructure and, specifically for the Esperance area, an additional

⁴²⁴ Exhibit 3, Tab 2A & 2B [7].

⁴²⁵ T 457~458.

⁴²⁶ Outline of Submissions on behalf of DPaW, filed 13 May 2019 [2].

repeater tower to improve coverage for the western and northern sectors of the Esperance area.

- 373. DFES referred in its submissions to the current Government Radio Network project and noted an opportunity exists to increase capacity where required to provide an improved communication capability for emergency services. DFES acknowledged that there are significant areas of the Great Southern region, particularly in the east in the areas affected by the Cascades fire and the more recent Esperance bushfire in 2019, that have limited or no effective radio communications capability. Similar issues are experienced in other remote parts of the State. DFES has indicated it will conduct a review of state-wide capacity and coverage that will information the State Government Radio Network business case.⁴²⁷
- 374. The Radio Network business case is the expected outcome of the interagency radio network team which is supported by government and is currently involved in moving emergency services onto a harmonised government network, which will then create an opportunity for the maximisation of radio infrastructure and interoperability within communications in emergency situations in the state. A/Deputy Commissioner Gifford emphasised that good communications is a cornerstone of effective emergency management, so these changes are very important.
- **375.** DFES has also identified that the current radio communications infrastructure resilience is exacerbated by an inability to remotely monitor and manage radio sites equipment. It was submitted that this could be alleviated by piloting a remote monitoring solution and DFES indicated that a business case will be developed to determine the ongoing costs to deploy the technology and then adequately monitor the network 24/7.⁴³⁰
- 376. DFES also indicated that it has identified a need to increase the number of DFES Operations Communications Capability experts at the Emergency Services Complex in Cockburn to provide the required level of specialist support for voice and data communications, as well as a need to increase the number of radio technicians and information technology staff to the various region, including Esperance, to provide timely and effective technical emergency communications to support regional Western Australia, rather than relying on outsourcing or contractors, which can be problematic. ⁴³¹ I am supportive of DFES' need for more Operations Communications Capability experts, but I do not see it as closely arising out of this inquest in a local sense, so I do not make a recommendation in this regard.

⁴²⁷ Outline of Submissions on behalf of DFES, filed 15 May 2019 [11].

⁴²⁸ T 510.

⁴²⁹ T 511

⁴³⁰ Outline of Submissions on behalf of DFES, filed 15 May 2019 [11].

⁴³¹ Outline of Submissions on behalf of DFES, filed 15 May 2019 [11].

I recommend that the State Government fund the installation of at least one new repeater tower in the north-western sector of the Esperance region to enhance communications during an emergency.

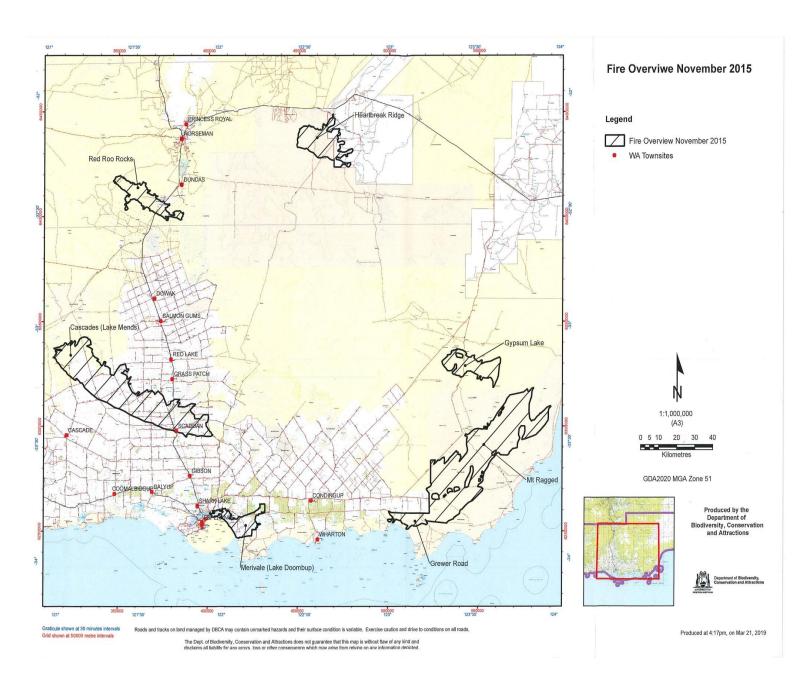
CONCLUSION

377. It is a trite saying that a picture paints a thousand words, but the picture below does show visually the sheer scale of what the firefighters in Esperance faced in November 2015 when the Cascades fire raged out of control. It must have been terrifying to behold. Experienced firefighters said that they had never before seen anything like it, in terms of its speed and ferocity. It was an unprecedented, and hopefully rare, event.



The above photograph depicts a portion of the intensity of the fire

378. The map below also shows visually the full extent of the complex of major fires in Esperance in November 2015. Again, just at a glance, it easily explains why the evidence of witnesses was universally that resources were stretched to breaking point by 17 November 2015.



The above map depicts the fire overview in November 2015

- **379.** The scale of the fires was enormous. However, I am told the March 2019 fires were even larger, involving a complex of 7 to 8 fires running at the same time and impacting on some 300,000 hectares of UCL and national parks. It was, therefore, bigger in terms of area than the November 2015 fires, although not attended by the same level of tragedy as fortunately, no deaths of people occurred.⁴³²
- **380.** What this demonstrates is that large and complex fires of this kind are no longer an isolated event, and the focus needs to be on reducing the harm that they will cause.
- **381.** The deaths of Kym Curnow, Tom, Julia and Anna were keenly felt by all involved in this inquest. Mr Scott, on behalf of the Shire, expressed it with the words,
 - "Your loss is our loss. Your family members were part of our community and, therefore, you are part of the community from this point onwards." 433
- 382. Mr Scott also acknowledged the bravery of the volunteer bushfire fighters and their families, noting they are "the true heroes for our community." ⁴³⁴ I fully endorse his comments and emphasise that Kym Curnow died a hero fighting for the Esperance community. Mr Carmody also should be singled out as he, in particular, took on the burden of managing the fight against the fire, which became increasingly onerous as time ran out and the resources he asked for didn't come. He was isolated out on the fire front, and wasn't even told about the deaths for hours after. His bravery and willingness to put himself on the line, is reflective of so much of what is good and great about the Australian community. Mr Carmody, and all the other volunteers, DPaW and DFES staff, should be proud of their efforts, despite the tragic outcome. They need more support and resources to do their jobs properly and safely.
- **383.** I hope that from these recommendations, based upon the information provided to me by the people who live and work in the area, the community of Esperance will become a safer place for the future.
- 384. The focus on the inquest was rightly on saving future human lives as the number one priority. However, the importance of the national parks to regional tourism in this area also can't be underestimated, as well as the importance of preserving our environment for future generations. That requires preservation of the State's biodiversity by ecosystems from large-scale damaging fires. As an example, due to a fire in Cape Arid that preceded the tragic November fires, they lost 90% of the habitat of the western ground parrot, an Australian native animal already on the brink of extinction. 435 The devastating effect on other native fauna and native flora from catastrophic wildfires can't be ignored. These fires do not provide the regenerative effect of

⁴³² T 373~374.

⁴³³ T 379.

⁴³⁴ T 379.

⁴³⁵ T 462~464.

fire on the Australian landscape that was provided by Indigenous burning practices of Australian Aboriginals developed over thousands of years. A better approach to controlled burning to preserve our natural biodiversity must surely be the future focus.

385. The people of Esperance, the staff of DFES and DPaW, and many others, have all contributed to the outcomes in this finding. I hope their work is not in vain and the State Government gives due regard to what the people who actually fight these fires say they need to save lives in the future when the next bushfire inevitably rages in Esperance.

S H Linton Coroner 22 November 2019