

REPORT OF PROCEEDINGS BEFORE

GENERAL PURPOSE STANDING COMMITTEE NO. 5

INQUIRY INTO THE WAMBELONG FIRE

CORRECTED PROOF

At Sydney on Monday 15 September 2014

The Committee met at 10.15 a.m.

PRESENT

The Hon. R. L. Brown (Chair)

The Hon. R. H. Colless
The Hon. G. J. Donnelly
Dr M. Faruqi
Mr S. MacDonald
The Hon. Dr P. R. Phelps
The Hon. L. Voltz

CHAIR: Good morning, ladies and gentlemen, and welcome to the second hearing of the General Purpose Standing Committee No. 5 into the Wambelong fire. This Committee was established to examine the issues of significance regarding the causes and the management of the Wambelong fire that broke out in January 2013. Before I commence I acknowledge the Gadigal people, who are the traditional custodians of this land. I also pay respect to the elders past and present of the Eora nation and extend that respect to other Aboriginal people.

The week before last the Committee travelled to Coonabarabran to speak with people directly affected by the Wambelong fire. Today, on our second and final hearing, we will hear from representatives of the NSW Rural Fire Service, the Volunteer Fire Fighters Association, the National Parks and Wildlife Service and Mr Vic Jurskis.

Before we commence, I would like to make some brief comments about the procedures for the hearing today. Broadcasting guidelines are available from the secretariat desk. I remind media representatives that they must take responsibility for what they publish about the Committee's proceedings. In accordance with the Parliament's broadcasting guidelines, while members of the media may film or record committee members and witnesses, people in the public gallery should not be the primary focus of any filming or photography. There may be questions that a witness could only answer if they had more time or certain documents to hand. In these circumstances witnesses are advised that they can take the question on notice and provide an answer within 21 days. The committee may also wish to ask additional questions. These will be sent to witnesses on notice and also need to be sent back to the committee within 21 days.

I remind everyone that Committee hearings are not intended to provide a forum for people to make adverse comments about other persons under the protection of parliamentary privilege. I therefore request that witnesses focus on the issues raised by the inquiry's terms of reference and avoid naming individuals unnecessarily. Witnesses are advised that any messages to Committee members should be delivered through Committee staff. I ask everyone present to switch off mobile phones. If anyone in the public gallery wishes to make a phone call then they should go outside the committee room. Mobile signals may interfere with the recording equipment. Witnesses will be invited to make short opening statements. I ask that statements be no more than a couple of minutes, unless a witness wishes to present additional evidence that has not been presented in their submissions.

VICTOR PAUL JURSKIS, Individual, sworn and examined:

CHAIR: I welcome Mr Jurskis. I note that you are the author of submission No. 6. Mr Jurskis, would you like to make an opening statement?

Mr JURSKIS: I would like to make a couple of corrections to my submission and a very brief opening statement. In the third paragraph on the second page of my submission I indicated that the minimum interval between prescribed fires in that type of bush out there was at least five to 10 years. I have now checked the bushfire code and found that they have set it at 15 years for normal land management zones. I left out a bit of pertinent history from the fifth paragraph on that same page. For the first half of the twentieth century rabbits did a good job of controlling fuel and cypress in that area. If you go back to the first page of my submission you will see that there was a big fire in 1952. That was the first bad fire season after myxomatosis decimated the rabbit population. The next big fire was in 1967, exactly 15 years later. That in itself shows that the idea of doing prescribed burns at minimum intervals of 15 years is a bad joke, and that brings me to my opening statement.

The cause of every mega-fire disaster in Australia, since the first burnt five million hectares of Victoria in 1851, is a lack of a burning. Every royal commission or inquiry that has been held has found this to be the case, and I am sure this inquiry will find the same. The problem is that the National Parks and Wildlife Service, the Nature Conservation Council of New South Wales and maybe some of the senior management of the NSW Rural Fire Service really do not want to burn. There is a philosophical objection to it. For example, the purpose of the bushfire code is supposedly to provide a streamlined environmental assessment process. But what it actually does is to interfere with burning or prevent burning. You have to have a risk management plan and a hazard reduction certificate, comply with the bushfire code and have a permit—and even after all of that you are still not allowed to burn often enough to make a difference. I think I have said enough.

Dr MEHREEN FARUQI: In your opinion and given your experience has the severity and frequency of bushfires been increasing over time? What challenges do you think this poses for hazard reduction as well as firefighting?

Mr JURSKIS: The severity of bushfires has not increased over time. We had a high frequency and severity of bushfires from the time of European settlement—as I said, the first mega-fire was in 1851—until the 1950s, when foresters learnt their lesson and started broadscale hazard reduction burning, including aerial ignition. With the rise of The Greens in the 1980s, we have now returned to what we had before the foresters woke up in the 1950s.

Dr MEHREEN FARUQI: Could you expand a little on what, in your opinion, the challenges are for hazard reduction and firefighting?

Mr JURSKIS: The challenges are to change the regulations so that we can actually facilitate burning rather than prevent it. The main challenge is to physically do plenty of burning.

The Hon. LYNDIA VOLTZ: Mr Jurskis, in your submission you say that there were big fires in 1952 and 1967 and then a smaller fire in 1990. Were there any fires in between that period?

Mr JURSKIS: I do not know.

The Hon. LYNDIA VOLTZ: The period from 1937 to 1952 is 15 years and the period from 1952 to 1967 is 15 years. The National Parks and Wildlife Service has shown us some maps of where they have had some burning. Is your concern, given the difficulty with burning, that no burning is happening or that the burning is ineffective, given that the time between the fires is now stretching out?

Mr JURSKIS: There is not enough burning; burning is too infrequent and too intense. The less frequent the burning the more intense the fire.

The Hon. LYNDIA VOLTZ: I understand that. But what was a 15-year cycle of burnings is now a much longer cycle. You raised the point in your submission about Central Victoria having an 11-year cycle of burnings.

Mr JURSKIS: There is no average in nature; there are always variations. You have to have extreme weather coinciding with an ignition event to get a mega-fire. The fact that you have a time bomb sitting there does not determine when it is going to go off. But I can guarantee you that after 15 years you have a time bomb.

The Hon. GREG DONNELLY: There are a number of articles cited as appendices to your submission that you have either authored or co-authored. Just for the benefit of the Committee in understanding the material you present, could you explain what your qualifications are in terms of training and background in this area.

Mr JURSKIS: I have a Bachelor of Science in forestry and 40 years' experience in the bush.

The Hon. GREG DONNELLY: Thank you, I was just trying to get the context. Mr Jurskis, in your submission you say:

New South Wales' National Parks and Wildlife Service (NPWS) tries to minimize burning across all tenures using a ridiculous, disproven theory that frequent burning threatens biodiversity.

Could you just elucidate that statement?

Mr JURSKIS: I attached a paper to my submission from 2013 from the journal *Fire Ecology*. Basically it covers the history of fire in the sandstone country around Sydney and all the research that has been done in that area, mainly by the National Parks and Wildlife Service. It shows that when we had extreme fire conditions in 1791 and 1792—with 43 degree temperatures, flying foxes and parrots dropping dead out of the trees and howling north-westerly gales—we had fires going around Sydney and Parramatta but there was very little damage as they were easily controlled. When we had similar conditions in 1994, and a huge army of well-equipped firefighters with water bombers, computer assistance and modern technology, the fires were uncontrollable. They burnt hundreds of houses and cost lives. Mr Conroy from the National Parks and Wildlife Service reviewed the fire history and noted that there were four areas where they did control fires during that event, and those were the areas that had been burnt.

The Hon. GREG DONNELLY: Which areas were they?

Mr JURSKIS: They were areas that had had prescribed burning. Was your question about the fire intervals?

The Hon. GREG DONNELLY: This is an important point because it really in some ways gets to the guts of the point you are trying to make in your submission. You say:

New South Wales' National Parks and Wildlife Service (NPWS) tries to minimize burning across all tenures using a ridiculous, disproven theory that frequent burning threatens biodiversity.

Mr JURSKIS: I will get to that now. Roger Underwood and I have gone through all of the research that they put up to attempt to prove that you have to impose these minimum intervals. The research does not show that at all. The research is mainly about the effects of high-intensity wildfires. The research clearly shows that fires favour large shrubs over smaller species where all the diversity is. History shows that those large shrubs have taken over the planet.

When European settlers arrived the sandstone country was open. Surveyor General Mitchell described riding a horse through that country at night-time with a couple of young Aboriginal fellas running ahead with strips of stringybark lighting up grass trees to show him the way. You cannot ride a horse through there now. You can hardly walk through there. You can hardly even breathe in that country because the regime of infrequent and intense fires has just turned it into scrub. The species that National Parks say they are trying to protect are those species that are taking over the planet.

If you restore the open bush that can be burnt in mild conditions you restore all the biodiversity, all the plants that are being choked out. Grass trees have become locally extinct in Royal National Park because that regime of infrequent high-intensity fires also favours phytophthora. It favours the shrubs that out-compete with grass trees and it favours the phytophthora that attacks their roots. The broad-headed snake is extinct in Ku-ring-gai Chase National Park and I think in Royal National Park. The parks' research shows that it is becoming rarer in Morton National Park because the regime of infrequent high-intensity fires and the scrub growth is obliterating its basking habitat. There is no study that shows that frequent low-intensity burning is

going to eliminate anything and there are a lot of studies that show that the current regime is eliminating lots of things.

The Hon. RICK COLLESS: In your professional career were you a district forester or a forest researcher? What was your role?

Mr JURSKIS: I was a district forester, a labourer, a researcher, a manager and a silviculturist.

The Hon. RICK COLLESS: So you have had pretty wide experience in the management of forests for your career. In your submission at the top of page 2 you make the statement that lack of burning or grazing creates three-dimensionally continuous fuels that can support firestorms. What do you mean by a three-dimensional continuous fuel?

Mr JURSKIS: It is continuous in the horizontal plane so there is nothing to stop a fire running and it is continuous in the vertical direction so that fire runs up in the crowns. Then you get a crown fire and you get long-distance spotting. You get firebrands travelling for kilometres. Once you get a firestorm you have a huge convection column that is throwing spot fires way ahead of it. With these three-dimensionally continuous fuels that develop after 15 years without burning you cannot burn them under mild conditions because it is too shady, normally too damp and there is not enough wind in the scrub to get a fire going under mild conditions. It is inevitably going to go off like a bomb at some time.

The Hon. RICK COLLESS: Correct me if I am wrong but the impact of that is that once it is dry enough to burn, because of the three-dimensional nature of the fuel, it goes automatically up into the crown and it starts a crown fire. Is that correct?

Mr JURSKIS: That is right. You need wind to carry fire into it. Once you get the fire in under that shrub canopy then it explodes upwards into the crowns and whatever trees are left and it develops into firestorms normally.

The Hon. RICK COLLESS: In your submission you refer to a book written by Bill Gammage. Is the title of that book *The Greatest Estate on Earth*?

Mr JURSKIS: That is correct.

The Hon. RICK COLLESS: You make the statement that in his book Bill Gammage documents the way the Aborigines burnt Australia prior to 1788. How was that different from the situation today and what is the impact on the fire regime?

Mr JURSKIS: Bill actually documents the fact that they did burn a lot prior to 1788. I do not think it really documents properly how they burnt. When Aborigines first arrived in Australia it was similar to what we see now: there was a lot of scrub and stuff that would not burn except under extreme conditions. Matthew Flinders, for example, described the situation on Kangaroo Island, which was uninhabited. He described the evidence of a firestorm.

But Aborigines arrived and over a short space of time they burnt a hell of a lot of bush and they extinguished the megafauna. They extinguished a lot of soft leaf plants and they pushed the remainder that are still here today into refuges that are normally too dark, shady and damp to burn or too bare, like rock shelves and things like that. Having done that, you had a landscape that was mostly open grassy woodland and forest. Within that landscape you had these fire refuges that had rainforests or swamps or rocky outcrops with rare shrubs on them.

Those refuges were really safe from fire because the surrounding landscape was a mosaic of green, brown and black. There was a lot of bare ground, there was green country that had just refreshed after the last fire and there was black country that had just been burnt. Fires would not run through that country and certainly would not develop into firestorms. Those refuges were safe. Under the current conditions, a lot of where that open grassy country should be is scrub. Once a fire does start it will tear through the scrub and through the refuges as well.

For example, in Western Australia there is a big national park that I cannot remember the name of that had not been burnt in 20 years. When fire came it was a mega-fire and it burnt every one of those rock outcrop

refuges over tens of thousands of hectares. Under Aboriginal management that sort of thing simply could not happen. The only time a refuge got burnt was if there was a lightning ignition under extreme weather right next door.

The Hon. RICK COLLESS: No doubt in your professional career you have been used to looking at climatic records and in particular temperature records around fire days. Do you believe that the temperatures that were observed in December 2012 and January 2013 were extraordinarily hot or expectedly hot in terms of normal summer temperatures?

Mr JURSKIS: Expectedly hot. We have had extreme weather forever. It is always going to happen. As I said, in Sydney in 1791 it was 43 degrees with howling north-westerly gales. Nothing has changed. You have to manage the land in the full knowledge that we are going to have extreme weather. It is going to happen and so it is totally irresponsible to use silly disproved ecological theories to interfere with the burning that has to happen if we want our biodiversity and fire safety.

The Hon. Dr PETER PHELPS: I want to play devil's advocate for a moment and use one of the arguments that I have heard. That is: Given the triple whammy of high temperature, low humidity and high winds facing the area on the day irrespective of the level of burning that would have been done a wildfire would have still broken out because, as we heard from testimony, there were already crown explosions going on in areas that had been cleared for agricultural use. Would you like to comment on the suggestion that no level of burning could have reduced the catastrophic consequences on that day?

Mr JURSKIS: There are two parts to that. Number one is, as I said of Sydney in 1792, when the inevitable severe and extreme weather happens the real problem is the firestorm that develops as a result of the scrub. There were fires burning in the sandstone country. It was open, it was mild and there were no firestorms. There were fires that climbed up trees and got into the crowns and there was a spot fire that destroyed a hut and a stack of wheat at Parramatta. But there were fires going everywhere and they were controlled.

The second point is that normally you have got fires burning before the extreme weather hits and you can control those fires so that you have got them contained when the extreme weather hits. The extreme days are only a handful in a bad season. There are only a handful of extreme days. If you have got fires going in country that has been managed properly before the bad weather hits you have got them contained and they do not explode on the bad days.

The Hon. Dr PETER PHELPS: My next question relates to the issue of the reduction or thinning which is necessary to prevent these fires from occurring. Is part of the problem we face that different areas and different silviculture require different styles of thinning? For example, you could not expect to have an effective burning program in the Pilliga because of the nature of the vegetation there whereas a burning culture might be effective elsewhere. Do different areas require different thinning and hazard reduction regimes?

Mr JURSKIS: Under forestry management in the Pilliga foresters did not want to burn because they did not want to damage the timber values. So the land management strategy was to do some strategic burning perhaps but in most cases to use grazing to manage the hazard and thin the dense scrub so trees could actually grow into trees for timber.

The Hon. Dr PETER PHELPS: In effect, foresters and cows performed the same function that prior to 1788 would have been performed by a range of small marsupial creatures?

Mr JURSKIS: Not really. Prior to 1788 the cypress was not forest; it was woodland. It was just open grassy woodland and Aboriginal fires were performing the function of keeping it as woodland. Those forests that were saved from logging and so forth are a human construction. Graziers initially occupied the country because it was open grassy woodland. When they were beaten by droughts and so forth and walked off, the shrub took over and then foresters thinned the scrub so that you had grass for the cattle and the saplings could grow into trees for timber. But that is an artificial system that requires ongoing management. In the Aboriginal woodland they just used fire. They had a different purpose.

The Hon. Dr PETER PHELPS: If the National Parks and Wildlife Service were to do nothing and just let natural regeneration take place and undertake no active intervention in the Warrumbungle National Park what do you think the consequence would be?

Mr JURSKIS: We have seen it. It is not just that area. It is any area. If you do not graze and/or burn the country, it will turn into scrub. It will turn into a time bomb and one day it will explode.

The Hon. Dr PETER PHELPS: What about selective thinning through forestry operations?

Mr JURSKIS: That is the system that worked. It was proven over the years and it produced benefits for biodiversity, for fire safety, and for socio-economics. But if people want to have national parks, there has to be burning. As I said, you cannot burn these scrubs once they have developed, under mild conditions, so there has to be thinning and burning. There is no other answer. In the United States they are thinning and burning their national parks for that reason—to restore biodiversity and fire safety. The editor of the scientific journal that published that article by me and Roger Underwood, Paul Hessburg, has been a driving force behind that process in the United States. When he published the article, he congratulated us and he said he hoped that the article would put the cat amongst the pigeons over here. Unfortunately, Australian pigeons simply ignore scientific cats like us. They just hang together in the academic pigeon coop and they continue to give bad advice to government without taking any responsibility for the devastation and suffering that they cause.

Mr SCOT MacDONALD: Mr Jurskis, you appeared before us in the national parks inquiry, I think.

Mr JURSKIS: Land management; that is right, yes.

Mr SCOT MacDONALD: When we put those sorts of questions to National Parks and Wildlife, National Parks and Wildlife show us plans. I think it is in their submission about a bushfire management plan. We are shown maps, we are shown a history of what has happened, et cetera, and in some respects even, a strategy going forward. But then we are told that the conditions did not suit, it was too wet, or whatever. Can you first of all comment? Where does it fall down between intentions and delivery?

Mr JURSKIS: They start with the wrong intention because, as I said, burning once every 15 years at a minimum is a nonsense. It is just no good for biodiversity, it is no good for fire safety; it is good for nothing. Having those long intervals—for example, even worse than out there, spotted gum on the South Coast is, believe it or not, classed as wet sclerophyll forest and with land management zones you are not permitted to burn more often than once in 30 years. It is just madness. They start with the wrong intention. They want to have long intervals between fires. If you have long intervals between fires, inevitably your prescribed burns are going to be intense fire.

Mr SCOT MacDONALD: Can I interrupt there? I hear your point about the interval. Can I just explore or can you give me your thoughts about their strategy and, whether we agree or disagree about the interval, then about delivery? It seems to me that there is an intention, some sort of plan, some sort of strategy to do some sort of hazard reduction, but it seems to fall before so many obstacles like things beyond control, such as weather, or other matters.

Mr JURSKIS: I was just coming to that. After starting with the wrong intention, it makes it virtually inevitable that something is going to go wrong with the burn. As I said, you cannot burn those places under mild conditions. If you do get a fire going it is going to be too damn hot. The last burning season, I think, in the Ben Boyd National Park near us they lit fire after 15 years or so. It burnt all night, it scorched trees, it felled trees, and worst of all it regenerates the scrub. The scrub bounces back quicker than ever. You turn an open forest with heavy fuels and scattered shrubs into a forest with a heavy scrub understorey because you germinate a lot of scrub undergrowth and a lot of it reshoots as well.

Mr SCOT MacDONALD: In your mind it is overwhelmingly the interval, and that impacts on the capacity to do a moderate term.

Mr JURSKIS: That and the fact that they do not get any practice at burning. Burning is pretty easy, once you have had a bit of practice. You know that exposed places are going to burn fiercer so you light from the top and there are all sorts of things you can do to manage a burn ignition pattern, but these people do not have any practice in that and they do not have the opportunity to do it because all the planning and everything that goes into it—you have a big plan, you burn a big area out all in one go. Back in the old days when we did not have planning and we had good burns, well-managed burns, when the conditions were right we went out and burnt whatever could be burnt at that time and we knew how to light it.

Mr SCOT MacDONALD: So biting off what you can chew?

Mr JURSKIS: Yes, but that is because you are doing it all the time. Now it is just the whole system of doing things infrequently in big lots that ensures that you are going to have a disaster.

Mr SCOT MacDONALD: I appreciate what you are saying about the interval but I still have not heard from the National Parks and Wildlife or you and I still do not understand why the intention does not seem to be deliverable. We hear from the National Parks and Wildlife that it is the weather conditions; we had two or three wet years; things just were not suitable for a range of reasons. I hear what you say. In the interests of fairness to others, can I just ask about what I think you started to allude to when you talked about the United States? When I read how other people manage this or handle this, I have read how the Australian Wildlife Conservancy does it in Western Australia. They are a private organisation. They are a non-government organisation [NGO]. They have a key performance indicator [KPI] of doing it every seven years. I appreciate it is a different sort of ecology, if you like, but they seem to manage a cycle of every seven years and it is a KPI that they seem to be able to deliver on. Why do private organisations—you alluded to what happens in the United States—or other organisations or other jurisdictions in other countries seem to be able to do this, but we do not seem to be able to do it?

Mr JURSKIS: We have got that many rules and regulations, planning and assessment occupies all the effort and there is nothing left for the actual doing. It seems to me to be the problem. Everyone is busy ticking boxes instead of being out there monitoring conditions and lighting fires according to conditions.

Mr SCOT MacDONALD: Can I put this thought to you: Is it worth exploring that maybe the National Parks and Wildlife Service is not the right organisation or agency to run a fire regime even on their own tenure because of all the reasons that you have talked about—they are too close to it, and they have other priorities? Should we be looking at another organisation that will do that, obviously with the National Parks and Wildlife as a key partner to that? If you have got someone in there who is looking after the day-to-day affairs of a park and yet they are also expected to burn moderately every seven or eight years or so, is there too much conflict there?

Mr JURSKIS: I do not think there is any organisation in New South Wales at the moment that is competent to do the job because we have not been doing it for so long. You would have to have somebody who had the practice. You would have to go to Western Australia to whatever the department of environment and conservation is called now. Even there, it was only the forestry half of the organisation that had the practice, as you saw from the problems they had at Margaret River a few years ago. It is all about practice—doing it all the time—and actually doing work rather than doing paperwork.

Mr SCOT MacDONALD: Is that a core competency skill that you are likely to fairly find in an organisation that starts with other goals?

Mr JURSKIS: No.

Mr SCOT MacDONALD: Is it fair to ask the National Parks and Wildlife to run their fire regime?

Mr JURSKIS: No. They have demonstrated that they cannot; so, no, it is not fair.

CHAIR: We will just do one question from the crossbench, one question from the Opposition and one question from the Government.

Dr MEHREEN FARUQI: Mr Jurskis, in your submission you say that among the causes of the Wambelong fire were also a lack of access, resources and a commitment to a quick response.

Mr JURSKIS: Yes.

Dr MEHREEN FARUQI: Could you just expand on that a little and also provide any evidence you have to support that statement?

Mr JURSKIS: I really do not have the evidence. I just know from experience what has happened when National Parks have taken over management of country close to home. I know what happens. I know that access is either deliberately blocked off or falls into disrepair from disuse. I also know that the commitment is not there because I have worked alongside the organisation for most of my career and I have seen the response. I have

seen where people would rather call a meeting in town about declaring a state of emergency than go out to work on the fire.

The Hon. LYNDA VOLTZ: Mr Jurskis, you said that we have always had extreme weather. Six of the hottest summers have been in the last 12 years: The summer of 2012-13 was the hottest summer on record. It broke the record for consecutive days over 39 degrees. When you are talking about fire burning by the National Parks and Wildlife Service, do you believe that those weather conditions are impacting on fire burning?

Mr JURSKIS: The angry summer is an invention of the Australian Meteorological Bureau based on records from 1910 onwards. All the extreme weather and all the extreme summers before 1910 are not in the record, according to the met bureau. Science is about scepticism. I think even the mildest sceptic would laugh at the idea of the angry summer because of the way it was constructed.

The Hon. GREG DONNELLY: Mr Jurskis, could you confirm this for me, please? We have, obviously, pre-European settlement and the way in which the Aboriginal practices dealt with land management. We have European settlement and then we have the more recent land management—and I am talking about the last perhaps 10 or 20 years or perhaps a bit longer. With respect to that period from Aboriginal management of the land and the way in which they did it and white settlement up to a relatively recent time, was there much difference in the way in which settled Australia was managing the land? Were we basically following Indigenous practices and really copying that? It is only in relatively recent time we have had this sort of slowing down of this regular burning? Is that essentially your argument?

Mr JURSKIS: No. it depends where you are. For example, in Victorian forests, even after the fifties, they did not wake up and manage forests properly like we did in Western Australia and New South Wales. As far as private land goes, in a lot of private land grazing substituted—carried out a similar ecological function—as Aboriginal burning used to. But specifically about forests in that period between European settlement and the 1950s, they were not being managed properly. Foresters were trying to exclude fire, suppress fire, and we had plenty of mega-fires then. From the middle of the last century, for a brief period of a couple of decades, we had good management of forests in New South Wales and Western Australia—not necessarily in Victoria.

The Hon. GREG DONNELLY: What was the cause of that better management or good management, as you describe?

Mr JURSKIS: It was the mega-fires in the first half of the twentieth century. After we had had enough mega-fires, we learnt our lesson and started broadscale burning. With the rise of The Greens in the eighties, and the growth of their political influence, we lost the will to burn.

The Hon. RICK COLLESS: Mr Jurskis, if you were in charge of land management in the Warrumbungle National Park for the next 10 years, for example, what sort of management plan would you implement?

Mr JURSKIS: I would implement a plan of heavy commercial thinning wherever possible; non-commercial thinning in the scrubs; and burning.

The Hon. RICK COLLESS: Given that we are facing a situation in the park now that you describe where there is a huge regrowth of shrub species like wattles and falling dead timber that the fire killed and so on, there is going to be another huge fuel load developing now, isn't there?

Mr JURSKIS: There is, yes.

The Hon. RICK COLLESS: How would you manage that?

Mr JURSKIS: I have not been there since the fire but I guess that you would have to apply horses for courses. There are some scrubs where you might need to do mechanical work to make it physically feasible to burn. You would have to target the worst problems and deal with them as appropriate. I cannot really visualise all the different situations there must be there now. But the important thing is to restore a landscape where you can apply a mild fire in the future.

The Hon. RICK COLLESS: So it would need a high level of active management going forward from here?

Mr JURSKIS: Absolutely.

The Hon. Dr PETER PHELPS: Three of the recommendations which came out of the Nairn inquiry, were: Fuel reduction; access routes; and the reliance on local knowledge. Do you feel that there is anything more that needed to be added to those recommendations from more than a decade ago or do those three still stand the test of time?

Mr JURSKIS: I think they are right. I think that an important part of that local knowledge is to get rid of all the assessments, the box-ticking and stuff that is not really doing anything except interfering with burning. You have to focus the limited resources on actually getting the job done, rather than complying with the environmental regulations. If you were doing an objective environmental assessment of the consequences of not burning—obviously so much more severe, as we have seen in all the mega-fires—they are far in excess of any consequences of anything that might go wrong with burning, environmentally and socially.

Dr MEHREEN FARUQI: Mr Jurskis, while targeted hazard reduction and controlled burning are obviously part of bushfire management in Australia, there was a recent Deloitte Access Economics report which found that there is greater value in measures for improving the design of houses and for burying electricity cables. I wonder if you have any views on that?

Mr JURSKIS: No, I am not really interested in the built environment; I am interested in how we should be managing the bush. I do not have any expertise in protecting houses from inevitable mega-fires. I think we have to make mega-fires a thing of the past.

The Hon. LYNDA VOLTZ: Getting back to the fire-burning around the Wambelong National Park, you talk about the frequency of burning by the National Parks and Wildlife Service. There is bush outside the national park. Did you look at the figures for how often that had been cleared and back-burned?

Mr JURSKIS: No, I have not conducted any specific investigations into the Wambelong fire. I know, from my experience right throughout New South Wales, that we are not burning nearly enough anywhere.

The Hon. LYNDA VOLTZ: So your points are not specifically in regards to burning there, they are just as to general burning?

Mr JURSKIS: I said at the start of my submission that the cause of mega-fires in Australia has always been a lack of burning and everywhere I go I see that we are in that situation where we are not doing enough burning. And I have seen the evidence of the type of burning that happens in national parks at long intervals and inevitably it is not good burning, it is not mild fire.

CHAIR: By way of clarification, what do you think about private property land management; do you think that they do enough?

Mr JURSKIS: You have two types of private property—you have got the fair dinkum graziers who—

CHAIR: I am talking about grazing—large chunks of land.

Mr JURSKIS: I think graziers are mostly controlling fuel by grazing. I do not live there anymore, but when I lived up on the North Coast, graziers were also burning. I was there a couple of years ago, in the Richmond Range State Forest, and there was a nice bit of dry hardwood forest that was held under a grazing permit and I think the grazier was actually doing the burning on the forest and it was a nice healthy, open, safe system. Next door you have the other facet—the hobby farmers. The hobby farmers bought out a grazier in 1980. It was nice, open, grassy, healthy forest and fire safe. They wrote an article in *Ecological Management and Restoration*. They bought the property and they excluded grazing to let the bush regenerate. And by the 1990s they had lantana scrub; they had dying, chronically declining trees; they were plagued with psyllids; and the whole place was overrun with bellbirds. In their article they said that was the result of logging in the sixties.

The Hon. LYNDA VOLTZ: Can we get back to the topography of land because one of your arguments is about the open lands and the grazing lands and where there are remnants of, say, rainforest that have been protected. Are you familiar with Undara on the Cape York Peninsula?

Mr JURSKIS: No.

The Hon. LYNDA VOLTZ: In Undara there are large lava tunnels with the largest lava tunnel section in the world, where the rainforest is protected because it is in crevices and where the lava tunnels have collapsed. But where you have open plains, it is grassland because that is where the lava has come through. How much of an impact does topography play in the protection of the different types of forest—as opposed to the idea of fire management—in protecting those remnants of rainforest? Because your argument was that the burning allowed the regrowth of those areas that are being protected.

Mr JURSKIS: No, my argument was that Aboriginal burning initially confined the rainforest to areas like that. In North Queensland you have a lot of areas of solid rock. When Mitchell was exploring in northern Queensland, he mentioned on a couple of occasions the bottle tree scrubs, for example. They grew on rocky outcrops which did not have the fuel to carry a mild fire and the surrounding landscape was open, grassy country that was maintained by burning.

The Hon. LYNDA VOLTZ: Hang on a second—the one I am talking about, Undara, is large and flat and it is in Cape York Peninsula. It is because it is lava plains, because that is where the volcano lava plains go through.

Mr JURSKIS: Yes, so it is rock.

The Hon. LYNDA VOLTZ: Yes, but it is not because it is maintained because of burning; it is maintained because of its topography.

Mr JURSKIS: Yes, but it is rock.

The Hon. LYNDA VOLTZ: Well, it is not all rock.

Mr JURSKIS: I think you are confusing topography with vegetation structure. Is your question what is keeping the rainforest where it is?

The Hon. LYNDA VOLTZ: No, I am going to the idea that you thought that the fires would come through and that there would be remnants of the rainforest. But the fact that they were there, the fire allowed regrowth that was coming back out. Some of it is actually about topography. For example, the Warrumbungles—you would have been to the Warrumbungles?

Mr JURSKIS: Yes.

The Hon. LYNDA VOLTZ: The topography there is very different; it is obviously rocky outcrops that are quite steep. So that also has an impact on the type of vegetation and fuel loads you are going to get, as opposed to open plains.

Mr JURSKIS: Yes, the reason that you have rainforest on rock is because you have low fuel loads. The reason you have black cypress on the steep, rocky country up there is because black cypress seedlings are sensitive to fire. That steeper rocky country does not grow grass like the plains do.

The Hon. LYNDA VOLTZ: Yes but you would not want to maintain that as reducing the vegetation that is on those crops, would you?

Mr JURSKIS: Well, if you want it natural, you would. Under Aboriginal management the plains were growing grass most of the time and they were burning when the grass cured. The rocky country with the black cypress was not growing grass and was not burning so much but it was burning occasionally in good seasons and it was maintained as a woodland. As you say, it is about topography and fire.

The Hon. GREG DONNELLY: Going back to an earlier comment you made about the West Australian jurisdiction and your comments—which I interpreted as being favourable, in part—on the way in which matters are managed over there. I appreciate that you are most familiar with New South Wales, but are there other jurisdictions in Australia which you think are becoming alert to the arguments that you are presenting to us today?

Mr JURSKIS: There is a trial going on in the Northern Territory somewhere where they are reinstating something like traditional Aboriginal management. I think they had a 10-year monitoring period where they had the big, late season fires that just cover the whole landscape and then they started implementing this program. They claim to have improved biodiversity, social conditions for the Aborigines and vastly reduced greenhouse gas emissions. So there are good things happening but not in New South Wales.

The Hon. RICK COLLESS: Mr Jurskis, at the end of this process the Committee has to make recommendations. What recommendations would you like to see come out of this Committee?

Mr JURSKIS: I would like to see all the rules, regulations and codes simplified and changed so that they are actually facilitating burning, rather than preventing burning. That would be the main thing I would like to see.

The Hon. Dr PETER PHELPS: Mr Jurskis, is part of this problem a definitional one? That is, when people talk of the natural landscape, one group of people thinks of it as being completely locked up with no human intervention whatsoever whereas, for at least 40,000 years, the natural landscape in Australia has been manifestly changed and affected and plants have developed and acclimatised to human intervention. Is that the real problem which we face here, that one person's nature clearly divorces the knowledge that the nature has been affected by human intervention?

Mr JURSKIS: Absolutely, that is the one big problem. All environmental problems in Australia come down to the wilderness mentality. We had a balance of nature that was established by and included human management. We had that going for 40,000 years and European people came along and interfered with it and we had scrubs and mega-fires and chronic decline and all the rest of it. These days we have people who see scrubs as biodiversity. They do not understand that it is just biomass; it is not diversity.

CHAIR: Thank you, Mr Jurskis, for coming in today. The Committee may have some questions they would like to put to you on notice. If it is possible, we would like answers to those questions within 21 days of your receiving them. The Committee normally resolves to have any of those questions on the notice paper within a couple of days.

(The witness withdrew)

PETER JOSEPH CANNON, President, Volunteer Fire Fighters Association, and

BRIAN WILLIAMS, Vice-President, Volunteer Fire Fighters Association, sworn and examined:

CHAIR: Gentlemen, for your information there may well be questions put on notice by members of the Committee after the proceedings. We would like answers to those questions within 21 days. Mr Cannon or Mr Williams, would either of you like to make an opening statement?

Mr CANNON: We are the Volunteer Fire Fighters Association. We are a stand-alone volunteer firefighters association that represents volunteer firefighters only. We have been in existence for 10 years. We do not represent staff; we are only volunteers. The association was formed as a result of the Goobang and Canberra fires. We found out then that there was no representative body that represented firefighters only, so that is why we were formed. We are here today to represent our members who attended the Wambelong fire. The other matters, as raised under Such Other Matters in section 8, most of our submission is in that. Also, our submission was confidential. We are now lifting that. I take it that is acceptable?

CHAIR: Yes. In fact, it has been resolved. Your submission is on the website now, if I am correct.

Mr CANNON: I might add that we are the backbone of the real fire service. Without us, there is no real fire service. If we are removed from the real fire service, all you have got is bureaucracy and bureaucracy does not put the fires out. In closing, I am a group captain of 13 years. I sit on the Bushfire Management Committee at Forbes in the Mid Lachlan Valley zone. I also sit as an executive on that subcommittee that forms draft policy. Over four shires, I am the only volunteer who does that. I just feel that this Committee needs to hear the voices of the volunteers. Thank you. I will pass over to Brian.

Mr WILLIAMS: I will introduce myself and give you my background; it might help with the questions you want to ask. I have had 46 years continuous service as a front-line firefighter. I have been the captain at Kurrajong Heights for the past 30 years. The Kurrajong Heights area sits on the top of a mountain range and can be completely surrounded by fire. I have got close to three-quarters of a million hectares in national park that directly adjoins the area. We have developed a risk management plan that works. In the 60 years since the brigade was formed we have never lost a house to a wild fire, even though we are in an extremely vulnerable position. The risk management plan has bettered the environment. Since we have been managing the bushfires by low intensity fire, we have an improvement in the environment. I am very happy to show anybody from the Committee around and then compare it with the adjoining national park that receives little management. It gets burnt by periodic wild fires and believe you me there is one big difference.

I am also the remote area firefighting team [RAFT] leader for Hawkesbury. I have been the team leader since its inception. My team pioneered the concept for the Rural Fire Service. The training that takes place now and the equipment that is used was designed and implemented to a great extent by my team. I have a group leader qualification. I was also on the independent hazard reduction audit panel. I have been a divisional commander at many big fires, including the State Mine fire recently. If you were to value the time that I have given the service at \$40 an hour, I have given more than \$500,000 of free service to the organisation. I am pretty passionate about it. I have appeared before five Government inquiries into bushfires prior to this one, plus a coronial inquiry. The thing that concerns me is the lack of hazard reduction that is taking place. I did not disagree with anything that the previous witness presented. I am concerned that out of those inquiries the common theme was lack of hazard reduction.

Command and control must go back to the local level. That is extremely important if we want fires managed properly. That is certainly not happening in this day and age and Coonabarabran was a very good example. If you have looked into the inquiry into the fires, they originated in New South Wales and burnt into Canberra. Exactly the same thing took place: the locals were locked out of it. I am concerned about the direction the Rural Fire Service is now heading. It was originally set up to assist and support volunteers in their role. It has become a powerful centralised bureaucracy, which is not good for our future. I am very concerned at the cost. There has been enormous cost associated with fire management. It is a big growth industry. We have people in research. We have people resourcing aircraft. The cost of the service has expanded dramatically. I do not think taxpayers in this day and age are getting value for their money and it needs to be looked at thoroughly.

My big concern over the years has been that we have changed from a preventative fire force into a reactive fire force. The environment has paid an enormous cost because that has happened. I am concerned as a divisional commander. I can have up to 100 people under my control in a big fire. I am very concerned for their safety. The fuel loads are getting to a level where you really are worried about the safety of the people on the ground. I think it is insanity that we are incinerating one or two of our iconic national parks every summer. It is madness; it is not sustainable into the future. Ultimately, I believe we need a royal commission into the whole firefighting industry to have a good look at where it is going and how we can improve it.

CHAIR: In New South Wales?

Mr WILLIAMS: In New South Wales or the country, it would not matter.

CHAIR: Before I pass over to Dr Faruqi I will ask a couple of points of clarification, Mr Williams. You mentioned that you were involved in the establishment of the RAFT system.

Mr WILLIAMS: Yes.

CHAIR: Are the RAFT teams capable of fighting or trained to fight fires at night?

Mr WILLIAMS: It has been a long battle to get to that stage. We are finally at that stage where they will allow us to stay overnight on fires. We could not do that in the early days.

The Hon. Dr PETER PHELPS: Who is "they"?

Mr WILLIAMS: The service. We had to have three means of exit to stay overnight, so it was not possible. The very nature of our business is that we are remote area firefighters. For instance, when we fought the Barkers Creek fire around the Warragamba catchment, we were not allowed to stay on the ridge lines overnight because we had no means of getting out of there. It is a shame because we can do our best work at night.

CHAIR: Approximately how many RAFT teams are there in New South Wales?

Mr WILLIAMS: I could not give you the exact figure. It is expanding quite rapidly. I think it is getting up somewhere around 15 to 20.

CHAIR: Thank you. Mr Cannon, you mentioned that you were a group captain. Will you quickly describe to the Committee what the responsibilities are of a group captain?

Mr CANNON: A group captain sits above the captains and you might have three or four brigades below you, but you are brought into the situation when the fire is outside a brigade area, then you take over or are asked to take over. Then you are the supreme fire boss on the ground until an incident controller comes in.

CHAIR: Group captains are within a zone; you do not go across zones, is that right?

Mr CANNON: Not unless you are asked to.

Dr MEHREEN FARUQI: Mr Williams and Mr Cannon, thank you for coming in today. Your submission recommends implementing the property-based fire levy based on what has been happening in Western Australia. Could you please outline some of the benefits of this system?

Mr CANNON: The problem we have got is that the figures float around, obviously, from year to year. We could have as little as 50 per cent of people who are insured in the way that they need to be insured that are covering for the other 50 per cent. The other 50 per cent would be made up of insurers offshore who do not contribute to the fire service levy. The other 25 per cent, for example, are not insured, so they are not contributing. If you go to a property-based fire service levy, everybody that owns land, under their council rates—and this is nothing to do with the councils—is identified as having to contribute to the fire service levy. Everybody pays, you pay less. Through rate notices, we are going to pick up everybody that owns land. We actually recommend a Western Australian model. There are four or five different categories of land-rated systems. A high rater would be industrial properties, for example, down to rural-based lands that are probably only grassland country. It is a very fair system and it is the one that we believe is acceptable.

The Hon. LYNDA VOLTZ: I want to get my head around the command structure. Setting aside whether the Wambelong fire was under control or not, if you have got an existing fire and extreme weather is coming in, someone's alarm bells should be ringing somewhere. I am ex-military. I was used to orders coming down from the top that directed us to where we needed to go. That is not the way it is working in the Rural Fire Service, but it is not the bottom-end-up structure where you can ring someone and say, "I think this is a major problem. We need to get more people out there." Will you explain to me where that is working?

Mr CANNON: I will comment so far and then I will hand over to Brian. Brian is more experienced because he has had to deal with more risk fires. In my zone, I cannot understand how this fire happened at Coonabarabran. I was absolutely appalled at how it was managed. My area exists under a very good fire controller officer; he is one of the best in the State. That worry is always there. We have even had alerts during the summer and we have taken the group vehicle—a fire vehicle with all the communications in it—with us no matter what we are doing. So we are on full alert. No, I do not believe this in any way, shape or form happened at this fire that we are inquiring into. The command structures are there and we are all basically trained in what is required but, in my eyes, there was a complete failure with this fire.

Mr WILLIAMS: A well-managed fire is run by your commanders at the fire. The incident management team should be there just to supply the resources that the people in the field require. The system is no longer like that in lots of areas. I am fortunate to come from a very good district where our district manager relies on the information coming from the people in the field. She puts the right people in the field, we run the fire and the incident management team is there to support us. That does not happen in all districts and from what I can gather it certainly did not happen in Coonabarabran. The most important thing with a fire is to have local knowledge.

The Hon. LYNDA VOLTZ: Just to take that a step further, you have the people on the ground who think it is under control—

Mr WILLIAMS: No.

The Hon. LYNDA VOLTZ: I am just giving an example. You have got a command somewhere that knows that extreme weather is coming or perhaps there is going to be a weather change; people on the ground do not necessarily know that. If you have people saying there is a fire on the ground and you are expecting extreme weather—maybe a day with an expected temperature of 45 degrees Celsius—is there some mechanism to start the alarm bells ringing for those people who are not necessarily fighting the fire or for them to give directions?

Mr WILLIAMS: Any fireman worth his salt knows what is happening with the weather. We do not have to rely on somebody from higher headquarters to tell us.

The Hon. LYNDA VOLTZ: Putting aside what you know, do not know or should know for the moment, what happens at this end? Where is the top end of the command overview of what might be a possible risk? Where do the different levels come in? Leaving aside the people on the ground, and maybe even the captains and group captains, where do the levels come in between the control command and the others? Is there some structure that says: Alarm bells should ring here about a possible risk of something spreading?

Mr WILLIAMS: Look, any fire is run by a team and everybody needs to contribute. Problems arise when you have an incident team that wants to dictate how the fire is going to be run at the fire front. There should be a flow of information from the commanders in the field back to your instant incident management team; in a good fire that flow of information gets back. The incident management team is all about supplying the resources the commander in the field needs. It is really that simple; it is not a complicated thing.

The Hon. LYNDA VOLTZ: It works in the opposite way to the military—namely, rather than from top down, it is down up?

Mr WILLIAMS: In lots of instances it is running from the top down now and that is why I believe we are having problems.

The Hon. LYNDA VOLTZ: You have raised concerns about workers compensation for rural fire services. What reviews would you like to see in workers compensation?

Mr CANNON: When we went from Occupational Health and Safety [OHS] to Work Health and Safety [WHS] for firefighters the report was put out by the Federal Government under Minister Bill Shorten at the time and we were the only association that questioned the new Work Health and Safety changeover to the point, "Nothing has changed. You will not be affected in any way." Yet we were looking at a \$300,000 fine and five years jail.

The Hon. LYNDA VOLTZ: You are covered by the Federal workers compensation scheme?

Mr CANNON: It was the Federal handing down but it still comes back to the Rural Fire Service. Are we now classified as a worker under the Rural Fire Service terminology?

Mr WILLIAMS: I think so.

Mr CANNON: And we questioned that. It took letters on three occasions to the Commissioner of the Rural Fire Service to try and clarify the grey areas: If there is no fall back to us how come there is a \$300,000 fine and five years jail?

The Hon. LYNDA VOLTZ: In your submission you talk about benefits on seasonal fluctuations.

Mr CANNON: Benefits?

Mr WILLIAMS: Are you talking about wage structure?

The Hon. LYNDA VOLTZ: Yes.

Mr WILLIAMS: Farmers have very varied income—one year they can make a fortune and the next year they are looking for a handout. There needs to be something in place where their income is averaged over a considerable period of time and there should be some benefit if a farmer has had a tough year and he does not get a pittance if he should be injured. We need a compensation scheme that is fairly—

Mr CANNON: You are talking about taxable income I think.

Mr WILLIAMS: Yes.

Mr CANNON: Everybody knows a farmer's taxable income could be zero and if they are going to go back to a taxable income to determine what his value is there is nothing there. So there has got to be a better system in place.

The Hon. LYNDA VOLTZ: Is that a self-employed—

Mr CANNON: Yes.

The Hon. LYNDA VOLTZ: Is that under income protection insurance or workers compensation? Workers compensation normally has a structure built into it with certain payments phased out and medical costs.

Mr CANNON: We are not experts in what category we should fall into but full protection.

Mr WILLIAMS: What we know is that there have been big problems in the past where somebody just sold a business, they got injured and they got a pittance out of it.

The Hon. GREG DONNELLY: Thank you for your submission and the detailed attachments. Your submission states, "Local knowledge and experience is being ignored by an increasingly heavy Rural Fire Service bureaucracy." That is quite a strong statement. Would one or both of you care to elucidate on that statement? Perhaps you may have some examples that you would care to offer in support of that statement.

Mr WILLIAMS: We have some very good examples. If we can give them in camera we would like to do that.

Mr CANNON: If I could clarify that we have got several that we want to deal with in camera. We will identify them then.

CHAIR: That is fine. We will not go into them now.

The Hon. GREG DONNELLY: The Committee has heard criticism about the Rural Fire Service's communication with property owners and volunteer firefighters both in the early stages of the Coonabarabran fire and as it progressed. How can communication be improved during a fire? I am asking for a general statement but, as I have said, there were some indications of communication issues around the Coonabarabran fire.

Mr WILLIAMS: One of the big problems in the early stages was that there were a lot of group captains in that Coonabarabran area that were not even informed that they had a fire or had no knowledge of what was going on. So the first thing is to let your troops know what the hell is going on: "We have a major problem; we need local expertise to come in and assist." They would have jumped at the chance but they were out of the loop.

The Hon. GREG DONNELLY: In your experience is the scenario you have just outlined unusual?

Mr WILLIAMS: It is very unusual for my district. As I say, I am fortunate to work in a very good district.

The Hon. GREG DONNELLY: But as a general proposition, with your broad knowledge, do you hear of that happening often, not often or sometimes?

Mr WILLIAMS: I would say not often. I mean if a district manager is doing his job he keeps everybody in the loop.

The Hon. GREG DONNELLY: But in your observation that would be quite an unusual episode?

Mr WILLIAMS: I would think so, from my experience.

Mr CANNON: Following up on that, there are a lot of questions that need to be asked as to why this was so and we are not here to answer that.

CHAIR: You can be assured that the Committee will ask those questions of other people.

The Hon. RICK COLLESS: Was it the National Parks and Wildlife Service or the fire control officer who did not advise the group captains?

Mr WILLIAMS: It is the job of the Rural Fire Service to advise Rural Fire Service people but in a major fire like that there should be a complete dialogue between the two agencies.

CHAIR: I remind witnesses and Committee members not to name people; that will be done in camera.

The Hon. RICK COLLESS: My next question is about the status of the National Parks and Wildlife Service as a firefighting authority. As you are probably aware, the three firefighting authorities in New South Wales are: NSW Rural Fire Service, National Parks and Wildlife Service and forestry. Do you believe there should be a single firefighting authority in New South Wales rather than three?

Mr CANNON: Yes, I do. I have dealt with this matter back through NSW Farmers with the RFS commissioner at the time and we passed this same resolution or words to that effect: There should only be one rural firefighting authority and not National Parks. We are of the opinion that the firefighting authority should be removed from National Parks because they are not firefighters; they are a national park.

The Hon. Dr PETER PHELPS: Is it correct that the organisation above "group" is the "zone"?

Mr CANNON: The top?

The Hon. Dr PETER PHELPS: What is immediately above "group"?

Mr CANNON: You are getting into staff then.

The Hon. Dr PETER PHELPS: It has a name. Is it the "zone"?

Mr CANNON: Zone manager. There are two different types of structures.

The Hon. Dr PETER PHELPS: In your experience would it be unusual for a zone to have no group captains officially appointed?

Mr CANNON: Yes. I do not know of any that would have that. I have never heard of it.

The Hon. Dr PETER PHELPS: If a zone was entirely composed of deputy group captains it would be highly unusual in your opinion?

Mr CANNON: It should have a group captain at least.

The Hon. Dr PETER PHELPS: In your experience would you expect individual captains to notify their group captains if they have been deployed to a fire?

Mr CANNON: Not necessarily, it would depend on the circumstances.

The Hon. Dr PETER PHELPS: How would group captains know—

Mr CANNON: The group captains should be told from the top down, from the zone manager, what is going on because that is the first interface to the volunteers.

The Hon. Dr PETER PHELPS: In an individual unit, for example, an individual captain would notify the zone and then the zone would be obliged to notify the group captains that this was happening?

Mr WILLIAMS: What normally happens in a fire is that a request goes out to brigades for vehicles and the brigades respond they can be there. The incident management team will organise the fire into different command structures or different divisions if it is a big fire and vehicles will be allocated to a division and that divisional commander will be briefed on the vehicles that he has coming in under his control.

The Hon. Dr PETER PHELPS: The prediction of fire movement is normally done by headquarters in Sydney, is it not? What has been your experience in relation to the efficacy of those predicted fire movements?

Mr WILLIAMS: Again, I have got some evidence I will give you in camera on that.

The Hon. Dr PETER PHELPS: Would you say you are happy or unhappy?

Mr WILLIAMS: Look, the service supplies a lot of good information and the more intelligence you have got the better it is—intelligence is your friend in a big fire. I have got no problem with the information flow but sometimes they make assessments that are not correct and that is the name of the game. We are in a changing environment when you are dealing with a major fire so you can make wrong decisions.

The Hon. Dr PETER PHELPS: Do you believe there is a significant disconnect, if I can use a shorthand phrase, between white shirts and yellow shirts?

Mr CANNON: We prefer to call ourselves blue shirts actually.

Mr WILLIAMS: I will put it this way, when we were under local government we were a very happy organisation. The bureaucracy since it has been formed has grown from something less than 150 staff to now somewhere around 1,000. They are chewing up an enormous amount of our budget. Yes, there are concerns that the bureaucracy is far too big, there are concerns that it is centralised and the bulk of volunteers I feel would like the service to move to a regional location—after all it is a rural fire service. A lot of people are not happy about having it situated in the middle of Sydney.

The Hon. Dr PETER PHELPS: What is your view on the current application of the section 44 system? Do you believe any improvements should be made to it? Is it functioning well at the moment? What do you believe should be done to the system, if anything?

Mr CANNON: I would just add that pre-emptive section 44s are okay but sometimes they want to get to section 44s instead of attempting to put the fire out immediately because costs are covered under section 44. There is a grey area there on what is the intent.

The Hon. Dr PETER PHELPS: Could you elaborate further?

CHAIR: We will not go any further there. The open section of this hearing is now adjourned. We will now proceed to evidence in camera. I ask that the gallery be cleared. The public hearing will be reconvened at 1.00 p.m.

NAOMI STEPHENS, Acting Director, Park Conservation and Heritage Branch, National Parks and Wildlife Service,

MICHAEL WRIGHT, Acting Deputy Chief Executive, National Parks and Wildlife Service,

TERENCE BAILEY, Chief Executive, Office of Environment and Heritage, and

MARK PEACOCK, Director Western Branch, National Parks and Wildlife Service, affirmed and examined:

CHAIR: Thank you for agreeing to attend this afternoon. I will place on the record the Committee's gratitude to Mark Peacock and his team for showing us around the fire ground. Before we proceed to questions, would one or all of you like to make an opening statement?

Mr BAILEY: Yes, I will make a statement on behalf of the agency. The National Parks and Wildlife Service, part of the Office of Environment and Heritage, has a significant land management responsibility, with almost 9 per cent of the land in New South Wales managed for conservation and for the public appreciation, understanding and enjoyment of the natural and cultural heritage, in a network of national parks and other reserves. As everybody here is aware, on the afternoon of 12 January 2013 fire was discovered in Warrumbungle National Park. The Wambelong fire lasted 41 days, burning 56,280 hectares, including 22,085 hectares of national park and 34,195 hectares of surrounding lands and destroyed a significant amount of property and infrastructure, both within and outside the park, including many houses.

Over the 41 days, enormous resources joined in a combined effort to extinguish the fire. As with many fires of similar or larger size, effective fire control relies on the combined and coordinated effort of fire authorities, firefighters, supporting organisations and the community. As a fire authority and a significant landholder in New South Wales, the NPWS is responsible for, and committed to, effective fire management practices, including bushfire responses on not only the lands it manages but also on other lands and in the community more broadly. Indeed, this was the case with the Wambelong fire. An NPWS staff member and the local Rural Fire Brigade member were first on the scene on the afternoon of 12 January. Together, they attacked the fire while additional resources were being deployed. The cooperation that afternoon between the two men set the scene for what would become an enormous cooperative effort between so many individuals and organisations over the coming days.

From the very first moment that afternoon when the water from the hose hit the ground at Wambelong, every subsequent effort of the NPWS was directed at containing the fire. In the first 19 hours the NPWS took responsibility for controlling the fire, a responsibility that I believe was exercised professionally and at all times with the best possible intentions. After the Section 44 declaration in the morning of Sunday 13 January, NPWS continued, as part of a multi-agency response, to fight the fire until it was declared out on 21 February. The significant and detrimental impacts of this fire, including the personal, community and environmental impacts, are shared acutely by NPWS, and in particular local NPWS staff.

Fire management efforts are part of the statewide approach, consistent with the Rural Fires Act, the State Emergency and Rescue Management Act, the State Bushfire Plan and NSW 2021. The National Parks and Wildlife Service is both a public authority and a firefighting authority under the Rural Fires Act. As a public authority, NPWS has statutory obligations to take steps to prevent the occurrence of bushfires and to minimise the danger of the spread of bushfires on or from land under its management. As a firefighting authority, NPWS has a statutory role in assisting other firefighting authorities and NPWS's neighbours, in the management of bushfires. The National Parks and Wildlife Service, as with other land managers, is often a first response agency to bushfires occurring both within national parks and outside national parks.

The State's firefighting authorities work together under the principles of coordinated firefighting and operate under a tenure-blind approach, to maximise the effectiveness of their firefighting efforts. The principal mechanisms for coordinated and cooperative fire management are the New South Wales Bushfire Coordinating Committee and local bushfire management committees. The National Parks and Wildlife Service is a member of the Bushfire Coordinating Committee and its standing committee and has a representative on most of the 67 bushfire management committees across New South Wales, especially where NPWS has significant reserves that may potentially be impacted by fire. For example, NPWS is represented on both committees covering Warrumbungle National Park; the Castlereagh Bushfire Management Committee, and the North West Bushfire

Management Committee. The National Parks and Wildlife Service has regular interactions with the Rural Fire Service at a State level, as well as closely cooperating with local RFS staff and RFS brigades. During periods of bushfire activity, NPWS places senior liaison officers and support teams at the NSW Rural Fire Service's State Operations Centre, to provide advice on fire suppression in national parks and reserves and on the ability and availability to deploy NPWS resources to assist in statewide situations, monitoring and strategic review, and to perform a range of other functions.

The National Parks and Wildlife Service places experienced aviation management personnel at RFS's State Operations Centre to assist at the State Air Desk in the coordination of aircraft during fires across New South Wales. The National Parks and Wildlife Service also cooperates with RFS for joint training, procurement, systems development, and data exchange and a wide range of other functions important for supporting firefighting operations. The National Parks and Wildlife Service has developed a hierarchy of planning documents to guide its approach to fire management in parks, as part of a consistent, coordinated and cooperative approach to fire management in New South Wales. These documents range from the Statewide NPWS Fire Management Manual, which is reviewed and updated annually, to a fire management strategy for every reserve managed by NPWS.

Strategic issues and statewide direction for NPWS's fire management over a 10-year time frame are articulated in *Living with Fire in New South Wales National Parks—A strategy for maintaining bushfire in national parks and reserves 2012-2021*, which was launched in April 2013. The strategy is the State's first comprehensive long-term fire management strategy for national parks. It identifies that the primary objective of managing fire in national parks is always to protect life and property. As a fire authority, NPWS has significant resources available to meet its fire management responsibilities. These resources include: almost 1,200 trained and skilled firefighters, fire specialists and fire support staff; 470 vehicles; 170 items of equipment, such as bulldozers, graders and slashers; and five aircraft. In addition, NPWS maintains 37,600 kilometres of fire trails and park roads for use for fire management purposes in the national park and reserve estate.

The National Parks and Wildlife Service takes its responsibility to reduce fire risk seriously. In 2013-14, NPWS completed 232 prescribed burns, covering 111,000 hectares. In the three years to June 2014, NPWS worked with the Rural Fire Service to carry out hazard reduction operations covering over 360,000 hectares. The average annual area treated, which is approximately 120,000 hectares, was nearly doubled during this period when compared with the average for the three previous years. The NPWS's hazard reduction activities are assisted by the NSW Government's Enhanced Bushfire Management Program, a 5-year, \$62.5 million program which runs through to June 2016. Through this program NPWS has employed and trained an extra 94 firefighters to assist with its expanded hazard reduction activities. The extra 94 staff are also available for firefighting wildfires in the park system and on other land, including private property.

The National Parks and Wildlife Service's firefighting staff are highly professional and are nationally and internationally recognised for their expertise. The National Parks and Wildlife Service has made significant contributions to interstate firefighting operations, such as the 2009 Black Saturday bushfires in Victoria. NPWS has also sent teams of firefighters to major fires overseas, including to the United States of America in 2002, 2003, 2006 and 2008 and to British Columbia in Canada in 2009 and as recently as only a couple of weeks ago.

The National Parks and Wildlife Service staff contribute to fighting fires that occur outside reserves as well. In 2013-14 NPWS firefighters assisted at an additional 100 fires that burnt entirely off park. The National Parks and Wildlife Service responds rapidly to wildfires burning within park, with the aim of limiting the area of park burn and containing the fire within reserve boundaries, where possible. This has resulted in NPWS successfully containing most fires within its reserve boundaries. This is largely due to responsive detection and suppression capability, effective cooperation of firefighting arrangements, and the success of NPWS's strategic hazard-reduction programs. For example, over the last 10 years, about 90 per cent of all wildfires burning in park have been contained within reserve boundaries. In the corresponding period it is estimated that 464 fires or 21 per cent of fires burning in parks moved from off park into park. Over the same period, only 188 fires, or 9 per cent, started in national parks and moved off.

Over the last 20 years, NPWS has made a significant achievement in reducing the size of wildfires burning in reserves. From 1993-94 to 2012-13, there was a downward trend in the annual average size of wildfires and the annual average area burnt on park and reserve. For example, in the last 10 years NPWS contained 82 per cent of fires in reserves to 100 hectares or less and only 5 per cent of fires in reserves were greater than 1,000 hectares. These figures indicate meaningful improvement in the management of wildfire as a

result of significantly enhancing our rapid response capability and implementing strategic hazard reduction programs.

The National Parks and Wildlife Service has achieved these improvements whilst, at the same time, the area of reserves that it manages has increased significantly. Over the last 20 years, the area of reserves managed by NPWS has increased from about 3.9 million hectares in 1994 to about 7.1 million hectares in 2013. As part of this increasing land management responsibility, NPWS is committed to continually improving its firefighting efforts across all the reserves it manages.

In the week preceding the Wambelong fire, NPWS was involved in fighting a growing number of fires across the State. On 6 January 2013, NPWS was involved in 19 fires, of which one was under a section 44 emergency declaration. By 13 January, NPWS was involved in 36 fires of which 22 were under a section 44 declaration. From the Wambelong fire's outbreak on the afternoon of 12 January 2013, NPWS allocated many resources to combating it and worked cooperatively with the Rural Fire Service in on-ground firefighting efforts, in incident managing teams and in providing many support functions.

Approximately, 95 per cent of Warrumbungle National Park was affected by the Wambelong fire. It destroyed the park's visitor centre, historic wool sheds, staff quarters and many other items of visitor infrastructure. The fire impacted on the Siding Spring Observatory and destroyed or significantly damaged private property and structures, other infrastructure and livestock. As noted earlier, it was finally contained at 56,280 hectares. The cause of the fire—as well as other events leading up to and during the fire—is the subject of a coronial inquiry.

The National Parks and Wildlife Service believes that all staff who were involved in the response to the Wambelong fire appropriately applied their training and experience to combating it and did so in good faith in accordance with the relevant plans, policies and procedures that were required to be implemented. NPWS is determined to maintain its focus on recovery actions in Warrumbungle National Park, recognising that a speedy recovery will help support the local community. NPWS continues to review its plans, policies and procedures as a result of lessons learnt from the 2012-13 fire season in order to continually improve its management preparedness response and recovery practices. The practices of continuous improvement through reviewing plans, policies and procedures is well embedded in NPWS, particularly in relation to its fire responsibilities, as is the operational application of reviewing and learning and applying outcomes.

The NPWS Fire Management Manual was updated in July 2014 and incorporated changes to firefighting procedures arising from the 2012-13 and 2013-14 fire seasons. The reserved fire management strategy for Warrumbungle National Park is being reviewed and will be finalised after the completion of this inquiry and the report of the Coroner into the Wambelong fire. NPWS is working with the Rural Fire Service to implement the interim arrangements issued in July 2014, clarifying the command and control provisions and the notification requirements to be followed by firefighting authorities for class one and class two fires. These arrangements mean that the Rural Fire Service or Fire and Rescue NSW have ultimate responsibility for all bushfires regardless of tenure and are responsible for the appointment of incident controllers. NPWS strongly supports those arrangements and supports the enhanced emphasis on notification and communication procedures.

NPWS considers itself to be an important part of the Coonabarabran community and recognises the importance of Warrumbungle National Park to the local economy. The park is the premier tourist attraction in the region and NPWS is focused on ensuring that the park's facilities can again be used by visitors. The recovery plan of NPWS includes restoring the buildings in the parks and its major walking tracks, replacing damaged infrastructure and developing research and wildlife recovery programs. To date a temporary visitor facility has been established. All major campgrounds have been reopened. The iconic Breadknife and Grand High Tops walking track was opened in Easter 2014. Research programs into wildlife, cultural heritage and fire behaviour have commenced and replacement of park signage and repairs to other infrastructure is underway.

Following the Wambelong fire and in response to noted concerns about the standard NPWS boundary fencing agreement, NPWS developed a simplified application process and fencing agreement, which was welcomed by adjoining landowners. NPWS also reviewed its boundary fencing policy to make it shorter and simpler. The revised policy, with a one-page standard agreement, was published by NPWS in February 2014. NPWS recognises that lessons can always be learnt from major fires such as this one. NPWS will look closely at the findings and recommendations from this inquiry and from the coronial inquiry into the Wambelong fire and see how its fire management responsibilities can be improved.

The fire was unprecedented in the history of the Warrumbungle National Park and NPWS has already initiated a three-year research program to assess the fire's impact on the park's landscape and ecology. The program includes research on fire behaviour, fauna and flora, soils and water quality, cultural heritage, and involves the community in research, known as citizen science. Fauna recovery projects that have already commenced include monitoring of brush-tailed rock wallabies and koala populations, installation of 300 nesting boxes for possums, parrots and microbats and control of invasive weeds in the park.

NPWS's emphasis on well-trained and professional firefighters was demonstrated on the day that our staff responded to the fire's outbreak, whether or not they were on duty, and they continued to work cooperatively with the Rural Fire Service and local Rural Fire Service brigades as the firefighting effort quickly escalated. NPWS staff were able to apply their experience and procedures that they have learnt in a real event and the agency and its staff are grateful that no lives were lost in a very difficult situation for the Coonabarabran community and the firefighting authorities.

In finishing, I acknowledge the significant and detrimental impacts of the fire, including the personal, community and environmental impact. These impacts are shared acutely by NPWS and our local staff. Secondly, I believe that all of our staff who were involved in the response to the fire appropriately applied their training and experience to combat it and did so in good faith and in accordance with the relevant plans, policies and procedures. I also take this opportunity to acknowledge and thank the support NPWS has received from the local council, from the Rural Fire Service, from neighbours and local community groups during and after the fire. Finally, on behalf of the Office of Environment and Heritage, including the National Parks and Wildlife Service, I look forward to us making a positive contribution to the Committee's inquiry.

CHAIR: Thank you, Mr Bailey. As a point of procedure, we had extensive discussions with Mr Peacock and his team on the ground, but none of that has been taken into evidence. If there is anything you wish to repeat that you think should go into evidence, Mr Peacock, we are well prepared to take that. We will proceed with questions from around the table but before I do that, are you able to table your introductory statement and all of the detail that you have provided for Hansard?

Mr BAILEY: I am certainly happy to.

CHAIR: Also as a matter of clarification, where it is not shown as a percentage of the total land under your fire control, can you put the hazard reduction numbers into percentage terms rather than just hectares. I do not think you did that in your evidence.

Mr BAILEY: I am certainly happy to and there are some other contexts that we can put that in in terms of the high-risk fire lands in New South Wales and the percentage of burns that we conduct on those.

CHAIR: That is great. We will consider all of those as questions on notice.

Dr MEHREEN FARUQI: Thank you all for being here. The work that the National Parks and Wildlife Services do to manage our national parks as well as manage the fires that arise within them is highly appreciated. The Committee has heard evidence that insufficient hazard reduction is undertaken in national parks. Had all the planned hazard reduction been completed within the Warrumbungle National Park and, if not, what were the specific reasons for that?

Mr BAILEY: I will pass to Mr Peacock in a moment, but I want to touch on the program for hazard reduction burn, which was mentioned in the opening statement, that we have implemented in the past three years as part of the enhanced bushfire management program, which has seen a doubling of the hazard reduction burn statistics across New South Wales. We have very successfully done that. I will ask Mr Peacock to make reference to Warrumbungle itself.

Mr PEACOCK: Since 1981, the National Parks and Wildlife Service has undertaken 60 separate hazard reduction burns and they have ranged in size from one hectare to 800 hectares. In the period from 2000 to 2012, approximately 2,600 hectares were hazard reduced. In the five-year period prior to the Wambelong fire, approximately 900 hectares of the park were treated in nine hazard reduction burns. For our northern plains region, we prepare a three-year hazard reduction burning strategy. Our region has a target, which flows down from the statewide target. The region is required to burn approximately 8,500 hectares within the northern plains region. That region goes through a process of looking at its reserve fire management strategies and risks and

allocates its 8,500 hectares into park areas. It prepares a three-year plan to help with that, so parks such as the Warrumbungle would be included in the three-year plan for the northern plains region.

To ensure that we have the maximum opportunity to match burns with weather windows, the three-year plan that we prepare on a regional basis contains 150 per cent of the burning area that we need to hit our targets, so the plan has much more burns ready to go than are required to hit the target. On that basis, all the burns that would have been scheduled for the Warrumbungles would not have been completed; some were. As I have mentioned, that is what you would expect, given the way that we put that plan together.

Dr MEHREEN FARUQI: The Committee also heard that the original fire in the national park was small and that it should have been contained. I would like to hear your view on that and what you heard from the national park staff on the ground at the time of the fire.

Mr PEACOCK: I thought perhaps a useful way to address that question is to use five quotes that were provided in statements that were made after the fire, one by a national park staff member and four by rural fire brigade members. These are quotes from the people who were first on the scene. The first national parks person arrived at the fire around 4.35 p.m. He said, "The fire was now across on the Wambelong Creek on the eastern side moving up the hill. It would have been about two-thirds of the way up the hill." One of the rural fire brigade members stated, "We could not work on the northern and eastern edge as it was up the steep hill and we could not get to it." Another brigade member said, "We backed the tanker up to the creek bed and started fighting the fire, although it was useless as the fire had almost made it to the top of the hill behind the creek." A brigade captain said, "I could see the fire had crossed the creek and was proceeding up the hill in a westerly direction. There was nothing we could do to stop the fire creeping into the hills due to the steep terrain." Another brigade captain said, "When I first arrived the fire was approximately 150 metres to the north from the John Renshaw Parkway travelling up a steep hill. It was impossible to fight the fire from this side due to the terrain." It was perhaps a relatively small fire but burning in very difficult country.

CHAIR: Before we proceed, on another procedural matter, during our visit to the fireground you had some fairly large-scale maps that you showed us. We took some small-scale maps with us. Would you be able to provide the Committee with copies of those larger maps that showed the national park and the description on the ground where the fire was?

Mr PEACOCK: Certainly.

The Hon. LYNDA VOLTZ: We have heard some comments regarding the arrival of the remote aerial response team [RART] while the fire was still under the control of the National Parks and Wildlife Service on the first night and that they were only on site for 40 minutes. Could you give us a rundown on what happened with the RART team?

Mr BAILEY: We might do an answer in two parts, which is one with the RART team, but we might give some clarification about the role, functions and safety requirements of the RART teams as well, which is an important component of supporting decision-making.

Ms STEPHENS: I would start by clarifying that it was a Rural Fire Service RART team that arrived on site that afternoon, but there are standard operating procedures for all RART teams.

CHAIR: For the purpose of Hansard could you elucidate on the acronym RAFT?

Ms STEPHENS: Sure. RAFT is remote area fire trained and it relates to a standard of training for staff, and Rural Fire Service and national parks staff are RAFT. RART stands for remote aerial response team and it is a program that is funded under the enhanced bushfire management program. Terry referred to that earlier. It is a five-year program of enhanced funding to assist parks with hazard reduction burning and also with rapid response and the Rural Fire Service is also funded to undertake RART.

The team that arrived on Saturday afternoon was a Rural Fire Service RART team—I understand they came from Tamworth. For them the key thing is that they needed to get back to their home base at Tamworth by the end of business that day. I understand that they stayed on site and undertook work for as long as they could while taking into account the constraint they had, which was to get back to base before nightfall.

Mr PEACOCK: I cannot be completely precise about the time that the RART team arrived but it was near enough to 6.00 p.m. as I understand it. I also understand that they were on a 7.15 p.m. deadline to be out of the park because they needed to be back in Tamworth before dark to meet flying restrictions. Approximately they may have had 40 minutes or an hour, somewhere in that ballpark, to work on the park. I understand that the helicopter dropped the four crew members in the Wambelong camping area. The helicopter took off and proceeded to undertake bucketing operations at the fire. The RART crew members set out to what we would call chip a line or use hand tools to try to rake a containment line around one edge of the fire. In evidence that was given in the first week of the coronial inquiry the crew member for the RART team indicated that they had chipped 40 metres of containment line around the fire in the time that they had.

The Hon. LYNDA VOLTZ: Was the requirement to be back by 7.15 p.m. a National Parks and Wildlife Service requirement or a Rural Fire Service requirement?

Ms STEPHENS: I will answer that one. Because the RART crews are rapid response crews they do tend to return to their place of origin by the end of the day. The program is all about having people on standby, ready to go when there is an outbreak of a new fire so that they can rapidly respond, put the fire out and stop it turning into a bigger fire. Under normal circumstances Remote Area Fire Team [RAFT] crews from both the Rural Fire Service and National Parks and Wildlife Service can operate at night, they can stay at fires overnight if the conditions are appropriate but with RART crews they do tend to return to base with their helicopter so they are ready to respond to a new outbreak—usually because other resources have arrived at a fire. If the RART crew has failed to catch the fire early and extinguish it before it gets beyond about 10 hectares, then they will go back to their place of origin and the crews that arrive from the other agencies and fire authorities will work on the fire.

The Hon. LYNDA VOLTZ: But in this instance no other crews had arrived. Why did they return at 7.15 p.m.?

Ms STEPHENS: My understanding is that there were other crews on site.

The Hon. LYNDA VOLTZ: Two Rural Fire Service crews were already there.

Ms STEPHENS: I think it is fair to say that—

Mr PEACOCK: No. At that stage, if we take that as being around 6.00 p.m. when the helicopter was there, there were seven National Parks staff on the ground fighting the fire, there was a National Parks incident controller in the office, a duty officer in the office, and the Rural Fire Service resources were three category 7 firefighting units plus a crew that had a rural fire brigade trailer, there were two fixed-wing water bombers, the RART crew, additional rural fire brigade crews had arrived at that time and the Rural Fire Service zone operations manager was also out at the scene. So there were a significant number of resources.

The Hon. LYNDA VOLTZ: But the fire was in hilly terrain where they could not access it?

Mr PEACOCK: That is correct.

The Hon. LYNDA VOLTZ: But one of these crews could?

Mr PEACOCK: Potentially, but what happened at the time was the divisional commander needed to make a decision about what the appropriate strategy was to deal with that fire. He engaged with the people who were there at the time, including the brigade members, and they had a discussion about what was the appropriate strategy. It was agreed that going up that hill and sending people in there was a safety risk; they decided against it.

CHAIR: Did you say divisional manager?

Mr PEACOCK: Divisional commander.

CHAIR: Was that the person at Coonabarabran?

Mr PEACOCK: That is correct, a National Parks staff member. In one sense the issue around the RART capabilities is a bit of a moot point because the decision was made at the time to not send people in there

on safety grounds. Whether RART could or could not have come in or continued to work is a bit of a moot point.

The Hon. LYNDA VOLTZ: So it was not necessarily about the 7.15 p.m.; it was about conditions on the ground and the state of the fire?

Mr PEACOCK: Yes. I might also note that when the RART crew leader gave his evidence at the coronial inquiry he confirmed a statement that he had made earlier: He thought that if three or four additional RART crews had been brought in they might have been able to get around the fire but he also indicated that they would not have been able to put it out that night; at best they would have been able to chip a containment line around it and that containment would only have been useful the following day under perfect conditions. He finished by stating that in any event he doubted there were three or four RART crews available in the context of all the other fire activity that was mentioned earlier.

CHAIR: I notice that you are referring to what appear to be some timetables or roster notes in front of you.

Mr PEACOCK: They are just my notes in preparation for the questioning today.

CHAIR: Do they have a detailed chronology of the occurrences, the crews and who was there and who was not?

Mr PEACOCK: Not that I would call—

CHAIR: Mr Bailey, I will direct the question to you. I want to know what document the witness is referring to.

Mr PEACOCK: It is not what I would call a 100 per cent accurate chronology.

CHAIR: But you are prepared to use the documents to give evidence to this Committee?

Mr PEACOCK: I guess what I am prepared to do is talk about what I know.

CHAIR: Mr Bailey, would you consider whether you would be prepared to give us those time lines in evidence?

Mr BAILEY: I will give proper consideration to the completeness of the set of notes and come back to the Committee.

CHAIR: Thank you.

The Hon. GREG DONNELLY: I draw your attention to the paragraph above the final two sentences on page two of your submission—the paragraph that commences "Additionally". Do you see that?

Mr PEACOCK: Yes.

The Hon. GREG DONNELLY: The last sentence reads:

The principle mechanisms for coordinated and cooperative higher management arrangements—

This is between the NSW Rural Fire Service and the National Parks and Wildlife Service—

Operate through the Bush Fire Coordinating Committee (BFCC) and local Bush Fire Management Committees (BFMC).

As opposed to what might be procedural practices, arrangements or obligations that may exist between the National Parks and Wildlife Service and the NSW Rural Fire Service, which requires you to inform them about a fire igniting in one of your parks, is there a specific legal obligation on the National Parks and Wildlife Service to communicate directly with the NSW Rural Fire Service about a fire igniting in a national park? I hope my question is clear. Is there a specific obligation in a piece of legislation that requires you to inform the NSW Rural Fire Service of a fire igniting in a national park or do we look for practices and procedures that are tied

up in the types of arrangements found in that paragraph on the bottom of page two? It is a very specific question.

Mr BAILEY: I will just give a couple of minor clarifications in terms of the question and setting the context. When we refer to the Bush Fire Coordinating Committee and the local Bush Fire Management Committees, they are much broader than Parks and Wildlife and the Rural Fire Service.

The Hon. GREG DONNELLY: That is taken for granted.

Mr BAILEY: The secondary component, certainly policies and procedures, is an absolute reference to National Parks and Wildlife Service having a legislative responsibility. I would not be aware if there is a general responsibility for land managers and others. It might be a question that we may have to take on notice and come back to you, apologies.

The Hon. GREG DONNELLY: With the greatest respect I find it quite amazing that you cannot tell me whether or not there is a legal obligation. Surely you would know that?

Mr BAILEY: Our practice is that we always advise.

The Hon. GREG DONNELLY: I am not talking about your practice; I am asking if there is a legal obligation.

Ms STEPHENS: I would say the BFCC enacts the legislation in this State through policies and procedures and we are always in adherence to BFCC policies. So that is in practice what we do. The first thing we would always do is make a phone call to the Rural Fire Service because it is required of us under the BFCC policies and procedures.

The Hon. GREG DONNELLY: Are you saying that there is a BFCC policy that mandates a communication from yourselves to the Rural Fire Service about a fire igniting in a national park?

Ms STEPHENS: Under the Act each of the BFMCs has a section 52 plan and under the section 52 plan there is a risk management plan and there is an operations plan. The operations plan details exactly how all the overland management agencies, the fire authorities will operate and act together to respond to a fire. In that plan it says who will ring and who will do what. Each of those plans would say specifically that whoever is the first detector of the fire would contact the Rural Fire Service and advise them of that fire.

The Hon. GREG DONNELLY: This is not a criticism; it is an observation: You would obviously have to burrow down to get that level of specificity inside one of those plans to be very clear—

Ms STEPHENS: We operate on a regional level; we operate on a BFMC level, so everybody involved with firefighting in New South Wales has an intimate relationship with a section 52 plan that relates to their Bush Fire Management Committee. So it is not burrowing as such; it is really one of the key documents that they refer to at all times when doing anything in relation to fire management.

The Hon. GREG DONNELLY: Was that procedure followed in the Coonabarabran fire?

Mr PEACOCK: In relation to the Wambelong fire the notifications started to occur around about 4.00 p.m.—certainly the notification to National Parks was at about 4.00 p.m. I do believe there may well have been notifications to 000 and the Rural Fire Service through community members who live west of the park and who may have seen the fire slightly earlier than 4.00 p.m.

The Hon. GREG DONNELLY: I am not interested in community members; I am dealing with your responsibilities pursuant to what has just been described to us as a requirement to inform the Rural Fire Service of a fire that ignites inside a national park.

Mr PEACOCK: Where I am leading to is this: we had someone on the scene to confirm that fire was there about 10 minutes later—say about 4.10 p.m. A short drive was required for them to get mobile phone reception to report it formally, which they did to National Parks and the Rural Fire Service. Our duty officer made the first formal call to the Rural Fire Service at 4.22 p.m. but I must say by 4.22 p.m. I reckon phones would have been going off all over the place.

The Hon. RICK COLLESS: I return to the issue of hazard reduction. Mr Peacock, I think you mentioned that something like 2,600 hectares had been hazard reduced during the period 2000 to 2012?

Mr PEACOCK: That is correct.

The Hon. RICK COLLESS: What percentage of the park in total does that represent?

Mr PEACOCK: The park is 23,312 hectares.

The Hon. RICK COLLESS: So pretty close to 1 per cent?

Mr PEACOCK: I do not have the percentage figure.

The Hon. RICK COLLESS: Sorry, 10 per cent, which is 1 per cent per year that you are actually burning. If you were to maintain that level of hazard reduction it would take you 100 years to work your way around the park at 1 per cent per year. I understand all the ramifications of that—some areas require more burning than others et cetera—but there is plenty of evidence to suggest that hazard reduction burning needs to be done in a much shorter time frame than one in a hundred years, would you agree with that?

Mr PEACOCK: I think it depends on a couple of factors. It depends on the purpose of the hazard reduction burning.

The Hon. RICK COLLESS: Surely the purpose of hazard reduction is to reduce the fire hazard.

Mr PEACOCK: But is it to protect an asset or is to protect an ecological value or some other purpose?

The Hon. RICK COLLESS: Maybe it is to prevent a wildfire.

Mr PEACOCK: Yes, although I would not think that we could and should rely on hazard reduction solely to prevent wildfires—it is one of a number of measures that can help alleviate the effects of wildfire, and typically more so in wildfires that are burning at a moderate intensity and less so for wildfires that are burning at a much higher intensity. I guess the point I am trying to get to is that some areas may require more frequent burning than others.

The Hon. RICK COLLESS: What is the range then within the Warrumbungle National Park? You may not have this information, but I am hoping that you do, quite frankly. If you look at the area of that park, what percentage of that park would require burning, say, once in every five years, once in every 10 years and once in every 30 years? Do you have those sorts of figures? Do you have any idea about what sorts of areas require what burning at what frequency?

Mr PEACOCK: What we do have is the fire management strategy that was in place leading up to the fire. The fire management strategy zones the park into four different zones, and those zones come with prescriptions around hazard reduction—with some zones requiring a higher frequency of hazard reduction than others.

The Hon. RICK COLLESS: When you say higher frequency, what sort of frequency are we talking about? Is it dependent on fuel build-up? What are the determining factors?

Ms STEPHENS: With the zonings, we have asset protection zones, we have strategic fire advantage zones and we have land management zones.

The Hon. RICK COLLESS: I am particularly interested in the land management zones.

Ms STEPHENS: The prime objective of land management zones is in fact prescribed burning, and it is really about ecological thresholds. If we are talking about asset protection and strategic fire advantage zones then we are talking about the build-up of fuel and the overall fuel hazard. We keep the overall fuel hazard for asset protection zones at low and we keep the overall fuel hazard for strategic fire advantage zones below high. With land management zones there are other considerations rather than fuel hazard—it is about the thresholds

for the vegetation to keep it within its biological good health. We also take into account taking action to ensure we do not get runs of fires across parks in those zones.

The Hon. RICK COLLESS: Has that been working?

Ms STEPHENS: We have some very good evidence of where those burns have slowed down and steered wildfires.

The Hon. RICK COLLESS: So the last wildfire prior to 2013 was in 1996, was it?

Mr PEACOCK: That could be correct.

The Hon. RICK COLLESS: Maybe it was in January 2002, when there was one in the far western portion of the park—a very small area in relation to the overall size of the park. I am just trying to get a bit of a handle on the level of fuel that has built up in the Warrumbungle National Park over those years and what sort of fuel levels we are looking at. Do you have any figures on the amount of fuel that was in there in tonnes per hectare? Has anyone done any assessment of that?

Mr PEACOCK: I do not have any figures here today about tonnes per hectare but I do know that the fuel loads in the park were known to be variable.

The Hon. RICK COLLESS: Was the level of fuel loads of concern to you?

Mr PEACOCK: I do not think they were of particular concern. It was noted that they were variable. We undertake an assessment of fuel loads when we are putting together plans to do hazard reduction burns. The fuel load and its variability is perhaps more about the different vegetation communities that exist in the park and their capacity to generate fine fuels and fuel loads. It is probably also worth noting, on the accumulation of fuel loads over time, that fuel tends to build up and then reach a level—it does not just keep continually accumulating and accumulating.

The Hon. RICK COLLESS: At that stage it would be pretty high, would it not? Certainly it would be high enough to support a wildfire.

Mr PEACOCK: Again, it depends. Some forest types, like ironbark or cypress forests, could potentially go for a long time without burning and when you walk through them it still does not look like there is much fuel on the ground to burn.

The Hon. RICK COLLESS: Given that virtually the whole of the park has been burnt now, and burnt quite severely in most cases, regeneration is occurring. We certainly observed this on the day when you showed us around, and I thank you very much for the tour you gave us. To my eye it was very obvious that there was a very quick build-up of regenerating species, mostly wattles, which are on the ground there now. There are also of course a lot of dead trees, which are beginning to fall into that mix as well. Are you concerned about the build-up of that material now in this very early stage of the rehabilitation of the park? What are your plans for managing that?

Mr BAILEY: The first part of the answer, before I pass over to Mr Peacock, is yes—because of the scale and magnitude of the fire in this instance. One of the reasons for going back and reviewing the strategy for the park is that we want to make sure that we maintain the mosaic of burning practices across the whole of the park. Now that we are into an ecosystem "mono age", in a sense, how do we bring in a plan that ensures that we get to a mosaic of age structures across the whole of the park? That is part of the strategy work that is going on at the moment. The key component of that is the strategy, which is very well advanced. But we are awaiting the outcomes of this inquiry and the coronial inquiry before we finalise that so that we can take anything out of those processes into account in the plan.

Mr PEACOCK: What we do know from research is that, following a fire, forest fuel builds up over time. So while I agree that when we were there we could see grass growth, dead trees, acacias and so forth, what predominately drives wildfire behaviour is fine fuels—pretty much anything less than the thickness of your little finger. So I believe that, given that we are still in a relatively recent period of time since the Wambelong fire, the overall level of fuel in the park would be quite low.

The Hon. RICK COLLESS: So will you be actively measuring that in different areas of the park over the next two or three years to see what is happening to it?

Mr PEACOCK: Yes. We have a comprehensive suite of scientific research being undertaken in the park over a three-year period and that is precisely the type of work they will be doing.

CHAIR: I would like to ask a point of clarification of Ms Stephens. Ms Stephens, when you talked about the three protocols of hazard reduction—

Ms STEPHENS: The zones.

CHAIR: Yes, the zones. You mentioned one that is called an asset protection zone. By that, do you mean park assets? Is it designed to protect park assets or other assets—in other words, neighbours' assets?

Ms STEPHENS: It is used in all contexts. So it would be used to protect neighbouring assets, residential or other kinds of business interests, but it also is used to protect infrastructure within the park. It can also be used to protect something with cultural values. It really refers to assets of all kinds.

CHAIR: So, by extension, and considering that most of your boundaries would bound either private property, State forest or some other Crown land, all of your boundary area would be classified then as asset protection zone, would it?

Ms STEPHENS: It is not as simple as that. It would also take into account things like the history of fire run in the park, the location of other hazard reduction zones and work within the park, vegetation type, terrain, the nature of the asset and what sort of other hazard reduction work is going on in the area under the bushfire management committee plan for the whole local government area—because obviously we work with the other land tenures to undertake a comprehensive hazard reduction program. So it would depend on those things as well.

Mr BAILEY: It depends on what that boundary adjoins, whether it adjoins other public land which might be fully integrated or high-density urban development. They will be a significant contributor to what actually is determined. So where you have high-density urban development adjoining the park that is likely to be an asset protection zone versus an area of forest adjoining forested public land.

CHAIR: I understand. If you had agricultural properties that were extremely high value abutting a national park—for example, a bloodstock horse stud or a cattle stud, where the assets are in fact quite critical and quite considerable—would they be considered for classification as an asset protection zone over and above another property?

Mr BAILEY: Without me oversimplifying, the basis of the planning process is to determine where they are and then how you can best protect that asset in particular circumstances. It would include the ability of the owner of that property to respond to the fire and to protect the assets. It is more likely that we would look at asset protection zones where the assets are immovable—so it includes urban development on the edge. In the mix of everything that you stop to think about in preparing the plans you give consideration to all those factors, yes. It is not necessarily the case that it leads to an asset protection zone every time.

CHAIR: Is an asset protection zone the zone that would have the highest probability of having hazard reduction burns applied to it?

Ms STEPHENS: Yes, they have the highest priority.

Mr BAILEY: Yes, and mechanical activity as well.

CHAIR: So all means of reduction.

The Hon. Dr PETER PHELPS: I would like to go to the evening of 12 January and the morning of 13 January and look at the reasonableness or otherwise of the decisions which were undertaken at that point. Mr Peacock, you mentioned previously—not in hearings but to me—that you received an updated fire spread forecast map from NSW Rural Fire Service State operations. Could you outline what that map indicated at the time?

Mr PEACOCK: That map was received from RFS State operations. It was received at around 9.30 p.m. on 12 January. That map essentially is a prediction for fire spread over a period of time. What that map showed was a prediction of the fire spreading from its current location generally in an easterly direction, in a nutshell.

The Hon. Dr PETER PHELPS: And you received no further fire spread forecast maps from that time until the time that back-burning operations commenced the following morning?

Mr PEACOCK: Not that I am aware of.

The Hon. Dr PETER PHELPS: On the basis of that presumably it was decided to undertake back-burning operations to the east of the existing fire?

Mr PEACOCK: That is correct.

The Hon. Dr PETER PHELPS: Why was the decision made to move away from direct attack to indirect attack?

Mr PEACOCK: The direct attack strategy that was proposed before the receipt of that fire prediction map would have relied on putting staff directly in to combat the fire in close proximity. Given the predicted growth of the fire overnight in terms of its size, the forecast weather conditions and the fire prediction map that we had received from the Rural Fire Service it was the view of the two incident controllers at the time that that direct strategy was unlikely to be successful and would put firefighters at risk.

The Hon. Dr PETER PHELPS: Can I take you back a little further to around 6 o'clock on the Saturday evening before the map had been received. Why was a direct attack strategy not undertaken at that point?

Mr PEACOCK: At 6.00 p.m.?

The Hon. Dr PETER PHELPS: Yes. Why was containment the option at that point rather than direct attack?

Mr PEACOCK: That is again solely on the basis that a discussion was held amongst all the people that were there at that particular time. Based on those discussions the divisional commander made the decision that it was unsafe to put firefighters in at night in that terrain to fight that fire.

The Hon. Dr PETER PHELPS: Was that done on the basis that there was basically only one fire trail in a horseshoe shape around the fire area?

Mr PEACOCK: That is correct. To utilise the direct attack overnight they would not have even been able to use that firebreak. They would have had to head off into that steep country on foot.

The Hon. Dr PETER PHELPS: But presumably if you had remote area firefighting team [RAFT] teams available they could have worked overnight?

Mr PEACOCK: They could have but again they would have been exposed to the safety issues that were identified at the time.

The Hon. Dr PETER PHELPS: Except at 6 o'clock the previous evening you had no indication that there was likely to be intensification in a northerly or easterly direction at that stage, did you?

Mr PEACOCK: No, that is correct but I think what we did know at that time—and perhaps I can refer back to those quotes I read out earlier—is that I do not think there was anyone who was there at the time who believed it was feasible or safe to go up that hill and fight that fire in a direct attack that night.

The Hon. Dr PETER PHELPS: I take that point on board but that is in relation to, if you like, ordinarily trained members of the RFS.

Mr PEACOCK: No, that is in relation to all of the people who were there, who were National Parks staff and RFS staff.

CHAIR: And the RAFT teams?

Mr PEACOCK: Yes.

The Hon. Dr PETER PHELPS: On what basis can an ordinary brigade captain judge the ability or otherwise of a RAFT team to operate in an environment in which they are clearly designed to operate—that is, remote areas?

Mr PEACOCK: I put a great deal of faith in the capacity of—

The Hon. Dr PETER PHELPS: That is okay. It is not a criticism of you or any of the people on the ground at the time other than maybe they thought that things could not be done that could have been done—that is, the insertion of RAFT teams into that area. It might not have been beyond the capability of RAFT teams to have managed it at that stage.

Mr PEACOCK: There is still a risk there of putting RAFT teams in and there is also the issue about whether they were available in any event at 6.00 p.m. at night.

CHAIR: The horseshoe shaped fire trail that Dr Phelps is referring to is called the northern fire trail, is that right?

Mr PEACOCK: That is correct.

CHAIR: Were any efforts to clear a firebreak being done westward and southward off that fire trail or were they a long way away from the fire trail and closer to the scene of the fire? In other words, would they have been on the fire trail or in the scrub itself?

Mr PEACOCK: Can I clarify that this is the heavy plant works that were done on the Sunday morning of the 13th that you are referring to?

CHAIR: No, on the night was it the possible requirement the teams would go in on that fire trail or in more hazardous conditions closer to the fire?

Mr PEACOCK: They would have gone in there working more closely to the fire.

The Hon. Dr PETER PHELPS: The point I am trying to get to is if more specialist resources had been deployed, particularly over that night-time period, could the fire have been contained or extinguished before the following morning?

Mr PEACOCK: Who knows?

The Hon. Dr PETER PHELPS: That is a fair enough answer but evidence has been given that if direct attack had been employed earlier, even considering the terrain, it could have been extinguished.

Mr PEACOCK: Yes, but I would note that from my involvement in the coronial inquiry and this inquiry the majority if not all of that evidence has come from people who were not there at the time.

Mr SCOT MacDONALD: Mr Bailey, the estate nearly doubled from 1995 to 2011 from 3.9 million hectares to about 7.1 million hectares. Have I got that right?

Mr BAILEY: My memory is that is right.

Mr SCOT MacDONALD: Can you tell me the commensurate resourcing funding for hazard reduction bushfire management in that time? If you want to take that on notice I am happy for you to do so.

Mr BAILEY: I would have to take that on notice because the most significant contribution to the hazard reduction program occurred in the last three years.

Mr SCOT MacDONALD: That was my next question. If I have got the dates and figures right, the enhanced bushfire management program started in 2011. It is a five-year program that finishes in 2016.

Mr BAILEY: That is correct.

Mr SCOT MacDONALD: That took the figures from roughly 120,000 to more than 300,000 hectares, so we are running at nearly 5 per cent.

Mr BAILEY: I am just doing this from memory and I am sure Ms Stephens will correct me if I am wrong. Over the three years we have increased burning to about 360,000 hectares in the first three years with an average of 120,000. Those averages vary year on year. The highest year was about 220,000. The first year was a very wet year and we were only at about 75,000 or 80,000 from memory. Our annual aim is to average over that five-year period at about 130,000, which is a doubling of the hazard reduction burn prior to the commencement of the program and the commencement of the new resource.

Mr SCOT MacDONALD: What dollar figure is behind the enhanced bushfire management program?

Mr BAILEY: It is \$62.5 million over the five years.

Mr SCOT MacDONALD: By the time this Committee reports at the end of this year or early next year there will only be one year left of that program. If that funding or something like it did not continue what would happen to the figures on hazard reduction? To reach those sorts of figures are you reliant on that special program?

Mr BAILEY: There is no doubt that with an additional 94 firefighters full-time on the hazard reduction program we would not be able to maintain those rates of hazard reduction burning without consideration of the resource allocation.

Mr SCOT MacDONALD: When you answer my question on notice can you please flesh that out? It is very important to the inquiry. We can forensically go back and work out who should have been where at what time but if we are looking forward it is about resources. That is what I am certainly interested in. In your answer can you also comment on whether there are any regulatory burdens that we could consider to address hazard reduction burning in a timely manner? We have taken evidence that there are all sorts of time limits, barriers and complexities in putting prescribed burnings into action. Are there any regulatory burdens we should be looking at?

Mr BAILEY: Certainly. I will just preface with a very short comment now. We will certainly look at any regulatory concerns. They are factored into the burn plan's development in its own right and we do those multiple years out so we know and can prepare for those. As Mr Peacock said, we always set those at about 150 per cent, which allows us the flexibility that is required in this program around the weather conditions. The fundamental contributor to the program is the optimal weather conditions. That is why we plan at 150 per cent knowing we will deliver 100 per cent. It is so that we can determine which ones we will undertake depending on particular weather conditions at a particular point in time.

Mr SCOT MacDONALD: I was a little surprised to hear a lot of emphasis on the area. I heard Mr Peacock say that his proportion of that target was 8,000 hectares or something like that. I am a bit surprised that it is calculated on hectares rather than fuel load, ecology, risk or that sort of thing. I am just curious who came up with the idea that it needs to be a certain number of hectares in the bushfire management program rather than basing it on fuel load, risk or ecology.

CHAIR: You mean other than the Victorian coroner?

Mr SCOT MacDONALD: As Mr Peacock said, he has some areas that could go a cycle of 15 years and he has other areas that might need five or seven years.

Mr BAILEY: The figure that we work with and the reason we have set the figure as it is reflects all those risk matters taken into consideration. When we spoke before about the classes of areas that we work with—

Mr SCOT MacDONALD: I guess I am trying to ask whether it is flexible enough. If one year it all needed to be in Mr Peacock's region could that be done?

Mr BAILEY: Certainly there is a high level of flexibility that we have in that program that allows resources to move between regions. We run regular reports on where we think is the best window. We certainly know that the hazard reduction burning opportunities in New South Wales start at the north and come down the coast. We allow for resources to move between regions and we have a particular program to do that.

Mr SCOT MacDONALD: So there is plenty of flexibility?

Mr BAILEY: We run a lot of flexibility. When we had the good year and the right weather conditions that is when we hit the 220,000 hectare target. That meant that we put in a lot of resources including resources beyond what we would normally do to meet those ongoing targets.

Mr SCOT MacDONALD: Mr Peacock, you and I have talked about the fencing agreement. Is the fencing agreement in the submission the one that is being used now?

Mr PEACOCK: I am pretty sure the one that you have access to is the interim arrangement that we put in place when we received feedback from BlazeAid and the neighbours about concern with the length of the previous fencing agreement. But what I can say is that we used that interim model to revise our policy, which was published in February 2014, and it is all but identical to what you have there.

Mr BAILEY: We will provide that updated policy and the agreement as a single page to the Committee.

CHAIR: Mr Bailey, you mentioned that your target is, shall we say, 130,000 a year if you can get it. Is that your 150 per cent target or the 100 per cent target?

Mr BAILEY: Can I just do one other clarification? I said 220,000 off the memory. It is 208,542 hectares. I apologise. The figure we run at about 135,000 is what we want to achieve on a five-year rolling average. That is what we want to achieve.

CHAIR: Your planning goes for plus 50 per cent to give you some flexibility?

Mr BAILEY: Yes, and to then work in the right windows and weather conditions in particular vegetation types.

Dr MEHREEN FARUQI: How is local knowledge, whether that is the local community or the volunteer firefighters, incorporated into bushfire management plans that the National Parks do? How does that knowledge come into firefighting efforts?

Mr BAILEY: I will ask Mr Peacock to answer further but the key aspect here is in fact local knowledge is fundamental to all the planning work that we undertake. Local knowledge is then used as much as you can possibly use in any of the incidents that we manage or co-work with RFS. Local knowledge is integral to the planning processes and then the operational processes when we deliver hazard reduction, and particularly when we are also doing wildfire. Then it builds through the planning processes as we have set in train through the local committees and our representation on those.

Mr PEACOCK: That is right, and I guess that flows down into when we prepare fire management strategies on a reserve-by-reserve basis. We will go through a consultative process with those, which includes putting those to the local fire management committee and giving those to the relevant local rural fire brigades to have input into.

Dr MEHREEN FARUQI: Usually you would be getting reports from those organisations and those volunteers?

Mr PEACOCK: Yes.

The Hon. LYNDIA VOLTZ: Maybe I have a bit of an extension on that. In regards to local knowledge, obviously the people from the National Parks and Wildlife Service in the park itself, the

Warrumbungles, have been there for a long time, were on the ground fighting the fire themselves, and made decisions about whether it was safe to send someone in or not send someone in. To some extent do you look to them after the fire to improve the local knowledge? How is this impacting on their relationship in the park? It must be getting a bit hard.

Mr BAILEY: I will start and hand over to Mr Peacock. Undoubtedly—there are kinds of two answers to that question that run instantly in my mind. The first is the very methodical answer that at the end of every incident like this we run a debrief program that looks into absolutely everything that has gone on so that we can learn and apply. That ultimately has its final manifestation in terms of the fire management manual being improved on, on an ongoing basis. We always take that on board.

The second component in an incident like this is the impact on our staff and the impact that that has for them at a personal level. It is interesting meeting and talking with our staff who have been involved in this, again at a personal level. They do think about the actions, the activities and the things that they did on the day. Rightfully, as a said in the opening statement, I am very confident that they did what they should have done, but it does serve a very strong local impact in terms of the considerations for them. Recognising as an organisation that we are in about 220 locations in New South Wales, we are a big part of a lot of rural communities and contribute significantly to a lot of rural communities. It is very complex and very difficult when you are in those circumstances in your local community.

Mr PEACOCK: I would probably just add that the planning framework or hierarchy that works out in the districts is a locals-based hierarchy. The people who sit on the bushfire management committees are local people. When we are preparing our plans we will consult with local people in that process. It was no different from a National Parks perspective in fighting fire on the twelfth and the morning of the thirteenth in relation to the key decision points, as much as we possibly could. We did that in a consultative way. We take responsibility for the decisions that we made, but we relied on the views and the expertise of local rural fire brigade members.

The Hon. GREG DONNELLY: Does the National Parks and Wildlife Service have a mandated protocol or standard operating procedure which requires communication with nearby property owners outside a national park or around the national park in an instance where a fire ignites in a national park?

Mr BAILEY: I might ask Ms Stephens in a moment. We certainly do for hazard reduction burns. It would be slightly different or more complex in terms of wildfire scenarios, which is all I am suggesting. But certainly for hazard reduction burns we have a notification protocol and we seek to advise everybody through a series of procedures there.

Ms STEPHENS: Responsibility for providing information to the community and neighbours in relation to wildfire lies with the Rural Fire Service under the Rural Fires Act. Our responsibility is to ensure that we enter the fire into the incident control on-line [ICON] system. I think you are probably all aware that that is the online control system that is operated by the RFS and which is used by agencies involved with wildfire. Once the information goes into ICON, and we maintain that information through situation reports, that fire immediately appears on the RFS website.

The Hon. GREG DONNELLY: I am not talking about a wildfire. My question was about a fire that ignites in a national park, not one that may develop into a wildfire, which is a separate issue, but, rather, the ignition of a fire in a park.

Ms STEPHENS: As soon as the fire is detected it is entered into ICON. It then goes onto the Rural Fire Service website and—there is a location in Fires Near Me—and information about that fire becomes available on the Rural Fire Service website. The level of notification is determined by the alert level. An alert level is set by the incident controller and entered into ICON. For example, if a fire was at advice alert level, then it would appear on the website providing information to people who log on to see that there was a fire present.

The Hon. GREG DONNELLY: What about someone who did not have access to a computer, or did not have access to be able to make contact with the Rural Fire Service in that instance? How would they become aware of the fire?

Ms STEPHENS: I guess they would become aware through general communications in the area.

Mr PEACOCK: I might also add that in the circumstances where the fire escalates, there will be additional communications triggered by the RFS hierarchy of notification. For example, one that you are probably familiar with is that people might start to receive text messages on their mobile phones. There is, I guess, a hierarchy of community notification that is based on classification of the fire at any given point in time.

The Hon. GREG DONNELLY: Anyway it is very clear that the Rural Fire Service itself, by virtue of that protocol, practice or procedure that you describe, has no obligation or requirement per se to inform neighbours around a national park. That obligation falls on the Rural Fire Service through its hierarchy of informing the community.

Ms STEPHENS: That is correct.

The Hon. RICK COLLESS: Ladies and gentlemen, can I just go back to this issue of hazard reduction again. Obviously it is something that concerns me. Mr Bailey you mentioned a figure of 135,000 hectares, which is your objective I think and your plan for 208,000 hectares. Given that that 135,000 hectares of seven million plus hectares is only 1.9 per cent, it means that on average every hectare of national park will get burnt once every 50 years. And given that the asset protection zones and other zones besides the land management zone, which fades from my memory at the moment, have priority for hazard reduction over the land management zone, it is quite likely, is it not, that some of those land management zones will be burnt well in excess of 50 years and probably would never get burnt at all?

Mr BAILEY: Mr Colless, there are probably a couple of things that I would give consideration to—and Ms Stephens might jump in, in a minute, as well. The way that we work and plan is particularly influenced by fire-prone forest types. Across New South Wales—I am doing this a little bit from memory—my memory is that we manage in the park estate about 25 per cent of the fire-prone lands of New South Wales. We currently—and this is the reason that I have a sense in comfort about our hazard reduction program—we are doing about 75 per cent of the hazard reduction burn in the fire-prone lands across the whole of New South Wales. The way we stratify the land is into different categories and there is a fire-prone category. We manage about 25 per cent of that and, if my memory is right, we are conducting about 75 per cent of the hazard reduction burn across the whole of the fire-prone lands.

We have a very large, very targeted and very strong program in terms of hazard reduction that we are doing. There are some areas in that mix that we would not necessarily see as requiring hazard reduction in its own right, particularly if you take into consideration wetlands, rainforests or particularly wet forest types. There is a mix of things in that sense but it is around the fact that we manage a percentage of the fire-prone lands and conduct a very high percentage of the hazard reduction burns on fire-prone lands in New South Wales. I would just defer—I think they are the right numbers.

Ms STEPHENS: National Parks undertakes, on average, 80 per cent of the hazard reduction burning that happens each year on fire-prone land in New South Wales. With the enhanced bushfire management program [EBMP] funding package that we received, we have doubled our hazard reduction effort. We have a risk-based approach. Our reserve fire management strategies have a risk basis. What we do is we identify a risk to assets and then we develop strategies that are focused upon protecting—obviously life and property—but those assets. Because we can only do a certain amount; that is the basis on which we prioritise the work that we do.

The Hon. RICK COLLESS: I accept all that, but I am just wondering how much of that actually happens in land management zones. Given what you have said, the majority must still happen in asset protection zones, must it not?

Ms STEPHENS: We give emphasis to asset protection zones and strategic fire advantage zones.

The Hon. RICK COLLESS: In the larger parts of parks such as Warrumbungle that are remote from your asset protection zones, those zones would not have a priority for hazard reduction despite the fact that they could be carrying quite high levels of fuel.

Ms STEPHENS: Certainly, strategic fire advantage zones and asset protection zones would receive priority.

The Hon. RICK COLLESS: Can I just turn to the issue of climatic data recording and so on? Does the park have any climatic recording stations in the park or on the Siding Springs Observatory?

Mr PEACOCK: I am not aware of one in the park. I have no doubt we collect rainfall figures in the park, but I would be fairly certain that they would be recording up at the Observatory.

The Hon. RICK COLLESS: Yes. I had a look on the Bureau of Meteorology [BOM] site this morning and I could not find any BOM data from the park itself. There is one in Coonabarabran, Coonamble and Baradine, but not in the park. In your submission you make the statement:

The weather observations reported from the fire ground at this time were: temperature 42.9oC, humidity 19%, and wind from the west gusting to the 13.3km/hr.

Where did that information come from?

Mr PEACOCK: Our staff who fight fires on the ground and particularly staff who have some kind of decision-making role, like a crew leader or divisional commander, have the capacity to undertake weather observations from the fire ground. They do that quite frequently and that is a source of information that comes direct from the fire ground to the incident management team to aid in decisions to understand what is actually happening on the ground.

The Hon. RICK COLLESS: They have those facilities in their vehicles? Is that correct?

Mr PEACOCK: That is correct, yes.

Mr BAILEY: We manage those often as mobile facilities so that they can be taken to the fire ground itself and fed in. In very big incidents it is not unusual for the Bureau of Meteorology to actually put a meteorologist at the fire as well, particularly for extended campaigns, to really give accurate, up-to-date conditions.

The Hon. RICK COLLESS: That is good, thank you. The other question I have is that, Mr Peacock, the day you were there you took us up to the observatory and we stood on the trig station on top of the observatory hill there, which obviously was a very advantageous point from which to view virtually the whole park. On days of high fire danger, do you have any staff located up there on fire lookout watch?

Mr PEACOCK: We do not have any staff located up at the observatory.

The Hon. RICK COLLESS: Do they take the opportunity to use that facility there for any sort of observation purposes?

Mr PEACOCK: There are a couple of things there. One is there is another high point in the park called White Gum Lookout, which also gives quite a good view of the park and that is more accessible and easier for our staff to go to.

The Hon. RICK COLLESS: Whereabouts is that, if you could just explain that to us?

Mr PEACOCK: As you come into the park from the east, it is on the southern side of the John Renshaw Parkway.

CHAIR: Before we get to the observatory turn off?

Mr PEACOCK: No, after the observatory and then you hit the park boundary, come a little further along and it is in there. That is an option for us and—as I discovered during your visit to Coonabarabran—the observatory staff were apparently undertaking hourly fire watches on the 12th and have subsequently established what I understand is a remote on-site camera.

The Hon. RICK COLLESS: I also acknowledge that but has your service got any plans to access that information in the coming summer, to use as a fire observation facility?

Mr PEACOCK: The camera sounds to me like a very useful piece of equipment. Until a week ago I was not aware of it but now that we are, we will certainly make contact with the observatory to see whether we

can also gain access to that. I do not know how it operates but if it is a webcam, it might be a simple thing for us to be able to just log on to a website and see what it is showing.

CHAIR: We will discuss this with the Rural Fire Service this afternoon but one of the comments we had while we were in Coonabarabran concerned the confusion surrounding the different communication modes in the fire vehicles themselves and for notification to residents et cetera. Do the National Parks and Wildlife Service appliances have the same three radio or communication systems in them as the RFS?

Ms STEPHENS: There is a series of radio systems used by different agencies but we put Rural Fire Service radios into our vehicles and we provide the RFS with National Parks and Wildlife Service radios. We also have CB radios in all our vehicles, as do the RFS, which are often used for small interactions on the fire ground.

CHAIR: So, Mr Peacock, given the wash-up of the fire and the fact that you are going to do a debrief, have you got any recommendations for your senior people as to whether you should make any changes or improvements in the communications equipment? Mr Bailey?

Mr BAILEY: Certainly one of the things that we have been working on and looking at for some time now is an improvement to our radio network system. We are investing significantly in that. I will take the question on notice in terms of how that will lead to improved communications between the two agencies.

CHAIR: The second point is mainly for my clarification: You mentioned that you had a debrief after the fire and I assume that is standard protocol whenever your staff are fighting fires. How soon after the fire did that take place—a month, six months, a week?

Mr PEACOCK: To give an accurate answer I will have to take the question on notice but what I can say is that it was very soon after the fire.

CHAIR: Are those debriefing sessions externally facilitated or totally in-house?

Mr BAILEY: Generally, a debrief would involve a number of people or agencies that were involved in the fire and not just the view of National Parks.

The Hon. Dr PETER PHELPS: Was any discussion held with RFS officials relating to the decision to change from direct to indirect attack before it was notified to them at 6 o'clock the following morning?

Mr PEACOCK: No and it was notified at about 3.45 a.m. the following morning. So at 3.45 a.m. we put in a situation report which detailed the change in strategy. Then about 4.56 a.m. we loaded the Incident Action Plan which also covered off on the background strategy. Then at 6 a.m. we had a conversation with an RFS staff member about the change of strategy.

The Hon. Dr PETER PHELPS: Was that a conscious decision not to involve them or was there simply no-one around at that stage with whom you could discuss the proposed change of plan?

Mr PEACOCK: I would not say that it was a conscious decision to not do that.

The Hon. Dr PETER PHELPS: I will put it another way: Were there people around that you could have discussed this change with? Basically, I want to know if RFS had knocked off for the night and were basically uncontactable, as far as you were aware?

Mr PEACOCK: No, I do not believe that to be the case. The fire prediction forecast that we discussed earlier came in at about 9.30 p.m. the night before and I imagine it would have taken—initially there were two incident controllers around the change of shift who pondered the decision about the change in strategy. I imagine that it took some time after that process for thoughts to be clear and for the strategy to be finalised to the point where it was definitive. I expect that that probably took place some time before 3.45 a.m. I would not say there was no RFS contactable at that stage.

Mr BAILEY: Just confirming, Dr Phelps, the State Operations Centre at these points in time for RFS was running 24 hours a day, so there certainly were RFS staff on duty.

The Hon. Dr PETER PHELPS: What about Coonabarabran RFS? Would there have been people available there overnight? Were you aware of them being there overnight or were you actively aware of them not being there?

Mr PEACOCK: I am not aware whether the Fire Control Centre was manned overnight on 12 January.

The Hon. Dr PETER PHELPS: That is fine. But the point is that you have changed tack, essentially of your own recognisance, without reference to RFS. Looking back on it, do you think it would have been better to have asked RFS—even officials on the ground—whether it was a viable strategy?

Mr PEACOCK: Well, that goes to the point of the procedures that have been identified in the lessons learnt coming out of this fire that have fed directly into some changed protocols between the RFS and other fire authorities in New South Wales around those very matters.

The Hon. Dr PETER PHELPS: Do not get me wrong, I do not intend to be mean to you or to National Parks generally, but the argument has been put to us. I can certainly see your point of view; you have received documentation saying, "This is what the fire is going to do tomorrow." You say, "Okay, let us plan for that." Aside from the fact that the information which you received was hopelessly wrong because it clearly did not take into account the prevailing wind conditions for the following day, but the argument has been put that, even if you received that official communication from RFS in relation to the likely fire spread, you should have known that the prevailing conditions would have meant that that fire spread plan was incorrect and you should have planned accordingly. Would you like to comment on that?

Mr PEACOCK: We put a considerable deal of faith and reliance in the forecast model that had been provided to us. We based our strategy around the information that was provided from State operations.

The Hon. Dr PETER PHELPS: That is fine. I just wanted to get you on the record as saying that that was the basis for your strategy, it was the information you received, presumably from a professional organisation using their whiz-bang computers, saying, "This is what is going to happen."

Mr PEACOCK: I might also add that in 1990 we had a wildfire break out in almost the same location and we used the identical strategy to contain it and we contained the fire successfully on that occasion.

The Hon. Dr PETER PHELPS: Given that humans rely on paradigms, do you feel that maybe you guessed too much? You assumed that, because X had happened in the past and Y had been successful that, with X happening again, Y would be successful again?

Mr PEACOCK: Not necessarily but I would acknowledge that decision-makers, in all fire-related roles, bring to their role past experience. I have no doubt that that forms part of the process and the judgement they make about the decisions at any point in time when they are combating a fire.

CHAIR: As interesting as this is getting, Mr Peacock, we have run out of time. The Committee may wish to ask you questions on notice. Would you be able to ensure that those replies are returned to us within 21 days of your receiving them?

Mr BAILEY: Certainly, Chair.

CHAIR: Thank you very much for appearing here today. We appreciate your evidence. Once again I thank your staff for helping us out on the tour we took of the fire ground.

Mr BAILEY: Thank you. I will pass that thanks on.

ROBIN ROGERS, Deputy Commissioner, NSW Rural Fire Service, sworn and examined:

CHAIR: Mr Rogers, before we proceed to questions, would you like to make an opening statement?

Mr ROGERS: The NSW Rural Fire Service welcomes the opportunity to participate in this inquiry. Not only does this inquiry address issues of relevance to bushfire management in this State but, more importantly, we are very much aware that those waiting for answers from this process have lost their homes, possessions, livelihoods and, in some cases, a lifetime of work.

As a service comprised of members from rural communities which works closely with rural communities, we are aware of the hardships that people have suffered from bushfires. I add that some of our local members who were actively fighting the fire lost their own properties because they were selflessly serving their communities. I think we need to acknowledge that. I take the opportunity to repeat the sentiments expressed by the Rural Fire Service Commissioner at the time that our sympathy continues to be with those in the community who were affected by this fire, a number of whom were RFS volunteers who were fighting the fire.

Every fire—especially those on the scale and having the impact of the Wambelong fire—provides an opportunity for the fire service agencies in this State to learn lessons and to improve. The RFS has been involved in, and its practice has been influenced by, a history of major fire seasons and numerous inquiries—parliamentary, coronial and other inquiries. At the end of each bushfire season, the RFS conducts debriefs into all major incidents and in consultation with the other fire agencies and the State Emergency Management Committee, assesses and considers actions to sustain and identify areas of improvement.

The NSW Government made a submission to this inquiry, to which the RFS contributed. In that submission we indicated that, together with the National Parks and Wildlife Service, we would consider how operational arrangements could be improved in light of the experiences in the early stages of managing the Wambelong fire. The assessment has now been completed and I will outline to the Committee the improvements that are being implemented to strengthen the coordinated firefighting arrangements.

I will abridge it slightly because I think the Committee has already been made aware of those. Before doing that, I would also like to give members of the Committee and others here an overview of the fire activity that was going on in the State during the time of the Wambelong fire. Its context will allow there to be a better appreciation and understanding of the conditions that firefighters were operating under across the State, as well as in the Warrumbungle National Park in January 2013.

The 2012-13 fire season was one of the most challenging seasons faced by this State. The fire conditions and levels of activity experienced—particularly during the fortnight between 7 and 21 January 2013—were at a level not witnessed for many years. During this fortnight there were eight days where total fire bans were declared, including four statewide bans. A total of 1,348 calls were received in relation to bush and grass fires across the State. The RFS and other agencies were attending more than 300 bush and grass fires which burnt out more than 650,000 hectares. There were 41 Section 44 declarations in that two-week period alone.

The firefighting effort during this time involved more than 10,500 firefighters from the RFS, Fire and Rescue NSW, the National Parks and Wildlife Service and the Forestry Corporation of NSW. Interstate crews from Victoria and the Australian Capital Territory were also assisting firefighting efforts in the southern part of New South Wales. The Rural Fire Service State Air Desk coordinated more than 650 aviation tasks involving up to 180 aircraft daily during this time.

Tuesday 8 January was one of the worst days experienced in fire weather. The extreme conditions led to a catastrophic fire danger rating being declared for some parts of the State. It was the first time since December 2009 that there had been a catastrophic fire danger rating and the first time ever that that rating had been applied in metropolitan areas, including the Illawarra and Shoalhaven.

While the statistics I have outlined speak for themselves, one of the most important things to remember is that no loss of life was reported. I will repeat that—no loss of life. One of the single measures that agencies across this State are held accountable for is, first and foremost, the primacy of life. That is one important thing that needs to be acknowledged. In saying that, I am not downplaying the importance of the loss experienced

during the Wambelong fire. We need to acknowledge that and have a lot of empathy for the people who lost not only their property but also their livestock and other valuable things. It is important to understand that there were 300 fires we were dealing with across New South Wales.

According to the Bureau of Meteorology, January was one of the hottest months on record for New South Wales. A build-up of hot air across the centre of Australia, particularly around the middle of the month, facilitated a build-up of heatwave conditions in the western districts. For all but two days from the start of January, forest fire danger ratings in the Coonabarabran area were within the very high category, resulting in a significant drying out of forest fields. On Saturday 12 January 2013, at approximately 4.00 p.m., a fire was discovered in a Wambelong camping area at the Wambelong National Park. The next day this fire spread quickly under strong winds and burnt beyond the eastern and northern boundary of the park. As those present here are aware, this fire impacted significantly on the national park, destroying some of its infrastructure. In addition, it impacted on the Siding Spring Observatory and destroyed or damaged private property, including 53 homes, agricultural land, infrastructure and very valuable livestock. Ninety-five per cent of the park was burnt out. The fire crossed multiple tenures and was finally contained at 56,280 hectares.

New South Wales has been well served for many years, including this fire season, by the principles of coordinated firefighting, which includes cooperation and coordination between the four firefighting authorities identified within the Act, those being the Rural Fire Service, Fire and Rescue NSW, the National Parks and Wildlife Service and the Forestry Corporation of NSW. However, as noted in the Government's submission to this inquiry, we have been examining ways to further enhance the coordinated arrangements in place, in particular, the area of the events leading up to the point where the Commissioner has taken charge of that fire under section 44. You would have heard these were class 1 and class 2 fires.

The Wambelong fire on Saturday 12 January and the morning of 13 January, prior to the section 44 Declaration, was a class 1 fire managed by the National Parks and Wildlife Service in accordance with the Local Bush Fire Management Committees operation plan. With the Committee's indulgence, I will paraphrase the new arrangements so as not to bog down the Committee as I am conscious of the time. The Act imposes significant obligations on public authorities about managing their land and preventing the spread of fire from their land. That would involve the National Parks and Wildlife Service or the Forestry Corporation of NSW responding to fires on or adjacent to their managed land and they may be the first agency in attendance.

Under the new operations they continue to do that. They can still manage the incident and appoint their local incident controller, with the following provisos: the Rural Fire Service expects appropriate notification of the fire, appropriate situation reports and it understands the strategies being employed and the resources that are being deployed to that fire. To sum it up, that it is happy they are sufficient to bring a speedy resolution to that fire. The other thing is that the RFS would reserve the right to take over management of that fire if it was not convinced that it was being managed properly.

These arrangements seek to strike a necessary balance between efficient use of resources and cooperation between fire agencies, while recognising there is a single chain of command. It also reinforces the unequivocal statutory responsibility of the RFS, following the Victorian Black Saturday fires, to keep the public informed. I am pleased to advise the Committee that these new arrangements were endorsed by the Bush Fire Coordinating Committee in July this year and will be operational during this upcoming bushfire season. All local Bush Fire Management Committees of the State have been advised that local representatives of the fire agencies and local personnel from Forestry and National Parks are working together to ensure that the arrangements are clear to those working locally to ensure that they are ready for what is predicted to be another potentially challenging fire season. We are confident that these new arrangements will ensure that the incident control protocols are clear to those responding to fires while preserving the principles of cooperative firefighting arrangements, which have served this State for many years.

CHAIR: Thank you, Mr Rogers. Before I pass to my colleague, I will ask a couple of questions. We understand that you cannot comment on government policy, but in your introductory presentation you have made a few things fairly clear. One is that under circumstances where the RFS considers that things are not going to be controlled, you have the capacity to take control?

Mr ROGERS: We do.

CHAIR: There is a statutory legislative procedure in place called a section 44 which allows you to take control.

Mr ROGERS: Yes.

CHAIR: The National Parks and Wildlife Service and State Forests combined control less than 12 per cent of the State. The Rural Fire Service is responsible for controlling fires in 88 per cent of the State. Given the extent of the potential for making the coordination better, I will not ask you a policy question; I will ask you a capability question. Would the RFS be capable of taking full control of all rural fires in this State, still allowing the Rural Fire Service or State Forests to be the first respondents, but instead of waiting for a section 44 declaration, change the law to make it immediately apparent that there is only one rural fire authority in the State, being the RFS. Would the RFS be capable of operating that way with cooperation from those agencies under its control?

Mr ROGERS: To answer that question I would go back to the new arrangements because I think that is effectively what we have in place. We have a system in place that means those agencies would continue doing what they are doing, and they are often locally there, and we would not want to stop that happening. There are highly trained people in local areas who are able to respond quickly. They have a lot of knowledge of their respective tenures, be it forestry or national parks, and we do not want to interfere with that. What we have within the new practice is that as soon as a fire is discovered by anyone, it must be reported to us. We must then understand what that agency intends to do about it, who is in charge of it, and what strategies and resources they bring to bear. That allows the RFS to make an assessment and say, "Do we think that is sufficient to bring that fire under control?" I guess it puts well and truly on the radar and within the auspices of our local managers to make a decision, whether they think it is right what is going on. If not, they can interject and say, "I am not convinced that is the right way of doing this and we need to do something else."

CHAIR: Given what you have just said and repeated, it will happen effectively that way, so why not simply legislate to make it that way? In other words, probably change section 44 so that it does not have the same relevance as it does now. It obviously has relevance in relation to people being paid under a grant scheme to get money to fight the fires. We have had submissions from local government members who are not happy with some of those arrangements. Again, I am not asking you a policy question. From a capability point of view, were the Rural Fire Service in New South Wales to be made the one authority responsible from the first spark on the ground, would that degrade the current capabilities, make no difference or enhance it?

Mr ROGERS: With your indulgence, I would like to give that some serious thought as opposed to simply giving you an answer here, but I will give you my opinion as well. I think we effectively have that ability in the legislation now. It is simply about practice, leaving those areas under the management of the land management agency.

CHAIR: With due respect, you do not have the legislative capability now until a section 44 is declared, is that correct?

Mr ROGERS: No, it is not correct, sir. The fact is that there are two fire districts in New South Wales. There is a rural fire district and there is a fire district. Those agencies are ultimately the agencies responsible for activities going on there. In those districts, predominantly a Rural Fire Service district has mostly national parks and State forest.

CHAIR: Correct.

Mr ROGERS: They are already in our districts. At the end of the day we are saying that we are going to exercise responsibility that we have been able to exercise legislatively, but the fact is that the practice has been to leave those to be managed separately. We are now saying we need to tighten the way we do this. It is not simply about a single incident. It is about the things that I mentioned in the introductory statement. The legal responsibility on the agency to inform the community about the threat of bushfire can only be affected where we are in possession of all the facts and that requires all that information to come to us. National Parks are correct to enter the information to ICON, and they do that and do it well.

What we are saying is that the game changer happened after the Victorian fires. When 173 people lost their lives in a fire, there were some lessons that came out of the royal commission. I appeared at that royal commission for New South Wales and some of the things that we took out of that is that we need to change the way we do things. We are no longer firefighting agencies. We are also about communicating with the public and that becomes one of the most important things that we do, particularly in bad fire situations. We warn people so

that they can make informed decisions. Obviously specific provisions were put in the legislation to enable the RFS to be responsible for issuing those warnings. I guess that is also partly why we need to change the way we do things. I am sorry if I have not answered your question.

CHAIR: That is fine. I take it from what you are saying that those strengthened protocols will be in place for the 2014 fire season?

Mr ROGERS: Correct.

Dr MEHREEN FARUQI: Thank you for coming in, Mr Rogers. The Committee has heard some criticisms of RFS in communicating with property owners, as well as with local brigades and notifying them of the Wambelong fire. Could you outline what methods of communications were used to notify the property owners, the community and the local brigades?

Mr ROGERS: I will talk, first, about the community. The national parks speakers alluded to this. When we are informing people about fires, we have the standard things on the website that we obviously know. We have applications that people can access, but we recognise that not everybody has access to those things and not everybody wants to use that level of technology, so we use radio station interviews. We put out information to local providers. Indeed, a lot of media take information directly off our website and then broadcast it. Again, that helps with getting information out as fast as we possibly can. What I would say, and this is fair in all significant fires, is that the first 12 to 24 hours of a fire, particularly a fire such as this was, are extremely challenging. I was not at that fire but I have managed many fires in my time in the RFS.

Situation awareness, to understand exactly where the fire is, where the fire is going to be in the next half an hour, hour or two hours is one of the most challenging things. We put enormous effort into getting information back from the fire scene. The brigades do the best they can, but they are looking at one part of the fire that might be burning over dozens of kilometres of a perimeter. It is very difficult for any person to have a good idea. We use things such as line scans. I am sure you would have seen some of those things. They are great, but they take a while to get and they are beamed down to the ground. Having accurate information in order to pass to the community, I think, is one of the holy grails that we aspire to. We do not have it right. We learn our lessons. We try to do it as best we can, but it would be very arrogant of me to sit here and say we have that all nussed out. We do not, but we try to improve each and every fire event. We learn from fire events. We tested that last summer in the Blue Mountains which, unfortunately, caused the loss of more than 200 homes. Again, we did not lose lives and I think the warning side of it helps with that.

In respect to communicating with brigades, obviously brigades were active from the very beginning of that fire, as were group officers. I think one of the after-action reviews that was carried out with brigade members acknowledged that there ought to be have been more proactive communication to brigade members generally in the whole area. The staff in the office said they agreed that would be something they should have done. They were just simply overwhelmed at the time with the amount of work they were doing, with how much they were trying to get done and their capacity to simply do stuff. But it was acknowledged and it was agreed that that is something we ought to be doing better.

Dr MEHREEN FARUQI: There was some concern that people were notified by mobile phones and there was no reception. How would you change that?

Mr ROGERS: The notification situation on the emergency alert system works in several ways. It works in three separate ways: It will ring a residential phone and give a pre-recorded message—someone will pick it up and it will say, "This is the RFS and this is what we need you to do or be aware of"; it will go to mobile phones based on their registered billing address; and it will go to mobile phones that are attached to a particular tower within an area that we have identified. Back when this fire occurred the mobile portability was only available for Telstra customers. It has subsequently been put in place by the other carriers but at that time it simply was not in place. It is a national system. We use the system but we do not drive the system so we did not have any control of that. I think it was left to each of the carriers to put a time line in place of when they could do that. Telstra did it pretty quickly but the other carriers did not do it quite as quickly.

The Hon. LYNDIA VOLTZ: How many other fires were burning at the same time as the Wambelong fire?

Mr ROGERS: On the actual day?

The Hon. LYNDA VOLTZ: Yes.

Mr ROGERS: There were certainly dozens. I cannot tell you the actual number. I know in that period there were 300 but there were certainly dozens and dozens of fires. We were absolutely being hit with fires all over the place. I am happy to come back to you with an exact number if you would like.

The Hon. LYNDA VOLTZ: That would be good. Given the nature of the conditions at the time—you had gone through the hottest summer ever, you had just gone through eight consecutive days with temperatures over 39 degrees Celsius and you had records at just about every weather station—and where the fire was—there were two trucks there so the Rural Fire Service would have been aware of the fire—when do the alarm bells start ringing? When do you say: Do we have enough resources in the area? Leave aside National Parks, the guys on the ground—as you have said, the guys on the ground can see the line of fire they are fighting but they do not necessarily see the big picture—and given that these were the most extreme conditions we have ever had, when do the alarm bells start ringing about how many resources are needed?

Mr ROGERS: I think the person who would have been seeing the big picture at that time would have been the National Parks incident controller because they were remote from that situation. Realistically, when you look at it you have an incident management team that is coordinating the entire incident and then you have a series of divisional commanders who are feeding information back to that incident management team in order for them to build up a level of situational awareness. So that person would have been the person with the best understanding of what was going on. At that point in time my understanding is there were some discussions with a local officer who was there in the afternoon and the evening—he did go out there. He understood the situation as it was. The situation changed obviously overnight and the strategy changed overnight but that was not something we were aware of at that time. Our role at that point under that regime was to simply support them with resources.

The Hon. LYNDA VOLTZ: They are telling you that the fire is under control—they certainly believed they had it under control by what they were containing and in the past they had controlled these fires—but I do not understand why in these extreme conditions somewhere higher up the food chain, someone with the most experience in fighting fires, did not say, "We have brigades sitting there doing nothing so we will allocate more resources to it." Were you inundated on that day? Is there some reason why you make that disconnect?

Mr ROGERS: There was certainly a lot of fire around the State. I will, if you will permit me to, provide a synopsis of what was going on in those days, where we had fires and where we had people committed, because I think it does help to paint the picture of what was going on. We certainly have faith—be it in our own people or National Parks or State Forests—and we trust that if the people who are there need more resources then they will stick their hands up and say so. With the benefit of hindsight one can say, "In view of what happened, maybe it would have been good to send some more units." But at that time with everything else that was going on and with what we knew there was no information to us to indicate that there was a significant issue that we needed to address.

The Hon. LYNDA VOLTZ: Some people in the Rural Fire Service have told the Committee that they thought it needed more resources but there was no way they could feed that information up the chain of command. How is information fed up the chain of command to try to get more resources into a fire that they perceive may be a risk?

Mr ROGERS: Are you talking about brigades that were on the scene at that time?

The Hon. LYNDA VOLTZ: Yes.

Mr ROGERS: That is the first I have heard of that. They can go back to their local district and say, "We think there needs to be more resources." I do not understand why that would be a barrier.

CHAIR: When you say, "district"?

Mr ROGERS: Sorry, the local Rural Fire Service office.

CHAIR: At Coonabarabran?

Mr ROGERS: Yes. Wherever they were attached—I am talking generically here. Whoever sent them there as far as the RFS office, then they would obviously go back to that office if they had concerns about what was going on. I would also expect that brigade captains or someone would also raise those issues with National Parks if they were concerned. They are there on the spot. There is no reason why they could not raise those issues also there.

The Hon. LYNDA VOLTZ: The National Parks and Wildfire Service thought they had it under control.

Mr ROGERS: Yes.

The Hon. LYNDA VOLTZ: And that was certainly the view your command had?

Mr ROGERS: From my understanding I do not think it was considered to be under control. I think there were strategies in place to try and deal with that fire but I do not think it was classed as contained or anything like that, which I would view as being under control. Unless there is a full perimeter around every part of the fire and it is pretty well patrolled I would not call that contained.

The Hon. LYNDA VOLTZ: Do you make an assessment in your command of what resources you have for an uncontained fire in the State and the conditions at the time?

Mr ROGERS: Are you talking at a State level or locally?

The Hon. LYNDA VOLTZ: At a State level, across the board. That must have been the most extreme day you guys have ever had.

Mr ROGERS: To put it in context from a statewide perspective, the State is broken up into four regions. The region that is looking after the area is relocated to head office so we have got some local people from that region. They basically talk to the incident management teams about: Do you need more resources? What is going on? I think that is the point of looking at that. I think when I provide to you the context of what was going on at that time, about the other fires we were dealing with, there is not a simple process of us second-guessing what is going on but under the new arrangements there will be.

The Hon. LYNDA VOLTZ: I have a military background so I think in the military way. It sounds to me as if you guys do not work on the military structure—namely, with everything being feed in at the top; the top sees what is going on and then says, "This is where we need the resources to go."

Mr ROGERS: Not from a State level. We do not direct where resources go locally—that is a local decision. Our role at the State level is to prioritise things like outside resources and aviation. That is based on the information we are getting from the local incidents about what the priorities in the State are.

CHAIR: It is the district controller who would make those sorts of local decisions?

Mr ROGERS: Yes. Just to add, if they were having concerns and were not able to have that matter addressed locally then they would escalate it to State and we would deal with it at a State level.

CHAIR: From your understanding of the way those local groups work together, should the group captains have been notified by the district controller?

Mr ROGERS: About the fire?

CHAIR: Yes.

Mr ROGERS: My understanding is that group captains were involved in the fire management for the entire process.

The Hon. LYNDA VOLTZ: But all group captains in that district?

Mr ROGERS: They were not all involved at any one time; they would not be and nor should they be. We cannot have every single person every single day—

CHAIR: I am not suggesting that. The Committee has received evidence related to the spread of the fire westward and the worries of the Coonamble brigade et cetera. I wanted to get an idea of the structure. So it would be the district controller's responsibility to control whatever resources were within the district?

Mr ROGERS: Exactly, and to notify and keep members of that area informed through the chain of command of what is going on.

CHAIR: And at the same time that person is responsible for feeding it up to you, is he not?

Mr ROGERS: Exactly.

The Hon. GREG DONNELLY: I refer you to pages four and five of the Government's submission. The third line of the second last paragraph on page four states:

When a bush fire is first discovered or reported, the agency first responding notifies the relevant land manager and the executive officer of the relevant BFMC (typically the local NSW RFS Superintendent) and immediately forms the incident management team and the most appropriate officer becomes the Incident Controller.

Was that followed in the Coonabarabran fire from your analysis and the information that has been provided to you?

Mr ROGERS: My understanding is that National Parks did advise the Rural Fire Service of the existence of the fire, which is really what this is saying.

The Hon. GREG DONNELLY: Was an incident controller appointed?

Mr ROGERS: Yes. National Parks quite rightly appointed someone as the incident controller for that incident.

The Hon. GREG DONNELLY: Turning to page five, the paragraph immediately above the heading "Bush Fire Risk Management Plans" states:

Once a fire is declared a Section 44 bush fire emergency, the NSW RFS Commissioner appoints an Incident Controller to take charge of all operations and usually an interagency incident management team is formed.

Did that transition take place between what we have seen on page four and around 11.00 a.m. on the Sunday and did it take place in the normal way when a section 44 is declared?

Mr ROGERS: I would like to follow this up to make sure I get this right because I am conscious of making sure that I get this accurate. My understanding is that a level of concern was expressed on the morning when the back-burning strategy was discovered and the fire behaviour was starting to kick up. Basically I think the local Bush Fire Management Committee agency heads were spoken to and it was suggested that, "This is what we are going to be doing", which was pretty much saying, "We are going to declare a section 44." It is my understanding at the time the section 44 was declared it was communicated to people and it was then said, "We don't want any more burning to go on." That is my paraphrasing of what occurred but, again, I am more than happy to provide that in writing to make sure I get the right times and individuals.

The Hon. GREG DONNELLY: It would great if you could do that. Is it the same incident controller referred to on page four or does it transfer to another person who is declared the incident controller once the section 44 has been declared?

Mr ROGERS: Could be either/or. It could be the same person but it may be someone different because there is a different level of training required for someone managing a fire at a lower level versus a section 44. So there is quite a bit of training that people need to do. From our point of view what we consider, and indeed the commissioner would consider, when appointing a section 44 is you are taking charge of all fires operating in that area, not just one fire on one land tenure. We would be thinking about the threat to public assets, homes and the like and we would have to have someone running that fire that was fully across the impact on structures and combating that. It is more likely that it would a Rural Fire Service person who would be appointed in that circumstance.

The Hon. GREG DONNELLY: I would be grateful if you could identify for us if it was the same person who was identified in the first instances—the incident controller—or if it was another person.

Mr ROGERS: I would say it would definitely have been another person because the previous incident controller was a National Parks and Wildlife Service incident controller. The subsequent appointee was a NSW Rural Fire Service person.

CHAIR: Just as a point of clarification, could you perhaps also on notice provide us with the position of the person who undertook that role—we do not need a name; we just want to know who it was who was appointed after the section 44.

Mr ROGERS: Yes, sure.

The Hon. RICK COLLESS: In the case of reporting a fire—and there was some discussion about this during the questioning from Mr Donnelly around where the initial report actually goes to—if that fire is reported via a 000 call what is the procedure?

Mr ROGERS: That would be received by the Fire and Rescue New South Wales communication centre in Newcastle. It would then be determined that that is in a rural fire service area and it would be passed to our local office.

The Hon. RICK COLLESS: So that would go straight to the NSW Rural Fire Service office rather than the National Parks and Wildlife Service office?

Mr ROGERS: Yes, it would go to RFS.

The Hon. RICK COLLESS: What does the NSW Rural Fire Service do with it then?

Mr ROGERS: Normally if we just received a call basically out of the blue about a fire and it was fairly close to a brigade area then we might respond a brigade, but we would also notify the National Parks and Wildlife Service that there was a fire, and if we had sent a brigade then we would advise them of that. They would also mobilise their resources, and obviously we would take it from there.

The Hon. RICK COLLESS: On page 22 of the Government submission it talks about the change in the situation report at 3.45 a.m. that was approved by the National Parks and Wildlife Service incident controller, consistent with procedures. It goes on to say:

While the change in strategy was made at about 10:30pm the previous night, it is normal practice for the overnight IMT to consider the approach to implementing the amended strategy ...

What input did the local fire control officer have at that stage?

Mr ROGERS: My understanding is none.

The Hon. RICK COLLESS: So he was probably not even there at that point in time?

Mr ROGERS: No.

The Hon. RICK COLLESS: So it was all handled by National Parks and Wildlife Service people, is that correct?

Mr ROGERS: My understanding is that he was there around 9.00 p.m. the previous evening. He then departed understanding the strategy was the way he understood it when he left. Obviously there was then receipt of the fire prediction modelling and then this subsequent decision. I think he found out about it at about 6.00 a.m. the following morning.

The Hon. RICK COLLESS: And that is in Castlereagh zone, is it not?

Mr ROGERS: Yes.

The Hon. RICK COLLESS: On page 19 of the Government submission it says:

... the NPWS Duty Officer contacted both the NSW RFS North West Zone and the NSW RFS Castlereagh Zone to discuss the management of the fire.

It goes on to say:

While a Section 44 declaration was in place in the RFS North West Zone, which encompassed where the fire was located ...

That indicates there was another fire somewhere in the north-west zone that had already been declared as a section 44. Is that correct?

Mr ROGERS: Yes, I think there were around eight or nine fires in the north-west zone. With the conditions and the number of fires, there was a pre-emptive section 44 put in place there to encompass all those fires, and that was being managed by the north-west area. So it was in place but it was not intended for, and deliberately excluded, the management of that fire. Does that make sense?

The Hon. RICK COLLESS: I am still a little confused. In a section 44 declaration is it the individual fire that is declared a section 44 or is it the zone that is declared a section 44?

Mr ROGERS: It is an area. It could be a local government area, it could be a rural fire district or it could be multiple local government areas. It is an area that is described. We can write into it the certain fire and the extent of it in case it travels outside of that geographical area.

The Hon. RICK COLLESS: So it is physically described in the section 44 declaration?

Mr ROGERS: Yes, it is. They can be quite long because they can talk about travelling across creeks et cetera.

The Hon. RICK COLLESS: Earlier on you stated that you rely on experienced officers from local areas, such as the captains, group captains and so on. Why were there experienced captains and group captains in that area who were not called immediately? I refer particularly to captains from Tooraweenah and Coonamble, who were not called despite the fact that they had called in and offered their assistance. They were told that they were not required.

Mr ROGERS: Do you mean they called in to go to the fire?

The Hon. RICK COLLESS: They actually called in to offer their assistance, as I understand it, and were advised that they were not required. Early the next day there were horrendous fires.

Mr ROGERS: So this was on the initial day of the fire, before the Sunday?

The Hon. RICK COLLESS: Yes, as I understand it.

Mr ROGERS: The only thing I guess I can say is that, again, we will rely on requests for assistance by the incident controller at the time, which was the National Parks and Wildlife Service. So if they are suggesting to us that they want two units then that is what we provide and we accept that that is what they want. I guess we take that information on good faith. I think in hindsight you could sit here and say, "Well, maybe some more should have been sent," and maybe there should have been. The fact is that, in the situation as it was, they were managing the incident and we provided the resources we were asked to provide.

CHAIR: Given what you were saying earlier in your evidence about the new protocols being in place now, would it be handled differently now if exactly the same situation were to occur?

Mr ROGERS: If the situation were to occur again then our local manager is expected to assess what is going on, the potential for that fire to escape the area, what resources are being brought to bear upon that fire and whether they are adequate to suppress the fire—and if not then obviously they can either say they want the resources sent or, if they not happy with that, take charge of the fire.

CHAIR: So that person would be the district controller—the local fire controller?

Mr ROGERS: Yes, our local manager.

The Hon. RICK COLLESS: So in that situation the Coonamble and Tooraweenah crews would have called the RFS headquarters in Coonabarabran, spoken to the fire control officer in Coonabarabran and offered their assistance. Would he have said that the fire was under the control of the National Parks and Wildlife Service or would he have said that they were not required? Who made that decision?

Mr ROGERS: I would have to check but I imagine it would be our local office—whether it was the fire control officer or someone else in the office I do not know. I would be quite confident in saying that they would have checked with what was asked for by the National Parks and Wildlife Service. They may have even gone back and confirmed, "Do you need any more," and been told, "No, we're fine."

The Hon. RICK COLLESS: Could you take that on notice and check that information, if you would not mind?

Mr ROGERS: Absolutely.

The Hon. RICK COLLESS: I think it is a very important point about who actually declined the offer of assistance—

Mr ROGERS: And the circumstances in which that happened.

The Hon. RICK COLLESS: Exactly.

Mr ROGERS: No problem.

The Hon. RICK COLLESS: While we are on that issue, the issue of the remote area fire teams [RAFT] has been raised with us, and why they were not on duty around that fire on the first evening of the fire when conditions were, even though hot during the day, relatively benign overnight—obviously with the evening comes cooler temperatures and increased humidity, and there was no wind. A situation like that, I understand, is where the RAFT teams can be put to work quite usefully. Talking to a number of locals at Coonabarabran when we were up there the other day, they made it very clear to us that if extra RAFT teams had been on duty that evening then even if the fire was not controlled that particular evening it may well have been a lot less severe earlier in the day on the following day. In your understanding, are there other RAFT teams—located maybe with those at Coonamble and Tooraweenah that were declined to attend—that could have in fact been on duty around that fire on the first evening?

Mr ROGERS: I have not heard of any being declined to attend. I know in that fire season, and I am more than happy to go back and check where RAFT was committed during that fire season, we had an extreme shortage of RAFT—because a lot of the fires were in more remote areas and we were using RAFT, which is really where they were designed to operate. So there was quite a shortage of RAFT. Only the National Parks and Wildlife Service and the NSW Rural Fire Service have those specialised firefighters. I think the RFS have around 120 or 130 across the State. We are trying to build more capability in that area because we recognise that it is a really important strategy to get to fires early. I am more than happy to look at that and give you information on where all RAFT are and what they were doing at the time. Certainly it was a challenge getting enough RAFT. We used RAFT from the Australian Capital Territory as well because we ran out of RAFT during that fire season. So we do call those people in and we do use them a lot.

The Hon. RICK COLLESS: That would be very useful information if you can get that to us.

Mr ROGERS: No problem at all.

The Hon. Dr PETER PHELPS: Deputy Commissioner, the forecast fire spread which was given to them at 9.30 that night was clearly very optimistic, and ultimately very wrong. Can you just explain how these forecast maps are done, where they are done and what sort of input goes into them?

Mr ROGERS: At that time the computer-based fire prediction analysis was pretty much in its infancy. That was the first year we have tried that. We have been doing fire prediction manual analysis for decades, and that is based on an individual's experience and what they think the fire will do. Basically the system we used at that time was a system called Phoenix. It was developed by a Victorian scientist, and the Country Fire Authority use this system extensively in Victoria. Basically it looks at the type of fuel that is there, the topography and the

predictions of wind for that day. It feeds it all into a computer and basically it provides a potential fire spread for the subsequent period. At the same time, there is a manual prediction done to look at what is predicted. Then they compare the two and come up with a final map.

The Hon. Dr PETER PHELPS: Why was it so wrong?

Mr ROGERS: I think one of the limitations of any modelling, and indeed any manual predictions, is that this fire became a wind-driven fire—a plume-driven fire. When a fire gets to a certain size the plume assumes such a proportion that it generates its own wind system in that area. It essentially becomes like a microclimate because it becomes so immense that it draws fresh air in from around. It makes fires behave very erratically. There is no fire behaviour system that at this point in time can actually take into account those sorts of plume-driven fires. That is something that has been flagged with the developers of that system. It has also been flagged with the Bushfire and Natural Hazards Cooperative Research Centre to see if we can get further alignment of that. But at the moment the system is simply not designed to be able to do that.

The reason I mention manual fire predictions is that is what I was given when I was managing incidents, albeit a few years ago now. I used those as a consideration. Fire prediction modelling has never been, and should never be, the be all and end all. It is like weather forecasting—you will take on board what is said but you do not simply take on board everything blindly. You expect things to be not quite as they are forecast, because sometimes things forecast never quite eventuate. So you always have to think about things, and you use your experience, to say, "Well, okay, what do I think this is going to do? Forget all the forecasting, what realistically do I think this will do?"

The Hon. Dr PETER PHELPS: Except that in the instance at hand the National Parks and Wildlife Service did take it blindly. They were told by RFS members on the ground that the prevailing northerly winds could see the fire jump Renshaw Road. Yet they had received information from you and said—not invalidly, in their defence—"We have received this expert advice". So in that sense they based their response on what was clearly, demonstrably, faulty information, which people on the ground knew was faulty. In that sense, does that mean RFS bears at least a degree of culpability in relation to the inability to manage the fire appropriately?

Mr ROGERS: No, I reject that completely. The fact is the fire behaviour analyses are provided as a guide. If you happen to want to look at the document, plastered all over the document are all of the limitations that that product brings with it. One of them is that it cannot simply be relied upon blindly. It never has been intended to be and every incident controller training we provide says to not simply take these things as a one-stop shop and that you cannot put all your eggs in one basket. I do not believe that that is the case.

Mr SCOT MacDONALD: We heard a lot of evidence from National Parks and Wildlife representatives about the enhanced bushfire management program. Can you explain to me quickly how you work in with that? And my main question is do you have enough resources to play your part in that program?

Mr ROGERS: When this Government came to power they set a very clear target. The target they set is encompassed in the 2021 plan and it is twofold. As a State we had to increase the land area burnt by 45 per cent and we had to also protect another 20,000 properties from fire. I guess the point is that what we looked at then was basically breaking that area into agencies and working out specific agency targets, which National Parks already spoke about. National Parks do carry out a lot of work on a land size basis because they have a lot of contiguous land.

The Rural Fire Service, on the other hand, is left with the rest of the private property which is not so simple to do because we have to keep fire within certain boundaries and particular pockets. Particularly in urban areas it could take enormous resources but be very low in hectareage. That is why we have the measure of protecting the number of properties. It is quite important to not just simply have a sole hectare focus because, as the Victorians have discovered, what that leads to is simply agencies going out into the middle of nowhere and dropping a lot of incendiaries. They will get the target but they will not necessarily reduce the risk to the community.

The RFS was the beneficiary also of some enhanced funding, which is why we have the remote area firefighting program but also we have grants up in the order of \$20 million available to land management agencies of local government to help them manage fire on their landscape. We are quite comfortable that we have sufficient resources to meet the targets that the Government has outlined. But, as the National Parks said, hazard reduction is not the panacea and it cannot always be achieved every time.

One of the things I would say that we are exploring, which goes a little bit to what Mr Colless was saying earlier, is we do believe that there is a fire frequency threshold for fuels in the land management zone area. I think over a period of time there ought to be consideration of a progressive reduction of the fuel loads in those areas. We are looking at experimenting with some modelling that basically says that this fuel was last burnt in this time so when it gets to this time we should be looking at targeting it. We are looking at providing those maps to bushfire management committees and making sure that they take that into consideration when they set their burning program to make sure that we are not just ignoring those broader areas in the landscape. I actually agree that they do need to be progressively reduced.

The Hon. Dr PETER PHELPS: If a brigade or a unit were to be deployed is it your expectation that the group captain who covered that brigade—or, if there were no group captain, the deputy group captain—would be informed of the deployment of that unit?

Mr ROGERS: As far as any fire? I think it depends on how the local areas operate. Sometimes they operate on a roster system where one group officer takes responsibility for the entire area. In other areas their pager also includes the group officers. I guess it would depend on—

The Hon. Dr PETER PHELPS: If that were not the case and it was simply the lineal command structure would you expect that the group captain—or, if there were no group captain, the deputy group captain—would be or should be notified of the deployment of one of their brigade assets to a fire?

Mr ROGERS: Was this post the section 44 declaration?

The Hon. Dr PETER PHELPS: No, prior to it.

Mr ROGERS: I think it is reasonable for those people to be informed, yes.

CHAIR: We are out of time. Deputy Commissioner, thank you for giving evidence today. I believe there will be a substantial number of questions on notice, particularly in relation to some of the technical aspects of your presentation. I ask that any replies are provided within 21 days of your receiving those questions. The secretariat will make sure that you get them.

Ladies and gentlemen, this brings to a close the second hearing of this inquiry. I thank all the witnesses and those in the public gallery for their forbearance.

(The witness withdrew)

The Committee adjourned at 3.35 p.m.