

TRANSCRIPT

STANDING COMMITTEE ON THE ENVIRONMENT AND PLANNING

Inquiry into fire season preparedness

Melbourne — 31 August 2016

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Mr Chris Hardman (affirmed), Acting Chief Executive,
Mr David Nugent (affirmed), Director, Fire and Emergency Services, and
Ms Jennifer Rebeiro (sworn), Executive Director, Business and Infrastructure Services, Parks Victoria.

The CHAIR — I declare open this hearing of the environment and planning committee with respect to its inquiry into bushfire preparedness. I welcome the Parks Victoria officials. I note that evidence given here is protected by parliamentary privilege, but if you speak outside, it may not be protected by parliamentary privilege. Welcome. I understand one member of your team has come back from holidays.

Mr HARDMAN — Yes.

The CHAIR — Welcome. Thank you, Mr Hardman, for your diligence. If I can ask Parks Victoria — Chris — to lead off with a short period of evidence, and then we will ask some questions.

Visual presentation.

Mr HARDMAN — Firstly, thank you for the opportunity for Parks Victoria in its own right to present to this committee. We will talk to the joint submission that DELWP made on behalf of a range of emergency management agencies, including Parks Victoria, and of course on Parks Victoria's role in fire preparedness and then take any questions that are relevant to our agency. With me today is David Nugent. He is our director of fire and emergency services. Jennifer Rebeiro is the executive director of business and infrastructure services for Parks Victoria.

Parks Victoria is a statutory authority established under the Parks Victoria Act. The primary objective of Parks Victoria is to ensure parks and reserves are healthy and resilient for both future and current generations. We manage 4.2 million hectares of public land, which takes into account national parks, state parks, conservation reserves and co-managed lands with traditional owners. We are also the state's biggest manager of urban parks. Our combined estate is roughly 17 per cent of the state of Victoria and attracts about 54 million visits to the terrestrial estate that we manage. We look after 100 national parks, wilderness areas and state metropolitan parks and thousands of Aboriginal and post-European settlement and cultural heritage sites. We are also a local port manager for three local ports. We are the waterway manager for the lower Yarra and the Maribyrnong, and we are also responsible for about 70 per cent of the coast of Victoria.

We are also very proud to be working with other government agencies and traditional owners, and again we are very proud to take care of our renowned national parks. We recognise Aboriginal people's strong connections and understanding of the land and waterways under our management. Through joint management we will ensure that traditional owners play a central role in managing these parks into the future.

I think it is important to reiterate that through the Forests Act DELWP has the responsibility for fire management on public land, including the Parks Victoria estate, also through the Water Industry Act 1994, the Port Services Act and the Marine Safety Act. As I indicated before, we also manage a range of other parts of the state, including the bays and rivers.

To allow the secretary of the department to fulfil his obligations under the Forests Act, Parks Victoria and DELWP work in a very close and strong partnership before, during and after bushfires. The role is to plan and deliver bushfire preparedness, response and recovery outcomes. Parks Victoria is structured to provide clear focus on delivering fire management services in support of DELWP and other emergency delivery partners.

Parks Victoria is also responsible for fire prevention on urban parks it manages in the greater Melbourne area. Our partnership with DELWP is based on an agreement — the Parks Victoria-DELWP fire agreement 2011. Bushfires do not respect public and private land boundaries. DELWP, Parks Victoria and the CFA will work together to increase the communication and share access to resources, vehicles and other equipment to reduce bushfire risk going forward.

Victoria is one of the most bushfire-prone areas in Australia. We work, again, with our partners and the Victorian communities to implement *Safer together*, the government's new approach to reduce the risk of bushfires. Parks Victoria works closely with the broader emergency management sector, including park neighbours, to plan and deliver fuel management programs on public and private land. By working together we will be more focused and more effective at reducing risk and keeping Victorians safer. Under *Safer together* there are four key priorities that Parks Victoria fully subscribes to: putting the community first; land and fire agencies working together; measuring our success; and better knowledge, which leads to better decisions.

Understanding the impact of bushfires on tourism operations in Victorian national parks and regional communities is also very important to Parks Victoria. The tourism industry is greatly affected by major bushfires. Bushfires impact on the natural environment and infrastructure which the tourism industry relies on.

We are also accountable for managing licensed tour operators on the whole public land estate on the behalf of DELWP. We have strong links to licensed tour operators and the tourism industry groups that are utilised before, during and after bushfires. Parks Victoria is currently implementing a Safety First program, which aims to improve the focus, safety and behaviour of all of our staff. This is particularly important when conducting fuel management. The safety of Parks Victoria staff, our agency partners and the community are paramount to us.

Parks Victoria makes a significant contribution to integrated emergency management in Victoria. A large portion of our workforce is trained and experienced across emergency operations. Although largely focused on bushfire response, these skills can be usefully applied to many emergency situations. A key advantage for us is that our workforce is distributed across the state, often in locations where several other lead emergency response agencies exist, and we are co-located with those groups. We use the Australasian Inter-service Incident Management System, better known as AIIMS, when we respond to emergency management scenarios.

I think it is important to note that our presence in rural and regional Victoria with over 100 work centres across the state means that we are well connected to communities and we have strong local knowledge to support control agencies. And local knowledge is paramount to good fire preparedness. Our bushfire preparedness budget is around \$46 million. Twenty-five point five million of that is provided through DELWP fire initiative programs and \$21 million of that is provided directly by Parks Victoria's recurrent budget. Annually we provide 25 per cent of everything our staff do is applied to fire management. It is important to note that that is what we plan for, and we can bring more resources to the table, should the emergency situation see that as absolutely necessary.

As you can see we have about 1000 staff. We have 720 of those trained in bushfire and emergency management roles. These staff are included in DELWP's emergency bushfire management resources. It is important to note that not all 720 of those staff are frontline, on-the-ground, hose-in-the hand firefighters, but they play critically important roles in the regional control centres and the incident management centres and are critically important to the firefighting effort. Our structure also includes 150 dedicated staff who are 100 per cent focused on bushfire and emergency management. We also recruit around 200 seasonal firefighters. That can change if DELWP — —

The CHAIR — Is that full time?

MR HARDMAN — No, seasonal firefighters, so they come for the bushfire season.

The CHAIR — But full-time employment through that period?

MR HARDMAN — Yes, sorry. Certainly. They are there 76 hours a fortnight, five days a week.

Ms SHING — Sorry, just to continue on that theme, within the 720, I assume that that is not all 1.0 EFT and that there are part-time employees within that code?

MR HARDMAN — No, generally they are 720 accredited firefighters. The vast majority of those would be full time. There may be a few that are not, but the majority would be full time.

Mr NUGENT — That does include our part-time workforce as well.

Ms SHING — Perhaps if that split could be provided to the committee, that would be useful.

MR HARDMAN — Sure.

Ms SHING — Thanks. Sorry to interrupt you.

MR HARDMAN — No, that is all right. Parks Victoria does employ 200 seasonal firefighters. The total number of firefighters recruited by DELWP totals around 660 for the state. The Department of Environment, Land, Water and Planning owns a significant amount of specialist firefighting equipment. Parks Victoria staff

operate that equipment — things like bulldozers and fire tankers. Parks Victoria staff operate this equipment. We also provide our own fleet of vehicles — 141 dedicated fire vehicles — which seasonally are used for firefighting purposes. We also provide a range of parts and equipment that help support work for fire preparedness, such as tractors, slashers and those types of things.

Fuel management: in the past decade Parks Victoria has seen the disastrous effects that bushfires can have on many communities — on people, property, our economy and the environment. Fuel management serves to mitigate the risk of major bushfires in the landscape by reducing the spread and intensity of fires. DELWP, in partnership with us, undertakes fuel management to reduce bushfire risk across all public land tenures, delivering one fuel management program on public land in the state.

Fuel management is one of the most effective ways to reduce bushfire risk, as it reduces the amount of fuel in the landscape. When fuels are reduced, the impacts of bushfire are less severe, and it also provides firefighters with a point to work from and this reduces the impact and consequences on the community. Beyond planned burning, we take many other actions to reduce bushfire risk, including slashing, mowing, mulching, creating fuel breaks and maintaining infrastructure like water points, dams and fire towers in our forests. Over the next three years almost 40 per cent of the fuel treatment program planned for the state of Victoria is to be undertaken on the Parks Victoria estate.

We support the code of practice for bushfire management on public land. The two objectives of the code are to minimise the impact of major bushfires on human life, infrastructure, industries, the economy and the environment — but as with all of us, human life will be afforded priority over all of those other values we describe. A key role of great interest to Parks Victoria is also to maintain or improve the resilience of natural ecosystems and their ability to deliver services to the community, such as biodiversity, water, carbon storage and forest production.

Fuel management is delivered in seven bushfire-risk landscapes across Victoria that contain a range of natural ecosystems that have different levels of risk. Bushfire risk is not evenly distributed across the bushfire-risk landscapes in Victoria. A large proportion of the risk in Victoria lies in what we call the East Central risk landscape, which surrounds Melbourne down towards Wilsons Prom. The other key area of risk is the Barwon Otway risk landscape, which includes the west coast. Some parts of Victoria contain less risk to life and property but have a high risk to ecosystem resilience, and a good example of that are the Mallee and Alpine ecosystems.

Following Black Saturday, the government recognised the risk posed by bushfire in Melbourne's outer urban fringe was growing dramatically as the population grew. The Melbourne bushfire protection program was established to focus on fire protection on public land in urban interface areas to help safeguard communities on Melbourne's outer fringe. The program is led by Parks Victoria and includes focus on increased fire prevention works and increased information sharing and engagement with the local community. We do this by reducing fuel loads in urban interface areas, building on existing programs of planned burning, improving the standard and quality of fuel breaks in the metropolitan area, enhancing response capability, building on existing community bushfire education and engagement programs, and working with DELWP on strategic planning.

The initial focus of the program has been to create fuel breaks along boundaries and strategically through landscapes. We use a range of methods, such as slashing, mechanical works and mulching. Right across the state we mechanically reduce fuels, around 10 000 hectares a year within the parks estate. Areas covered include bushfire-risk locations for this Melbourne fire and emergency program. Areas covered include the Mornington Peninsula, the Dandenong Ranges, the Plenty Gorge parklands, the riverine parklands along the Yarra and the grassland parks in Melbourne's north and west. The 2015–16 program has led to 700 kilometres of fuel-break slashing, 25 kilometres of fuel-break improvement works, 36 kilometres of planned-burn edge preparation and 16 kilometres of civil works, which is mainly tracks and trails.

Mechanical methods for treating fuel hazard provide a good alternative to burning where burning presents a high risk to life and property and environmental values or the treatment is in close proximity to community assets. Parks Victoria works closely with the local community to tailor risk-reduction strategies that suit the local environment.

Protecting people will always be our highest priority. However, as a park agency our management approach seeks to balance the need to reduce impacts to life and property and retain ecosystem resilience for future

generations. In instances where fuel management activities may have the potential to impact on ecosystem values, due to the need to protect life and property, DELWP, together with Parks Victoria and other delivery partners, aim to mitigate this risk and negative impact to those environmental values. We also work very closely with the community, who have local knowledge, local environment groups, and DELWP to gather information about local flora, local fauna and threatened and rare species. We will quite often take action to make sure that we protect those in our fire management activities.

We will continue to invest in science and technology and collaborate with local knowledge to achieve better outcomes for the community and the environment. We use broad indicators of resilience at a landscape level, and we will continue to expand our understanding to develop more sophisticated measures of ecosystem resilience. Partnerships with agencies and research institutions are important in assisting us to improve our knowledge and adapt our management as knowledge improves. Adaptive management has been a mark of the success of the research partnership between DELWP, Parks Victoria and a range of universities through the Mallee Fire and Biodiversity Project. Parks Victoria has been a key player to protect and actively contribute on many levels, including to our research partners and on-ground support of our rangers.

The Mallee parks north-west of Victoria, including Hattah-Kulkyne and Murray-Sunset national parks, provide the focal point for a project area of 7556 square kilometres. Bushfire is a regular feature in a semi-arid landscape and has profound effects on the environment. The 10 years of monitoring and research associated with the first Mallee fire and biodiversity project has enabled investigation of many aspects of how flora and fauna respond to fire in our Mallee ecosystems. The project results have influenced on-ground strategies to manage fire through the provision of comprehensive datasets of species, distributions, habitats and attributes associated with fire and directly inform the DELWP strategic bushfire landscape plan for the Murray-Goulburn risk landscape area.

We understand that no single strategy alone can manage bushfire risk, and burning is just one strategy to reduce that risk. Under the new approach we work together with communities to share valuable information across agencies and approaches that work for different communities and landscapes.

Parks Victoria is working with DELWP to implement a monitoring, evaluating and reporting system. This program aims to ensure effectiveness of the fuel management program in reducing bushfire risk to the community and the environmental values across public land. Information gathered from this program will be used for future decision-making.

On behalf of Parks Victoria I would like to take this opportunity to thank our dedicated staff who contribute to emergency response in their tireless efforts to help keep Victoria safe. I think it is important for the people of Victoria to know that, after 13 years of major landscape fires, Victoria — in my opinion; I am a level 3 incident controller — has the best forest firefighters in the world bar any jurisdiction. Managing two and half million hectares of our state that have been burnt over that 13-year period, the experience gain means that our firefighters across DELWP and the CFA and Parks Victoria are regularly required to travel internationally to represent Australia in California and in Canada. For myself and my colleagues, I think it is just important to understand how great our forest firefighters are. We are consistently learning and adjusting our actions and strategy to reflect the changing environment and implement an evidence-based approach to reducing the risk of bushfire with our partner DELWP.

Parks Victoria will continue to work collaboratively with DELWP and other government agencies and the broader Victorian community to minimise the impact of major bushfires on human life, communities, infrastructure, the economy and of course, importantly for all of us, the environment. Together we will aim to identify and implement the smartest and most effective ways to continue to reduce the risk of bushfires and deliver better outcomes for Victoria and Victorians.

The CHAIR — Can I thank you, Mr Hardman, for your contribution and its comprehensiveness. I want to reiterate your view about our forest firefighters. Both in 2003 and 2006 and in 2009 and beyond I have had close contact with them, and I have a very high regard. That is the first point.

For my second point, I am deeply interested in the way in which these targets are set. I think one of the important things for our inquiry is to understand the new targeting system, which is across all agencies. I want to understand how that operates and how you interact with the other agencies, given that you actually have different landscapes. So, in the setting of those targets — and I do not think I am being unfair to anyone here — there is a risk-based approach, and settlements and human habitations and so forth are prioritised, and the risk is

the approach now rather than the volume. I guess what I am asking with respect to your agency and the specifics of your large-scale landscapes is: is that approach alone sufficient?

Mr HARDMAN — As a level 3 incident controller I have been involved in all of those large-scale fires over time. In the 20-odd years I have been doing this, I have seen a range of different approaches in dealing with fuel management. For me, I think, understanding what a risk-based approach means is something that I have to spend a lot of time endeavouring to understand of recent times. I do not necessarily think it will mean that we will burn less in the environment, but as a firefighter I think it will focus us on making sure that we burn in the right places. I think a risk-based approach will ensure that the work that we do delivers best value for money for the Victorian community on the basis that it will enable us to measure and reduce the residual risk to those communities surrounding public land.

On the environmental side, I think we have had those big fires in the landscapes, and we have — —

The CHAIR — Which have majorly reduced the amount of area that needs to be burnt immediately because of such huge fires over a series of years?

Mr HARDMAN — That is absolutely correct. We monitor the fuel loadings in those areas and start then to work out when we should start to burn those areas. The risk that we are talking about is to that full range of issues. So human life is the no. 1 issue, and we put most effort into that, but also — —

The CHAIR — Property and then environment?

Mr HARDMAN — Property, environment, state infrastructure, economy, rural — all of those sorts of things. I think a risk-based approach when considered holistically is a good evolution.

The CHAIR — Forgive me for labouring this point, because I think it is a central one. There are many people who were sceptical as agencies, including yours, did not do the burning through the 1990s and beyond, and the fuel loads built up massively. Then we have had a series of big fires, and over the last four or five years an uptick in the amount of planned preparatory burning, but now we have moved to a different approach. How do we have confidence that the same, I would argue, errors in the 1990s and early 2000s are not repeated, and the amount of load does not build up again, because some of this is volume based as well as narrow risk based?

Mr HARDMAN — Look, I think it is a really good question and a really thoughtful question. I might step back a little bit. With every major fire that we have had, there have been reviews and committees such as this that have looked into how things went during those dramatic periods in our history. As somebody that has been around for all of those, I have seen dramatic improvements in the way we gather evidence — an evidence-based approach to dealing with the challenges of the bushfire and understanding how fire works in the environment and what the impacts of climate change have on how fire runs through the environment. So as time has gone on I think our knowledge and understanding of how fire works in the landscape has improved. And I do believe that every inquiry has certainly changed the way we approach — —

The CHAIR — So my sceptical country friends say Parks — and they single out Parks, but they mean a broader group, DELWP too and so forth — are going to return to their old ways of not doing sufficient burning and we are going to end up in a few years with a build-up. You have heard this, I am sure, very directly. I have still not heard from agencies a really clear rebuttal to that scepticism.

Mr HARDMAN — I think proof will be in the pudding. The reality is that we need to be able to step up and do what we say we are going to do. I think the community will hold us to account if we do not do what we say we are going to do — —

The CHAIR — Yes, but so might tragic incidents is my point, I guess.

Mr HARDMAN — Sure. Look, I think I have confidence in the science, the knowledge, our understanding of how fire works in the landscape and our experience of going through these dramatic situations. We are in a better position now than we have been in the past, and I am confident that with the support of governments we can continue to improve the outcome, and I think we will see results of that over time.

The CHAIR — So can I just as a follow-up to that understand how these targets are set. So, you know, CFA has certain responsibilities, as do DELWP and other agencies, and you are in there with a specific type of

terrain — larger areas often and less populated, although near population in some cases. How are these targets set across these organisations, because I would argue that the interests and the terrain of the different agencies would lead them to different conclusions?

Mr HARDMAN — We plan the burning together as agencies — Parks Victoria and DELWP. We develop a thing called the fire operations plan. That fire operations plan projects out three years and defines and identifies the parcels of land that will be burnt in the next three-year period. We do that work together. We then take that work out to the community and we engage and we ask the community to come along and make comments on the proposed burns for the next three-year period. They may well then make submissions and offer different alternative suggestions, and we would then take those on board and we would then lock in that three-year program. But that program is reviewed annually. So we say this is our burn — —

The CHAIR — It is a rolling three-year program.

Mr HARDMAN — It is a rolling three-year program that is reviewed on an annual basis, and that is done in partnership with DELWP, Parks Victoria, Melbourne Water, municipal fire projection committees et cetera.

The CHAIR — So in the same way the submission from DELWP was a whole-of-government submission — all putting your bits in — did you put in an earlier document before the harmonisation of the final DELWP whole-of-government submission?

Mr HARDMAN — My understanding is that we worked with DELWP on the development of our part of the submission, but I am not sure — —

The CHAIR — I would appreciate it if you do have that document, that would be helpful to us.

Mr HARDMAN — I will have to take that on notice, Chair.

The CHAIR — Fine. Thank you.

Ms SHING — Thank you for a really comprehensive and detailed presentation and also for attending this evening to give oral evidence to the committee in relation to the terms of reference. I would like to explore a little more the evidence that you gave around the fact that it is not about one single strategy being sufficient to meet and manage the risk and to talk about that in the context of across land tenure and the periphery and the borders between the Parks Victoria estate and the way in which that land is managed and fuel reduction occurs in a very strategic way and the need to engage with the community around how they manage fuel accrual, how that is monitored, how that is reduced or removed, including through incendiaries or other sorts of arrangements, and how we incorporate local knowledge when determining fire preparedness measures and planned burns, in particular at that interface between private landholdings on the one hand and the estate on the other. Just a little question.

Mr HARDMAN — That is an excellent question. I might tell a story, and I might pick a spot and talk about Arthurs Seat, which is an area of very significant risk to the community, with a significant population on the top of the hill there. Particularly in those urban interface areas — places like the Dandenongs and Arthurs Seat — it is a really difficult environment in which to manage fuel reduction, and the boundaries of those parks are not beautiful lines that make it easy to work to. Generally there are private land inliers and a whole range of things which make it far more complicated to deliver that sort of outcome.

With that additional funding we got in 2009, the Melbourne bushfire protection program, we developed a capability to trial and test new ways of doing things. At Arthurs Seat we have a combination of large-scale mechanical fuel reduction and traditional fuel reduction burning and slashing and those other types of things. But it has not always been easy to get agreement with private land owners to burn on their land. They really struggle. Some of those people care passionately about the environment and they perceive that the burning will have a negative effect. Even though it might not, it is really hard to have that conversation because these people own that land.

What we found is that if we started to come up with different ways, different ideas and different solutions, we might be able to get the community on board because getting the community on board, particularly landowners, is fundamental. It does not make any sense creating really crazy boundaries because that is where public land

ownership begins and ends. We came across this new machine that can walk on the side of hills with a big mulching head on it.

Ms SHING — That was in one of the pictures that you posted earlier.

Mr HARDMAN — I think it was, yes.

Ms SHING — A very steep gradient with a piece of machinery on the top of it.

Mr HARDMAN — That landscape in Arthurs Seat is full of fallow wattle, which is an invasive weed but provides a significant amount to the fuel loading. So we were able to bring that machine and walk it up the side of the mountain and mulch all of those fallow wattles down to ground level — just crunch them down like this. It was expensive to do, but we were able to remove that and mulch that down and remove that fire risk. The community members were quite interested and started to get involved, looking at this weird piece of machinery working on the side of the hill, and started to talk to us about partnering with us and allowing some of that work to be done on their land so we could simplify some of those boundaries.

What is quite exciting about that body of work is that there were two parcels of land: one we treated by fire, one we treated by mechanical. I cannot remember the cost, but the mechanical one was a lot more expensive, of course, but my fire experts — and I have got fire ecologists — said to me, ‘You know, Chris, we may not need to go back there for 20 or 30 years because putting the fire in that landscape did not necessarily encourage new plant growth or those sorts of things’. So I think it was a great result.

That will not work in every landscape, that will not work in every ecosystem, but I think we were able to come up with a plan that gave the community confidence that we were not going to put their values at risk. We were able to apply that across land tenure, and we would like to try more of those sorts of things in the future. But it is going to be a challenge getting community buy-in to burn across public and private land, and I think CFA, Parks Vic and DELWP working together are going to have to be very focused and clever about getting community support to do that sort of cross-tenure burning.

Mr NUGENT — I was just going to add, if I may, that the first part of your question was in relation to national parks and other public land, if you like, and it is just important to understand, as we spoke earlier in our submission, that we support the secretary in his responsibilities to fulfil his requirements under the Forests Act. We manage that fire prevention or fuel management, if you like, across the whole public land estate. So we do not distinguish between national park or other areas of public land for the purposes of fuel management. That is an important thing to understand.

We participate very actively in all of the work, the strategic operational work, that occurs on our land. The example that Chris talked about is very much an area that Parks Victoria is very active in, but it is just important to understand that the department has that accountability, and we support them in how we manage for fuel management across the whole of public land.

Ms SHING — Thank you, and that is certainly borne out in the evidence that has been prepared by other stakeholders. The Victorian National Parks Association has talked about that cross-agency work, noting that fire does not respect borders and that it is necessary to plan for that.

As a follow-up to the contribution that you made around the technology that is now available to be able to really negotiate some very steep and often difficult terrain, which is a big part of regional Victoria, I would like to talk about the cost associated with that and to note in particular that the Victorian National Parks Association in its submission has also indicated that we need a consolidated fire planning and budget allocation process in a cross-agency planning sense. How do we meet the costs, in your view, associated with that front-end investment, that expensive investment in equipment, to be able to reduce fuel or to otherwise allow it to suppress growth of other fuel over time, to get that 20 or 30-year benefit from a budgetary planning sense?

Mr HARDMAN — I will just reflect for a moment.

Ms SHING — That is okay. Feel free to take that on notice if you want to.

Mr HARDMAN — No. I think from a resourcing point of view we highlighted the number of people and dollars that we apply. For instance — and I will pick a person, so it is a Port Phillip region of DELWP — Kelly

Crosthwaite is somebody we work with, and we both bring resources together to apply to the landscapes that we manage in the greater Melbourne area.

We think very carefully about making sure that we do not duplicate effort. We think very carefully about making sure that we have end-to-end processes. Even though we are a different agency, we very carefully line up our resources because both Kelly and myself want to be confident that we can look the community in the eye and say that we are delivering the best possible outcome with the resources that we have got.

The risk-based approach is quite new, and I think that we are now turning our minds to applying our resources to deliver on the outcomes in the bushfire risk landscape plans. And, you know, I think that for what the secretary asks Parks Victoria to do in that regard, I think we are resourced appropriately to do what he is needing us to do — he is asking us to do — on public land. On the other side of that, should that ask change, should the demand increase on what we are asked to do, I think then the resources would need to increase accordingly. So again, because we do provide that service to the secretary and the department, we are resourced appropriately for what we are asked to do now. Should that ask change then we would say that we would need more resources.

Mr NUGENT — Can I just add again, one of the things again you would have seen in Chris's introduction in our submission is *Safer together*, the government's initiative around *Safer together*, and for Chris's example, again, down at Arthurs Seat where we are working on boundaries between public and private land, *Safer together* will mean that we will work more closely — we already do work closely, but even more closely — with the CFA and local government, for example. And I think there are opportunities there for us to be more efficient in how we use our resources and invest in some of the technology. You saw that creepy-crawly thing on the side of the hill as well. So I think we are getting smarter. Chris mentioned that before. We are getting smarter at this all the time, and *Safer together* is going to be a fantastic way for us to just bring everybody together to get even better at that into the future.

Ms SHING — Excellent. And one final question, if I may, and the answer does not have to be long. Emergency management commissioner Craig Lapsley has indicated that this year will be an intense fire season and that we are in the process of fuel loads building up, which is great for farmers — we call it feed in Gippsland — but other people when it cures and dries out have a different take on what it actually means as far as risk is concerned. In your view do you think we are adequately prepared to be able to either tackle the bushfire season as it comes upon us, which will start later but be more intense, as Mr Lapsley has indicated, and if not, are we working towards getting there by the time the risk eventuates, which, as I understand the projection to be, should be later in the season than in previous years?

Mr HARDMAN — Very timely question. This is something I did not prepare earlier. This came out today, and it shows a map of Australia. And it shows what Victoria — you will not be able to see that from here — but right across —

The CHAIR — What is the source?

Ms SHING — This is a document entitled 'Hazard note —

Mr NUGENT — This is the annual seasonal outlook provided for southern Australia by the Bushfire and Natural Hazards Cooperative Research Centre. They published that today.

Ms SHING — If a copy of that could be provided to the secretariat, that would be wonderful. Thank you.

Mr HARDMAN — Absolutely. But what it does show is that right across western Victoria into South Australia, across the northern part of Melbourne and possibly to around Eildon — it is very low granularity there — it shows in this part of Victoria that we could expect a higher than average bushfire season. The beige bits around most of central Gippsland and East Gippsland and the north-east look like being an average season, and in far East Gippsland lower than average. So this is not an uncommon scenario, and I think that Parks Victoria will be able to play its role along with the other government agencies in being prepared for a projection such as this.

Ms SHING — Particularly as it relates to the north and the west of the state?

Mr HARDMAN — Yes.

Ms SHING — Thank you very much for that.

Mr MELHEM — I have got a very brief question. Has the recent CFA debacle had any impact on your operations as far as preparing for fires goes? My understanding is that the prime responsibility in preparing us for fires rests with DELWP. I do not know whether I have got this order right: DELWP and yourselves, Melbourne Water, Parks and then CFA. Is that about right for the ranking? Not fighting the fires, but preparedness for the fires.

Mr HARDMAN — I will spend a little bit of time explaining. With DELWP and Parks Victoria, you need to think about us as one. Melbourne Water are part of that networked emergency organisation for the catchments, but their responsibility is in the catchment. The CFA look after the rest of the country area Victoria, and then you have the metropolitan fire district in the middle. So our roles and responsibilities are quite separate and different even though we do all of this work together hand in hand.

I have got to say that following the 2002–03 fire seasons and then the 2006–07 fire seasons, I mostly spend my time as an incident controller at Kangaroo Ground. My whole team is CFA. I very rarely see a Parkie or a DELWP person in there — I get one or two — and, you know, right now it does not matter. It does not matter what badge; as soon as we are at an incident, the respect that I get from the local CFA at Kangaroo Ground makes me feel great, because it never used to be like that. I think that has evolved, and I think that the relationship between ourselves and the CFA is as good as it has ever been. Because of our work arrangements within the department, I do not perceive any connection whatsoever with how we will work with the CFA and what is occurring in the media at the moment.

Mr MELHEM — Just a quick follow-up, going back to the 2009 royal commission into bushfires and the resources allocated as a result of that and the various recommendations, in your own opinion how do you think we are travelling? Are we meeting the expectations the royal commissioners put out? That is including resources, numbers — —

Mr HARDMAN — I had the task, along with Dave, to give evidence at the commission. Dave and I were both involved during the Black Saturday bushfires. The results of the commission and the subsequent reviews and investigations — it was a deeply troubling time for me; I really struggled with it — —

Ms SHING — You would not have been the only one.

Mr HARDMAN — Along with a lot of other people. Being professional, you suck it up and you get on with these things, but I did see significant change. I did see a change in focus. If I can say that I think, very personally, that the best and most wonderful thing that has changed is the way we have connected with community, the way we get our warnings out to community and the way we inform community about what to do when fire occurs. We are in a high-risk landscape in south-east Australia, and sometimes, when Mother Nature decides to, she can kick our butt any time she wants. Our ability to connect and communicate with the community — vulnerable people, people at risk — and help people understand what they should do at any given time, I think that is probably the single most important thing. I think all of us live, breathe and eat that every day.

Ms DUNN — Thank you for your presentation this evening. There are only three areas that I want to explore tonight. The first one is in relation to the Dandenong Ranges and the Melbourne fire and emergency program, where you see mechanical treatment undertaken in the Dandenong Ranges for the creation of fuel breaks, for want of a better term. What that has resulted in in the past is the removal and loss of threatened species, the removal of habitat trees and the creation of wind tunnels through vegetation, and because of the mechanical disturbance as part of those treatments it has created a fresh seed bank, if you like, for weed invasion in those areas. My question is in relation to those sorts of works. We have a community that completely appreciate the risky environments that they live in in the Dandenongs but also value the environment. How can they have confidence in that particular program when they, in the past, have been some of the outcomes from those treatments?

Mr HARDMAN — I was actually accountable for the implementation of that program in the early days, so I know it intimately. We created a range of new firebreaks and we improved the range of existing firebreaks throughout the Dandenong Ranges, and that was based on a risk-based approach.

Earlier work that we built on was work that my colleague Dave Nugent had done in the catchments in creating the catchment firebreaks, where we established new standards for fuel breaks. Traditionally fuel breaks were cleared of all vegetation, and they were mowed on an annual basis. This time we left a significant portion of standing trees throughout the fuel breaks, because trees themselves do not necessarily add to the fuel risk. I do understand and empathise with how some of those people in the Dandenongs felt, because they are passionate about the environment, as we are, but we did put a lot of effort in trying to minimise the loss of overstorey, retaining those trees to try and soften the look of it without reducing the effectiveness of fuel breaks.

One of the things that we did with the Melbourne fire and emergency program — and this was something that I was really keen on — was to invest in weed control following fire prevention works. So we utilised those additional resources we got through that program. I know the community up there very well, and I think they see understorey species and ferns and things removed and it is quite upsetting for them, so I am not undermining or downplaying what they feel about that, but what we have done is we have done follow-up weed work where we have created that soil disturbance.

The other thing we did in the early days is we used heavy plants and equipment, such as bulldozers, to clear those firebreaks, and the community again were very upset, because it just stripped that and, as you rightly said, created an opportunity for weed invasion. So as we progressed through this and we started to learn more about different ways of doing it, we started to bring in machines called posi tracks, which are rubber-track machines that mulch, do not scar the ground and do not leave the same exposure for weed invasion.

So we got that money in 2009. We started off doing the best job we knew how to then. I think my local rangers spent so much time engaging with the community there that they were able to modify their approach over time to progressively reduce the impact, and we made some money available for follow-up weed work. As I said, I understand why they would feel that way, but I think under the circumstances we have done the best job we could have.

Ms DUNN — Thank you for that. Moving further, also to the Dandenong Ranges — the western flank of the Dandenong Ranges, which I think Parks Victoria has jurisdiction over — —

Mr HARDMAN — Yes.

Ms DUNN — The issue is I guess around the constant attention to the western flank. I understand why that exists because of the nature of risk there, but some observe that that flank, because of all the activity in relation to the fire operations plans, seems to be in a state of constant regeneration, and express concerns about whether that is in fact creating a fire hazard in itself or fundamentally changing the ecological vegetation class of that particular section of the Dandenongs. So I am interested in just understanding the evidence that underpins the frequency in relation to that burning and whether there has been any research done in relation to changing that EVC — and if you do not know off the top of your head, I am more than happy for you to take it on notice.

Mr HARDMAN — No. Again, the Dandenongs is a place I intimately understand. When we look at fire risk we have different zones, and zone 1 is about life and property. So if we think about the ridgeline along the western face, just below are all of the townships along the ridgeline there. We do not have a choice but to reduce the fuel there on a regular basis, because in 2006 we had five deliberate lights along the western face of the Dandenongs. Some guy was riding along with a motorbike and setting things off, and one of those fires — I remember it; I was on duty on that day — ran up the western face and hit the SkyHigh restaurant within just a few minutes, because for every 10 degrees of slope the rate of spread doubles, and that fire ran up that side of the hill in the blink of an eye.

Ms DUNN — And it is steep country.

Mr HARDMAN — Very, very steep. So those zones along the ridge line are changed forever. We will not have great environmental values in those zones because we cannot afford to allow those fuel loads to build, because you will not stop a fire going over the top of the mountain, no matter what, but you can reduce the intensity as it approaches the houses. So I think that we have to sacrifice those zones from an environmental point of view. It does not mean they do not have any environmental value; they do, but not the same as the dry grassy woodlands further down which do not get the burning. But they do also provide a buffer to the higher quality areas, so I accept that the values have changed, but I also say that in those areas we do not have a choice.

Ms DUNN — Just because of the nature of where the population has settled. I am glad that you touched on arson as part of your answer because that was the third point I wanted to explore, and I was just interested in understanding the role that Parks Victoria may play in relation to arson prevention and resources that might go towards that in Parks Victoria.

Mr HARDMAN — Do you mind if I tell another story?

Ms DUNN — I do not mind at all.

Mr HARDMAN — It sort of just helps me.

Ms SHING — It is a very useful way of giving evidence.

Ms DUNN — I think we should encourage it.

Ms SHING — At this hour of the night anything which engages on a different level after a long day in the house is welcome.

Mr HARDMAN — Parks are closed on a code red event, so that is a fire danger index of 100. Who would want to be out anyway? But, nevertheless, we close the parks. And we cannot physically close the parks, but we advise people, 'Please don't come to the parks — they're closed', and that keeps people out and keeps them safe.

But we also have other triggers for visitor safety in places like the Dandenong Ranges. So you would all be aware of the Thousand Steps, which is a really popular location that attracts around 800 000 people a year. When the fire danger index hits about 50, which is half of what closes across the rest of the state, because so many people use it we have made a local decision to shut that area at that time.

Additionally the sorts of things that we do in those landscapes like the Dandenongs is we support police and other emergency services in having a presence. So our vehicles have a big green leaf on them, and we put the vehicles out in the park driving around the roads. We have a presence. We have fire investigators. A lot of our staff are trained in enforcement and compliance, and they have fantastic relationships with the local police. And on those high fire danger days we do support Victoria Police, other agencies and the CFA by having a presence out in the park, which creates a deterrent.

Our staff who are trained in enforcement and compliance, they will not get involved in apprehending or anything like that — that is the role of the police — but they can take great evidence, make fantastic observations, have direct links with local police and can support police in their endeavours as well.

So it is a really good question. Although we are involved in our fire response and emergency management responsibilities, we do offer support to the other agencies. Arson can be such a devastating and horrendous crime that can cost people lives, so we do put a lot of effort into that, particularly with our relationship with local police.

Ms DUNN — Do you believe that as part of that supporting the local police and other agencies that you have adequate funding to resource that particular role you undertake?

Mr HARDMAN — Certainly when we think about high fire danger days, whether it is a total fire ban or FDIs, we turn all of our attention to that. So I said before that we spend about 25 per cent of our total resources as an organisation, which includes all our central office staff. In some of our work centres — places like Olinda, Warrandyte, Mornington Peninsula — that number can be 40 or 50 per cent or even higher. And on those high fire danger days, that simply becomes the most important thing to do. So other things do not get done on those days, because we lose everything if we do not put our attention in the right place, and I think that when we are needed, we are there, and we make that a priority.

Ms DUNN — Thank you for that, Mr Hardman.

Mr DALLA-RIVA — Thanks, Mr Hardman, Mr Nugent and Ms Rebeiro. Just a question in relation to the CFA and the UFU enterprise agreement.

Ms SHING — We got so far without getting there.

Mr DALLA-RIVA — In discussions, you mentioned the CFA, and I am interested: have you looked at the enterprise agreement that has been put out?

Mr HARDMAN — No, I have not.

Mr DALLA-RIVA — Do you have any concerns about the CFA and the UFU agreement in the way that you operate, given that you mentioned earlier — and I put that in the context — that you do have a good working relationship with the CFA? Do any of the concerns that have been raised give your organisation concern?

Ms SHING — Raised where?

Mr DALLA-RIVA — That nasty paper called the *Herald Sun*.

Mr HARDMAN — When we are involved in fire management and fire preparedness, we generally think about how we are going to resource things — what skills, people capacity, trucks and everything that we need to do a job — and that is always joint agency. So it is always DELWP, Parks Victoria, local government and all of those sorts of things. I do not pretend to understand the complexity of the UFU-CFA issue, but looking at our role, at what we do, the responsibilities that we have, I struggle to see a link between the two.

Mr DALLA-RIVA — So on that basis, you have not assessed the EBA. Do you think it would be important perhaps to have a look at the EBA to see if it does impact on that relationship you do have with the CFA, given the public concerns that have been raised?

Mr HARDMAN — Our relationships are at the local level — so our rangers, our local brigade captains, the local crews — and these relationships have been forged over many years. And I am really confident that those relationships will continue, because they are not about an agency, they are not about anything else. They are based on mutual respect of people that have been working together side by side through really difficult circumstances. I would probably ask DELWP, who have got the overall strategic accountability for fire in Victoria, some of those questions. For me and our staff, I cannot see that there would be a negative effect, because the relationships right across the state are forged in battle, and I just cannot see that they will be damaged by these sorts of things.

Mr DALLA-RIVA — As you say, the fight is forged in battle — the battle obviously being the fire and the fire season. The issue that we have had in evidence is some of the concerns by the V — —

The CHAIR — Volunteer fire — —

Mr DALLA-RIVA — Volunteers. I am making sure I get it right — the Victorian volunteer fire — —

Ms BATH — Brigade.

Mr DALLA-RIVA — brigade about some of the feelings within — —

Ms SHING — Volunteer Fire Brigades.

Ms BATH — VFBV.

Mr DALLA-RIVA — VFBV — I can never get that right, for the whole inquiry. Their concerns are with some of the impacts that this was having on the CFA volunteers, and you say the relationship is very important when the battle is being fought. The issue I was trying to get at is the morale. How is the morale of Parks Victoria dealing with the CFA, who I guess — the evidence we have heard — has some level of low morale, given some of the concerns? Have you dealt with that as the CEO, or acting CEO, in ensuring that as we head into, as Mr Lapsley said, another high fire danger season? Are you comfortable that those relationships are still going to be there, and if so, why?

Mr HARDMAN — What I can talk about is the relationship between my staff and the local CFA. As I said, whatever difficulties people are having in their own agencies, when they are together doing that work together, I have never seen it fail. I have seen personal conflicts, I have seen people get a bit peeved at somebody for a

whole range of reasons and I have seen where people have worked together and not liked each other for a period of time, but generally I think overall the respect has grown and is strong. I do not expect that to change at that grassroots level.

Mr DALLA-RIVA — Just to clarify in my mind, Parks Victoria has a firefighting unit. They are not part of the UFU. Which union are they with?

Mr HARDMAN — No, we have the Australian Workers Union and the CPSU. They are the two primary unions involved with our fire staff.

Mr DALLA-RIVA — So those members — you mentioned about training, the overlap. Is there training within the CFA — working with CFA facilities, if I was to use country locations?

Mr HARDMAN — Yes, absolutely. We share facilities and resources with the CFA.

Mr DALLA-RIVA — Within the EBA there are issues around the UFU training facilities — the CFA — would that therefore not impact on your training abilities within Parks Victoria? I notice Mr Nugent is shaking his head.

Mr HARDMAN — I might ask Dave. I think that would be great, Dave, because I cannot answer that.

Mr NUGENT — There is no doubt that we undertake training across agencies, and again it is one of the real areas of progress over the last few years that we now train together as well as working together. But as far as we are concerned our training arrangements will continue. We are not aware of any potential impact.

Mr DALLA-RIVA — Final question: the fire has been notified — non-fireman talk.

Mr HARDMAN — That is okay.

Mr DALLA-RIVA — And your firefighting unit is the closest unit. Does the time of dispatch from the moment of notification to your arrival — and I am trying to get this — —

Mr HARDMAN — No, that is okay.

Mr DALLA-RIVA — So you are at that point, and then you need to have an additional fire unit attend. On that occasion it might be either an integrated station or a volunteer CFA station. They are therefore called as the backup because it has gone to a grade 3, from my memory — —

Ms BATH — Grade 2.

Mr DALLA-RIVA — Grade 2 level.

Mr HARDMAN — That is okay. I know what you mean.

Mr DALLA-RIVA — Do you have a measurement of the time it takes from the initial call to the arrival? Is that something you document? The second part of that question is: from your understanding, when the CFA unit is called is it their time to when they arrive, separate to your time when you were called and you arrived? In other words, if you were called at 0 and the arrival time was 8 minutes but the CFA were called at 4 minutes past or 8 minutes or 9 minutes and they arrive at 16, and therefore their arrival time from the start of the fire was 16, is that the way you understand they calculate their arrival or you do not know? And how do you calculate yours?

Ms SHING — Are you talking about concurrent versus consecutive, just so that we understand?

Mr HARDMAN — Yes. What I might need to do, and I might ask Dave to jump in on this one as well, is I understand the scenario but our roles and responsibilities are different. So, for instance, if there is a fire in a middle of a forest, the CFA probably would not attend because they would not have the right equipment or vehicles to reach the forest. But from your scenario, if it is on the edge of public-private land, for instance, where the CFA can access it, if we just get it there because — —

Mr DALLA-RIVA — That is important for me to clarify as well, so, yes, I understand.

Mr HARDMAN — We believe as a principle the hard aggressive first attack is fundamental to stop the spread of wildfire, and there are two levels. So you have the initial dispatch of resources, which is controlled by Vicfire, with the CFA. They will roll through and roll an initial resource, and quite often it is CFA, and we may also be dispatching our people at the same time — whoever arrives there first. We do not have a designated response time; that is not how we function. I know that the CFA probably do. Under those circumstances we might roll a slip-on vehicle to go and see what is going on and what impact it might be. The first vehicle on scene will then assess whether it needs additional support.

That first person on the scene becomes the incident controller, in the CFA parlance, and it becomes an operations point, in the Parks Victoria parlance. That person will then determine what additional resources they might need based on the circumstances they are facing at any particular time. They would then go back to Vicfire and ask for those resources. Quite often now the very first resource that will be applied will be aircraft, and those aircraft will not necessarily need to be managed by the people on the ground. They may not have the capacity to do that. As the original incident control, they may well have communications with the aircraft and can advise where they would like water drops to occur.

All of that happens and every situation is different. At some stage when it transitions from the local arrangements, at the same time the regional controllers would be thinking about activating an incident control centre. If it is a bad day, that centre may already be prepositioned and in place. At one stage then the regional controller or the district controller will make a decision to transfer control from the incident to the incident control centre, so from the man on the ground to the incident control centre. They will then have a range of teams in place that will be able to access the full range of resources, aircraft capability, to enable the escalation of that fire. So I am not sure I specifically answered your question, but, Dave, can you add anything?

Mr NUGENT — I just want to reinforce perhaps one point that Chris made, which is an important one, that arrival time to fire is not a performance indicator for our organisations, with DELWP and Parks Victoria, and how we respond to fires. Chris indicated there is a whole range of factors that come into play depending on where the fire is. I think that is an important point. I think your work around there is timing. We do not have a performance indicator. Our performance indicators are around the size of fires, and that is because of the nature of fires that we talk about.

Mr DALLA-RIVA — So the CFA would not have the same remit either in the performance, because it would depend whether it is a grassfire or a structural fire. You really could not compare it with a MFB performance. That would obviously be more structural fires — internal.

Mr NUGENT — That is correct. You would find that the performance indicators are subtly different given the responsibilities that the organisations have.

Mr DALLA-RIVA — Mr Marshall will be very happy. Thank you very much.

Ms BATH — The good news about being last is that many questions that I was going to ask were already asked, so thank you for the arson questions and some training questions. Can I just delve into it a little bit. You commented on the 1000 staff, and 750 are trained — —

Mr HARDMAN — Seven hundred and twenty.

Ms BATH — Seven hundred and twenty. Can you talk about the type of training, to what standard and who implements that training? I guess my question is leading to: you are only as good as the people who are on the front, actioning in battle with the fire or preparing for pre-burns and the like. Can you walk us through so that we feel confident that you are confident that your people are trained well, or are there gaps and how could we recommend to fill those gaps?

Mr HARDMAN — It is an excellent question because one of the things following Black Saturday reviews was the focus on training and competency across all of the various functions. Whatever I say about Parks Victoria is exactly the same for DELWP, because we have the same training standards. For instance, when our project firefighters receive an accreditation of what we would call ‘basic firefighter’, they attend a five-day camp where they undertake a full week’s intensive training about fire behaviour and fuel management. That qualifies them to undertake fire management activities on the ground under the supervision of crew leaders. Crew leaders are then accredited. For instance, what we would call ‘level 1 operations’ would be a crew leader,

who is somebody most likely to have three to five years experience or more who goes through an accreditation test to test their competency and capability. They are then accredited as a level 1 operations officer.

Ms BATH — Can I butt in for a moment?

Mr HARDMAN — Yes.

Ms BATH — Is that internally? Are they Parks Victoria internal people, or are they outside sourced?

Mr HARDMAN — No, these are generally Parks Victoria staff, either dedicated fire staff, the general ranger or field service officer workforce. Rank within the organisation is completely different from qualification for fire. So you can have very highly paid, highly skilled managers working for somebody that might be a grade 2 ranger, because their fire competency is higher. It has nothing to do with rank.

We then in the operations field have level 2 and level 3 operations officers. We also now have accreditations for logistics, for planning, for public information and so on. So all of the incident management teams all go through an evaluation and accreditation process.

The technical training is quite extensive for aircraft operations and for plant and equipment. Bulldozer drivers and chainsaw operators will have a range of qualifications, from a crosscut, who can clear tracks and trails, to an advanced faller, who can drop a 90-metre ash tree. You cannot afford to have people in those roles that are not fully experienced, trained and accredited, though, because people's lives are at stake.

I will ask Dave to add something here, but I think the training and accreditation standards for Parks Victoria and DELWP are world class.

Mr NUGENT — I will just add a couple of points, and I will make the point here that DELWP is the registered training organisation and helps to lead a lot of our training. Much of our training these days is working towards national units of competency so that we are operating at a national standard. I would also just make the comment that as part of my role I work with the Australasian Fire and Emergency Service Authorities Council, AFAC, on a whole range of things, and there is no doubt that the skills, the capabilities and the training standards that we operate within Victoria are some of the best in the country, if not the best in the country in many areas. Particularly, as Chris said, after Black Saturday roles like incident control, the standards that we were asked to meet just moved up another level. So I am very confident in saying that our training standards are topnotch in the country and — again Chris mentioned — even internationally. As we work with our colleagues in North America in particular, we stand up very strongly with our colleagues over there as well.

Ms BATH — I have got one more question. The simulation fire experience called Phoenix, how is your feeling around that? Are you using it in conjunction with DELWP? Do they drive the bus and you take advice from them, or do you work in with them in terms of that? What I am wanting to gauge is — it has been used for a while, it is a demonstrated model overseas, we have brought it in. How is it going, and do you feel confident in it in protecting us in terms of fire readiness?

Mr HARDMAN — Again I will ask Dave to add here; this is something he has great knowledge on. I will talk now not as the acting chief executive but as an incident controller. It is fantastic. I say that because generally before Phoenix I would have a map in front of me, I would put a point on the map and I would say, 'Where is the wind coming from?'. They would say, 'From the north-west'. I would then draw a line as far on the map as I could to the south-east and say, 'This is the area at risk'. It did not factor in slope, topography, weather conditions, fuel moisture, so that was the best we could do at that time. We used to endeavour to look at the forward rate of spread of fire and determine what the likely point is at any given time. That was good because we had highly skilled people who could make those predictions because we understood with local knowledge the fuel types, fuel arrangements et cetera.

With Phoenix it is a set of parameters. So the parameter might be Ash Wednesday conditions, and it can say if a fire starts un-suppressed, where is it going to go, what is it going to look like, what are the spotting distances going to be and how do we need to plan our resources now and in the future. It will not save anything; it is an invaluable tool that improves our intelligence and understanding of the likely progression of a fire. At that time we will be bombing it with aircraft. We will be doing all sorts of things on that fire — —

Ms BATH — So it is a dynamic situation tool?

Mr HARDMAN — It is a dynamic situation, but it provides us with a really great indication of what we need to be thinking of at what time. It is just a great improvement to intelligence. Dave?

Mr NUGENT — In the interests of moving on I will just make one comment, and that is that you might recall at the DELWP presentation that Phoenix is a terrific tool for planning as well as it is in a response mode. What Chris has described is when we have got a bushfire on our doorstep and we are dealing with it, but very much it is a terrific tool as well to help us understand the potential movement of fires through the landscape. We use it in our bushfire risk landscape planning work that the department needs as well. So it is a fantastic tool.

Ms BATH — I have got a bit of a thing about fire towers because I think that they are important in the overall preparedness and also the monitoring of fires as they are occurring. From your 720 or your 1000, do you move people into the fire towers over the season? Is that totally separate; is that a DELWP? The second question is then: how many national parks would have fire towers in them? Are they a regular occurrence, or is that a rarity? You can take it on notice.

The CHAIR — They do not have to tell us now; they may not know.

Mr NUGENT — We might have to take that one on notice if that is okay.

Mr HARDMAN — We will take it on notice.

The CHAIR — Maybe a list of fire towers that apply to national parks would be actually helpful.

Mr NUGENT — We certainly do have them in national parks and other areas that we manage, but it is a DELWP-managed capability. But we certainly have them in our parks system as a part of the broader fire tower detection system.

The CHAIR — I thank you for your evidence tonight. It has actually been very helpful. The secretariat will want to be in touch on a couple of matters to follow up with fire towers and draft submissions.

Ms SHING — Anything to add, Ms Rebeiro?

Ms REBEIRO — I think my contribution has been very good!

Ms SHING — There you are. You are on the Hansard transcript!

The CHAIR — I am thankful for the evidence you have provided. I also thank Hansard in particular too at this hour. The hearing is closed.

Committee adjourned.