

Make better decisions about bushfire risk in our changing climate

Chair: Malcolm Hackett OAM

Presenter: Michael Vermeulen



Okay, Bushfire Resilience. I'm going to start off repeating Malcolm's words, just with an acknowledgement to the country, acknowledging traditional owners of the land on which we are meeting. I pay my respects to their elders past and present and the Aboriginal elders of other communities who may be here today. Okay, so some things we're going to cover tonight: understanding our risks, okay. What are the options available to us? What can we expect from a fire? Gathering information to assist in making decisions: extremely important. And around planning and decision making.

Okay. Understanding our risks. If you live in an area that might be impacted by a bushfire, you're probably hearing a lot you need to have a plan, or you should be writing a plan at this point of the year. And if you've got a plan, you should be prepared to be using it, okay? You're probably thinking to yourself, "I know I have a risk, I just don't know where to start." And tonight, we're just going to cover some of the basics to get you started, and certainly head you into the right direction where you can take some follow on, okay?

When it comes to understanding risks, I tend to break up risks into two different areas. We'll have environmental risks and then we have personal risks. And I'll start off just talking about environmental risks. So, really understanding the environmental risk is having a bit of an idea about how bushfire is going to act within where you live, Okay? And you can start to think about things like how we have different types of fuel loads: we have light fuel loads such as your grasslands and your paddocks, and we have the heavy fuel loads which are the forests and the bushlands and things like that. The light fuel loads, because of that grassland, has access to more oxygen and such, you'll find that it burns faster, and as a result the actual fire-front moves much quicker, sometimes 25km/hr plus, even with pulses of wind behind it, it can sometimes reach up to 60km/hr. And it does generate some heat and it does generate a lot of smoke, which makes driving in those sorts of circumstances extremely dangerous.

If you get across to your heavier fuel loads and your bushlands and such, much thicker tree trunks, lots of scrub, generating a lot more heat as a result, and you'll find that it is that creation of embers that occurs when bushland's burning. Doesn't quite move as fast, but certainly you're still getting a massive and great amount of heat coming out of those bushlands.

If you look down here, we talk about wind. Wind has a huge influence on bushfires and the direction it goes, okay? The wind's pushing the fire in a certain direction. And just in this circumstance down there that you can see in the slide, one thing we need to consider as we look at that, we can see on the left hand side, generally our Northern wind is coming down pushing the fire to the South, sometimes later on in the afternoon you can actually get a swing of the wind direction moving from a north to a South Westerly direction, which means if you are living in a little area here, thinking that you're safe because the fire-front has passed you, actually what's happening is the fire front can start moving in your direction without you knowing it. So, understanding wind direction and how it can change is something you really need to think about.

The other thing is wind can be impacted by the topography and the terrain. It has a habit of making its way through gullies and gorges and such, even against directions of the headwind. Wind, as

you're aware, when it gets compressed it gets stronger and it gets harder. So you'll find it push its way through these little gullies and such, okay? The thing to understand is don't always anticipate a fire is going to come from a certain direction: "It's always going to come from the north because those north and northwesterly winds are always the hardest and the strongest, okay?" It actually could come from any direction, and you need to be prepared for that.

Temperature and weather, okay. In most circumstances what happens is generally overnight, you'll find that you have a high humidity or moisture level, and then you've got a low temperature, and then as the day starts to progress, what you'll find is that that humidity is dropping, that temperature's starting to increase, they cross over and then you get to a point in the day where the humidity is at its lowest, and the temperatures at its highest. And you've got this risk window of the hottest and the driest part of the day, generally around two to four o'clock in the afternoon, where the potential of fire starting is very high. The thing to consider, though, is that when we start getting into summer and we start getting runs of these long hot days, you'll find that during the day it's high temperatures, but overnight it's only dipping, maybe down to your high 20s and such. So, the humidity is still staying low and the temperature is still staying somewhat high, and that will go into the evening, into the AMs, and well into the morning over the next day.

So, what happens is you're having this perception: the risk window is between two and four, and actually that risk window is starting to push into 24 hours a day. So, the idea is that preparation of understanding that, "Don't always think as the afternoon is going to be the time when a fire starts." It could happen anytime.

And the last thing just to think about is around the topography. It has huge impacts on fire speed. We know that fire traveling uphill travels much faster than it does going downhill. So, if you're living on top of hills and such, a fire down at the bottom is going to come to you a lot quicker than what you expect.

So, when you're putting all this together, the idea is just to crush all those perceptions of the "It's always going to happen during the day" "It's always going to happen in the afternoon" "The fire's always going to come from the north" and "If it goes past me, I'm safe because I haven't considered the wind directions". So, the idea is, when you're coming towards the summer your capacity to appreciate the risk of that it's happening throughout the summer, not at certain points of the day. Not on the Mondays or the Saturdays or things like that, but seven days a week.

Okay, now that we have a basic understanding of what influences bushfires, the way it works when we're coming to think about our plans and what's the environmental risk to us is we actually sit there and we open up our front doors and we step outside, and we have a look at our own property.

And we have a look and see where the house is positioned, what's surrounding the house, what vegetation is here, how large are the bush fires, and we think about, "If the fire was coming through here, how's it going to act?" There's your immediate risk, then you start to push that out. As you're driving around your area, you might be thinking about "What will happen here?" "What will happen there?" I might be in a position where a tree may fall, and don't always consider the trees are going to fall as a result of a fire, certainly boughs can drop and trees can drop from the high winds that may be coming preceding that fire. Other things you might want to think about is what the terrain's like. Is it hilly? Do you have surrounded by grasslands? If a fire's coming through a grassland, it's going to come through a lot faster, then it's going to hit some very high forested bush areas, and then you'll find that it will slow down, but suddenly you'll see an increase in heat, you'll see a massive increase in embers, and things like that.

So this is those things, and as you're starting to go out, you think about your general area, 5-10km and think about "My risk actually pushes out." Okay? Having an understanding and they were saying that on Black Saturday, embers were traveling up to 30km. So, you start to think, "Well, if I consider say 15, 20, 25km, or what's around me, if any instance was occurring in that radius of where I live, is that going to be something that I'm going to seriously take notice of? Am I going to start thinking, "Okay, a fire that close to me at 20-25km could actually start impacting me by an ember attack where I live"? So, it's going to make you stand up and take notice, fires happening in that radius and greater coming towards you.

Okay, local risks. As you can see by some of the slides, we talked about the fact that we might have surrounded by roads, that have trees that could potentially fall and block our exit paths. Do we have a number of exit parts? Or are we limited to one way in, one way out? Do we think about the timing of when we choose to leave, and what it would be like if every single person in the area was leaving at the same time, and suddenly as we leave our driveways and get into the main roads, we come across gridlock? With everyone trying to leave at the same time. Is there situations like we have extra high voltage power lines which could pose a risk of a fire starting as a result of those? So, you're broadening what you see as your area, and you're starting to take all this information now, what you know, and bring it together and think, "Okay, I am grasping what the risk is to me and to the area where I live."

Now the other plan, that's your environmental risks. Now we think about the personal risks. And that's about how prepared are you mentally and physically? So, when you're thinking about your plan, it's about what is your capacity to be able to do the things you want to do? And there may be some other factors that are going to be built into that? Do you have family? What are the ages of the children? Are there elderly parents? And things like that. Do you have pets? What are the things that are important to you that you might want to consider? And all of these little things start coming together, and you refactor those into your plan?

So, the idea is you're distinguishing the things that are important to you, the things you're capable of, the things you're mentally able to do, and that starts to become your plan. And the other thing to consider is you might be one of those people who don't work close to your area. So, your Monday to Friday might be a completely different circumstance to your Saturdays and Sundays. So, suddenly you've got yourself two different situations, and that's this Monday to Friday might need a slightly altered plan to the things happening on Saturday to Sunday.

The other things for those of you who actually do have plans, generally in about the 12 months between the last fire season finishing and the new fire season starting in the following year, your life circumstances may have changed. Maybe a small amount, maybe a large amount. And what you need to do is bring out those plans prior to the fire season, start to go through them, think about things like, "Am I physically able to do things I used to do?" "Have my life circumstances changed?" More pets, less pets, older children, younger children, all those sorts of things and review that plan on a yearly basis.

Thing about your personal risks is your circumstances, which makes your plan completely individual to you and your situation. So, that doesn't mean that your neighbour's is going to be the same as yours or people who live in a similar risk area. It's your plan, and it's about what affects you and how you are going to respond to it.

Now we get to the situation, what can I do now? What are the options available to me? And really, there's probably three we really need to consider. We always talk about leaving early, and the situation about leaving early is the timing when we choose to leave. Understanding, as Kevin was saying that mass evacuations of areas at the same time can be quite challenging so the timing of

when you choose to leave may be something like the night before or very early in the morning. You might alter what time you leave.

Informing people that you are going, so the people, your loved ones, friends, family, are aware that you have actually vacated the area, and if something was to happen there and they weren't aware of the fact you had left, they may be getting onto emergency services saying "Mim and dad are still there, I don't know why they're not answering their phone, etc etc." So, making sure that informing people that you are leaving to a much more safer location.

Certainly, bringing things that you need. I'm not going to go into exact details about every single thing you need to take, but I can certainly direct you into where to find that sort of thing. But the idea is that when you are leaving, you're thinking about the possibility that, should an incident occur in your area, there may be very little chance to return straight away. And you may be away from home for several days. So, when you're thinking of that destination that you're heading to, and that's important as well, is that a destination you can actually stay a few days with the family, and the six dogs, and the eight cats, and things like that? Really think about the situation where you're ending up. The other thing is, think about different routes to get to your destinations as well. Just in case one's either blocked by traffic or one you're unable to get out, you have different ways to get there.

Staying and defending. Staying and defending is certainly an option that's available to you. There's a whole workshop that CFA offers in regards to those of you who wish to be trained on staying and defending. Very basically, I'll just give you a few heading points of what I think. At least two able-bodied adults are needed to stay and defend the property. You need to have a sufficient static water supply. So, enough for it to be able to manage the fire fighting equipment you have on board, and the sprinkler systems and the hoses and things like that.

Appropriate equipment. So, you are sufficiently set up and your property has defensible space. It's not a situation where, as you look at the front door, you've got bushes and trees and tanbark gardens and trees kissing the gutters and things like that. You've got to ask yourself and it's a wooden house is this some sort of place that I can actually safely defend? The other thing to think about is what do you do when it becomes so overwhelming that it's too much for you to take on board as well? Is it too late to flee? What can I do in those situations?

Which leads to that third option, and it's an option that both parties, whether you're leaving early group or staying and defending group, is that situation where something has happened, that a fire has started, so close to where you live that you haven't got time to either A: enact the plan, be it stay and defend or leave early, and you've got to choose a shelter in place option. So, you need to really think about what are going to be the options when both of those options aren't available to me? And the thing about shelter-in-place is the consideration of what it's going to be like to get to that particular shelter-in-place, understanding that when it's at the height of the bushfire, you'll have embers flying around, you'll have smoke which could be extremely disorientating, and the timing of when you go there trying to get there safely. So, get from your house to wherever you choose to be at. So, it may be your shelter-in-place is actually staying inside of your particular property.

Okay, what to expect from fires. So, I'm actually going to start off by just demonstrating. We've got a nice little animation which shows you a response to an ember attack. I do warn you that some people might find this a little bit confronting, but just to remember it is an animation. I'm just gonna stop sharing my screen for a moment, okay here we go.

Female Narrator

During a bushfire, embers will reach your home long before the flames do. Ember attacks are the most common way that houses catch fire. Embers are burning leaves, twigs, and pieces of bark. They help the bushfire spread by starting spot fires ahead of the main fire-front. Short distance ember attacks happen when leaves and small pieces of bark are blown from burning trees. The intense shower of sparks that forms fills the air with hot, burning embers which will land on nearby vegetation and properties. The hot embers can easily land and get into your clothes, and burn your skin, eyes and airways. Small fires will start all around you and quickly become uncontrollable. The resulting chaos creates confusion as the fire seems to come from many directions, meaning it will be difficult to make good decisions about your safety. The experience will be physically exhausting and emotionally traumatic.

Long distance ember attack is caused by large bushfires that generate intense heat. As the hot air rises, it forms a column of smoke that sucks in air like a vacuum, increasing the intensity of the fire. The updraft in the column lifts embers, like large pieces of burning ribbon bark, hundreds of metres into the air where strong winds can carry them many kilometers beyond the fire-front. On Black Saturday, embers travelled more than 30km ahead of the main fire. When these embers land, they often start fires where leaves naturally accumulate, like in gutters, doorways and garden beds. So, while you might think you're safe when a bushfire is far away, embers can fall from the sky and land around your home long before you even know there's a fire. But remember, your home isn't the only thing under threat during an ember attack. By the time you realize the danger, it might be too late as escape routes become jammed. Embers can also start fires on roads and block them completely, making late evacuation dangerous or impossible. That's why leaving early before a fire starts is always your safest option.

Thank you. So, just getting back, you actually saw the couple there and the wife was arguing at the front of the house and the husband was arguing about the front of house, and what it seems, it's really quite clearly indicated, is the two of them never actually sat down together and actually planned it. And when you're thinking about your fire plans, that impacts on everyone in the household. So, it should be a shared discussion. It should be a discussion that's done as a family, or whoever else lives in the household, so that everyone is aware of what's going on in those situations. And if you're in a circumstance where sometimes you're leaving teenage children at home and things like that, you've got to make sure they're really aware of what they're going to do under those sorts of circumstances. Should something happen that you can't get back to the house, such as, and they are left alone.

So, remember, fire plans is not something that you live in your head, or you keep to yourself. It's actually a plan that, and Kevin certainly talked about it before, it's a family discussion and family decisions are made. And everyone has to understand that they've got a role to play and such.

Again, biggest cause of property loss, Kevin was saying 80% of houses burn from ember attack. The other 20% would probably be a result of radiant heat and direct flame contact, where fire actually has started and it will make the house burn by itself.

Now we're getting to the next stage, and this is again another risk that we have to seriously consider, and that is the risk to our own physical bodies as a result of radiant heat the biggest killer in the fires. So, I'm just going going to see another little short animation just to give you an idea of radiant heat. The thing to note about this animation is again, it may be quite confronting for people. It can be quite graphic in certain points. But remember, it is an animation.

Female Narrator

Victoria is one of the most bushfire prone parts of the world. Every summer, bushfires threaten properties and lives. But did you know it's not the flames that kill most bushfire victims? No, it's the radiant heat. Most victims die from the effects of radiant heat long before they're reached by the flames.

Radiant heat is what you feel when you sit next to a campfire. If a campfire heats up to two kilowatts per square meter, you'll feel that it's too hot and will want to move back from the fire. If you don't, this amount of radiant heat is enough to cause burns and blisters in as little as 40 seconds. At 12 kilowatts, it can cause some materials like dry timber to ignite. A bush fire can reach 100 kilowatts, and the effects can be truly catastrophic. For humans, radiant heat can cause burns from 100m away, and cause a dangerous increase in body temperature. Radiant heat can cause the rapid onset of heat stroke. Heat stroke damages your brain, meaning you won't be able to concentrate to make good decisions as the fire arrives. Other impacts include severe damage of internal organs and death.

There are some things you can do if you're caught in a fire. Cover your skin with long-sleeved natural fiber clothing, like wool. It's also useful to know that radiant heat only travels in straight lines and can't bend around corners. So, sheltering behind or inside solid structures may help protect you. But be aware, radiant heat will travel straight through glass. The best defense against radiant heat is a simple one: if you're not anywhere near a bushfire, its radiant heat can't hurt you. Leaving early is always your safest option.

So, I think one of the things I take from certainly watching that particular clip is the fact that the radiant heat has got such an impact. It's even greater than just the blistering of the skin. It's the damage done to our internal bodies as well, and that's not even considering damage to eyes from smoke, and damage to our lungs from breathing it in. It's just the general cause of being exposed to such high amounts of radiant heat. What is also good to think about in those sorts of circumstances is the identification of heat related illnesses in other people who are you or with. Being able to see and distinguish heat related illnesses, and to take preventative measures if you see people experiencing that can be really important if you're put in those sorts of circumstances.

So, again, we can go through. It's hats to cover our heads. Goggles to protect our eyes and prevent smoke from getting in, visibility being extremely important. Mask usually have P2 to prevent smoke and the other carcinogens floating in the smoke to getting in our lungs. Long-sleeve natural fibers, again because we don't want to expose our skin. Good leather gloves, they actually have leather on both sides. Long, natural fibre trousers and heavy boots. You think runners might be, but that foam rubber of the sole, you'll find standing on hot embers and things like that probably just end up going straight through sneakers, and as such heavy boots.

And again, when we think about what are our options when it comes to shelter-in-place, certainly sheltering behind solid objects is going to offer some protection from that radiant heat.

So, now we start thinking about what's it going to be for us. We're going to be putting ourselves into a traumatic situation, and are we physically and mentally prepared for that? The fact that there is positions where exit routes may be blocked, and we need to factor that into our plans. We understand that ember attack causes bushfires to leap frog and start spot fires in front of it, which can end up joining up and making larger fires, and we need to protect ourselves against radiant heat. Obviously, that first level is that physical protection, and then we'd go into second levels of protection by seeking shelter in houses and things like that. A lot of things going on, but it's all

these things need to be considered when starting to think about, “What am I going to do and how am I going to plan for that?”

Okay, so, it's all very good. We've got our plans. The thing that's really important with plans is having a set of criteria or triggers, as Kevin referred to, that has to be ticked or met for that plan to be taken into effect. And the only way we're going to know if that criteria is met, or our triggers are actually being reached, is from the information we get. And there are plenty of places out there to get information. I feel that it's always good to have a series of different sources of information, and not just rely on one single source. So, you're not always hoping that you're going to get the pop-up message on the Vic Emergency app and that's the only thing you listen and look out for and such.

So how many different types of information sources are there? Okay, we'll start off with Fire Danger Ratings. So, Fire Danger Ratings very simply put, it just basically tells you how dangerous a fire would be if one was to start. And as we get into the different sections of the wagon wheel, you can see there we've got “Severe” and “Code Red” and “Extreme”. Now, Code Red would be considered the worst conditions for bush and grass fires. Not very many homes that are constructed or designed to withstand fires in those conditions. And in a situation where it's Code Red, the best place would be to out of a high risk bushfire area. When it gets to Extreme, you know it's going to be hot, it's going to be dry, it's going to be windy, if the fire starts and it can be uncontrollable, it will be unpredictable, fast moving, you'll get spot fire starting that can move and travel in different directions, and there are houses there that are suited and constructed to withstand a bushfire providing they're well prepared and you actively defend it. So, they may provide some safety. But, again, it would get back to that “Are you physically prepared for that firefight and are you mentally prepared for that fire fight?”

We get to Severe. Still going to be hot, still going to be dry. May be fairly high winds. If fire does start, it could potentially be uncontrollable. But, if you have a well prepared home, it could be actively defended and could provide safety. So again, making sure that you're mentally and physically prepared for that situation.

Other places where we can get information. We can talk to our community members. There's a whole different realm, and there's a lot of Facebook community pages or WhatsApp community pages. In a situation like that where you see people making comments in community pages, I strongly recommend that if someone makes a comment regarding any type of bushfire or risk that's occurring in the area, you actually go to a source of truth and validate that before you act on it. Different places where we can get source of information. Local news. Certainly ABC 774 will be relaying information to us. We can always validate our suspicions by ringing the VicEmergency hotline. We can jump on website, you can go to the CFA website, which will lead you to all the incidents in the area, which is on the Emergency Management Victoria website. We can follow CFA on twitter and Facebook and they will both be providing updates via social media. Again, we talked about the VicEmergency App, having that on your phone and also having a watch zone which is specifically looking for fire incidences, and think about what your watch zone is and maybe shrinking it down or increasing it in size to gather the area you want to cover.

We have the national relay service, which is for people who are deaf or hard of hearing, or who have speeches impediment, so they can make and receive phone calls, access to interpreter services, should you have neighbors or people who speak a language other than English, and also if you go into the CFA website you'll find that there's a link to the deaf emergency information website, which is a resource specifically built for people who are therefore deaf/blind, and it's got emergency warnings and emergency information targeting people of those capabilities.

And lastly you can just see you've got emergency alerts. Now, emergency alerts can either be run through to a landline on your phone, or they can be sent as an SMS message to your handset or your mobile phone. Both of those are based on the billing address of your landline and the billing address of your mobile phone and you may find that your landline may ring, you'll hear a siren and you'll hear an "Emergency, Emergency" with instructions to follow and an SMS may come through on your mobile phone. Two ways, as I said, targeted to your billing address or based on the last location it picked up a signal on a cell. And in a cell or around a tower and such they could target mobile phones within it, which is quite helpful if you're traveling in an area where you don't live out the countryside.

But, like most things, don't be relying specifically on waiting for that emergency message to come through on your phone or your landline to act. Again, we talking about having different sources of information and not relying on the one single point

Warnings can come through the CFA Emergency website. They come through as messages on both Twitter and Facebook posts, Advice being that there's an incident occurring in the area or have occurred in the area and they'll give you some information about what to do. You've got Watch and Act there which tells you that there's an emergency developing nearby, and you may need to take some action to protect yourself and others. And then you get to the Emergency Warnings which means that you are potentially in imminent danger and you need to take action now and you will be impacted.

The thing to note is it just doesn't go through the steps of, "I'm going to receive an advice message first. I'm going to receive Watch and Act next. And I'm going to receive an Emergency warning last." Actually, that emergency warning could be the very first warning you get. It may not go through the steps. It may jump from a device straight to emergency warning depending on the nature of the fire.

Okay, then we have the All Clear, which means all emergency activity in the area has subsided and is no longer a danger to you. You have community information, that's another type of information source where you may get some information regarding communities that have been affected by a fire or an emergency. So, some sort of notification. Well, there isn't a threat to the community, just some information. And then there's obviously an evacuation message, which is, "There's an evacuation recommended and here are some procedures in place to evacuate."

The last thing to think about is using the senses that are built into us that don't require batteries and will always be with us. And that's just our sense of smell, our sense of sight, and our sense of hearing. If you were to step outside on days which have a potential for a bushfire, I mean, just something as simple as looking at different types of unusual cloud formation might be setting up radars. Normally, we call these types of clouds you can see in the slide Pyro Cumulus. Clouds that actually been created as a result of a fire.

The other thing is smelling. You'd be surprised how far away smoke has to come from for you to actually be able to pick it up in your nose. I think if you're in a situation where you've stepped outside and you see an unusual looking cloud formation that has different colors, or you're actually smelling smoke within your nose and such, go back, get onto the phone, ring the VicEmergency hotline, check your VicEmergency app, maybe get on the website, maybe ring a neighbor and say, "Hey, can you see what I'm seeing?" That sort of thing, and validate it. The idea is if you have your suspicions that there may be something working in the area, something going wrong, validate that information. Validate what's going on.

Planning and decision making. I've reiterated before earlier on about making a plan. It's really important that when you are thinking about the plans you are going to create for yourself, that your individual plans after you've considered all the things that are important to you and all the risks you might be exposed to, it's nice to document it. Because it's good to know that when it gets to a stage where you need to act, sometimes you're going to think, "Oh yeah, I'm going to do this" or "Do I do that?" or "What do I do first?" Those sorts of things. At least when you have it written down, apart from one thing it actually brings your level down, because you will be getting quite concerned about what's going on, it's good grounding and you can just follow the steps one by one. It's also something that everyone has access to that's in the family and they all know what's going on and what point they're up to.

Stay informed. Again, of course, we always highly recommend the VicEmergency app. Jump on that get it onto your phone, and program it to again identify fire incidents and think about how big your watch zone is. You can even set up multiple watch zones should you like, if you want to watch certain areas. If you find you're getting inundated with too many warnings, think about what exactly is the size of it and maybe shrink it down, or maybe you've got more than one emergency you're receiving notifications on okay.

The other thing is CFA certainly have other options around training, and they can put you onto a bushfire planning workshop and give you some more information that you can take back to your individual home, and plan around that and what you can do in those circumstances.

Okay, take action as I say, start thinking about making a plan now. Have it ready for the summer, review it if you've already got one, and again keep that as a family discussion. If you're struggling about where to start, how do I start a plan up? If you direct yourself down to the CFA website, you'll find there's a listing for publications and you can choose things like a guide to survival, which has got some good reading, property preparation, if there's things around your home that you want to do that's going to help reduce your risk. And the other documents there have templates at the back which actually start you on the right track to making a plan. So, you're not starting from scratch not knowing where to start. It actually has the steps which you follow, fields you can fill in and make it really easy for you.

Alternatively, if you feel like you still need some more help, head your way down to your local brigade, have a discussion with the guys down there. I can tell you now they'll be more than happy to sit there and go through it and help you with anything you're trying to do with regards to creating a bushfire plan.

Further reading, if you're interested in getting some more information you can jump on the VicEmergency website. And, you see up there we've got the Plan and Prepare. Go through that, plenty of information there to get you started as well. Also, similar information is obtainable on the CFA website. If you go to the tab up the top there, Plan and Prepare as well. Again, you'll find situations about how to leave early, stay and defend, those sorts of things. Plenty of literature to read.

And, if you're interested in understanding about seasonal outlooks, you can jump on the Bureau of Meteorology website. A little bit further down the page, you'll find Outlook's stamp on that. They have a nice little YouTube clip which they release every month, which talks about the forthcoming next four weeks, what the bushfire risk is going to be, temperatures, moisture, rainfall, all those sorts of things. For those of you who are interested in knowing what sort of things are coming their way.