AFAC18 panel: The advance of information and public warnings

Transcript

[DEB MARTINDALE] While it's tempting for me to offer a lengthy preamble on something that I'm very passionate about personally, I think it's more important that I introduce the panel members and that we get rolling and use our time really well.

With us today on the stage, we have

- Amanda Leck from AFAC
- Shoni Maguire from the Bureau of Meteorology
- Anthony Clark from New South Wales Rural Fire Service
- Fiona Dunstan from the Country Fire Service and from SAFECOM
- and we have Sascha Rundle from the ABC's emergency broadcasting team
- and Hannah Tagore from DFES in Western Australia.

I've worked with each of these wonderful people, and they all have a treasure trove of knowledge and information to share.

In the format for today, what we'll do is each of them will come to the lectern here and talk a little bit about one area or one aspect of public information and warnings. And then we'll have an opportunity to talk as a group, and for you to ask questions as well.

So, without further ado, I might kick off by inviting Amanda Leck, thanks.

0:01:20 [AMANDA LECK] Thank you Deb, and good afternoon. So, the evolution of public information and warnings. Where have we come from and where are we headed?

In 2009, following the Black Saturday bushfires in Victoria, there was a national agreement for bushfire…advice and warnings frameworks – so that's the three-level framework, Advice, Watch and Act, an emergency warning that you would be familiar with. And after a period of time of implementing that across all the states and territories, it was determined that it was important that we actually review that practice, to understand how it was working nationally, to understand how communities perceive the warnings. And so a national review of warnings and information was undertaken – and I'd like to acknowledge Deb, who actually was the project lead on that with Emergency Management Victoria.

There were nine key recommendations, and the first of those recommendations was to, as a priority, establish a dedicated, multi-hazard, national working group for public information and warnings. But at that time, there was really no home for that group, and so with the agreement of and endorsement of ANZEMC, the national public information and warnings working group – which we affectionately know as the AFAC Warnings Group – was established in 2015 as part of the AFAC

Collaboration Model: to implement the recommendations from the national review; to share good practice; and to continue to drive the evolution of warnings.

I'd like to acknowledge my colleagues and fellow panellists, who are members of this national group, and particularly the chair of the group, Anthony Clark, from New South Wales Rural Fire Service. They've all worked incredibly hard, over the past three years, to really drive best – I'm going to say best practice…practice – in relation to public information and warnings.

So as I said, the focus of the national review has been – or the focus of the national warnings group – has actually been the implementation of those recommendations. It drives our agendas, it drives our work plan. We provide annual reports to the AFAC Council, the Commissioners and Chief Officers Strategic Committee, and the Bureau of Meteorology Hazard Services Forum, so we report against how we're tracking with regard to the implementation of those recommendations.

AFAC's role within this is to facilitate that national collaboration because many of the recommendations actually needed to be implemented nationally. Some of them sit with the agencies and jurisdictions, but there were three key ones that actually sit nationally. So we facilitate national collaboration, it's effectively what AFAC does. It allows our members to share their practice, to share research, and to improve the provision of public information and warnings.

Recommendation 2 of the review centred on the need to improve our knowledge in this particular part of the emergency management business. And the Australian Institute for Disaster Resilience – or AIDR, which is an operating division of AFAC, and a partnership between AFAC, the Bushfire and Natural Hazards CRC, and the Australian Red Cross, and is actually funded by the Commonwealth through Emergency Management Australia – maintains and develops a national Handbook Collection. Over the past twelve months, a significant body of work has been undertaken to develop the *Public Information and Warnings Handbook*, which I am very proud to hold up in my hand and is on your screen, and some companion documents. The work has been undertaken by the AFAC Warnings Group members together with representatives of police and health, who made up the handbook working group. And this handbook was actually launched yesterday by Stuart Ellis at the Australian Disaster Resilience Conference.

The *Public Information and Warnings Handbook* provides nationally agreed principles of warnings policy and practice; explores research on effective warnings; and sets out the discipline of developing and issuing warnings.

There are also two companion documents. We're rewritten *Choosing your words*, with the assistance of researchers from the Bushfire and Natural Hazards CRC, who embedded their research in that particular document, and a code of practice for warnings republishers.

You can download the handbook from the AIDR Knowledge Hub for free, or you can actually buy a copy of it if you'd like to.

A piece of work we did as part of the handbook work was actually to develop some principles for warnings. Warnings principles were first established in 2008, so, as you can understand, it had been some time since those had been reviewed, some ten years. So, we reviewed those principles, the new principles you can see, and I believe you have a handout with you, and those principles were

endorsed by CCOSC at their meeting in early May for inclusion in the handbook. The principles guide the development and use of warnings in Australia.

The other key thing that we've now agreed is a Total Warning System for Australia. The Total Warning System defines the essential elements of delivering warnings effectively, with a lifecycle of action before, during and after emergency.

So, I mean, they're two pretty fundamental pieces of doctrine we have, and I would like to also acknowledge Deb as the author of the handbook and working with everyone nationally to be able to deliver that.

And finally, Recommendation 3 of the review called for greater national consistency for warnings across jurisdictions and hazards. CCOSC has now committed to a consistent warnings framework across all states and hazards based on a three-level warning system, and we're currently undertaking some social science research across a range of hazards across Australia to understand how the community understands and receives warnings – what makes sense to them – so that we can use that research to develop that warnings framework further. Thank you.

0:07:25 [SHONI MAGUIRE] All right, good afternoon everyone. *(To Amanda)* Thanks for setting the scene really well. So, at the weather bureau we've been providing information to the Australian community for over a hundred years. A hundred years ago, you most likely would have received that information through the newspapers – through a newspaper, much like what's being shown up on the top right there.

Perhaps 30, 30-odd years ago, we would have used the avenues of our emergency partners in ABC to get that message out on radio and we would have sent either a Telex message across to them to read out, or indeed done interviews ourselves, as you can see with…Rooney pictured up in the bottom right.

Now, more recently, we've had television information, and most of that information that we passed on would have been in text format. Today you'll see that the basis of our warnings hasn't really changed that much. Opportunistically, we've added maps, in some areas we've added…the functionality still needs work to fully be enabled, and we're also supplementing our official warnings with lots of other products that are on other channels, such as Tweets, videos and the like.

So, as you can see, there's been an explosion in channels that we've had to adapt to, and into the future we'll have to think about how we do so, to keep up with the changing needs of our communities.

So the Bureau has responsibility to provide community warnings for gale storms and other weather conditions likely to endanger life and property, including weather conditions likely to give rise to flood or bushfires. And that's outlined in the *Meteorology Act* of 1955. It's also codified through an intergovernmental agreement signed by the Commonwealth and the states and territories.

To fulfil our obligations in disseminating our warnings, we do so very much in partnership with all of your agencies, including our emergency broadcast partner, the ABC.

So at present, we've undertaken a stocktake on where our warnings are at. So we've had a look at our 11 services, we've looked at best practice from international – world meteorological – partners in terms of multi-hazard, early warning systems, and a checklist has been developed, and also through the national doctrine, which Amanda just outlined, in terms of the principles and the Total Warning System.

So, utilising that information, we've had a good, hard look at all of our 11 services and the related products that sit underneath those, so there's about 57 products. We've also had a look at the communications channels that we use, as they're expanding.

So, that analysis is currently in the middle of being completed but we are very keen to make sure that once we have an idea of where our warnings sit against, what we think a good – best-evidenced practice, then we will, we'll be able to see where the gaps are.

We're very keen to make sure that our suite of warnings services are consistent and work very well together in a multi-hazard situation. So, when we have heat, we often have fire. So we need to really make sure that those services work well together. When we have tropical cyclone, we can have the wind, we can have the storm surge, we can have the heavy rainfall, conducive to flash flooding, we can have riverine flooding, so we've gotta make sure that our different services work well together in that sort of context.

The information that we've got from the World Meteorological Association, the trends that we've seen across the world, have shown that being able to provide information on what the weather will be is not enough for the community. We really have to be able to communicate that and translate that into what it'll actually do, and how that relates to what people value and what's at risk to them. So to do that, we really do need to move more towards impact-based forecasting and warnings.

And that's something we can't do alone. We'll have to do that in collaboration, and help enable our emergency service partners around the country, to better inform about consequences through their warning services and public information.

But we'll be working very closely with our Commonwealth partners in Geoscience Australia and Home Affairs, and some of you may have seen some of the talks over the last few days about some of the work that is happening in that space.

Alright, now, I'll hand across to Anthony Clark.

0:12:56 [ANTHONY CLARK] Thanks Shoni. Certainly an area of work that I'm really passionate about, and I think it's really important to acknowledge that we've actually come a long way over recent years. And one of the ways that we've done that is trying to learn from experience, and I think most agencies have engaged quite heavily in recent years in a research agenda, especially after major events, to learn more about how people actually receive information from emergency services and warnings providers, and importantly, if they actually do anything with the information they receive. Not surprisingly, quite often, people aren't doing much.

What we've found in some of our research – this here, one of the fire incidents in New South Wales a couple of years back, the Sir Ivan fire, up near Coonabarabran, it's been spoken about a fair bit during the conference already, 55,000 hectares of land destroyed, a big impact on rural areas – we

got feedback from the community after the fire, that there was too much of a focus on saving houses not farming country. Some of the community felt let down by the emergency services.

Another fire was the Carwoola fire on the outskirts of Canberra, and again, this was a fire that took off quite quickly. That first fire, Sir Ivan, was burning under Catastrophic fire conditions – this fire was not. And this actually gave us a really interesting insight into the way that people receive information from us, and what they actually do as a result.

Some of the key insights:

- People found that information and warnings were easy to understand, that they were up-to-date and useful.

And this came from the community interviews that the University of Wollongong through the CRC conducted on our behalf. Unfortunately, many people didn't actually do anything as a result of receiving these messages. This is one of the wicked problems we're facing.

- There's good recognition of the Catastrophic fire danger warnings.

In the lead-up to that Sir Ivan fire, we had a huge swathe of New South Wales affected by Catastrophic fire danger ratings. We sent out more than a million telephone warnings that were received quite well by the community. But again, people didn't do much as a result. And what we actually found through the research, through the CRC, was that people started underestimating those lower levels, such as in the situation in Carwoola, where even when it was Severe or Extreme, people thought, well at least it's not Catastrophic, so I don't have to do anything.

And the final one was:

- When people receive warnings, they seek confirmation.

For many of us, this is no great surprise, but the really surprising thing that came through from this research was this fact – this is kind of the Darwin concept: We tell people not to go out to the fire so what do they do, they go jump in the car and drive out to the fire to actually seek confirmation that there is a fire there.

What we're now using this research for is potentially to put information points in these locations, where people actually go out to seek confirmation. Put a brigade there, put a truck there, to actually get information when people are in that hot state and ready to actually receive the information, and they're probably going to be more susceptive to doing what we're asking them to do.

The other one was more recently, this one was in March of this year, in the Tathra fire on the south coast of New South Wales, down in the Bega Valley area. Certainly an event that got a lot of coverage, and a lot of media attention in the days and weeks afterwards. We look at this fire and think – look, this was a fairly extraordinary event happening at that time of year and impacting on the community in that way. Fortunately, not a single life was lost during that fire event, something that is quite often overlooked.

But some of the insights – and these are just initial insights:

- There was an over-reliance both from agencies and the community on technology.

During this fire, power went down. Mobile phone networks went down. There was already pretty dodgy mobile reception in Tathra anyway. And there was feedback from the community that 'we didn't receive a warning,' despite the agencies making their best effort in getting the information out to the community. Technology fails. When you need it most.

- There's potentially a need to recalibrate what success looks like.

And again, we were criticised quite publicly about the handling of the fire but also the delivery of information and warnings and the timeliness of it. I guess also we look at it and go, 'was it a success? if no-one lost their life?' There were 65 homes destroyed in that fire, but potentially, this is a success.

And finally:

- Longer fire seasons may require a community recalibration as well.

This is a really interesting one because as the fire seasons seem to get longer and longer, and the periods in between get shorter and shorter, potentially we actually need to re-educate the community and deliver more information to them, about what you can actually expect at any time of the year. Because the feedback from the community was, 'an event like this wasn't supposed to happen at that time of year,' and the community simply wasn't ready to take action at that point.

So there's some of the insights from some of the research that we've done over the last couple of years. And I think there's plenty of opportunities to further improve, while we've come a long way, in the last decade or so, but there's certainly a lot more room for improvement as well.

I'll hand over to Fiona now.

0:18:28 [FIONA DUNSTAN] Thanks Anthony, and thankyou everyone for giving us the opportunity to discuss this really important topic today.

So I'm going to briefly touch on our journey towards professionalisation. And what we've seen over, really over a relatively short period of time as Amanda's highlighted, we've seen an adoption and embedding of public information and warnings function and capability within our organisations. Think back in the mid-1980s, it was when AIIMS itself was actually developed, and then in 2004 it was when AFAC and the member agencies actually then agreed to adopt and embed AIIMS version three within our agencies.

For those of you who were working within the industry around that time, public information was really a subset of planning and you would have an information officer and that individual may be responsible for really predominantly a media release capability around warnings and also, maybe running some community meetings. I say that with, sort of a bit of an offhanded comment, but it really is through that process that we saw a greater sophistication and demand and expectation from the community about what we needed to provide them as combat and control agencies in this particular space.

It wasn't really until around 2013, in response to the Black Saturday fires, that we saw the real elevation of public information out of the planning cell, into a function and unit of its own. It's through that process that we then started to identify the specific roles and capabilities that were

AFAC | ABN 52 060 049 327
Australian Institute for Disaster Resilience | ABN 52 060 049 327
Level 1, 340 Albert Street East Melbourne VIC 3002

6

afac.com.au   @AFACnews   @AFACnews   aidr.org.au   @AIDRnews   @AIDRnews

required within a public information unit, such as acknowledging community liaison, media and importantly the warnings officer as a skillset that was required to actually support that function going forward.

It's also around that time that we acknowledged how important public information was. It's coming off the back of a number of inquiries including the Victorian Royal Commission, and then, really, through each jurisdiction, we had our own inquiries that actually then started to question about, how important was the – and how critical was the – information we were delivering. And were we then appropriately resourcing and skilling our people to be able to undertake that capability.

I'll use a South Australian example here, so within the CFS, it was around 2012 and '13 that we acknowledged that there is a unique skill that we need to elevate and through that process we placed a community engagement and media and our communications teams within state operations. And it was through that process and through the training and elevation of that position – it was very clear, both to our agency and to our partners within the sector and more broadly, that public information, warnings and community engagement are equally, if not more important, than actually putting out the fire. If we can't get the information and the safety messages out to the community, it's making it very difficult for us to do the rest of what we're trying to achieve.

So, really, the next part of that is the 2014 review of public information and warnings again which Amanda's touched on today. And we started to see the evolution and doctrinisation of what it is we're doing. There was a lot of it in our heads, we individually had agencies with pieces of information or doctrine around this, but we're really proud of the handbook that's been developed and launched at this particular conference, that actually can then capture that into the warnings principles, our foundation principles, and also the Total Warnings System.

What that's done now is led to the work conducted by the EMPS – and I'll just get that slide up – and it's the Emergency Management Professionalisation Scheme. So, for many years we've seen the role of incident controllers being certified, and the role and work that's been undertaken in that space. But through the EMPS scheme, we've seen the role of public information officers acknowledged as a senior role, as an important function. And then what we've done is move towards the acknowledgement of a registration and then certification of that particular function.

In that, we've acknowledged that involvement in public information is more than just 'talking to the community,' it is – a certain competency is required, there's skills. And we've also developed position descriptions and training required, for each one of those functions that sit within that unit.

Through the EMPS, we've achieved the certification program, which acknowledges – sorry, the registration and then certification – so that nationally we can have acknowledged function of public information and the skills required, and be able to then, at a glance, be able to see who we have available to be able to either deploy both nationally or internationally as required. But then also acknowledge the unique skillset that's required, that we acknowledge in an incident controller, about managing complex teams, strategic oversight, and also the work that's required within the team about how we can bring that together and ensure that we continue to provide safe, clear, consistent and timely information to the community.

So, on that point, I will promote the EMPS website and encourage you to go and have a look. For those of you who are either trained in public information I consider you – encourage you to go and actually check this out and seek – considering registration or certification, and also at the AFAC stand there's a couple of people there, both Triona and Paul, who can speak to you about that process. So thank you.

<mark>0:23:58</mark> [SASCHA RUNDLE] Hello. First of all, I'd like to say, I am from the ABC, but trust me – I'm not a journalist! I have been a journalist, I'm very proud of the work I did as a journalist, covering fires, floods, a war zone – but I'm not a journalist. I'm the manager of emergency broadcasting and I'm really lucky to work with a great team of emergency broadcasters.

So, many people don't actually know what emergency broadcasting is. I guess I can tell you what it isn't. It isn't the news reports that you see on your TV, or in the radio news, or online. It's not news coverage of emergencies. They do fantastic work, both within the ABC and other media organisations. However, if your house if on fire, you're unlikely to need to know whether that fire was started by an arsonist or a lightning strike. You don't really need to know the exact numbers of fire tankers in your street. What you need to know is what you should be doing now to protect yourself, your family and your property. And that's what emergency broadcasting is. It's where we deliver frequent information – very, very frequent – which gives the audience the information they need, so they can decide how they'll respond to that particular emergency event. And that is the information that is crucial at those times, and before, during and after an emergency.

Now, that is done best when we collaborate. When we collaborate with your organisations, with the organisations represented up here, and with the many other emergency agencies around the country. I always think collaboration works best in emergencies when locals speak to locals. We have 52 different Bureau and radio stations around the country; in regional stations, in metropolitan areas. And it is always best when we have locals in those areas speaking to the locals from your agencies. To speak directly to that impacted audience.

Our collaboration could also be managers ringing managers of the agencies and asking for 'off the record' planning information. Information that will not be handed to a journalist, that will not be given to anyone behind a microphone – but is intended to help plan ahead, so that together we know, I guess, the scale and shape of that emergency. So we, like you, can ensure that there are adequate resources dealing with it.

It could also involve managers sitting in emergency state operations centres, which I know Hannah's going to be referring to. Or it could be our managers sitting on your district emergency management committees.

Now, the reason we do this, the reason we collaborate, the reason why we are so involved in emergency broadcasting, is in one sense because we're a bureaucratic organisation. And like all good bureaucratic organisations, we have a policy! It is our Emergency Broadcasting Policy, and it says quite clearly that we will work with you, we'll work with our stakeholders, to give the audience that information that they need in an emergency event.

But in reality, the reason we are involved in emergency broadcasting is because it is in the best interests of the community. The community absolutely expects the ABC to be there and to provide that emergency broadcasting information.

It's been quite interesting during the past couple of days, particularly with the keynote speakers, I've heard a theme of vulnerability coming to the fore. Mark Crosweller mentioned it in his talk yesterday, we heard it again this morning, with Dana mentioning vulnerability. And in March, with the Tathra bushfires that you heard Anthony refer to, the ABC had to come face to face with its own vulnerability. We didn't handle those fires in the way that we should have, in the way we thought we were handling them.

And as a result, we have had to go back and take a good, hard look in the mirror and assess our own vulnerability for emergency broadcasting. To look at, what are the needs, as we have a changing staff structure. As we have new people coming in, a younger staff presence, who may not have experienced emergencies, or may not have experienced fires before. And from that, we have learnt that, in order to collaborate fully with the agencies and best serve the audience, we need to provide that absolute support, and look at our vulnerability, and our stations that need that support more than others and throw everything at them in times of emergency.

Now, with the community, they know to come to us. And they do come to us. They come to us in all different channels because, as we heard, in an emergency people need to be informed. Not once, that this is happening. Not twice, but even three or more times. They need that reinforced before they are likely to take action. So that means that we need to engage the community in all the ways that they are currently engaging. Yes, we will broadcast warnings on radio, on local radio. Yes, you will see on ABC News 24 the ticker, running across the bottom of the screen, that tells people about that emergency event. But yes, on social media as well, because as we all know, that's where the Australian public is. That's where the international public is. And if we are going to truly inform and warn the public, we need to be playing in the spaces that they are playing in.

And we need to do it according to their rules. We all know what it's like to sit somewhere and just be scrolling through our phones. Well, in order to truly engage that audience, we need to have the thumb-stopping post, the great images, the great photos, the great graphics that will make them stand up and take notice. We are even using emojis to help share the information about the warnings that your agencies are – distribute.

And even from within our own teams, I'm often asked – why would we use emojis? This is an incredibly serious event. But it's because in order to best engage that public, and truly get them to take action, and to not drive down the road to look at the fire, we need to be liaising with them and engaging with them, using the language that they speak.

So, these are some of the ways that the ABC is already working, we've had great collaboration through AFAC and through the public warnings working group, and through the various agencies, and we look forward to doing that into the future. Thank you.

0:30:00 [HANNAH TAGORE] Thank you. Hi everyone. So I'm Hannah Tagore, Department of Fire and Emergency Services. And, when I was asked to put this together, I came up with the title, *Driving to*

catch up with the Ferrari – Running to catch up with the Ferrari, because that's sometimes what public information feels like to us in the industry.

Can I just ask people to put their hand up if they remember a time before alerts and warnings? Yep, exactly! So, look, alerts and warnings are only about ten to 15 years old **checks with Amanda Leck** – ten to 15 years old, and I only came to DFES, probably about four years ago.

Now those of you that aren't from Western Australia probably know we think of ourselves a bit like Steven Bradbury, you know, the ice skater that won the gold medal? In the winter Olympics before, no? We just wait until everyone else has done it and falls over, and then we come in and we win the gold behind.

So, look, four or five years ago in Western Australia, we were facing a real challenge that we were pretty behind the 8-ball in terms of alerts and warnings and what we were going to do. And people say I look like Ellen DeGeneres, so this is me when I walked in and realised that this was my big challenge. And you can see me go through – yes, me and Ellen did share a very bad childhood where I was – did have hair like that! And then, it was the shock and disbelief that we were probably really underprepared for a major emergency. Right the way through to coming to terms with it and getting on the phone, calling a few of these guys **gestures to other panellists** and working out what we were gonna do. And taking that challenge.

And so the last three years has really been a massive journey for us as to what we did.

Just to take you through that a little bit – for those of you that might be facing similar challenges in your own organisations. There's a job to do first of all just to stop and take an audit, and really think, right, what do we need to do now? Where are the gaps? And trust me, when you're working in public information, there's so much new stuff out there. Technology's running at such a pace. The public actions and the attitudes are changing at such a pace, that you get a bit behind. Even if you think that you're ready, every time we turn around and meet as a group **looks to other panellists** there's more to do, isn't there.

So, look, there's an audit to do, and we really because research-based in our warnings. That meant going out to the community and asking them what they want. Shocking, I know – but we did it! And then really changing the way that we talk to the community and the way that we structure our warnings. And if you're interested, there's a huge body of work, a huge body of information out there now, around how people like to receive information.

But it's an age today, where temperature-triggered advertising is something we can even consider. I mean, can you imagine that? The temperature's 30 degrees and I don't even have to push a button, it just automatically means that we know there might be bad fire conditions out there and I can change the ads that are reaching you, in your own home, on your cell phone, wherever you are. And that's an amazing thing.

So in a world where all this technology's happening, how do we get ready for that? And how do we take advantage of that?

The other thing that we did was talk to Sascha about, well, we need to work in partnership with the ABC. And when we're all in the SOC – which is our State Operations Centre, sorry – it's really difficult

to try and take calls from twenty different ABC stations. Those of you that have done a job like mine will understand this. And so the ABC is now embedded in our State Operations Centre with us. They sit alongside us – I'm not a journalist!

But somebody like Sascha who's here – who's from WA, who sits alongside my team, who takes all of those different calls from the ABC, corrals them in together, and then gives us quite a neat list of, look, if you're gonna prioritise three, here's the three that we want you to prioritise. And then here's the rest of nice-to-haves that we'd like.

So that partnership – and convincing people within DFES that actually journalists aren't that scary and that we should work with the ABC at this level – has been an amazing journey. And it's created some really big results for us.

We also have Australia's first virtual operations support team. And that's a group of people who sit at home – when they're not in work, they work for BankWest, most of them – and can help us out with our alerts and warnings and our posts when we reach capacity. And that comes down to what Craig Fugate talked about earlier yesterday morning, when he said, you know, we don't – we only practise to succeed, we don't actually practise beyond the scope of our imagination. So having that surge capacity is becoming more and more, and our virtual operations support group has been one of the things that we've worked on.

We've brought international and national conferences to our local governments, in the form of the Emergency Media and Public Affairs conference; bringing the best speakers in so that they don't just listen to someone like DFES who is – let's face it – facing challenges of being too authoritarian, because we're a fire agency, that's what we do. And hearing from the experts themselves so that people can get that range of information, to know how they can improve and what they want to do.

And we're turning towards, now, more process-mapping. That, you know, if we all get hit by a bus, everything will be written down in a nice, clear way.

And also, how we take advantage of vision. The vision that's out there now is incredible, isn't it? Cameras on trucks. When we had the Waroona fires – I don't know if you're aware, but there is this amazing vision from Parks and Wildlife, who just had a dashcam, and they turned it on. And it just got played for weeks and weeks as the scale of the Waroona fire… Now those guys, when they went to get out of their trucks to the Waroona fire couldn't actually open the doors of their trucks, because the wind was howling too much, that they couldn't even push their doors open to get out and even take stock of what's around them. We wouldn't have been able to experience or sense the noise, the light, the sound, the darkness that was there – when day turned to night – if it wasn't for that vision as well.

So, bringing more live feeds and bringing more cameras to our operational crews is something that we're also trying to do so that we can really improve the way that we're dealing with the community, our public information.

So look, there's a lot of challenges for the future, I won't go through all of them, but capacity is one, NBN is another.

And the last thing that I will leave you with is this concept that, we still send one PIO to a fireground, and we still send one MLO to a fireground, and we think, great, they're there, they can do a good job. In the meantime, we now have about 50 media descending on one place. And we probably have about 40 other stakeholders that we're now being told to work with. And two people are not gonna cut it. I challenge everybody here to think about a new way of public information where we actually resource up. Now, where that resource comes from is gonna be really, really challenging. I don't know where it comes from yet, I'm still working on it. I've got my eye on SES volunteers if anyone's around!

But look, we're going to need to resource up, and I imagine a place where there's 20 people in a public information team at a fireground. Because things have moved on since 15 years ago when we decided two people. And if we don't change, and if we don't run to catch up with a Ferrari, then we just won't be in the game and we – you know, the definition of insanity is trying to do the same thing over and over and expecting a different result. We can't do that any longer, it's time to change.

This *is* a Ferrari, it *is* here to stay, and there's a lot of challenges, but I'm sure that you'll all be with me in thinking that together we can come up with the answers. Looking forward to hearing your thoughts. Thanks.

0:38:33 [DEB MARTINDALE] Thanks everyone and I think you should all just acknowledge that six communication-ish-type people who love to talk stayed on time! We still have the chance to have a good conversation now, which is wonderful, and thank you to all of you.

I wonder if we should talk a little bit more about getting the message through. So we're heard about some of the ways that we're doing that, the research that's informing what we're thinking about. I guess, I'm thinking a bit more about the – what really is going to get the behaviour that we're looking for and the decision-making behaviour that we need from people?

A few years ago, we were still talking about channels; how many ways can we reach them? And I think we've moved on. I wonder, Anthony, do you want to extend a little bit more?

0:39:27 [HANNAH TAGORE] Deb, can I just ask Anthony as well, can you talk to us about the way that you do your pre-warnings well on catastrophic fire days, because I think that's a great strategy, and I think it would be worth sharing.

0:39:39 [ANTHONY CLARK] Well, I think, firstly, it's really important to acknowledge – as is now articulated in the handbook – that there's a long process in the lead-up to warnings. And that includes educating and engaging the community.

And I think, in recent years, the industry has looked at new approaches – and I'm thinking things like, behavioural insights. You know, companies have been using this for years now to sell more stuff! It's a multi-million-dollar business and delivers huge profits for them.

And finally, I think the industry is looking at that as some guidance on how we can actually change people's behaviour and, I suppose, 'complete the sale,' with the community. So that they actually take the action that we're looking for.

And that investment does actually come well before there's smoke in the air or there's storm clouds out on the horizon. And I think it's really important to invest in that engagement well before the event.

I think, in terms of getting the language right, in terms of getting the outcome that we're looking for, I'm thinking about some of the research that's recently been done through the CRC, for instance, and pretty – pretty amazing stuff which five years ago we would never have even thought about. Where you're putting a warning message in front of somebody and you're actually looking at where their eyes go on the screen to see what they're taking in, what words they're picking up on, and does a picture here actually make them take action more than if it's just a slab of text? Like, it's new approaches like that that I think are really helping us deliver much more 'on message' messages. Things that are really going to get the outcome.

To Hannah's point, you know, putting out a million telephone warnings before a day of catastrophic fire danger – can I tell you, we saw that coming three or four days out, and, you know, we think we're pretty good at crafting messages – we sat there for three days, contemplating what words to put in there. What word will be the one that actually gets people to take action?

And then, of course, because we were so focused on that, we actually forgot to mention it was catastrophic tomorrow, we left the day out of the actual text message!

But it does show, using all of these different inputs – and this is something that kind of keeps us awake at night – choosing the words, choosing the imagery. I think, also, we're now in the game of engaging content. We're content producers, we're content providers. And if that gets the outcome that we're looking for, fantastic.

0:42:28 [DEB MARTINDALE] Absolutely. And we should mention that one of the companion documents with the handbook is *Choosing your words*. So if anyone is familiar with the original *Choosing your words*, it's been revised and the…as well.

What about the issue of trust versus authority? Would anyone like to talk to…*gestures to panellists*

Once upon a time, and in other cultures, internationally, authority would be, you know, all you needed to say it's time to go. Our culture isn't doing that.

0:42:57 [FIONA DUNSTAN] Can I just add to that, I think – and Anthony did touch on that when he presented – and we see that with some of the research that's come out of the CRC and more broadly around that people are seeking that authoritative source, but it's not the only source. So, it's about using that authoritative source to confirm and ensure that – you're *a* voice, but you – acknowledging that you're not going to be the only voice in that space.

So through the research, we've found that people want to seek out so they'll go to the ABC or they'll go to an emergency service or police or whoever that – and there are different arrangements within each state and jurisdiction. But then they'll actually go and qualify that. So whether it's from a trusted friend, family member or through a network that they have.

So, it really, really emphasises that strength of community and about the knowledge and value that we need to place in the local information that the community has. And ensure that we're using that local knowledge to inform our decisions as well.

0:43:59 [AMANDA LECK] I just wanted to make the point, with regard to that – this is a really fast-moving place in terms of warning republishers. And that's actually one of the companion documents.

The original one I think was written in about 2008 by, probably some bureaucrats, probably somewhere in Canberra. And it was written as a, sort of, very formal code of practice and we – we took one look at it and said, that's not the space we're in now.

So, it's been completely rewritten to understand *who will be* republishing the information issued by the fire and emergency services and others, such that a Facebook group can pick it up and follow some key guidelines that the industry's provided, or an ABC official emergency broadcaster. So we've tried to make something that we think will be useful for people, because people are consuming their information and their warnings in a whole range of ways, from a whole range of channels. I think, Deb, you used the example of your insurance company issuing 'purple warnings.' Don't know why they're purple, but they're purple.

0:44:59 [DEB MARTINDALE] It's a really good point, and it's an example of the evolution, or the pace of evolution, of practice, in that, not so long ago, we were trying to say to people, you don't publish warnings, *we* publish warnings. And now the message has completely flipped about.

Sascha, what do you see in the social media space? I must say, when you said emoji I went to all the wrong places! But what do you see in terms of sharing warnings and others picking up your warnings and using them?

0:45:30 [SASCHA RUNDLE] Well, I think that's where collaboration is really, really strong because it's not enough for an ABC to simply post a warning and expect all of the public is now aware. In the same way, it's not enough for an agency, a single agency, to merely post a warning. We all have to be sharing each other's content – because everyone is a content maker these days.

We all have to be sharing that and we have to encourage the community to also share information. So whether that is via social media, whether that is a radio announcer telling the audience – if you know someone who lives in that area and you don't think they are listening to this radio station, can you please tell them about this information, can you contact them and make them aware.

Because we all have to be responsible for the broader community and try to – try to help that broader community know what is coming their way. In the same way that that community needs to also take responsibility themselves for preparing themselves, and preparing their friends and loved ones.

0:46:36 [DEB MARTINDALE] Great. Shoni, not so long ago, we put out a lot of warnings about the hazard. And you touched on the fact that we're now trying to talk about the consequences of the hazard, and that impact-based warning. How much of a shift is that? For all of us, but for the Bureau as well?

0:46:53 [SHONI MAGUIRE] Look, a tremendous shift. It really does show that we need to form relationships ahead of any event and make sure that we're, we're connecting with the right people who have that other pieces – all those other pieces of the puzzle. We, we have a lot of information and experience in and around our weather, and the hazard, but the information about what the hazard will actually do is not the realm of the Bureau.

So we really need to connect up with the right people. And make sure that we're seeing what we do all the way through to our community. To see that it is making that difference to the community.

0:47:31 [DEB MARTINDALE] I don't know if we've used the term, but that 'call to action' – you know, we've talked a lot about the need to actually give someone something that they *can* do. And make that very clear.

0:47:41 [SHONI MAGUIRE] Yeah, and I think, you know, the climate change space is an interesting space in that we used to go out and talk about climate change from the Bureau of Meteorology's point of view with the agricultural community. And, if we went out by ourselves, we didn't leave them with a solution. But if we went out with some other experts, some agronomists or some other experts that they're used to doing business with, they'd go, oh look, look at the technology that you're using now, the minimum…then the increasing yield that you're getting from the different seed types and these sorts of things, and the amount of variability you have… Then it put them in a better space to be able to cope with and see that they were coping and that they did have a solution.

And I think it's a similar sort of thing, you know, we come in and tell the story about what's going to happen with the weather, but then our partners and the community themselves come up with – what should you do?

0:48:32 [DEB MARTINDALE] *to audience* I'm wondering – I'm hoping – that you haven't run out of questions after a very big conference. Are there any questions that you would like to ask the panel? We have a question down the front here… *pause* it's a long way!

0:48:56 [AUDIENCE MEMBER] My name's…and I'm actually from the other conference that Amanda Leck suggest I attend.

So I – you might consider me a republisher. One of the frustrations that I have – the impetus for what I do – is the siloed nature of the various different agencies that do their work. And they all do a fantastic job and I'm not criticising that at all. But it strikes me that working on a consistent notification and warnings system between all the organisations could potentially be addressed by having one location where everybody goes to find out what's going on. Just like we all go to BOM to find out what's going on with the weather.

various panellists express interest in responding

[AMANDA LECK] We'll all run to that one!

[AUDIENCE MEMBER] It sounds like I might have struck a chord! So I'd be interested to know what the panel thinks.

0:49:55 [AMANDA LECK] I think a foundational piece to that is actually that Recommendation 3 I spoke to, which is a national warnings framework. It's very difficult to have any sort of, you know, national platform or even to be able to communicate with the community about what different warning levels mean and who they apply to when, at the moment, it's pretty much a dog's breakfast across the country, for a whole range of hazards. Bushfire, tsunami are the only hazards that really have a nationally consistent warnings framework. So you can travel from Tasmania to Far North Queensland and know that when you receive a Watch and Act it means the same thing. And you should take the same action.

I think the ABC would also like that system in place as well *Sascha nodding* – I'll let others talk to this matter.

0:50:48 [FIONA DUNSTAN] So, I absolutely acknowledge that challenge, and we often find that even within jurisdictions that there's the same challenge there. So – Amanda touched on it a little earlier – but we are in the process of undertaking some social research.

So part of the review of the new National Fire Danger Rating System, there is money put aside for some social research, to go out to community to undertake their understanding of the current National Fire Danger Rating System – the warning system for bushfire, that's coupled with that. And we've been very fortunate through representation nationally – every agency and jurisdiction – to receive additional funding to test warnings for other hazards as well.

So, in the next – actually, next week, our survey goes live, and we'll be testing, nationally, five and a half thousand people, to gain their current understanding of fire danger ratings, whether or not they are meaningful, whether the language, colours and symbology is meaningful, and what people are acting on it – together with the warning frameworks about five main hazards that our country is exposed to.

And from there, we'll be conducting 49 focus groups, to go through with symbology, colours and language, to, again, unpack further with community directly, around their understanding of the warnings, the symbols, the colours.

And then we'll be quantifying that with another round of five and a half thousand surveys, so that we'll be able to come back with very strong recommendations, to be able to say, this is what is meaningful for the community. So that we can then build towards that three-tiered, national warnings system for all hazards. So that's really that foundation piece and evidence, and it's actually about engaging the community and asking what the community wants, to actually then inform that national warnings system.

0:52:33 [ANTHONY CLARK] And I think there's a real drive from the industry to get this right. And actually work with the community to work out what will work with the community. Because, I think, if you look at – and I'm not singling out any particular hazard or agencies or anything like that – but this mindset that if you live on the New South Wales-Victoria border, that the river only spills over one way towards Victoria or New South Wales, and it's called something different – it doesn't make sense, if you live on that border. The flood doesn't suddenly become a different flood because you're on the New South Wales side or the Victorian side.

It's the same with bushfires, it's the same with cyclones. Cyclones are quite often held up by people as a great way of explaining different warning levels and times to impact, but it's actually not nationally consistent either.

So there's huge opportunity there. And the industry is really keen to get this right.

0:53:34 [SHONI MAGUIRE] I think earlier we mentioned trust, and I think if we're going to hold the trust of the community we do need to get this right and make it as easy as possible.

I think in other parts of our lives, you see that with your mobile phone, we're already getting the integration of all the different bits of information. So we've gotta be smarter and making sure that we're doing that for the community, as Sascha's said. We've gotta be doing our communicating the way that the community's already doing it.

0:54:03 [DEB MARTINDALE] You can see that there is actually passion in your question and I'm sure everyone would love to talk more.

0:54:09 [AUDIENCE MEMBER] It's great, it's close to my heart…from Cairns and Far North Queensland…Cyclone Debbie, was a major event, which I hopefully might talk to you guys… I don't mean to hog the microphone, but –

…Just a comment in terms of retyping ads for – in order to get to the community…I work on a project which gets 50,000 unique users a day, but actually Google only tracks one third of that and that's because of ad blockers. So, they're actually becoming more of an influence now – so that would be something I'd suggest you respond to.

0:54:44 [DEB MARTINDALE] We could talk for an entire session, couldn't we, on social media and the social/digital channels and algorithms and all those sorts of things as well so – definitely on the agenda, the broader agenda…

We've got time for one more question. Does anyone have…a question. There's a question up here.

0:55:09 [AUDIENCE MEMBER] I'm Chris, from a community just east of Perth. We find a lot of people don't use social media. Does that mean you'd research into other avenues like PA systems, and stuff like that, around the communities?

0:55:26 [HANNAH TAGORE] There was, after Waroona-Yarloop, there was – if you're aware, the Ferguson inquiry recommended that we do some investigation into PA systems and what they'd look like. It wasn't done by fire and emergency services, it was done by – at the time – the Office of Emergency Management. And I think the conclusion of that piece of research found that, across the 139 different local governments, there was probably about 50 different ways of using local sirens and PA systems, and to bring that together would have created possibly more confusion than benefit to the community.

So the outcome of that piece of research was, if it works for your community, keep doing it. It has to be what's right for you at a local level. But it wasn't the right answer to try and standardise it across Western Australia because we found places where that would've really not worked, and really caused more harm than good.

But absolutely, it needs to be so many different forms and channels of communication. And this is where local people know best. At the end of the day, there's only so much that we can say, from a state perspective. Whereas local people have many different channels.

I know for Preston Beach, we were trying to get a message out to Preston Beach during the Waroona-Yarloop fires, and people came up to me and they said, well, don't you know? You just need to go to the local store and the guy at the general store then puts a post here, and then that person takes it down the street, and then everyone gets told.

So, each community has a way of working, we need to respect that, we need to make sure that we're not coming in as the experts into any community and thinking we know best. And listening to you and finding those influencers and connectors and making sure that they come first.