

Video Transcript: Mics & Sirens Episode 1 – Season 2

[Silvana Pulitano, Podcast Host] You're listening to Mics and Sirens, the official podcast of the Department of Fire and Emergency Services in Western Australia. DFES acknowledges the traditional owners on the land on which this podcast is created, the Whadjuk people.

[Sirens sound while news footage of fires play]

[Dr Lori Moore-Merrell, former US Fire Administrator] This fire was an unwinnable fight because now what happens are the structures themselves become the fuel. You have this overwhelming feeling of what could have been done to have prevented this from happening? These responders are not superhuman. They are, in fact, human. In 35 years, I'd never been affected that way.

[Silvana] In January 2025, the suburb of Pacific Palisades made international headlines. Not for the film stars and singers who lived there, but as one of the neighbourhoods across Los Angeles flattened by a firestorm. It was relentless. More than 9,000 firefighters battled the flames for over a month. Many lives lost. Thousands of homes destroyed. For Dr Lori Moore-Merrell, former US Fire Administrator, the devastation wasn't just a tragedy. It was a warning. In this episode of Mics and Sirens, Lori shares lessons from LA and what they mean for us here in Western Australia.

[Di Darmody, Interviewer] Lori, welcome.

[Lori] Thank you so much and thanks for having me.

[Di] Well, it's a delight, and I know our audience will really appreciate being able to hear about your insights from specific incidents, and one that we all saw unfold, and the devastation it caused was the Palisades wildfire in Los Angeles in January 2025. You were there not long after ignition. What can you tell us about those early hours?

[Lori] Wow, thank you for asking, because that's still very front of mind for me. This was one of the last fires that I responded as the US Fire Administrator, and I was on the ground just about 12 hours after ignition. I had called the LA County Fire Chief early on, and I just said to him, "I don't want us to be in the way when your early - response, but what do you want me to do?" And he said, "Please come." And so, of course, we got on a plane, the FEMA Administrator and myself, and we went to LA immediately.

So, when we landed, they had had another fire that had ignited in the Hollywood area, just as I was landing at LAX. And you could see it from the plane. So, I have these first images in my head, of course, and we arrived, got to the Incident Command Centre that night. And there were multiple because by this point, there were multiple ignitions and because of the size of this fire. So, it was an LA city, LA County response. It was also a massive response from the region. The two fires that you know as the LA fires, however, are the Palisades and the Eaton Fire. And so the Palisades is the most prominent, but honestly, that was one of the more well-to-do neighbourhoods, and that's why everyone knows it. There were a lot of stars that lived there. A lot of celebrity.

The Eaton Fire, equally as devastating from a structural standpoint, but also the most lives lost. We're in an area, a community called Altadena, and that was deemed the Eaton Fire. And so these two fires were massive, and those are the two out of the multiple that were

burning in those - that timeframe. These are the two that we focus on most of all. So, utter devastation, many, many structural loss. But also, what I think a lot of people focus on is the initial response. This was, where we see the news. And I'm sure even here, the news coverage around there's no water, not enough firefighters, all of those things. And that was a little bit of a misinformation because, yes, the infrastructure, the water infrastructure, was indeed a problem. It was, however, that most infrastructure is like that. The water infrastructure that we have in our communities can handle maybe one, two major structure fires. This was a fire that has not been seen in this capacity before in the built environment, well, hundreds of years, I should say, that we are now calling conflagration. So, this was truly a community conflagration that is not a wildland fire. It was a community-driven wildfire.

[Di] What do you mean by that?

[Lori] So, what we know is a lot of our governments talk about wildland fire. And one of the things we have to make very clear is that wild land is a space. It's a location. And yes, we have fire in that. That's mostly vegetative fire. And then you have where the forests or the vegetation meets the built environment. And that's what we call the interface, the wildland urban interface. And so now you've got a mixed fuel. It's everything between vegetation plus structures. And then you have the community. And that's where we get into pretty exclusive structures. Those are some vegetation on our properties - landscape, that sort of thing. But the fuel load in each of those areas is different. Wildfire can affect all of it.

And so when we get to that built environment, this is where we deem it a conflagration. And that is a structure-to-structure ignition. So, it could have started, and in fact, we used the term wildfire-initiated conflagration, community conflagration. Because now what happens are the structures themselves become the fuel. They now are launching embers, from the burning, from the wildfire into other homes and igniting homes miles away. And now that's another fire. And they all come together. And so we see that the assets, people, our homes that we deem assets, actually become the peril. They fuel the peril and the loss, because now they are the fuel in the wildfire. So, that's what we are now trying to help people understand is that these are not wildland fires. These are conflagrations where your home itself becomes the fuel.

[Di] What were firefighters up against, Lori?

[Lori] You know, this was - often when I talk about it now as what I witnessed. And in talking to the firefighters on the ground, the first thing they think about is life safety. So, evacuation was huge. Let's get the people out of the area. And there were over 200,000 people evacuated, 41,000 of those were directly in the fire impingement area.

And so that's what firefighters keep front of mind is how do we maintain life safety as best we can while we're getting suppression activity underway? Because the thing that's gonna change for everybody, change the circumstance, is to get that fire out.

But they were in hurricane-force winds, ember cast like we've never seen before, because of what was burning. So, these were large coals that were being launched, based on the winds. So, the Santa Ana winds, up to 100 miles an hour. And so this combination of variables gives us an unwinnable fight. We had over 9,000 firefighters on this fire. You could have put thousands of more, and they couldn't have gotten in front of this fire. This fire was an unwinnable fight. Firefighters don't like to be in that circumstance. They like to go in. They

like to do the suppression, the rescue, the life safety, not be in this scenario where there is nothing they - we had firefighters with water. I know everybody thinks water was a challenge and it was a challenge, but not the challenge. What was the challenge were all of the variables that came together, the fuel load on the front end, the drought that had been there for months, the fuel of the structures themselves. And then couple that with the wind and an ignition. Now we're off to the races. So, this was very much a wind-driven, almost a blowtorch style. Firefighters would say, "We had water. I couldn't get it on the fire." The wind was taking the water and whisking it away before they could get it on the fire.

[Di] Given that it was an unprecedented situation, what learnings have emerged from the LA fires?

[Lori] I love this question because if we fail to learn from this one, we're doomed to suffer many, many more. And the biggest thing that I think is the takeaway is that we cannot focus on the response. There is never gonna be enough firefighters. There are not enough in the world to stop these kinds of fires that we're facing today. We have already have climate that has changed the face of the risk that we encounter in the response environment - emergency response environment.

And so we have to get individuals to understand this is an all-hands approach here. Everybody's got to be focused on the potential threats in your area. Particularly, you need to know where you live. And this is something we're trying to teach the people from the Palisades and from the Eaton Fire. You're in a fire-prone land, and many of them have never heard that. Now, some, of course, are familiar, but people buy homes in these areas. Real estate doesn't tell them that this is fire prone, that you're living in an ember-cast area, that if someone else is home and there's wind, your home is in the path of those embers. People aren't told that. And so we have to teach individuals about that. We also have to teach them that they must, and we have to enforce codes around buildings. If you're gonna build in a fire-prone land, then you have to build by building codes that are fire-resistant. That's the roof, that's the siding. It's the windows. It's having shutters that close over the vents and the windows. These are things, and it's having a zone zero. That's what the governor of California is doing, implementing zone zero, where you can't have anything combustible within five feet of your home.

So, these are just measures that we need individuals to take. Because anything that was gonna change the outcome of the Palisades and the Eaton Fire, had to happen before we had an ignition, because the response was never gonna be able to address this kind of fire.

[Di] Lori, while you're here in Australia, you'll be travelling the country and talking about wildfire or bushfire, as we call it here. In your experience, how has fire itself changed, especially in recent years?

[Lori] Oh my goodness. This, and some of it we saw in the LA fires, the drought that we're seeing now around the world, long extended drought, the heatwaves, extreme heat has become a real factor here. And so soil moisture's down, our basic barometric pressure, the humidity in the air, is down, and so we are having these - the fuel of the vegetation is becoming more ripe. So, you'll have, in areas, a rainy season. Everything gets green, and then the drought hits. So, things that grew are now dry, and now that's fast fuel.

So we're seeing this around the world, and we're seeing that what were deemed 100-year fire or 100-year flood or, you know, these extreme events are not extreme anymore. From a time standpoint, they are extreme in nature. And so one of the things that we've got to be aware is that we have to prepare our response forces to become preparedness forces. We have to leverage the standing army that is the fire service around the world, to be able to teach people ahead of time, to get ahead of risk, to prepare and have this all-hands approach to really lessening your own individual risk. Because we've got to understand response is not gonna meet now the need or the risk event.

So, we're going to have, you know, when we have these scenarios where the response does not match the risk event. And that's what we're facing now in these large-scale events that become disasters. That's what happens if we don't match. Then we have a disaster where we have life, civilian life loss or injury. We have property life loss or injury and firefighter life loss and injury. And so these are the outcomes that we want to avoid. And that means getting in front and reducing the risk that we have to respond to today.

[Di] One area you believe we can lean into to help us understand more about the fires we fight here in Western Australia and across the world is data. Can you explain why that's so important from your perspective?

[Lori] Yes, I love data.

[Di] You do. [Laughs]

[Lori] So, it is I think the real lifeblood, particularly for the fire service. We must have data, and we must have it in a way that is multifactorial. And what I mean by that is we need data about risk. And we just talked some about that. You need to know where you live and the jurisdiction in which you're responding, and not the whole, but maybe just your station. What kind of risk are in your first due area? What kind of equipment do you have, and how are you staffed from your station to meet that risk with your response should an event occur?

And so we need to know risk. We need to know about our response mechanism. And we need to know how we perform. So, I often say "what is your availability, your capability and your operational performance?" And that's what we want data to inform. And so we need data not just about the incident itself, because we can do that. How fast did you get there? What did you do when you show up, you know, what was your response time? And how many people went? I mean, these are numbers, right?

What we need is the intelligence of those numbers being coupled with the risk environment. Now, do they match? Because if they don't, then we are vulnerable for bad things to happen. And so this is why data are critical today to inform the fire service and to inform decision makers about how you need to deploy resources in your own area.

[Di] And how are you collecting that data in the United States?

[Lori] Well, this is a fun story because this was when I went in as fire administrator for the US in 2021, with the Biden administration, this was my main goal. We had been living with a 50-year-old legacy system in the US. The system was actually established in 1976. And there are, you know, hundreds of people at this conference right now that weren't even born then. Right? So, that's how old this data system is, and it just didn't meet the need. And yet we

were still, had compulsory data entry from our firefighters, and they know it had no value, so they were putting in bad data. So, now we've got a bad data system. We were putting in bad data. So, it just keeps compiling.

We have a true lack of understanding of the fire problem in the US, or how we were responding to it, because this system was so legacy. And so one of the things that I was determined to do was to build a new data platform. And so we were really successful in moving and leaning into that, and we were able to launch a data analytics platform that does data fusion, and it's called the National Emergency Response Information System, or NERIS for short. And so NERIS is, it was launched in November of 2024. So, in the last couple of months of my administration, we were actually able to launch this platform in version one. And they're onboarding now. So, we have over 1,200 departments right now that have successfully onboarded. There's about 27...29,000 that have to be onboarded. So, we are moving to be able to shut down the legacy system in January of 2026.

And so the team that we contracted to build this system, we put it outside government. So, that was important because we could move a bit faster in the development and how dynamic it could be. And so they are moving forward, and the onboarding is going beautifully. So, we'll get all 29,000 fire departments in the US on this new system and the new analytics platform very soon.

[Di] And then how will that support fire departments?

[Lori] Great question. So, what we will have the capability of doing is they will enter some data about the incidents to which they respond. But the key here is that, that system already holds a lot of data about their communities before they ever enter one incident. So, it's gonna have data on the built environment. So, every building is there. It'll have their street grid. It's gonna have their weather. It's gonna have all of these things that are live. So, these data, that's why I called it a data fusion system, because these data already exist. And then you couple that with incident information. And now we can see the match that I spoke about earlier. What's my risk environment? How am I deploying resources in that risk environment? And does it match? Because we have science behind crew size on fire engines or pumpers, and ladder trucks. We know what the crew needs to be. How large it is for low, medium and high hazard events, and so that science can be deployed now. And I can actually measure what is the risk environment, what is my response capability, and does it match? And we'll be able to deliver dashboards in that regard and really show decision makers, not just fire chiefs, but show decision makers, the value of having a properly deployed fire department in your jurisdiction.

[Male Narrator] Working as a firefighter at the Department of Fire and Emergency Services in WA, is a career where you get to help keep the community safe every day. So, are you a team player? Resilient, compassionate, and courageous? If that sounds like you, come and join us! Visit the DFES website: dfes.wa.gov.au to find out how you can join the frontline.

[Di] A large part of the work you do now is in the technology space and the role that could play in fighting fires. What tech is coming down the pipeline, Lori?

[Lori] Oh, technology, data and technology. These are the highlights for me. So, technology is going to really help us level the playing field with the way that our response environment is changing. So, we've talked some about that already. The extremes that we are responding

to now much more frequently, these are not 100-year floods anymore. They're not, you know, extreme or changing new evolution of firefighters or fire in our lands.

So, we have to be prepared to do things differently. We cannot continue to respond to these extreme events with the same technology we've used in the past. It simply is a mismatch. And so given that, technology development is critical, and so we need it and the way I try to categorise it is in the before, the during and the after an event.

And so in the US, we'll say, that are we gonna do to try to change the risk environment before boom, left of boom, right? Because boom is the event. So, if I wanna get in front of it, I'm gonna, you know, what is left of boom? Well, that means fuels reduction. If I'm talking about wildfire, that's getting technology to really do all that vegetative fuels reduction. So, for example, there's a company called BurnBot in the US. And they're also here in Australia, in Brisbane. So, BurnBot brings technology, large-scale robots. They do mastication, and fuels reduction. They have prescribed fire. They can put on the land with this large robot that actually controls the smoke. So, this is really innovative, and we need it because that will reduce the risk so that your response can match a wildfire that occurs in a much lower risk environment. So, that's important.

If we talk about the during, so, how do we sense ignition? We need cameras. There's, in fact here, I saw Pano AI here. So, Pano is a camera that senses, it's AI-enabled to sense anomalies and see smoke. And so long before you see a flame, sometimes you'll see smouldering.

We have the same thing with a company called N5 Sensors, where it's AI-enabled sniffing sensors. They sniff anomalies in the air, and they understand. Wait a minute, something's different - because it learns your normal environment. It can learn barbecue smoke. It can learn volcanic ash, right? That's normal. What is not normal is a wildfire smoke. And so it senses these and alerts, because the faster we get to an ignited fire to hold it and not have it grow, that's the best-case scenario.

And so, and then we of course have the after technology. And there's all kinds of sensing and satellite data that we can use to be able to understand how to be prepared for flooding, post-fire and things like that. So, I think technology is gonna be a game-changer for us. It is going to equalise the playing field between our response capabilities today and our preparedness capabilities of tomorrow.

[Di] I'm sure we can't even imagine what might be possible in five, ten, 15, 20 years' time.

[Lori] Yes.

[Di] In this series, Mics and Sirens, we speak to fire and emergency services experts from all around the world, and they all bring a vast depth of knowledge and a wide range of experiences. But all our guests are connected, like you are, Lori, by a personal drive to improve how we respond to and manage emergencies.

So, I hope we can delve a little bit into your own personal experience. You have had, and continue to have, may I say, such a distinguished and impactful career, but could we go back to where you first started in fire and emergency services? I think it was 1987, and you were a fire department paramedic in Memphis, Tennessee. Why were you drawn to that job?

[Lori] You know, we could have left out the year there.

[Di] Sorry, apologies. [BOTH LAUGH]

[Lori] Not at all, not at all. Again, there are people in this hall that weren't born then. So, yes, it goes back a long way. So, I was actually in medical school, and just started, and the fire department was hiring in Memphis, and so they were giving preference points to paramedics. And I had gone to paramedic school in my undergrad. And so that was really, I'm like, OK, that's what I really want to do. And so dropped out of medical school, went to the fire department and was hired there. Was the sixth woman hired in Memphis, Tennessee, and went on the job. And I spent seven years there, learning as much as I could, and then was recruited to the International Association of Firefighters, which is our large labour organisation. And I went there and spent 26.5 years of my career there, doing research and really working in labour to try to help firefighters have greater opportunity for health and safety.

So it wasn't for us in the US, labour is not just about wages, hours and working conditions. It really is about health and safety. It's about the work environment and making sure that your departments are properly equipped. And so it's a lot of advocacy. And that's where I spent a lot of my time.

And then of course, I was out of there, data, we've already talked a bit about, but that really became my passion. And so when I retired from the IFF, I started the International Public Safety Data Institute that really looked at big data, right? How do we fuse data to tell a story? And so that was really my passion. And then, of course, President Biden tapped me to come in as the US Fire Administrator. And that was really related to my work with the IFF, because the IFF was a big part of his campaign, and they were looking for leadership to really come in and make changes and do innovative things with the US Fire Administration. And so I was fortunate enough to be tapped by President Biden to come in and do that.

[Di] I'm wondering if you might be able to give us an insight. You mentioned you were the sixth woman, I think, in that position as a firehouse paramedic in Memphis, Tennessee. What was your experience like as a woman then?

[Lori] Wow, you know it was... It had many perspectives, I would think, because I had some of the male counterparts when I went in, some didn't want you there, and some stepped up to make sure you were successful. And so I was confronted with both. I had some that, you know, are emotionally immature, because that's the only way I can describe them without using words I can't use on camera. And so, they were not prepared for change. They didn't want me or anybody, any other woman there.

And so you have to be prepared to just be determined to do the job well. And that's what I did. I didn't come in as a woman paramedic or firefighter. I came in as a paramedic, a firefighter. I was there to do the job like everybody else, and I wanted to do it well. And so I found those men who would step up and be mentors. And there were plenty of those. All my mentors throughout my career have been men, and so I have men who have opened doors for me that I could have never done by myself, and that encouraged me and helped me to learn based on these scenarios of bad actors. Because they teach you that, you know, everybody can be an example, you can learn from everybody. Sometimes it's a bad example that you learn not to be that. And so that has happened throughout my career, but I've had

men who have actually given me a hand up and been there for me and taught me to be a good leader. And I go back to them often, even today. So, I encountered it both ways. And I think for women, we have to be prepared to see that. So, don't get down on yourself and think, I can't sustain this. Yes, you can. Don't wear your gender on your sleeve. Be there to do the job. Drive ahead, keep your head down and do well. Learn, because opportunities are gonna come. And if you are not prepared when that opportunity comes, that's gonna be very sad. So, learn, prepare and watch for what's coming.

[Di] We usually ask our guests to reflect on a on a fire that stands out in their memory. Lori, you told me there's one that stays with you. Can you share what happened in Maui, in Hawaii, in 2023?

[Lori] Yeah. Thank you for asking because that is one, you know, we've talked about how many years I have and at that time, 35 years in the fire service. So, I have been in a lot of scenarios. I've seen a lot - unspeakable things. But this one was different. We arrived in Maui. The Maui fire was about an eight-hour fire. It was devastating. It was wind driven. It moved through that community with speed that is unmentionable. It burned everything. We had 102 fatalities.

And when we arrived, it was still - the FEMA Administrator, and I flew over immediately, and it was still smouldering. We walked the streets with Governor Josh Green. Tremendous individual. And the things we saw that you cannot unsee. It's not like our, you know, our firefighters, even today, they see things they can't unsee. Police officers the same. You carry that with you. And for me, this one, while I was there, I was fine. You know, I feel like often we are resilient, and you learn how to process things in a healthy way: the things that you cannot unsee.

And so while we were there and understanding, the dogs were coming in to start to search. It was so hot still that they were putting covers on the paws, on the dogs' paws, so they could go into the areas that were still smouldering, because we had to. They had to find the bodies; there were hundreds missing. So, we really didn't know how many.

And as they would find bodies, the first 56 of the 102 were found outside; people trying to run or in their front yards. And you know, you don't know quite how to process that. There were many that were found in their cars trying to evacuate, and the roads were cut off, and they weren't able. So, they were found, you know, stories upon stories of where people were found and what the responders experienced that day. And it was a culture, on Maui, that is very aware of the people that were found in this fire. And so there were interventions during the searches where they would ask that the search would stop when they'd find a body, and they would have an observance of that body before they would remove it.

And so these were, it was purposeful. It wasn't just come in, we have a body. Let's move it. And so this purpose driven to recognise this was a life that was lost. And I think all of that culminated in such a way for me, observing all of that at the time, that when I got back to my hotel room that night, just to grab a few hours of rest, I called my husband, who's also from the, you know, in the fire service, and I had been OK until I heard his voice. And you can tell now I'm getting a little emotional. I know you're looking at me. And I sort of lost it, and I don't know why. I've never done that before in 35 years. I've never been affected that way. But this fire was so devastating, and so many lives lost. And we were there just hours. And you

have this overwhelming feeling of what could have been done to have prevented this from happening? And so it gives you - a new purpose. I think that we must educate people. We must do things differently.

We must fight when decision makers make decisions that are putting people in harm's way. And we must also remember our responders need to have resources that prepare them mentally or that help them process these events after the fact, because they, like me, we are human. And there is a threshold that mentally we can take. And it took me 35 years to hit that threshold, but when I hit it, I hit it. And so I needed to talk to someone. I needed to be able to download and process in such a way that it was healthy. And so we want that for our responders. And I think that is so important that we all remember: these responders are not superhuman. They are in fact human. And to remember to make sure they have the resources they need to process the things they cannot see.

[Di] Yeah, I think that's beautifully said. They're not superhuman. They're human.

[Lori] Yes.

[Di] It's been such a delight to speak to you today. Thank you so much for sharing your vast knowledge and experience. Dr Lori Moore-Merrell, thank you for being part of Mics and Sirens.

[Lori] Thank you so much for having me. And thank you for giving me a further voice with a new population. So, thank you.

[Male Narrator] Are you looking for fast, accurate and official information that helps you to make informed decisions to stay safe during an emergency? The Department of Fire and Emergency Services Emergency WA app lets you set up watch zones for places important to you. So, if an emergency happens in your watch zone, you'll receive alerts and warnings. The best part? It's sent direct to your mobile device. Download DFES' Emergency WA app from the App Store or Google Play today.

[Silvana] That was Doctor Lori Moore-Merrell, sharing insights from the Palisades firestorm. You've been listening to Mics and Sirens, the official podcast of the Department of Fire and Emergency Services in Western Australia. If you enjoyed this episode, please follow, rate and share the podcast so more people can hear these important stories.

Join us next week as we explore the Grenfell Tower tragedy with Mark Hardingham and the lessons it holds for emergency response, building safety, and community engagement.