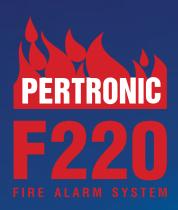
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NEW OPPORTUNITIES THROUGH ADVERSITY



It is with much anticipation that we prepare for AFAC21 powered by INTERSCHUTZ at the Sydney International Convention Centre on 5-8 October 2021. With the postponement of the 2020 event, this year's conference and exhibition presents a much-overdue opportunity to come together to learn, discuss and connect in a COVID-safe manner.

When we look back to our last conference in 2019 in Melbourne, it is dizzying to reflect on just how much has occurred in the past two years. Our theme in 2019—'A shift to the new norm: riding the wave of change'-

focused on our sector's flexibility to handle novel and emerging challenges and was more apt than we could have ever anticipated. The conference was followed by the catastrophic 2019–20 bushfire season that had widespread impacts for the sector and for many Australian communities, who were then dealt a second blow with the emergence of the disruptive and restrictive COVID-19 pandemic.

Such events force a shift in thinking, push us to reconsider our game plan and, in some instances, rewrite the rule book altogether. This year we step back, take stock of these tumultuous events and consider the evolving conditions that are producing new challenges in terms of impact on the community, environment, emergency services and economies.

As the extremity of hazards and emergency events increases, so too does the community expectation for the fire and emergency sector to respond. Inquiries and a royal commission have provided their recommendations, but resourcing challenges, the COVID-19 pandemic and compounding events continue to contribute to the increasingly complex landscape in which we work.

This year's theme at AFAC21 is 'Balancing impact and expectations' and the conference will deliver a comprehensive program designed to help our delegates navigate the consequences of major events while meeting the expectations of the community and government. Details of the program, including keynote speakers, can be found on page 14.

At AFAC21, broad participation across our sector will ensure the foundations for robust conversation. Participants will learn from each other, unearth new innovations and collaborate meaningfully. Your voice and experiences form the basis for us collectively to improve our work and deliver real outcomes to enhance community safety. I hope to see you there.

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FIRE



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OUR COVER

The AFAC National Memorial Service was held in May 2021 on the banks of Lake Burley Griffin in Canberra.

PHOTO: PAUL BERRY

ABOUT FIRE AUSTRALIA

Fire Australia is a joint publication of Fire Protection Association Australia, AFAC and the Bushfire and Natural Hazards CRC. We aim to bring the latest news, developments and technical information to the fire protection industry, emergency services and natural hazards research organisations. Fire Australia is produced quarterly and distributed throughout Australia and New Zealand. Editorial submissions are welcome and can be sent to: magazine@fpaa.com.au. For more details on submitting a contribution, please contact the editors.

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SUPPORTING OUR UNSUNG HEROES: **AUSTRALIAN VOLUNTEER SUPPORT TRUST**



NSW RFS Commissioner Shane **Fitzsimmons** presents a badge to Harvey, son of deceased deputy captain Geoffrey Keaton, at the 2020 NSW State Memorial Service.

new trust has been established to support the families of volunteers in the wake of disasters. The Business Council of Australia (BCA) and Equity Trustees have joined to establish the Australian Volunteer Support Trust (AVST), to assist the families of any recognised emergency services volunteer in Australia who, when responding to a disaster, tragically loses their life or is seriously injured.

The AVST was formed in the wake of the devastating 2019-20 bushfire season and in acknowledgement that recovering from catastrophic disasters and emergencies is an ongoing challenge in Australia. It is designed to support any future disaster and emergency recovery efforts.

The primary focus of the trust is to support children through to adulthood, with a particular emphasis on education.

"Our aim, through the AVST, is to provide support-particularly where there are dependent children with education needs or families that have lost a breadwinner through this selfless service," said Mick O'Brien,

Managing Director of Equity Trustees, which will manage the trust pro bono.

"We are honoured to support the families of volunteers who pay a terrible price while helping protect and preserve our communities during disasters."

The AVST is supported by an advisory panel comprised of former Governor-General Dame Quentin Bryce, BCA Chief Executive Jennifer Westacott, ANZ Chairman David Gonski, former Secretary of the Australian Government Department of Education Lisa Paul, and AFAC CEO Stuart Ellis.

Volunteers are crucial to the fire and emergency services sector, providing the critical capacity required to respond to disasters. Each year, emergency services volunteers in Australia contribute more than \$690 million of

"Given the significant contribution of fire and emergency service volunteers, and the ever-increasing demands of their work due to more intense and frequent disasters in Australia, it is fitting that we can provide support to the families of those volunteers who have paid the ultimate price," Mr Ellis said.

Ultimately, the AVST will recognise this commitment and provide some relief to the families of those who lose their lives while volunteering to protect their communities.



John Clampett

JOHN CLAMPETT APPOINTED AS FPA AUSTRALIA CEO

he Board of FPA Australia has appointed John Clampett as the Association's new Chief Executive Officer.

Mr Clampett will be known to many readers, having served for the last ten months as the National Manager, Policy, and from various other roles within the industry.

He brings 40 years' experience to the position across building and fire protection roles as diverse as fire engineering, building surveying, facility management, regulation and standards development, and research.

Mr Clampett replaces Scott Williams, who left the Association last year, and is supported in his new role by current

Chief Operating Officer Nathan Semos and the FPA Australia executive team.

He expressed his thanks to Mr Semos, who has held down the fort for the last 12 months.

"Nathan has worked with the team to get FPA Australia into a good financial and structural position so that we can deliver for the members," he said.

"It has set us up well to capitalise on our opportunities and increase our effectiveness, as we seek to improve the fire protection sector."

FPA Australia President, Bill Lea, welcomed Mr Clampett's appointment: "John has significant experience in the sector and has extensive networks in the industry and in government.

"He is well positioned to represent the industry as we roll out accreditation and work with governments to reform

It has been a busy 18 months for the

Association, dealing not only with the onset of a once-in-a-century pandemic, but also a significant regulatory reform program at a state and territory level, and the introduction of mandatory accreditation in NSW.

Mr Clampett and the team will be building on the good work of the Association to extend its influence and deliver a better environment for fire safety. It will be a challenge, but he is looking forward to it: "I am excited about this new role and the chance to work with the team and the Board to expand our advocacy, develop practitioner skills and deliver tangible benefits to our membership.

"If the industry focuses on improving its professionalism and competence, the community will benefit and buildings and their occupants will be much safer," he said.



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CULTURALLY APPROPRIATE NATURAL HAZARDS TRAINING FOR INDIGENOUS COMMUNITIES

orthern Australia is sparsely populated, prone to natural hazards, and home to nearly 360,000 people—predominantly Indigenous Australians who live in remote communities. However, local Indigenous land, fire and emergency managers considered previous fire and emergency management training to be inadequate because it was based on suitability for southern Australia and lacked the tailored, collaborative strategies required to keep remote northern communities safe from frequent natural hazards in unique environments.

The Bushfire and Natural Hazards CRC's Northern Australian bushfire and natural hazard training project, led by Stephen Sutton at Charles Darwin University, prioritised the inclusion of Indigenous leaders, ranger groups and researchers, focusing on the specific social context of the delivery of disaster management services.

This project developed a new, culturally appropriate training program that provides practical support and reinforcement of capabilities in remote



northern communities. Researchers used a participatory action research approach to provide a 'next generation' training program. This builds on the existing assets in northern Australia, such as ranger programs, and leads to increasing levels of competence, confidence and resilience.

Designed for delivery at the vocational education and training certificate II level, the program comprises ten units that interweave a set of philosophical and practical

understandings of the management of landscapes for natural hazards in a changing climate, Indigenous knowledge and experience with non-Indigenous approaches.

To learn more about this new training program, read *Hazard Note 96* (at www. bnhcrc.com.au/hazardnotes/96), which explains the inclusive research behind the program, showing how it is being used in remote communities to develop capabilities in bushfire and natural hazard management and leadership.

AIDR AWARDED FOR EXCELLENCE IN RECOVERY COMMUNICATION

he Australian Institute for Disaster Resilience (AIDR) has been awarded the Emergency Management Public Affairs (EMPA) Recovery Award for excellence in disaster and emergency communication.

The award recognised AIDR's work to support community recovery following the Black Summer bushfires. AIDR contributed to Australia's national recovery capability by developing and sharing resources to assist practitioners to support communities as they moved into recovery.

AIDR's winning project included:

- Knowledge-into-Action briefs that could be quickly read, understood and put into practice.
- the Recovery Matters webinar series that explores key issues in disaster recovery. A broad range of expert speakers were invited to share their experience and insights on disaster recovery, followed by an extended Q&A session for participants.
- the Possibility Lab community of practice to support people working in community recovery that was

- established with the Social Recovery Reference Group.
- ◆ trauma-informed guidance materials created with Emerging Minds that support educators in bushfire affected communities.

Explore these resources and more in the Recovery Collection on the AIDR Knowledge Hub: www.knowledge.aidr.org.au/collections/ recovery

PHOTO: BUSHFIRE AND NATURAL HAZARDS CRC



new video series that draws on Bushfire and Natural Hazards CRC

research is helping to guide emergency managers and policymakers with mitigation funding decisions.

Taught by

Dr Veronique Florec from the University of Western Australia and produced by the CRC, the ten-video series draws on research from the CRC's Economics of natural hazards project to explain the core economic concepts and models that are relevant to the mitigation of natural hazards.

bnhere.com.au/research/naturalhazardeconomies The video series starts with the simplest concepts and progresses through different economic principles across the ten lessons. It covers the types of economic analyses available; their data requirements; how to evaluate mitigation options, estimating costs, benefits and value for money of mitigation; how to integrate intangible values; and how to deal with uncertainty.

Economic analysis is a key tool that can support decision-making, said Dr Florec.

"Economic analysis won't tell you exactly what you should do, but it does provide guidance and makes the trade-offs clearer," she said.

Centre for Environmental Economics & Policy

Types of economic

analyses

Full economic analyses help predict the impacts of future events, enable strategic decisions on how to improve the allocation of resources, and make decisions about mitigation or land-use planning. The video series introduces key economic principles and helps end users appreciate the importance of, and challenges associated with, conducting economic analyses of natural hazard mitigation.

The videos complement a sold-out

training course the CRC and Dr Florec hosted between March and May, upskilling and building capacity within the emergency management sector so that natural hazard managers feel more confident to commission and use economic information in their decision-making.

METURAL HAZARDE CH I Western Australia

View the full video series at www.bnhcrc.com.au/hazchan-playlists/ economics-natural-hazards-video-course

The economics video series draws on **Bushfire** and Natural **Hazards CRC** research to help guide emergency managers and policymakers with mitigation funding decisions.

VIDEO 1/10

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FIREFIGHTING SAFETY RESEARCH WINS NATIONAL AWARD

ushfire and Natural Hazards
CRC associate student Dr
Greg Penney has taken out a
national award for his PhD research into
operational effectiveness and firefighter
safety during wildfire suppression.

Dr Penney, who completed his PhD with Edith Cowan University in October 2020, has been awarded the Eric Wigglesworth Occupational Health and Safety (OHS) Education Medal by the Australian Institute of Health & Safety (AIHS).

The national award recognises achievement in OHS education in the Doctor of Philosophy, and recognises:

- a high level of OHS technical skill and knowledge
- the ability to apply OHS knowledge to practical solutions
- good communication skills.

The award brings with it a commemorative medal and certificate, a professional development fund to the value of \$3,000, and membership of the AIHS until 30 June 2022.

"The Bushfire and Natural Hazards CRC's support was a big help in producing the study," Dr Penney said.

"I plan on using the grant to fund professional executive development that will assist me to translate my research into tangible safety improvement in fire and emergency services practices for frontline responders." The OHS Education Awards were presented in accordance with the Wigglesworth Lecture on Thursday 17 June 2021.

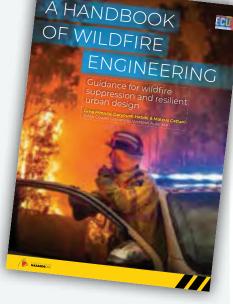
CRC Research Director Dr John Bates congratulated Dr Penney on his award

"The national Eric Wigglesworth award is a testament to the value of Greg's research and the work that he has put in over many years. Congratulations Greg," Dr Bates said.

Dr Penney is a Superintendent with the Department of Fire and Emergency Services in Western Australia, with more than 16 years' operational and incident management experience, both as a firefighter and paramedic.

His PhD research, titled *Through* the flames – quantitative analysis of strategic and tactical wildfire suppression, examined the critical components of bushfire suppression to improve firefighter safety and operational effectiveness during siege bushfire responses. You can learn more about his research at www.bnhcrc. com.au/research/understanding-andmitigating-hazards/4648.

Upon completion of his PhD, Dr Penney wrote A Handbook of Wildfire Engineering: Guidance for Wildfire Suppression and Resilient Urban Design, which draws on his research and is designed to promote the emerging



field of wildfire engineering and provide practical guidance to firefighters, incident management teams and urban planners to improve fire suppression operations, firefighter safety and resilience of community design at the rural—urban interface.

Dr Penney was also awarded the Ron Coffey Award for Excellence in Bushfire Protection at the 2021 Fire Protection Industry Awards (see page 21). ■

Download the handbook online at www.bnhcrc.com.au/publications/handbook-of-wildfire-engineering.

"I plan on using the grant to fund professional executive development that will assist me to translate my research into tangible safety improvement in fire and emergency services practices for frontline responders."

Dr Greg Penney



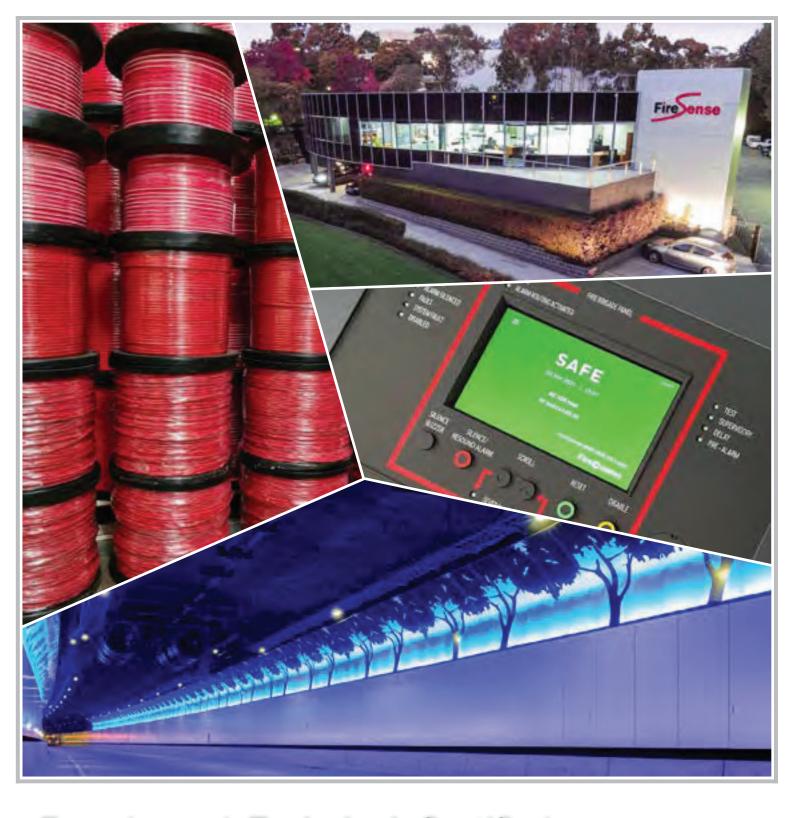
The Predictive Services Webinar Series shares work and research from presenters such as Mike Wouters, Marta Yebra, Miguel Cruz and Paul Fox Hughes.

PREDICTIVE SERVICES KNOWLEDGE ON SCREEN

The Predictive Services Webinar Series collection continues to grow, with new instalments added to the AFAC YouTube Channel in 2021. The latest videos cover topics such as soil moisture and

its influence on flammability and fire danger ratings, the '10% rule of thumb' for estimating wildfire rate of spread from wind speed, and current work to improve the model for fire in dry eucalypt forest.

The collection now includes 22 webinars, which are all available to view on AFAC's YouTube channel: https://youtube.com/playlist?list=PL4MeOp_-uJIPo9vm_1oefpgnN-z61oaOt.



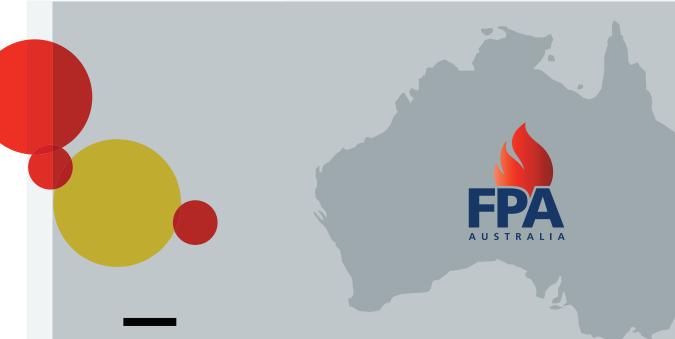
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FPA AUSTRALIA NATIONAL ADVOCACY FRAMEWORK

he FPA Australia Board has approved a new strategy to improve the advocacy reach of the Association and increase its ability to support its members. The Association will eventually extend its governance in each state and territory by appointing local representatives to focus on advocacy.

Allen Mitchell has been tasked

with building up FPA Australia's profile in Queensland and continuing its engagement with the Department of Energy and Public Works and the Queensland Building and Construction Commission as it seeks to extend the time frames within which practitioners need to become qualified.

He will be supporting the

Association's Local Coordinating Committees and other members in addressing local issues, and will be a first port of call for enquiries from members in Queensland.

FPA Australia welcomes Allen and looks forward to appointing more local representatives to support its members at state and territory levels. ■

RESIDENTIAL SPRINKLER TECH SPECS AMENEDED

ver the last 12 months, the FPA Australia office has been reviewing and amending its technical specifications for residential sprinklers. Supported by the Technical Specification Advisory Group (TSAG-01), this project resulted in over 400 public comments addressing various elements of the Specifications, allowing us to make improvements to these important documents.

The Australian Building Codes Board (ABCB) is now considering these new versions of FPAA101D and FPAA101H for inclusion in the National Construction Code (NCC), to replace the versions already recognised.

These systems will increase the life safety for occupants of Class 2 and 3 sole-occupancy units in buildings that



are less than 25 metres in effective height, by increasing the available egress time for occupants in the event of a fire. FPA Australia would like to thank the members of TSAG-01 and everyone who submitted comments for their contributions to these reviews.

This has allowed the new technical specifications to be more relevant and achievable for designers and installers,

ensuring that they continue to meet their objective of providing safe, reliable, fit-for-purpose, cost-effective automatic fire sprinkler systems. ■

To view the public comment drafts, or for more information about the key changes, visit www.fpaa.com.au/technical/technical-specifications/public-comment-2021.aspx.

AFAC LEADERSHIP **MEETINGS PROGRESS** STRATEGIC **EFFORTS**



he AFAC National Council met in Canberra on 13 May, with many Chiefs and Commissioners attending in person, despite travel challenges.

Discussions centred on the strategic path forward for the sector, including an update of the AFAC Strategic Directions, the AFAC Strategy, and the development of principles to guide the work of fire and emergency services.

The AFAC National Council appointed Georgie Cornish, Executive Director of Frontline Services Support at SA Country Fire Service, to the AFAC Board and approved three new and five revised pieces of doctrine. These will be added to the growing collection hosted on the AFAC website: www.afac.com.au/ insight/doctrine.

On 14 May the Commissioners and Chief Officers Strategic Committee

(CCOSC) met. CCOSC is focused on operational issues and interstate and international resource sharing. It considered updating the arrangements between Canada and the United States, adjusting CCOSC terms of reference for endorsement by the Ministerial Emergency Management Meeting and establishing a private sector register for potential assistance during major events. CCOSC also endorsed the National Aerial Firefighting Strategy.

The Champions of Change Fire and Emergency Group also met on 14 May and considered the implications of sexual harassment in the workplace, heard from agencies in South Australia about progress with their diversity and inclusion initiatives, and discussed the importance of sponsorship as a key career enabler.

QUALIFIED PATHWAY

n 1 July 2021, the Fire **Protection Accreditation** Scheme (FPAS) in NSW officially moved to a Qualified pathway for new applicants for accreditation.

This means that the Transitional pathway is no longer available for Fire Safety Assessment (FSA) or Fire Systems Design (FSD) applicants in that state.

New entrants will now need to be fully qualified if they wish to carry out fire safety assessment or fire systems design work.

In addition, practitioners holding Transitional accreditation are required to become fully qualified within four years of first gaining that status.

These changes are part of the NSW Government's plans to see the fire protection sector improve its skills and professionalism.

These moves, plus the requirement for professional indemnity insurance, will protect the owners, managers, and occupants of buildings, and deliver greater community safety.

To see the qualifications required for FSA or FSD, visit the FPA Australia website at www.fpaa.com.au/fpas/transitional-toqualified.aspx.



CHAMPIONS OF CHANGE **PROGRESS** REPORT

he Champions of Change Fire and Emergency Group includes representatives from metropolitan, rural and regional communities across Australia and New Zealand. A particular priority is building the representation of women in frontline service delivery positions, which serve as critical pathways to leadership positions in the sector.

The group released its third progress report in April 2021 to provide an update on actions, outcomes and achievements over the past 12 months regarding gender equality priorities.

This includes gender representation data from across the sector, including frontline service and delivery roles.

The Champions of Change Fire and Emergency Group members remain committed to their goals of gender equality, advancing more women into leadership, and building professional, respectful and inclusive environments for all.

Highlights from the 2019-20 progress report include:

- members achieved gender balance or an increase in women's representation across 66.4% of employment categories in 2020
- ◆ 24.9% women's representation was achieved overall across the group, compared to 22.0% in 2018 when the group released its first report
- ◆ 37.8% of overall hires across the group were women
- ◆ 84.6% of members now have mainstreamed flexible working strategies in place
- ◆ 92.3% of members have systems and structures in place to address bias and ensure equality in recruitment and promotion processes.

Read the progress report online: https:// championsofchangecoalition.org/ resource/champions-of-changefire-and-emergency-progressreport-2020.



VALUING DIFFERENCES TO ENHANCE CAPABILITY

mbracing diversity and inclusion creates safer workplaces and enhances capability.

AFAC has published Valuing differences to enhance SES operational capability to showcase existing initiatives within the State Emergency Service (SES) that demonstrate the value of greater inclusion and diversity.

The publication provides real-life case studies and suggestions that fire and emergency services agencies can apply to their own organisations to enhance participation of members and the broader community.

The case studies cover topics such as cultural and linguistic diversity, Indigenous engagement, disability, religion and spirituality, LGBTIQ+, and gender.

But the guideline is not just relevant to the SES—it can be used by all AFAC member agencies to support their existing efforts to improve diversity and inclusion within their ranks.

Valuing differences to enhance SES operational capability is publicly available at AFAC's Diversity and Inclusion webpage: www.afac. com.au/initiative/diversity-and-inclusion





DESIGN AND BUILDING PRACTITIONERS ACT 2020

ince 1 July 2021, design and building practitioners working on Class 2 residential buildings have new obligations for declaring and lodging designs, as part of an effort to restore public confidence in the construction of apartment buildings.

Fire systems practitioners working on these buildings will need to be registered to lodge declarations for regulated designs, confirming that the systems are compliant with the National Construction Code and relevant standards.

Building work cannot commence until regulated designs and compliance declarations are lodged on the NSW Planning Portal.

These changes have been introduced through the *Design and Building Practitioners Act 2020* and, to assist practitioners with the requirements, the NSW Government has launched new guidelines, which can be found at www.fairtrading.nsw.gov.au/__data/assets/pdf_file/0010/989335/regulated-design-guidance-material.pdf.

Designers of any residential projects

that have not commenced construction will now have to be registered and submit declared designs and compliance declarations for their work.

Construction work will only be allowed to start once all regulated designs have been declared for compliance and lodged online via the NSW Planning Portal.

Other information can be found on the Fair Trading website: www.fairtrading.nsw.gov. au/housing-and-property/changes-to-class-2-buildings.



Whether you want to improve your crisis or emergency management and leadership skills, bushfire awareness or multi-agency communication skills, the National Centre for Emergency Management Studies (NCEMS) has a course that can get you and your staff emergency ready. NCEMS is a specialist department within TAFE NSW that is committed to providing nationally recognised qualifications to help you better function in an emergency – because while you can't always predict when an emergency will occur, you can predict your response.

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NATIONAL CENTRE FOR EMERGENCY MANAGEMENT STUDIES



The AFAC21 Conference and Exhibition returns in 2021 to the International Convention Centre in Sydney

AFAC21 PROGRAM LAUNCHED: BALANCING IMPACT AND EXPECTATIONS

The AFAC21 powered by INTERSCHUTZ conference and exhibition has been postponed until 5–8 October. The event will bring together a broad spectrum of emergency management practitioners to learn and share experiences.



KEYNOTE SPEAKERS



Grace Tame, Australian of the Year and an advocate for survivors of child sexual abuse. After being groomed and raped by her maths teacher when she was just 15 years old, Ms Tame is dedicated to eradicating child sexual abuse in Australia and supporting the survivors of child sexual abuse.



Stan Grant, International Affairs
Analyst for the Australian Broadcasting
Corporation. Well-known for having
brought the former Prime Minister
Malcolm Turnbull to tears when
interviewing him about Indigenous
Affairs on The Point, Mr Grant's keynotes
are insightful, engaging, always
professional and at times, controversial.



Dominique Hogan-Doran SC, Senior Counsel of the Australian Bar. She conducts a national practice, appearing as an advocate in superior courts and tribunals, as well as royal commissions and public inquiries, including the Independent Commission Against Corruption. In 2020, Ms Hogan-Doran led the Counsel Assisting team for the Royal Commission into National Natural Disaster Arrangements.

BY MOLLY PRICE

AFAC

ith an impressive program of over 90 presentations across four days, AFAC21 powered by INTERSCHUTZ will explore the theme 'Balancing impact and expectations' at the International Conference Centre in Sydney this August.

Delegates will have the opportunity to learn from international and local thought leaders across the multistreamed conference, which will include the Australian Institution of Fire Engineers (IFE) National Conference and the Australian Disaster Resilience Conference.

Presentations will discuss the latest in research and practice across the sector, with topics including planning and risk, mental health and well-being, community approaches, volunteer capability, prediction and modelling, prescribed burning, and simulation and data.



Shane Fitzsimmons AFSM,

Commissioner of Resilience NSW. Following a distinguished career of over 35 years with the NSW Rural Fire Service, Mr Fitzsimmons was appointed the inaugural Commissioner of Resilience NSW and Deputy Secretary, Emergency Management within the Department of Premier and Cabinet in 2020.

EXHIBITION

After for the postponement of the conference in 2020, AFAC21 has had over 170 exhibiting companies sign up to date. The exhibition will showcase the latest technology available in fire, emergency and rescue services, as well as first response, public safety, defence, hazards, industry and mining. This year, it will also include the fire safety, prevention and protection sector.

Expect to see several leading drone and aerial services providers, robotics, satellite technology, real-time data platforms, fire detection and prediction

platforms, rope rescue and safety at height solutions, communication technology, specialised operational equipment, medical supplies, emergency shelters and field camp solutions, and an extensive range of PPE suppliers.

The exhibition will display the latest in fire vehicles from leading brands including Scania, Rosenbauer, Volvo, Isuzu, Iveco, Hino and Fraser Fire and Rescue. It will also showcase a new paramedic vehicle from Volkswagen.

The AFAC and IFE Expo Stage programs will give delegates the

opportunity to hear from training organisations and attend a range of educational sessions designed for operational personnel. The live demonstration zone will include sandbag filling solutions, vehicle extractions and more.

Building on the success of the 2019 conference and exhibition, which attracted record attendance of over 4,000 emergency management personnel, AFAC21 is back better than ever and on track to be the most comprehensive event in the 26-year history of the conference.

AFAC21 was originally scheduled for 17-20 August. Due to the COVID-19 situation in NSW and interstate travel restrictions, the event has been postponed to 5-8 October. ■

Registrations are now open for AFAC21 powered by INTERSCHUTZ. Explore the full conference program and register your attendance on the conference website at www.afacconference.com.au.





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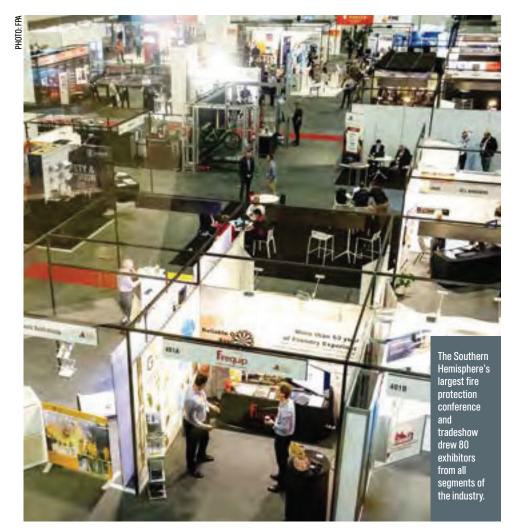
Disaster Resilience





CHANGING THE CULTURE AT FIRE AUSTRALIA

In 2021, the Fire Australia Conference and Tradeshow started the discussion on how cultural change in the industry is essential if we are to increase competency and professionalism.





BY HAJNAL NAGY

FPA Australia

n 2021, Fire Australia came back and was better than ever. The Southern Hemisphere's largest dedicated fire protection conference and tradeshow returned, after a year of coronavirus lockdowns and Zoom calls, to give the industry a chance to learn and reconnect.

Over 1,500 attendees heard from leading industry experts and international guests, witnessed new technologies, and saw the best in fire protection services and training.

Insights into reform and disaster

The conference program represented a mix of ideas and challenges for the fire protection industry.

Presentations from leading speakers focused on the need for industry reform, the lessons learnt from the Black Summer bushfires and the Grenfell Towers disaster.

An opening message from NSW Minister for Better Regulation the Hon. Kevin Anderson MP set the scene, expressing the importance of the industry and its role in community safety.

This was reinforced by presentations from Michael Lambert of the NSW Fire Safety Reform Steering Committee; Bronwyn Weir, co-author of the Building Confidence report; and representatives of the NSW Government, who talked about the need for industry to take a lead, and how fire protection was going to be affected by coming regulations.

Dame Judith Hackitt beamed in from the UK to discuss the implications of the Grenfell fire, and what industry needed to consider moving forward—specifically the need for improved skills, proper certification and fit-forpurpose materials. Closer to home, Leah Bertholini discussed the experiences of the SA Country Fire Service with the Kangaroo Island bushfires.



66

Someone stood behind me and helped me achieve my goals, and it's only fair that I do the same."

- Kristy Walters NSW Police Force

Other speakers talked about product compliance, the application of standards, and what the Victorian Appeals Court decision about the Lacrosse fire means for the industry.

The program was separated into streams—Policy, Bushfire, Technical, Engineering, Cladding, and Women in Fire—which presented the opportunity to delve more deeply into relevant issues, and this will be a model for future events.

The key message? That fire protection practitioners need to take more responsibility for the work they do, and that industry leaders should be instrumental in improving the professionalism of the sector.



Women in Fire

Following on from the successful Women in Fire panel in 2019, Fire Australia 2021 dedicated a whole day to the issue of diversity in the industry.

Speakers from across the emergency services sector discussed their experiences and how the industry can embrace diversity and entice more women into fire protection.

They revealed that resilience, authenticity and self-confidence are essential qualities for female leaders to succeed, and it is important to spend time upskilling and networking.

The conference and tradeshow

The largest fire protection conference and tradeshow in the Southern Hemisphere can always be counted on to show the latest technology from some of Australia's leading suppliers.

Fire Australia 2021 showcased the best in the industry, demonstrating some of the most innovative fire safety solutions.

This year the tradeshow went virtual, with 3D imaging used to recreate the entire space so anyone who could not make it could still see what was on offer from some of Australia's leading fire protection companies.

To see the virtual tradeshow, visit https://captur3d.io/view/fire-protection-industry/fire-australia-conference-tradeshow-2021.



66

We don't want to have cowboys in our industry. We want to have an industry that is fully professional."

Michael Lambert, NSW
 Fire Safety Reform Steering Committee



Off-site tours

Only two tours were run this year, but both to impressive locations—the Fire Experimental and Testing Laboratory in North Ryde and Fire and Rescue NSW's (FRNSW) Emergency Services Academy at Orchard Hills.

Delegates got to see how materials are tested for fire safety and heard how the brigade trains the next generation of firefighters.

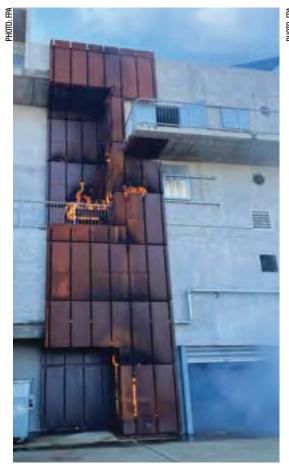
Both tours got to see lots of flames(!), and FPA Australia thanks CSIRO and FRNSW for granting access.

Charity dinner success

For the first time, the Conference Gala Dinner was combined with the Fire Protection Industry Awards.

More than 420 people came together to celebrate the best in the industry and network with their peers while raising money for the Fiona Wood Foundation to help with lifesaving research into burns treatments.

A description of the award winners is in the pages following. ■





The NSW Emergency Service Academy's cladding simulation starts from a leak from a pretend BBQ.

phone: 1800 069 469

Above Delegates witness a fire test at the CSIRO laboratories.







INDUSTRY LEADERS RECOGNISED **IN THE 2021 FIRE PROTECTION**

INDUSTRY AWARDS

BY HAJNAL NAGY

FPA Australia

An impressive list of nominees has again delivered some inspirational winners for this year's Fire Protection Industry Awards.

The awards were conducted, for the first time, as part of the Fire Australia 2021 Conference Gala Dinner, where ten worthy recipients demonstrated the quality of the fire protection industry.

Winners for 2021

A V Viscogliosi Award

Keith Shinn, Honeywell

The A V Viscogliosi Award recognises "excellence for outstanding service to fire protection".

Keith has participated in the fire industry for 45 years, first at Wormald Fire Systems in Canberra and then in the design, installation and servicing of fire alarm systems. Currently the Industry Affairs Manager for Honeywell, Keith is heavily involved in local and international standards, and is regarded as a specialist in fire detection and occupant warning systems.

Meritorious Service Award

David Percy, Pertronic Industries

FPA Australia gives the Meritorious Service Award to members who have made a standout contribution to our industry.





1982, developing and manufacturing power supplies for the New Zealand Fire Service. For more than 20 years, he has invested in the development of the fire detection and alarm side of the industry. David is an active

David started Pertronic Industries in

member of the fire detection Technical Advisory Committee (TAC) 2 and a representative of the Standards Committee FP-002.

Barry Lee Technical Excellence Award (sponsored by Wormald Australia)

Firas Shawash, i-Fire Engineers

This award recognises individuals who have achieved technical excellence within the Australian fire protection industry through active participation in technical committees.

Firas, a Chartered Professional Engineer in Mechanical Engineering and Fire Engineering, has demonstrated his involvement and leadership in the fire protection industry through participation in research and the development of Australian standards. He was a winner of the Emerging Fire Protection Industry Leader award in 2019, and a participant in TAC/4/8/9 and in reviews of a variety of standards, the National Construction Code and the residential sprinkler technical specifications.

Fire Protection Project of the Year (Over \$1 million)

Brett Sheppard, Blue Fire Systems

This category acknowledges excellence in the management and administration of fire protection projects costing more than \$1 million.

Brett and his company were recognised for their work managing the migration of 80 fire indicator panels and 80 Emergency Warning and Communication System panels in stages from the existing copper network to a new fibre-optic network for Monash University. This required minimal disruption to the systems during transition and strategies to avoid failures in data communication, in the face of staffing changes, COVID-19, impacts on supply chains, remote technical support, and competing construction projects. The judges noted the complexity of the project, which required comprehensive planning and training to ensure smooth execution.

Fire Protection Project of the Year (Under \$1 million)

Doron Levy, Fahrenheit Global

This category acknowledges excellence in the management and administration of fire protection projects costing less than \$1 million.

Doran and his team designed and integrated the fire safety system and design of the COVID-19 Surge Centre, a new turnkey solution providing healthcare to COVID-19 patients. The facility had to be designed and constructed in 42 days, during lockdown using off-the-shelf products (since imports were not available) and negotiating an expedited fire engineered solution with the fire brigade.

Harry Marryatt Fire Protection Company of the Year Award (1-49 Employees)

All Fired Up Fire Services Pty Ltd

This award recognises businesses that are committed to staff training, technical advancement, community safety,









Above: Some of the award recipients celebrating their success.

ongoing professionalism, and emerging best practice and innovation.

All Fired Up Fire Services won for its ambition to make a positive impact on the fire protection industry and its work to exceed the expectations of clients, the industry and the community. It has experienced rapid growth, servicing approximately 3,500 properties from Newcastle down to Wollongong and across to Muswellbrook and Goulburn, and ensures all of its technicians are trained and accredited.

Innovative Product and Technology Award (sponsored by Uptick)

Kane Ng, Kidde Australia

This award goes to innovative, commercially available products or technology fire protection solutions that comply with applicable Australian standards and regulatory requirements.

The Kidde Natura™ Inert Gas System (Natura IGS) won for changing the way gaseous fire suppression systems are deployed, making installation easier, faster and safer than ever before. The product has a high level of flexibility for different inert gas agents, is efficient to install and has a lower cost of ownership due to the reduced cost of installation and economical refill cost after a discharge.

Ron Coffey Award for Excellence in Bushfire Protection

Greg Penney, Edith Cowan University and Department of Fire and Emergency Services

Greg is a decorated firefighter with

extensive experience in planning and engineering in wildfire-prone areas. He leads the development and delivery of Incident Management training, authored the inaugural FPA Australia Bushfire Protection and Design Accreditation (BPAD) Level 1 course, and consulted with various other organisations. His PhD investigated a series of issues concerned with understanding and managing bushfires. Greg is the Department of Fire and Emergency Services leader for the WA Emergency Management Training Centre project to ensure Western Australian emergency services are prepared to respond to a variety of infrastructure fires, collapses and natural disasters.

Emerging Fire Protection Industry Leader

Nathan Brown, FireM

Nathan is a proven entrepreneur who has demonstrated leadership, innovation and technical excellence. He is motivated by the social value and imperatives of fire safety engineering, and works across silos with various stakeholders to improve fire safety. He has set up a flourishing undergraduate program that gives valuable experience to students and a practical and broad real-life view of the requirements of the fire safety industry. He also develops thought leadership papers to explore opportunities for innovation. He is a Chartered Professional Engineer with Engineers Australia, an accredited certifier in Mechanical Engineering,

Hydraulics and Fire Safety Engineering in the Northern Territory, NSW, Victoria, Queensland and Tasmania, and internationally recognised as an APEC Engineer and International Practicing Engineer.

Young Achiever of the Year Award (sponsored by UL)

Amy Bryan, Warringtonfire

This award recognises achievement in fire protection by professionals under the age of 35.

Amy is a fire safety engineer who managed the engineering component of the Cladding Audit Response Team (CART) for the ACT Government, involving 106 buildings across 70 sites in two months. CART conducted risk assessments and identified treatment plans, coordinated with the project's façade consultant. This required the coordination of over 30 fire safety engineers in different locations and time zones, and the need to maintain technical consistency. Amy achieved this without previously having a background in fire safety and in the face of COVID-19 restrictions. The project has had a significant impact on the industry and community in the ACT.

FPA Australia thanks everyone who took the time to participate and submit a nomination this year, and our congratulations go to all the winners.

This year's award recipients have once again shown the high level of professionalism and technical expertise that exists in our industry.

Despite last minute coronavirus restrictions, 420 people attended the awards dinner, which was combined for the first time with the conference gala.

SUPPORTING RESILIENCE IN INDIGENOUS COMMUNITIES

HOW THE EMERGENCY MANAGEMENT SECTOR CAN DO BETTER

The emergency management sector recognises that Indigenous groups and emergency management agencies can work together to strengthen natural hazard resilience. While there is still a long way to go, research is identifying pathways to strengthen resilience in Indigenous communities through respectful and culturally appropriate collaboration.

BY BETHANY PATCH

Bushfire and Natural Hazards CRC

here are differences in the ways Indigenous communities, agencies and the broader community manage natural hazards. However, these differences provide opportunities to build strong relationships and find mutual benefit in supportive approaches.

Five Bushfire and Natural Hazards CRC projects have identified ways to make the most of these opportunities, deepening the understanding of how the emergency management sector and Indigenous communities can work together to build disaster resilience.

- A training program was developed that provides practical support for land management capabilities in remote communities across northern Australia. Led by Stephen Sutton at Charles Darwin University (CDU), this research was a partnership between CDU's Aboriginal Research Practitioners' Network (ARPNet), emergency management agencies, and several northern Indigenous communities and their leaders.
- 2. Community-led participatory action research in two Indigenous communities in Arnhem Land, Northern Territory, explored governance issues and aspirations to guide future collaboration:
 - one was conducted with the Ramingining community as

- a partnership between local community members, Dr Bevlyne Sithole and researchers from ARPNet and the Research Institute for Environment and Livelihoods at CDU
- another was conducted with the Galiwin'ku community as a partnership between Glenn James, local Indigenous leaders and the North Australian Indigenous Land and Sea Management Alliance (NAILSMA).
- 3. Professor Jeremy Russell-Smith, Dr Kamaljit Sangha, and Dr Andrew Edwards from CDU worked closely with remote Indigenous communities, through the Darwin Centre for Bushfire Research, NAILSMA and ARPNet, to identify what is needed to build emergency management capacity across northern Australia.
- 4. Dr Timothy Neale (Deakin University) and Dr Jessica Weir (Western Sydney University) led a recent examination of the challenges and opportunities of collaborations between Indigenous communities and the emergency management sector in southern Australia.

This research provides a snapshot of current priorities for the emergency management sector and strengthens relationships with Indigenous communities in ways that are respectful, culturally appropriate and effective in the collective effort to build resilience and reduce harm from natural hazards.

Engagement with Indigenous leaders

The projects focused on developing a close dialogue between emergency management agencies and Indigenous communities, particularly senior Traditional Owners, Elders and leaders.

Emergency management must recognise and respect leadership and governance structures within each community through inclusive collaboration that shows deference to Indigenous communities and knowledge from the outset.

Maratja Dhamarrandji and Ted Gondarra—two Elders from the Galiwin'ku (Elcho Island) community, Arnhem Land-said in a joint statement on behalf of their community that they were optimistic about future possibilities.

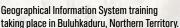
"We have the power to help the emergency service providers do their job, but they must see us-our law, our systems, our leaders. We can work hard to support good emergency management here at Galiwin'ku, but that needs mutual respect, resources and the time so we can get it right. We want to take it further, but we need support."

Indigenous leaders emphasised the importance of engaging directly with them to lead the development of emergency management strategies.

"That's the real difference from any other projects that I have seen," one Elder from Malanganark in Arnhem Land said of Mr Sutton's work to develop new hazard management training units.

"We want to start targeting each clan







A bush bulletin showing a fire mapping training schedule in Buluhkaduru, Northern Territory.

group, train them so they can be strong leaders for their own family and clan and make their own emergency plan for their community."

These projects used the highly collaborative participatory action research approach, including the work led by Mr Sutton, which involved researchers and Indigenous leaders working together to address the natural hazard training needs of people in the Top End region of the Northern Territory.

The result was an innovative training program, applicable in other jurisdictions, that concentrates on Indigenous perspectives and connections with the land and integrates Indigenous with non-Indigenous approaches to land and fire management.

You can learn more about the training program by reading *Hazard Note 96:*Developing a culturally appropriate natural hazards training program for Indigenous communities at www.bnhcrc. com.au/hazardnotes/96.

Empowering existing knowledge structures

Self-determination is central to Indigenous community empowerment. The customary governance and hazard management structures within Indigenous communities are a core foundation for understanding and

responding to community needs.

The two studies led by Dr Sithole and Mr James found issues with a lack of recognition of customary authority and local governance structures.

"Although some agencies express interest, there is little evidence of understanding or genuine desire for change that would stimulate meaningful reform," Dr Sithole said.

"Communities are keen to develop materials and strategies to help emergency management agencies to understand their circumstances, and the principles and benefits of successful community engagement."

This research has created a framework and set of protocols that help emergency management agencies engage more effectively with communities by highlighting issues around customary authority and recreating an independent voice for Indigenous authority to inform future land management. You can learn more about this research at www.bnhcrc.com. au/research/remotecommunities.

This empowerment of existing structures was also central to Prof Russell-Smith's research, and summarised in the final report at www.bnhcrc.com.au/research/firemanagement or in *Hazard Note 94* at www.bnhcrc.com.au/hazardnotes/94.

The research team worked closely

with Indigenous community members and leaders to address their emergency management issues and aspirations and, particularly, to explore the role of Indigenous Ranger Groups, working with state and territory agencies to provide frontline prevention, preparedness, response and recovery functions. This program, which began in 2007, is now widely used for a range of cultural and land management activities around Australia. The research showed that it was important for agencies to support these Groups to deliver emergency management services in remote settings, especially in the absence of agency capability.

"A collaborative model of emergency management in remote communities, developed in consultation with local members, is vital to improve the current situation," Prof Russell-Smith said.

"Agencies need to be patient with their support and provide regular, flexible and approachable training, mentoring and resourcing assistance, and consider innovative approaches for contracting and delivering effective emergency management in remote communities."

Inclusive and transparent communication

Another theme was the importance of inclusive, regular communication with

remote communities. Strengthening cultural literacy across the sector will contribute to a more transparent and inclusive communication process.

For example, in Galiwin'ku in east Arnhem Land, community leaders identified poor communication between service providers and residents as a key focus moving forward, because it is a strong contributing factor to community disengagement, marginalisation, disempowerment and disadvantage.

Mr Sutton's research echoed the need for more inclusive and transparent communication. Throughout the project, researchers encouraged Traditional Owners to 'own' the process by hosting all training development sessions on Country and inviting attendees who they knew would benefit from hazard management training. Working with Traditional Owners, custodians and knowledge-holders prior to any actual service delivery was found to be one of the best possible predictors of success and sustained practice.

"To avoid trying to solve a longstanding problem with short-term Band-Aids, we focused on asking Indigenous peoples for their perspectives, their needs and, ultimately, their world view on managing fire and disasters in their communities," he said.

"It costs a bit more upfront, but the result is long-term sustainable change on the ground."

A connection to place

The projects found that a deeper understanding of cultural and social contexts hugely benefits engagement and creates an environment of understanding and compassion for sociocultural intricacies specific to respective Indigenous communities. Working with communities on Country—that is, on Aboriginal land in a way that respects local law and customs,

supports local aspirations, and promotes ecological, spiritual and human health—was seen as essential for prioritising Indigenous connection to place.

Mr Dhamarrandji and Mr Gondarra explained that it isn't just about a connection to the land, but also about the laws and culture of those who live there.

"We are the holders and the keepers of Yolngu law. We are responsible for the land and the people. This project unites us with the common cause of protecting our rights, interests and values under the law," they said.

A key focus of Dr Neale and Dr Weir's research in southern Australia was the establishment of new avenues for trust, capacity and knowledge in intercultural contexts that can reduce risk to Indigenous peoples and the wider community. Their research (at www.bnhcrc.com.au/research/indigenouscommunities) found that the emergency management sector isn't sufficiently familiar with the fundamentals of Indigenous knowledge and governance.

"It is clear from our research that if emerging collaborations are to be sustainable, Aboriginal peoples need to be centred on meaningful terms across a suite of natural hazard practices and policies," Dr Weir said.

"This should involve not only support for Aboriginal peoples' governance organisations to lead, partner with and participate in natural hazard risk reduction and resilience more generally, but also building capacity in the sector's understanding about Country as a required expertise for all public servants across all employment levels and emergency management training."

The projects and their tools and resources are collected in the Indigenous Initiatives theme of the CRC's Driving Change website:

www.bnhcrc.com.au/driving-change/indigenous-initiatives.

Research like this can help to build trust-based collaborations that respect Indigenous peoples' contexts, creating arrangements that ensure they are partners in building a resilient Australia for all.

According to CRC Research Director Dr John Bates, future research—such as is being discussed for inclusion in the research plan of the new national centre for natural hazard research—can use these findings as a foundation.

"This research gives the emergency management sector insights on how to advance co-designed programs and identifies opportunities to improve crosscultural hazard management,"

Dr Bates said.

"These projects could provide guidance for future research on how to develop natural hazard programs that are inclusive of First Nations people and what new effective partnerships might look like."

Dr Neale also emphasised the importance of respectful partnerships as the sector continues to find collaborative solutions that strengthen resilience of Indigenous communities.

"We have to understand that, in Australia and elsewhere, many Indigenous peoples' past and present experiences of sharing their knowledge have frequently been negative and exploitative," Dr Neale said.

"There are better alternatives, and one is to think in terms of respectful partnership. As Aboriginal scholars and activists have been saying for a long time: non-Indigenous people have to give up some of their power and control if they want to work together.

"We have to start from the premise of their rights, as the First Peoples of this place, to speak authoritatively about Country."

and CRC
researchers
have
worked with
Indigenous
communities
in northern
Australia for
many years,
conducting
research that
strengthens
resilience.

Far right:

ARPNet

Right: Researchers from the **Darwin Centre** for Bushfire Research collaborated with Indigenous community leaders and land managers to identify emergency management needs in northern Australia.





BURNING AMBITION WOMEN IN FIRE AND EMERGENCY



Ariana Henderson speaks with Quinn Cramer about her career in fire and emergency, its challenges and highlights, and her heroes, as well as her advice for women wanting a career in the sector.

BY ARIANA HENDERSON

Implementation Leader, Champions of Change Fire and Emergency Group

uinn Cramer began her career with Queensland Fire and Emergency Services (QFES) in 2008 as an auxiliary firefighter. In 2011, she was the first female firefighter to be stationed at Rockhampton, and she spent seven years working through the ranks to become Station Officer at Gladstone. She enjoys all aspects of her role: being in charge of the appliance, working around the station, mentoring and coaching other firefighters, response, and community education.

In 2016, Ms Cramer began to get involved in inclusion and diversity and joined the Women and Firefighting Australasia (WAFA) board, becoming its president in 2019.

Admiration: Who have been your greatest heroes or champions of your career?

QC: A key person I met early in my career is Janine Taylor, who works for QFES and is well known for her work in inclusion and diversity across Australasia. Janine has supported and encouraged me, been a sounding board, and challenged me throughout my career.

At the WAFA conference in 2014 I met Kate Hill, Rochelle Martin, Tobi Noble, Alison Walters and Gen Delves. We formed a strong connection and support network, and I can go to them for advice. Donna Wheatley from Fire Rescue Victoria has been a key role model, especially in the WAFA president role.

Adversity: What hardships or challenges have you had to overcome?

QC: Being the first female in an area made it difficult to overcome perceptions and stereotypes. One of my biggest challenges wasn't obvious until I did the Australian Institute for Police Management Balance course in 2017. The course pushed me to recognise that you can be vulnerable and showing it at work is okay. It taught me to be more authentic with my own vulnerabilities.

Personally, I believe one of the reasons we have high rates of PTSD (post-traumatic stress disorder) is because people don't have the space to be vulnerable, to show they're hurting. The old fire service culture of 'don't bring your feelings to work' is sometimes not healthy. As an officer, modelling vulnerability demonstrates and encourages my crew to show their own.

Achievement: What do you see are the greatest highlights and rewards of your career?

QC: The 2018 WAFA conference in Wellington and the energy, networks and people I met. Continuing to meet people and finding out the positive impact of getting together with other women has been a highlight.

In 2017, I worked on some media with a local police inspector who later became a mentor. I got a letter from a

young girl on the Sunshine Coast. She had moved from England where women in the fire service are more visible thanks to Danielle Cotton, retired London Fire Commissioner. Since moving to Australia, this girl hadn't seen any female firefighters until she saw me on the news, so she reached out to say how great that was.

Ambition: What advice would you give to women wanting to start or accelerate their career in the fire and emergency services sector?

QC: Believe in yourself. I didn't get into the service the first time I tried, but if you believe in what you are doing and keep working towards the goal, you will achieve it. Have a network around youpeople who will help, listen and support you.

The statement 'you can be what you can see' is true. The 2016 WAFA conference, had some really strong, inspirational female leaders including Rhoda Mae Kerr, Austin Fire Chief and President of the International Association of Fire Chiefs, and Jona Olsson Latir, New Mexico Fire Chief. Having Katarina Carroll as the Commissioner for QFES was the first time I saw women at that high level and thought, 'that's something I could achieve'.

Sometimes we shy away when people ask us to do something. You don't want to be the token female for the photo. I had to switch that in my head to become the female role model for others—not just a token of diversity. It's about visibility for others, so they can see me, and what they can be.

Gladstone
Station
Officer Quinn
Cramer wants
to increase
visibility of
women in
the fire and
emergency
services to
encourage
greater
diversity in
recruitment.
PHOTO: QFES

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LIVES HONOURED AT 2021 NATIONAL MEMORIAL SERVICE

Above:
His Excellency General
the Honourable
David John Hurley
AC DSC (Retd) gives
his condolences at
2021 AFAC National
Memorial Service



Above: DFES Commissioner Darren Klemm and NSW SES Commissioner Carlene York lay a wreath during the National Memorial Service.

BY **ALANA BEITZ**

AFAC

embers, dignitaries and families of the fire and emergency services sector gathered for the AFAC National Memorial Service in Canberra on Friday 14 May to remember the lives lost in the line of duty.

Twelve personnel were commemorated during the service, held at the National Emergency Services Memorial on the banks of Lake Burley Griffin, and in 2021, an additional 12 names were also added to the Memorial Wall.

Families of those being commemorated received an AFAC memorial medallion, presented by the Governor-General of Australia, His Excellency General the Honourable David John Hurley AC DSC (Retd); Her Excellency Mrs Linda Hurley; and AFAC President Commissioner Paul Baxter.

The event was also attended by High Commissioner of New Zealand the Honourable Dame Annette King; His Excellency Mr Mark Glauser, High Commissioner for Canada; Mrs Diane Glauser; and Regional Security Officer of the United States Embassy Janet Meyer.

AFAC CEO Stuart Ellis AM said the day was an opportunity to recognise the sacrifice of fire and emergency services personnel in the pursuit of community safety.

"Participating in this service provides national, indeed Australasian, recognition for those who have served and those who have died. Gratitude of grateful nations, recognising those that while seeking to protect their communities from fire, flood, cyclone and other emergencies, have lost their lives," he said.

"We are here this morning to respect and reflect on those who have died serving their communities, acknowledge and support those families joining us here today, and hold in esteem all those who serve day in, day out, at all hours, volunteers and paid."

During his address to the service, the Governor-General spoke directly to the families in attendance.





Above: Attendees lay rosemary on the Memorial Wall for fire and emergency personnel who have lost their lives.

"When, tragically, the ultimate sacrifice occurs, there are loved ones left behind. Today, especially, our thoughts are with you. To the families here today—know that we will always remember their service, and the bravery of your loved one," he said.

"We will remember them, and that when their community was threatened, they served, they responded, they gave, they were brave, and they continue to inspire us."

Speaking on behalf of the AFAC National Council, Forest Fire Management Victoria Chief Officer Chris Hardman acknowledged the values of community and commitment that unite the fire and emergency services.

"The people that commit themselves to fire and emergency services come from all walks of life ... their sense of duty to their communities is something larger," he said.

"We all desire to protect the people we love, but any time disaster strikes, fire and emergency personnel leave their loved ones, leave their homes, and they travel to places to protect people they have never met. This act of self-sacrifice and courage is not to be taken lightly."

Following the virtual service held in 2020 due to COVID-19 pandemic restrictions, the event in Canberra was well attended both in person and online via livestream.

To view the 2021 National Memorial Service, visit the AFAC YouTube channel: www.youtube.com/channel/UCu18IYmKgFcL27XBKFI7Klw.

Find more information about the National Emergency Services Memorial, including the digital Honour Roll, at: memorial.afac.com.au. "The people that commit themselves to fire and emergency services come from all walks of life ... their sense of duty to their communities is something larger."

Chris Hardman, AFAC

FIRE AND EMERGENCY SERVICES PERSONNEL COMMEMORATED AT THE 2021 NATIONAL MEMORIAL SERVICE.

Name	Agency	Date of death
Stephen Richardson	Fire and Rescue NSW	14 June 2006
Mark White	Fire and Rescue NSW	19 May 2020
Maurice Treloar	SA Department of Woods and Forests	5 April 1958
Ryan Clay	Northern Territory Fire and Rescue Service	3 February 2018
Thomas Lawler	Northern Territory Fire and Rescue Service	27 October 2018
Robert Platt	NSW Rural Fire Service	28 February 1932
Reg Gartrell	NSW Rural Fire Service	16 August 1976
Gregory Moon	NSW Rural Fire Service	9 January 1983
Donald Deppeler	NSW Rural Fire Service	31 January 2011
Michael Maria	NSW Rural Fire Service	18 May 2013
Keith Lyons	NSW Rural Fire Service	12 May 2020
Jim Shanahan	NSW Rural Fire Service	9 October 2020



Above: **Dignitaries** at the launch (from left to right): Commissioner Paul Baxter AFSM, the Hon, David Elliott MP, Mr Bill Lea AFSM, Mrs Tanya Davies MP, Mr Barry Lee OAM, Mrs Lorraine Lee.

LAUNCH OF THE BARRY LEE TRAINING ROOM

Industry stalwart Barry Lee has been celebrated with a new training room named after him.

BY PAUL WATERHOUSE

FPA Australia

ire Protection Association
Australia (FPA Australia) and Fire
and Rescue NSW (FRNSW) came
together on 30 April 2021 to launch a
unique facility.

The Barry Lee Training Room is the first of its kind—a dedicated room that showcases a range of equipment covering wet and dry fire systems. Situated within the grounds of the NSW Emergency Services Academy, the room is a collaboration between the two organisations.

It provides the facilities to train fire protection practitioners and firefighters alike on the types of equipment likely to be found within Australian buildings.

The Barry Lee Training Room was officially opened by the Hon. David Elliott

MP, Minister for Police and Emergency Services, in the presence of:

- ◆ Fire Commissioner Paul Baxter AFSM
- ♦ Mrs Tanya Davies MP, Member for Mulgoa
- ◆ FPA Australia President Bill Lea AFSM
- Mr Barry Lee OAM, after whom the facility has been named.

Mr Lee, the honouree, is an icon of the industry. He was a long-term employee of Wormald Australia and, over his 50-year career in fire protection, he played a major role in shaping the industry.

His work saw him travelling the world, with regular visits to major fire protection and fire research organisations in the UK, Europe, the USA, Canada, New Zealand, China and South-East Asia.

As the president of the then Australian Fire Protection Association, Mr Lee was instrumental in creating FPA Australia and served as its founding president.

In launching the facility, Mr Elliott commented on the relative uniqueness of having something named in your honour while you are still alive. He also congratulated Mr Lee for the achievement and thanked him for his contribution to the industry.

FPA Australia thanks the Minister for launching the Training Room and acknowledges the significant influence Mr Lee has had on the development of fire protection in this country.

FPA Australia also thanks all the suppliers and installers who donated equipment and time to the Barry Lee Training Room; without their contributions, it would not have been possible. ■

To see a 3D scan of the facility, visit https:// captur3d.io/view/fire-protection-industry/fireprotection-industry-training-centre.

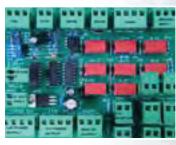


Located in the grounds of the NSW **Emergency** Services Academy, the Barry Lee Training Room is a dedicated facility for instruction on installed fire systems.





Launched by the Minister for Police and **Emergency** Services, the Hon. David Elliott MP, the facility is the first in its kind. It significantly increases the ability of FPA Australia to train practitioners and Fire and Rescue NSW to instruct trainee fire fighters on fire systems.





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RESEARCH GUIDES MENTAL HFALTH SUPPORT FOR YOUNG FIRE AND EMERGENCY **VOLUNTEERS**

Entering into an emergency zone is dangerous. Fires, flood and storms can all cause significant physical harm, but one of the most significant risks to young volunteers is exposure to potentially traumatic events and the subsequent impacts on mental health.

BY ALANA BEITZ

AFAC

esearch has found that exposure to traumatic events is common in young fire and emergency service volunteers, with 25% experiencing an event that affected them deeply in the course of their volunteering. A majority (four in five) of young firefighters experienced at least one stressful event.

Across Australia, fire and emergency service volunteers are essential to keeping communities safe during emergencies and disasters. With a current average age of 55 years, attracting and retaining young volunteers is key to sustaining this capability.

This Bushfire and Natural Hazards CRC (CRC) research, led by Dr Amanda Taylor from the School of Psychology at the University of Adelaide, focuses on maintaining good mental health in young volunteers. It provides the evidence base for a suite of new resources to support young volunteers and their agencies to improve their mental health literacy and establish stronger support networks for their workforces.

"This study is the first in Australia to focus specifically on the mental health needs of young adult fire and emergency service volunteers aged 16-25. The resources developed from this research include both simple practical strategies for young volunteers to support their own mental health and well-being, as well as a Well-being Framework and Implementation Guide

for fire and emergency agencies to better support younger volunteers," Dr Taylor said.

"Most importantly, these resources have been designed by subject matter experts across Australia together with fire and emergency agencies and the young volunteers themselves, which is a unique way of ensuring that they are understandable and relevant to those who will be using them."

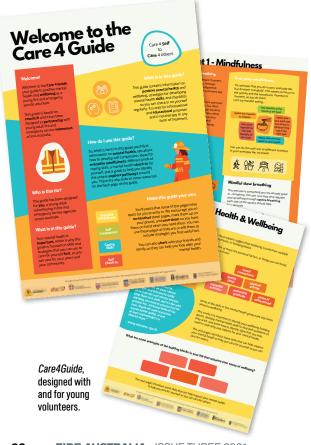
The Positive Mental Health in Young Adult Emergency Services Personnel project was funded by CRC and the Hospital Research Foundation, and supported by AFAC, National Council for fire and emergency services.

The University of Adelaide worked collaboratively with Flinders University, the University of Western Australia, Military and Emergency Services Health Australia (MESHA), and the University of British Columbia, in Canada, to undertake the research.

The study included a significant literature review and surveyed young volunteers (aged 16-25) to create a comprehensive snapshot of the current state of young volunteers' mental health, and develop a Young Volunteer Wellbeing Framework to improve resources and support that will be made available through their fire and emergency agency.

AFAC CEO Stuart Ellis said that it is the duty of agencies to meet the commitment of young volunteers with appropriate and relevant support.

"Volunteering is a rewarding venture in and of itself, and this research shows us that young volunteers' sense of well-being is improved through their



participation. Their service to their communities is invaluable to the fire and emergency services sector," he said.

"However, we cannot ignore the risks. Their willingness to step up for their communities must be reciprocated by fire and emergency services through mental health and well-being support."

The research has created the evidence base for the new *Care4Guide*. Designed with and for young volunteers, this is a practical self-completed guide to maintaining positive mental health and well-being as a young fire and emergency service volunteer.

"The Care4Guide gives young volunteers, their agencies and the whole fire and emergency sector the tools they need to have a conversation about mental health early in their engagement," said Dr Richard Thornton, CEO of CRC.

Dr Miranda Van Hooff, Executive Director of MESHA said, "The Hospital Research Foundation Group, through MESHA, is proud to have co-funded and collaborated on this important piece of research which will have a positive impact on the young people who serve our community."

"We hope the practical and tailored resources that have been developed can be utilised by both young fire and emergency services volunteers as well as their agencies to promote and support the health and well-being of our young emergency service volunteers now and into the future."

Other resources include an Agency Implementation Guide aimed at agency leaders, fact sheets that summarise key findings, and shareable assets such as posters that agencies can use to promote positive mental health within brigades, groups and units.

Until now, there has been limited research into supporting and promoting positive mental health for young fire and emergency service volunteers. The project highlights significant potential for more understanding and evidence-based resources on this topic, especially as we continue towards an increasingly complex natural hazard landscape due to the impacts of climate change.

These resources can be found on the CRC's website: www.bnhcrc.com.au/resources/volunteer-mental-health.

KEY RESEARCH FINDINGS

- International research identified that volunteer exposure to potentially traumatising events is common.
- 25% of young volunteers had experienced an event that affected them deeply during their volunteering. Four in five young firefighters had experienced at least one stressful event in the course of their role.
- 75% of surveyed volunteers had an active role in the 2019–20 Australian bushfires. 44% lived in a bushfire affected area.
- Young volunteers generally perceived that their volunteer role benefited their well-being

via a sense of contributing to the community.

- Young volunteers have higher levels of probable post-traumatic stress disorder (8.8%) compared to older volunteers (4.7%).
- Young volunteers believed that they had good skills for identifying and responding to potential mental health concerns in others but had less well-developed skills for identifying mental health concerns in themselves.
- Young volunteers said mental health-related stigma is present within many brigades, groups and units, particularly among older volunteers and personnel.

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Extinguishers, Emergency Ughting, Exit. Signs, Fire Blankets, Fire Hose Reels, Manual Call Points, etc.)



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Brushed Alloy or Anodised, A3 displaying all necessary information about the buildings sprinkler system,



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LESSONS FROM BLACK SUMMER

HOW PEOPLE EXPERIENCED THE 2019-20 NSW FIRE SEASON

More than 1,200 people share their experiences during the worst fire season in New South Wales' history to help improve communications and warnings.

BY DR JOSH WHITTAKER, DR KATHARINE HAYNES. **CARRIE WILKINSON. STEPHANIE SAMSON**

University of Wollongong

AND DR MATALENA TOFA, **TASMIN DILWORTH, JESSICA COLLINS, LILLIAN TAIT**

Macquarie University

fter the worst fire season in NSW history, research shows there are challenges around community expectations of bushfire warnings, with many people expecting to receive highly detailed and localised information in near real time.

Between August 2019 and February 2020, tens of thousands of people in NSW were displaced over the Christmas and New Year period, including residents, tourists and visitors. Tragically, 26 people lost their lives, while many more people were affected by smoke in both metropolitan and regional areas. By season's end, bushfires had burned a record 5.5 million hectares of NSW and destroyed 2,476 homes (NSW RFS, 2020). The fires adversely affected many industries, including agriculture, forestry and tourism.

New research has investigated exactly how people across NSW were affected by the 2019–20 bushfires and the actions they took. It was commissioned by the NSW Rural Fire Service and undertaken by the Bushfire and Natural Hazards CRC, the University of Wollongong and Macquarie University. The research can be used to evaluate the effectiveness of community warnings and engagement approaches.

Researchers conducted 202 in-depth interviews with people affected by the fires across NSW to identify key themes

and experiences, while a further 1,004 others completed an online survey. Importantly, both the interviews and survey included ACT residents who were in NSW at the time of the fires, to understand their experiences as visitors. Both the interviews and survey explored risk communication, preparedness (and how this changed due to the length of the fire season) and the experiences of tourists and visitors, especially during the Christmas and New Year period.

What did the research find?

The research found that previous experience of bushfire motivated many people to plan and prepare. The extent of the 2019-20 fires and the sheer number of people affected presents opportunities to reach new audiences with bushfire safety information and promote planning and preparation. However, the research shows the challenges around community expectations of warnings, with many people expecting to receive highly detailed and localised information in near real time. New initiatives, including fire spread prediction maps and 'Tourist Leave Zone' messages, were found to be effective in communicating risk and motivating people to take protective action during the worst of the conditions.

Prolonged and/or repeated exposure to fire

The length of the fire season and the repeated threat of bushfire was a significant factor that influenced people's planning, preparation and response. The extended fire season required many people to adapt to fire as an everyday part of their life, juggling work, schooling and family celebrations with ongoing monitoring, preparation and response to fire.

Many people were exhausted by the ongoing nature of the threat and the continual need to monitor and prepare. Some discussed living with the continual 'anticipation of threat' and voiced times where they had wished the fires would arrive so that the experience would

The length of the fire season allowed many people to engage in considerable planning and preparation. Residents who had not previously considered the risk of bushfire talked about how they made fire plans for the first time, while others had time to hone their preparations.

The long duration of the fire season influenced some people to change their bushfire plans. Notably, some realised that they no longer accepted the risks involved with staying to defend due to an increased understanding of the likely severity of the fire and witnessing fire impacts in other areas.

Fires Near Me NSW

The Fires Near Me NSW app was extremely popular, with 94% of primary residents surveyed reporting they had downloaded the app, including 39% reporting that it was the most useful source of information (followed by NSW RFS volunteers as the next most useful source at 13%). Most residents thought Fires Near Me NSW was easy to understand (89%) and useful (88%). More than two-thirds thought the information was sufficiently localised. However, less than half (47%) believed the information was up to date.

While a number of people reported that Fires Near Me NSW was not updated frequently enough, there was still a strong preference for it as a source of information, with 78% of survey respondents indicating it would be their preferred source of information in the future.



The NSW RFS had identified issues with Fires Near Me NSW, including the timeliness of maps due to the large number of fires and the speed of fires spreading, and these issues were reflected in many community interviews.

Fire spread prediction maps

Fire spread prediction maps were introduced by the NSW RFS to communicate elevated risk from fire conditions and the large number of dangerous fires burning across the state.

Most people (86%) recalled seeing these maps for their area and found

them easy to understand (93%), sufficiently localised (77%) and useful (85%). Around half of these respondents said that seeing the fire spread prediction influenced their decision to leave or avoid travelling to a fire threatened area.

Some tourists and visitors consulted fire spread prediction maps prior to commencing their travel. A small number of people said the fact that their travel destination was not within a fire spread prediction area gave them a false sense of security in continuing with their travel plans.

Tourist Leave Zones

Tourist Leave Zones were communicated to encourage visitors to leave certain areas due to the fire risk.

Around half (47%) of the tourists, visitors and secondary residents who were surveyed reported that they were in a Tourist Leave Zone during the bushfires. After receiving notification of the Tourist Leave Zone, 54% of people returned home to their primary residence and 14% went to another location outside the zone. Around one-third stayed within the zone. Reasons for staying within the zone included to protect houses and

SUMMARY OF KEY STATISTICS*

Engagement with NSW RFS programs and materials:

- 57% had read the NSW RFS Guide to Making a Bushfire Plan
- 44% had participated in a local NSW RFS brigade event

Fire spread prediction maps:

- 86% recalled seeing a fire spread prediction for their area
- 93% found it easy to understand, 77% sufficiently localised and 85% useful

Official warnings:

78% received official warnings with sufficient time and 71% with sufficient information to take protective action

Fires Near Me NSW app:

- 94% had downloaded the Fires Near Me NSW app
- 78% indicated that the app would be their preferred source of information in the future

Neighbourhood Safer Places:

- 44% were familiar with the term 'Neighbourhood Safer Place'
- 72% of those who were familiar with the term were aware of a Neighbourhood Safer Place in their area

Experiences of tourists and visitors:

38% considered it likely that a bushfire could occur in the area they were visiting and

- 33% considered it unlikely. Just 2% had not considered the risk
- 27% indicated that a bushfire was already burning in the area they were going to visit
- 45% of those who travelled to an area where a fire was already burning did so to defend a property or assist family or friends. 26% did not think the fire would affect them and 11% wanted to continue with holiday or business plans
- 52% had not done anything to prepare for the possibility of bushfire on their trip
- 47% reported that they were in a Tourist Leave Zone during a period of bushfire threat

- 34% found out about the Tourist Leave Zone via radio. 13% via television, 13% via social media, 11% from people in the surrounding area and 10% via Fires Near Me NSW
- 54% returned to their primary residence after receiving notification of the Tourist Leave Zone, 14% went to another location outside the Tourist Leave Zone and 32% remained within the Tourist Leave Zone, mostly to defend property (typically holiday home owners) or because they were unable to leave.
- * Statistics are for survey respondents who were threatened or affected by bushfire at their primary place of residence ('residents').

property (mostly occupants of secondary residences – 32%); because police, fire or emergency service advised people to stay (12%); and because attempts to leave were unsuccessful (11%). The majority of interviewees understood the purpose and were supportive of Tourist Leave Zones.

Tourists and visitors

While most tourists, visitors and those who owned secondary homes were aware of bushfire activity in the vicinity of their travel destination, many did not think they would be directly affected. Continuing with annual holiday plans and wanting to escape smokier conditions at their primary place of residence were the main motivations for people to travel during the bushfire threat.

Opportunities for the future

The findings in this research present numerous opportunities for the NSW RFS and other government agencies and communities to reduce future bushfire risk. Few opportunities are the responsibility of any one stakeholder alone. The findings highlight the complexities of community preparedness and responses to

bushfire, and the need for integrated and holistic responses to risk reduction. Bushfire risk reduction is a shared responsibility between governments, fire and emergency services, businesses and communities.

Community expectations of warnings and information appear to be growing. Many people expect to receive highly detailed and localised information in near real time. Analysis of interviews suggests that people want this information to make more 'responsive' or 'timely' decisions about protective actions. Messaging is needed about the potential for disruptions to communications during bushfires, underscoring the need for well-planned and decisive action to avoid last-minute evacuations or being unable to leave a fire-affected area.

For most people, the Fires Near Me NSW app remains the preferred source of warnings and information during bushfires. People identified ways it could be improved, including by providing more information about where the fire is spreading and, particularly for tourists and visitors, information about roads and transport. While there are benefits

of providing more localised and detailed information about the likely spread and impact of bushfires, there is a risk that this would encourage people to delay their protective action. Those who plan to leave during bushfires should do so long before they are directly threatened.

Fire spread prediction maps and Tourist Leave Zone messages were effective in communicating risk and motivating people to take protective action. Consideration should be given to reserving their use, so they continue to be taken seriously by the community. Community members must understand that such communications are based on predictions that, while based on the best available science, are inherently uncertain.

Few travellers had prepared for the possibility of encountering bushfire while travelling or at their destination. Tourists and visitors should be encouraged to plan and prepare for bushfire when travelling to and visiting bushfire risk areas. ■

For the full research findings, see *Black*Summer – how the NSW community responded to the 2019–20 bushfire season at www.bnhcrc.com.au/publications/black-summer-nsw-community.

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The Black Summer bushfires are changing the way we think about and understand community recovery. New research explores how the communities impacted by the fires in eastern Victoria assessed their strengths and capabilities following the 2019–20 bushfires.

BY RADHIYA FANHAM

Bushfire and Natural Hazards CRC

ecovery from natural hazards, such as bushfire, flood or cyclone, is complicated. It is different for each person and across communities. There is no switch to flick that leads to recovery, and no specific time frame for it. With that in mind, what does community recovery look like after some of the worst bushfires ever recorded, when combined with a pandemic? Just as the 2009 Black Saturday bushfires fundamentally altered how bushfires are seen, the 2019-20 Black Summer bushfires have changed perceptions about community recovery across the country.

In Gippsland, in Victoria's east, the bushfires were devastating. Over half of the East Gippsland Shire—an area of over 1.16 million hectares—was burnt from November 2019 to February 2020, destroying more than 400 dwellings and businesses. Recovery was just beginning when the COVID-19 pandemic hit.

Research from the Bushfire and Natural Hazards CRC and Victoria University examined community recovery in this specific context, providing a starting point for assessing and understanding community

capability for recovery in a practical sense. Specifically focusing on two local council areas in Victoria's east-East Gippsland Shire and Wellington Shire councils—the Understanding experiences and recovery capabilities of diverse communities in Gippsland post 2019-20 bushfires project examined the capabilities that currently exist and those that were important for these communities. The research aimed to explore how the two communities experienced their strengths and capabilities and how they were affected by 106 days of active bushfires, followed by the COVID-19 pandemic, and statewide lockdown.

"In initial conversations, it became clear that community members wanted a different conversation to the ones they had been having," project leader Celeste Young explained.

"They were seeking to be heard and understood—not as victims of the bushfires, but as people who needed support because of the bushfires. To accommodate this, we focused on community strength and capabilities."

Joining Ms Young on the research team were her colleagues at Victoria University's Institute for Sustainable Industries and Liveable Cities, Professor Roger Jones and Dr Craig Cormick. Together they explored:

- the capabilities that currently exist within Wellington and East Gippsland shire communities, and those the communities needed
- the key influences that shape these capabilities
- which capabilities are most important to the communities
- what is needed to support and grow these capabilities.

The team also surveyed neighbouring fire-affected regions of NSW to understand what was context-specific. One finding was that NSW respondents were more likely to state that the bushfires had been more severe compared to previous fires.

In addition, researchers sought to understand the historical and changing risks, alongside economic and demographic perspectives derived from data analysis and reports in the East Gippsland and Wellington shires.

Exploring community capability

Community capability was explored through the participants' lens of the strengths and experiences of their recovery process, acquired through an online community conversation, semi-structured interviews and focus groups. The data collected was thematically

Bushfires tore through the town of Sarsfield in East Gippsland over 30–31 December 2019, destroying at least 12 homes. analysed and categorised. Capabilities were then extracted from those themes and assessed by adapting an asset-based community development approach. An online survey saw 614 people from fire-affected communities in the East Gippsland Shire, Wellington Shire, other areas of Gippsland and regions of NSW give their views on communications, personal and community resilience, and attitudes towards the future.

"What we were originally aiming to do was something much smaller than this," Ms Young explained. "But after doing the interviews, the workshop and the survey up and down the coast, we realised that what we really needed to understand was why. Why did this recovery play out differently and what sits beneath this?

"We also chose to focus on capabilities because often in risk responses people start with vulnerability, but when you are thinking about recovery it's different as you are rebuilding, so you need to start with strengths. It also creates a really different conversation as you are looking at what people have and what they can do with that."

Strengths and capabilities

Capabilities enable communities to achieve outcomes and were articulated by study participants as strengths.

Overall capabilities were felt to be not well understood by those outside their community and often only known to those within communities or those working closely with them.

The most important strengths and capabilities identified by the communities were attribute-based, such as 'hopeful', 'supportive', and 'compassion'. These were seen to underpin how communities function and were also strongly associated with resilience.

"One of the most important outcomes of this research was making visible what hasn't been visible," said Ms Young.

"These invisible, attribute-based aspects aren't typically looked at or measured, but they are actually really important indicators as a signal that communities are reaching a threshold and that specific support is needed to keep them functioning."

This was reflected in the survey when participants were asked what strengths their community showed following the bushfires, with generosity and kindness, resilience, and active volunteering seen as the most-needed strengths (Figure 1). The project report also provides a

FIGURE 1 Survey question: What strengths do you think your community showed following the bushfires?

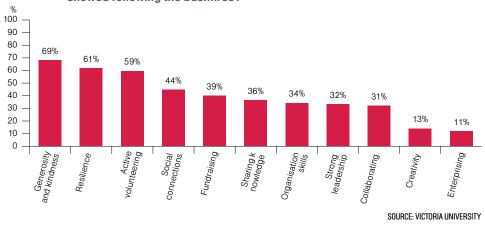
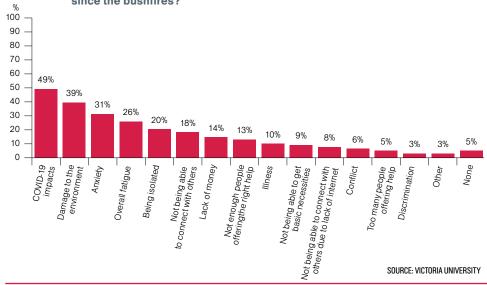


FIGURE 2 Survey question: What are the main challenges you have faced since the bushfires?



functional assessment of community capabilities and an indicative status of some of these strengths. This provides insight into how they manifest in communities and helps to identify what is most important and why.

Challenges and needs

While the length and severity of the bushfires meant that some communities were exhausted before recovery even started, COVID-19 was named by research participants as the main challenge since the bushfires, followed by damage to the environment, anxiety and overall fatigue (Figure 2).

COVID-19 restrictions were felt to have exacerbated pre-existing issues and vulnerabilities within communities and amplified the impacts of the bushfires in both directly and indirectly affected communities, increasing and compounding trauma. The research found that the restrictions in place to reduce the spread of the pandemic resulted in communities becoming more isolated, and adversely impacted their ability to provide care and community

connectivity. Conversely, where people had the resources and the ability to adapt, it had built strengths in areas such as the growth of online networks, communication and resilience.

There were also challenges associated with program delivery, which negatively impacted some communities' capabilities. These issues primarily stemmed from a lack of knowledge, and limited inclusion by government, areas of emergency management and some support agencies in areas of the planning process. Low awareness of the specific nature of these communities, how to engage with them, and the diversity of subgroups within them were additional factors.

"The social structures within each community are different and incredibly important to understand," said Ms Young, "because that shapes how they communicate and want to be communicated with."

Study participants emphasised the importance of feeling their concerns and needs had been heard and acknowledged, and would be acted

upon. The people communicating, and levels of trust, were found to determine how information was received and heard by different communities.

"This reinforces the need to build and maintain trust over the longer term with communities before they are under duress," Ms Young explained.

"The type of communication required goes beyond standard approaches, and skills need to be built in this area with those who work in these communities."

The survey also provided insight into the significant differences in how culturally diverse people view their communities, the information they receive, and from whom they prefer to receive it. This reinforces the importance of having an improved understanding of the similarities and differences between communities and their diverse demographics, including their social, physical and cultural nuances. The study participants also emphasised that communities want to communicate with state and local government and see this as important.

Meeting the challenge

The study found that the overarching context of recovery at the community scale was complex and fragmented. The place-based, context-specific nature of recovery, and the lack of clarity around the role of the community in the recovery process, further complicated this issue. There are also opportunities to leverage these capabilities, particularly using local knowledge to strengthen management of natural hazard risk.

"Looking at the bigger picture across the region can help identify who's got

what capabilities and how they might work together," Ms Young said.

"Clarifying the points where the baton changes between the government and communities in terms of decision-making and responsibilities is important."

Ms Young explained that the results of this research highlight that recovery is a "non-linear" process.

"Recovery is systems-based," she said. "People recover in response to what is around them; the community, the natural environment, the economy, other individuals—it's all linked.

"This means that the process itself is not simply a matter of moving from Point A to Point B because the interactions between the different parts in the system determine how recovery plays out—you need to have flexibility in support structures to accommodate this."

Recovery from future disasters, therefore, should consider the impact of increasingly dynamic events on communities and the point at which their ability to recover may be exceeded, so that this risk can be managed.

"The most important takeback from this project is that community capabilities are an untapped resource," Ms Young said.

"We need to develop a baseline of what community strengths and capabilities exist using bottom-up community assessments to determine what is needed for their recoveries, why it is needed and how this can be best achieved."

There is a critical need to continue to build data and knowledge of community capabilities to support resilient community recovery and ensure that

targeted policy-making and programs are in place to support capability, prior to events occurring.

As a starting point for recovery, community strength and capability can help to provide a constructive focus for conversations between communities, emergency services and government regarding the priorities after a disaster and what can realistically be achieved. More importantly, listening to these communities offers an opportunity to learn from their experiences and to support the development of community-led practical pathways that aid recovery and build resilience.

Read the full findings of this research in the *Growing the Seeds: recovery, strength* and capability in Gippsland communities report: www.bnhcrc.com.au/research/ communitycapability. The East Gippsland community recovery postbushfires.





Residential fire safety is essential to fire and emergency service agencies' primary mission to protect human life. Collectively, they are enacting steps to reduce the resident fire fatality rate to zero.

BY IVAN WEST, ALANA BEITZ

AFAC

ustralia has a high number of preventable residential fire deaths each year—a number that has remained stubbornly high for more than a decade. The Preventable Residential Fire Fatalities in Australia July 2003 to June 2017 report (Coates et al., 2019), published by the Bushfire and Natural Hazards CRC, uncovered an annual national death rate of 0.29 preventable residential fire fatalities per 100,000 population, equating to an average of 64 fatalities per year in Australia.

If this fatality rate were attributed to a one-off disaster—such as bushfire, cyclone or flood—it would be considered a national tragedy. This has led the residential fire death toll to be considered a 'diffused disaster' within the fire and emergency sector.

Critically, the research behind the report found there was no clear decline in the annual number of fatalities over the 14-year time span of the study, which ran from July 2003 toand June 2018. The persistent nature of this issue has triggered a concentrated and strategic effort across the fire and emergency services sector to drive the preventable residential fire fatality rate down.

Taking a firm position

Following the publication of the research report, AFAC developed the *Residential Fire Safety Position*, which was endorsed by AFAC National Council in September 2020.

As part of the AFAC Doctrine collection, the position has been nationally acknowledged by all AFAC members and acts as a guiding document for agencies to develop their policies and procedures. The position states:

"AFAC member agencies take the position that residential fire safety is essential to their primary mission to protect human life. It is the role of member agencies to engage with community members, both directly and indirectly, to enable them to develop understanding of the risks of fires in the home and identify appropriate actions to minimise these risks. Vulnerable members of the community who are less able to minimise these risks independently will be supported by member agencies through advocacy, legislation and collaboration."

Amanda Leck, Director of Risk and Resilience at AFAC, said residential fires have a significant emotional, economic and social toll.

"Damage of your home and possessions due to residential fire is a terrible loss, and it can take years to recover from the impacts. But the real cost is devastating—with currently more than one preventable residential firerelated death occurring every week in Australia," she said.

"AFAC is working with fire agencies and communities to improve understanding and reduce the risk of residential fires. Knowing the risks is key, and we are providing fire agencies with the strategic framework to understand their communities' vulnerabilities in relation to residential fires, and ensure action is being taken to reduce the harm and loss they cause."

Strategy towards zero

To better support the sector in understanding and reducing residential fire risks, AFAC has developed the Residential Fire Fatality and Injury Prevention Strategy: Towards Zero Fatalities.

The strategy, endorsed by AFAC National Council in May 2021, aims to develop a strategic framework to support Australian fire and rescue services to reduce the number of preventable residential fire fatalities. It reflects the recommendations contained in the *Preventable Residential Fire Fatalities in Australia* report and further work through AFAC to develop and operationalise the report's recommendations.

In response to the recommendations from the research report, and in support

RECOMMENDATIONS FROM THE PREVENTABLE RESIDENTIAL FIRE FATALITIES IN AUSTRALIA REPORT:

- Develop a national residential fire strategy with an overall aim of reducing preventable fire deaths towards zero.
- 2. Develop an annual fire fatality report that sources fire and fatality data from fire services and use this data to drive evidence-based policy and practice.
- Update residential fire fatality data sourced from National Coronial Information System (NCIS), optimally every three years.
- 4. Consider how fire services could more proactively provide information and data to inform coroners, particularly around aspects of fire risk, prevention and smoke alarms.
- 5. Develop and evaluate partnership approaches to residential fire safety with other sectors such as providers of National Disability Insurance Agency and My Aged Care services, maternal and child health services, Aboriginal services, and others.
- 6. Extend the uptake of the Basic Home Fire Safety Training Materials as a unit of competency in a wider range of qualifications and sectors that provide services in the homes of people at increased risk from fire.
- 7. Consider how older people and people with a disability can more easily access fire safety devices appropriate to their needs, including specialised smoke alarms and residential sprinkler systems.



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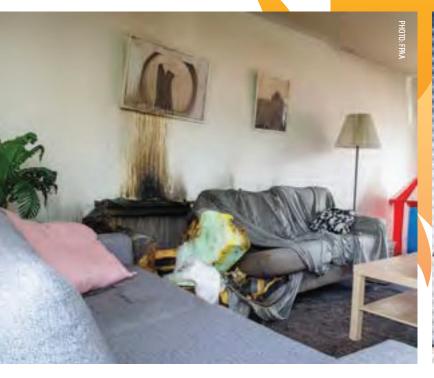
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Above: A demonstration burn by the Home Fire Sprinkler Coalition shows how sprinklers can contain fire spread to the point or room of ignition.

Above: FRNSW personnel extinguish a demonstration burn hosted by the Home Fire Sprinkler Coalition.

of the AFAC *Residential Fire Safety Position*, two key strategic outcomes were identified:

- **1.** Collection and reporting of robust fire fatality and injury data
- **2.** Implementation of evidence-based, targeted fire safety interventions to reduce risk.

AFAC will continue to support its membership to achieve these outcomes as the sector collectively works towards zero preventable fire fatalities. The strategy is intended to provide strategic direction to AFAC member agencies as they develop policy, procedures and guidelines related to reducing injuries and deaths in residential fires. It may also be useful to non-member emergency services providers, local government bodies, non-government organisations, building regulators and land-use planners as they develop their own guidance material related to residential fire safety.

Building solutions

AFAC is also addressing residential fire risk through regulatory reform and strong partnerships in the fire protection industry. Born from the successful effort to introduce cost-effective residential fire sprinklers in Class 2 and 3 buildings in the 2019 National Construction Code (NCC), the Home Fire Sprinkler Coalition (HFSC) is a collaborative initiative between AFAC and FPA Australia.

The HFSC has continued its hard work supporting industry and fire services in the adoption of the new

regulations. This has led to discussions with insurance companies, large scale housing developers, state housing departments and retailers. With momentum building and support increasing, the HFSC has been finalising its strategic intent.

The HFSC's purpose is to inform and advocate the benefits of home fire sprinklers to protect Australian communities from the impact of residential fires, and to support the sustainability of the built environment. This will be done through six key influencing areas:

- ◆ Advocacy
- Education
- Research
- Capability and capacity building
- ◆ Technical advice
- Standard setting.

As the capacity of industry increases, and equipped with a new strategy, the HFSC expects to strengthen its support of industry, fire services and, eventually, the community.

Connecting with the sector

The HFSC participated at the Fire Australia 2021 conference with a stand in the expo hall and a presentation by HFSC Chair Mark Whybro. There were many constructive discussions at the stand with a large range of attendees stopping by to find out more about the Coalition and its work.

Discussions ranged from how the changes in the NCC were building a new market, not just for plumbers but also

for traditional sprinkler fitters, to how residential fire sprinklers could be used in social housing. A number of attendees were excited about the work of the HFSC and have followed up to become official supporters.

The HFSC looks forward to continuing these discussions with the sector and the community when it exhibits at the upcoming AFAC21 powered by INTERSCHUZ Conference and Exhibition in Sydney in August. Attendees can talk to Coalition representatives at Stand 367.

Collaborative approach for effective messaging

The HFSC has recently worked with students of the Worcester Polytechnic Institute in Massachusetts. The students analysed effective home fire sprinkler campaigns undertaken in the United States, together with public safety campaigns from Australia. The aim was to provide insight into home fire sprinkler campaigns and strategies that may be effective in Australia.

Explore more from: The Home Fire Sprinkler Coalition: https://homefiresprinklers.org.au/

The AFAC Residential Fire Safety Position: https://www.afac.com.au/insight/doctrine/ article/current/residential-fire-safety-position

The Preventable Residential Fire Fatality report: https://www.bnhcrc.com.au/publications/ biblio/bnh-5807

Fire-protected timber passes all classes.

In the 2019 edition of the NCC. a Deemed-to-Satisfy solution was extended to permit construction in fire-protected timber building systems to an effective height of 25 metres (typically 8 storeys) for all classes of building, enabling the use of timber building systems in aged accommodation, schools,

Timber building systems include traditional lightweight timber framing and the newer mass timber options, including cross laminated timber (CLT), laminated veneer lumber (LVL) and glue laminated timber (glulam).

retail and hospitals.

For more information use the QR code below or Search '2019 NCC' at the WoodSolutions website.

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Technical Director, Wormald

ires can occur wherever there is significant heat and flammable materials, but no more so than around the equipment and vehicles that are vital to a mine's operation. Heavy vehicles pose significant risks due to the long hours they operate and the inevitable wear and tear of machinery and components.

The risk of fires in mining equipment and vehicles becomes clear when we consider the potential domino effect of danger that threatens an entire mining site.

An example of this occurred in 2018 in the Tritton Copper Mine, where 19 workers were trapped 900 metres underground after a haul truck caught fire within the mine's main decline. The workers were forced into the refuge chamber; they had no communications and had to rely on the self-contained air supply. Fortunately, they were eventually evacuated without suffering any permanent injury. An investigation later determined that the fire was likely caused by the truck's diesel fuel escaping the fuel system and contacting hot components in the engine compartment.

Fire originating from heavy machinery can lead to further problems that exacerbate the situation, causing widespread operational damage and, potentially, the loss of life.

It is no secret that fire is still a major concern in the mines, making up most of the reported incidents across the country. For example:

◆ NSW recorded 55 incidents involving

- fires on mobile plants in the third quarter of the 2020 financial year. This compared to 45 reported incidents in the 2020 financial year's second quarter.
- ◆ In Queensland, the high potential incident (HPI) frequency rate increased in the 2019–20 financial year by 3%, with reported incidents increasing in surface coal (up 7%), underground coal (up 16%), and underground mineral mines (up 24%) during the reporting year. The Queensland Mines and Quarries Safety Performance and Health Report 2019–20 stated that the most frequently reported HPIs for mines was fire on vehicle or plant.

Mining conditions with harsh off-road operations can often cause pressurised oil and fuel lines to perish over time, or vibrations that cause components to become loose or leak. Other reported causes for vehicle or machine fires include alternator faults, jammed starter motors, overheated cables or frictional heat from rubbing against moving parts.

Due to these ever-present risks, states provide regulatory frameworks that require suitable emergency procedures to handle fires, including the need for effective fire suppression systems. These systems are often required to be of suitable use and placed in the engine compartment of vehicles and machinery, and in other likely combustion compartments.

With regulations in place and fires still prevalent, there are several important

considerations when reviewing fire suppression systems:

- Non-restrictive installation—fire suppression systems must be close enough to high-risk areas to suitably prevent fire danger. Effective systems should comprise of flexible sensor tubing, which can be installed directly above and around an engine to ensure maximum fire coverage.
- ◆ Early fire detection—fire suppression systems and detection must suit the hazards present. It is important to review the temperature at and in direction which your fire suppression system operates.
- Suppression scale—vehicular-based fires and other fires related to mining activities have a wide spectrum of causes and intensities. Suitable fire suppression systems must include the appropriate extinguishing agent delivered at the correct volume and temperature.

As fires remain a prevalent hazard to Australian mining, it is important to do all you can to mitigate the risk.

This includes taking the flammability of the haul into consideration and ensuring that any toxic, flammable or combustible materials are kept safely away from heat sources like turbo and exhaust systems.

But to ensure the safety of miners, equipment and the entire operation, appropriate attention must be given to the fire systems in place to that will respond to and remove the danger if it ever arises.





PERSPECTIVES FROM THE SECTOR

In this regular series, AFAC CEO Stuart Ellis interviews a senior AFAC leader for each issue of *Fire Australia*. In this edition, he speaks with Queensland Fire and Emergency Services (QFES) Commissioner Greg Leach.

You have now been in Queensland as QFES Commissioner for 18 months. Any reflections on the organisational arrangements in Queensland as one department versus the arrangements in Victoria?

In Victoria each of the agencies is a separate statutory authority, while Queensland Fire and Emergency Services (QFES) includes several agency streams-Fire and Rescue Service, Rural Fire Service and the State Emergency Service—as well as administering the state's disaster management arrangements. It's quite different, but it does provide opportunity for collaboration, cooperation and better understanding between the agencies within QFES. It is an interesting and sometimes complex organisation to manage, but I believe the organisational arrangement is effective, with the core of what we do being focused on

building resilience in Queensland communities. That greater level of understanding and cooperation across the agencies is beneficial, particularly in joint operations or with multi-hazard operations, including our COVID-19 response. In 2020, when we had floods up north, bushfires down south and COVID-19 operations right across Queensland, one of the strengths of QFES was the ability to work across those various agencies to get the job done and deliver the best outcomes for Queensland communities. The Queensland Government has recently announced an independent review into the organisational structure and financial sustainability of QFES, and our stakeholders will have the opportunity to express their views on the current arrangements. We will continue to work with the government and stakeholders on the best model to deliver good public value to the community.

What do you see as QFES's greatest challenges in the next three years?

The greatest challenge we face broadly across Australia is climate change and Queensland is no different. For QFES that means increasing unpredictability of all our major hazards, whether they be cyclones, bushfires or floods. We need to be ready for that and we have got to do it in an environment that is fiscally constrained due to COVID-19. Budgets are under pressure at a time when we must continue to deliver the best services to the people of Queensland, and to manage expectations while maintaining the safety and well-being of our staff and volunteers.

QFES is leading the way with local government in plotting these risks at a local level and putting local prevention and response plans in place to counter those risks. One of the strengths of this state is its disaster management arrangements,



Above: Commissioner Greg Leach addresses the QFES Marine Rescue Implementation Working Group.



Above: The 2019–20 bushfire season challenged QFES operations. Severe bushfires occurred in several parts of the state with fire behaviour and intensity that Queensland rarely experiences.

including the Queensland Emergency Risk Management Framework, which promotes the continual review and identification of risk at the local level and the delivery of improvements through the shared responsibility of risk management and mitigation at local community level.

Contracting a Large Air Tanker (LAT) in Queensland indicates a real commitment by the Queensland Government to address bushfire threat. Has the situation changed in recent years?

Queensland in 2018 and 2019 experienced bushfire conditions the likes of which it hadn't seen before. We had severe bushfires in several parts of the state with fire behaviour and intensity that Queensland rarely experiences. As part of our response to a warming climate and the changing conditions we are facing, in 2020 the Queensland Government committed to the provision of a LAT.

We have many contracted aircraft on standby but one of the challenges of Queensland is its size. So, with the provisioning of the LAT and locating it strategically at Bundaberg where it can service much of the state within an hour's flying time, we have the best of both worlds. We saw the success of the LAT when it was a strategic part of air operations during the fires on K'gari (Fraser Island) in 2020, where it was one of 30 aircraft used to drop more than a million litres of water a day and deliver a total of 13.3 million litres over the course of that fire fight.

While the LAT plays an important part in our firefighting operations, it shouldn't be of surprise that many of our smaller aircraft on standby can deliver a quicker and sometimes better result because of their manoeuvrability and flexibility in refill.

With such a large state, your QFES regions and local government play a critical role in emergency management. Can your share your approach with our readers?

The main thing I noticed when I came to Queensland is the critical role local government plays in disaster management arrangements, and I think it is that role that sets Queensland apart from other jurisdictions. Our state arrangements are quite typical of what you would find in most states and territories with a three-tier arrangement of local, regional and state, but it's the role of local government at the heart of prevention, preparedness, response and recovery (PPRR) arrangements that is our strength.

By using QFES regions and local governments in emergency management, it ensures a locally led response based on local insight and data. It allows for tailored emergency management rather than a top-down approach that is unsuitable for a vast and diverse state.

How do you see your membership and engagement with AFAC benefiting QFES in the past and the future?

The ability to collaborate with other

agencies in a national forum to leverage off best practice in other jurisdictions is incredibly beneficial. There are always opportunities to improve and it's important we learn from past experiences, not only from within Queensland, but from our interstate and international counterparts as well. With Victoria and NSW having experienced severe bushfire seasons over a long period of time, we can learn from them in terms of their doctrine, training and appliance design, so we don't have to reinvent the wheel when it comes to how we address Queensland's growing bushfire risk.

The benefits of having access to industry insights, emerging research and national information helps build community connection because, at the end of the day, we are all here to support each other.

How do you balance the demands of the role with life outside work?

In jobs like this it can be all-consuming at times, so you do need to separate work from home and maintain a healthy balance and perspective. It's important to take time out and keep track of yourself, and that can be a challenge because we are a 24/7 organisation and there's always something going on. I want to make sure all our people take care of their mental and physical health over the course of their time with QFES. It's important to me that our volunteers and staff have a long, healthy, happy and rewarding career with us and, when they finish their career, they also have a long, happy and healthy retirement.

BLAST FROM THE PAST



Above: General view of the fire from Guy's Tower, 1871.

Riaht: The Castle today





Left: The great hall, restored in 1871 following the fire.

Below: The scene in the courtyard as valuable paintings and furniture are carried to safety.



FIRE AT WARWICK CASTLE—1871

BY BARRY LEE OAM

arwick Castle, seat of the Earls of Warwick, is one of the finest specimens of a feudal stronghold in England. It occupies an imposing position between the town of Warwick and the River Avon in Warwickshire. The first castle was built there in 1068 on the orders of William the Conqueror. Over the centuries it has been owned by Richard III, Henry VII and Elizabeth I, as well as the powerful Earls of Warwick.

At about 1.30 am on Sunday, 3 December 1871, fire was discovered on the first floor of the East Wing. The wing comprised the waiting room and library, ladies maids' rooms, the countess's bed and dressing rooms, his lordship's dressing room, and rooms called the White Room, the Red Bedroom and the Leather Bedroom. Smoke was pouring from the countess's first-floor apartments. Staff attempting to enter the rooms were confronted by a mass of flames. Occupants of the castle were wakened and hurried into the courtyard, among them two children who were brought down narrow, winding, smoke-filled stairs to the Grand Staircase before it was seized by fire.

The castle alarm bell was rung, the Warwickshire fire brigade was called,

and messages were sent to Leamington, Kenilworth and Coventry for further help. Lord Warwick's agent telegraphed Birmingham for a steam fire engine to be sent by special train. That city did not at the time possess a steam fire engine and nor could a special train be procured—but a powerful manual engine was promptly sent by road.

The fire spread rapidly and it was only possible to save some of the most valuable pictures and books from the East Wing. Having consumed the apartments in the East Wing, the flames crossed the Grand Staircase and attacked the Great Hall beyond. The Great Hall was considered one of the finest apartments of its kind in the kingdom. Its carved gothic roof was emblazoned with heraldic devices, the floor was red and white Venetian marble, and the panelled walls were hung with armour, swords, guns and antlers. It houses various treasures, such as a battered helmet that had belonged to Oliver Cromwell, together with statues, tombs and other antique objects.

Warwick Castle also possessed a superb collection of paintings by old masters. There were portraits of Charles I, Prince Rupert and Montrose by Van Dyck, and oils by Rembrandt, Rubens, Kneller, Holbein, Titian, Salvator Rosa and Lely. A great deal of the furniture

was far too heavy to be moved in a hurry, but it was possible to dismantle Queen Anne's bed, which had been presented to Warwick Castle by George III. A valuable Brussels tapestry was also pulled from the wall and taken to safety.

Drafting water from the Avon was out of the question at that period in history, and even today would present a problem. Water had to come from the supply laid on from the town of Warwick. Further, it seems that at the time the fire broke out the water to the castle had been turned off. The Chief Fire Officer. had to tell the town turncock to turn water into the mains from Warwick's water tower and to commence pumping at the waterworks. What really saved the West Wing was a massive stone wall between the Great Hall and the Red Drawing Room. It kept flames at bay until the fire was under control by 10 am. The cause was not determined, but the Illustrated London News said that painters and decorators had been at work on the previous day and plumbers had been on the roof where there were fires.

In the immediate aftermath there were fears that the damage to the castle was irreparable. However, the internal walls were still stable, and the blaze did not reach the state apartments ... but the cost to repair the damage was huge.

UPDATE STANDARDS AUSTRALIA

BY IAN FINDLAY

Technical Officer—Projects and Standards, FPA Australia

AUSTRALIAN STANDARDS

Here is what's currently happening with fire protection-related standards at Standards Australia:

FP-002 Fire detection and alarm systems

The amendments to AS 1670.1, AS 1670.3 and AS 1670.4 are now at committee hallot

Combined procedures (public comment and committee ballot) on the revision of AS 3786 (an adoption, with modification, of ISO 12239) and on the identical adoptions of the recent revisions of ISO 7240.3, ISO 7240.13 and ISO 7240.17 have all now closed.

Progress on the AS 1670.6 revision has been delayed as resources have been directed to focus on standards and amendments for National Construction Code (NCC) 2022.

FP-004 Automatic fire sprinkler installations

The AS 2118.2 revision is still at committee ballot. Work continues on the revision of AS 2118.6

FP-009 Fire hydrant installations

Public comment on the revision of AS 2419.1 is still being resolved.

FP-018 Fire safety

Work on the newly approved projects to revise AS 1530.1 (Combustibility test) and AS 1530.4 (Fire-resistance tests) is yet to kick off.

FP-020 Construction in bushfire-prone areas

Work on the new handbook for 'Maintenance of construction in bushfireprone areas' (SA HB 208) is yet to kick off.

FP-022 Fire protection of mobile and transportable equipment

Progress on the revision of AS 5062 has also been delayed as resources have been directed to focus on standards and amendments for NCC 2022.

LG-007 Emergency lighting in **buildings**

The amendments to AS/NZS 2293.1 and AS/NZS 2293.3 were published on 14 May.



LG-011 Photoluminescent exit signage

Public comment on the draft new AS 5358.1.1, Photoluminescent exit signage: Product Specification, Installation, and Operation is still being resolved.

TS-001 Building commissioning

SATS 5342 was published on 21 May.

TECHNICAL ADVISORY COMMITTEES

The most recent round of Technical Advisory Committee meetings were held in March via web conference with the next round to be held in July. Stay tuned for more details on the next round. Due to the ongoing lockdowns and restrictions in Melbourne, at this stage. these meetings will be conducted via 700m.

TAC/1 Maintenance of fire protection systems and equipment

The TAC continues to work on its 2021 work program, which will continue to focus on the draft project proposal for the revision of AS 1851-2012, as well as several outstanding technical documents.

TAC/2 Fire detection and alarm systems

The TAC continues to seek to progress the draft 'Good Practice Guide' on speaker layout and draft 'Information Bulletin' on building occupant warning systems. The TAC continues actively to contribute to the work of FP-002.

TAC/3/7 Portable and mobile equipment

The TAC has completed its input to the ACCC mandatory safety standard and is awaiting its progress through the relevant ACCC approval processes. The TAC continues to work on its 2021 work program, particularly looking at possible project proposals and technical documents.

TAC/4/8/9 Fire sprinkler and hydrant systems, tanks and fixed fire pumps

The TAC continues to monitor and contribute to the work of FP-004 and FP-009. The TAC also continues to discuss. the development of several outstanding technical documents.

TAC/11/22 Special hazards fire protection systems

The TAC continues to monitor changing requirements regarding PFAS and firefighting foams, including the recent NSW EPA Regulation changes. The TAC continues to work on its 2021 work program, including some potential new technical documents.

TAC/17 Emergency planning

The TAC has begun work on a potential project proposal for the revision of AS 3745, particularly to address the current COVID-19 situation and what that means in regard to emergency evacuation procedures and any future guidelines that may be required. Progress is being sought on several technical documents.

TAC/18/19 Passive fire protection

Discussions on the topic of passive training continue. Progress is being sought on several technical documents including the update of PS-05 Product compliance and evidence of suitability and other documents.

TAC/20 Bushfire safety

The TAC discussed potential ways of addressing some issues associated with fuel load assessments for performance solutions; the testing of roof systems in regard to Appendix H in AS 3959; the need for clarity around some definitions on a national level; and, the need to clarify the complex method used in the Bushfire Verification Method Handbook.

FPA AUSTRALIA

TECHNICAL WEBINARS

We run a range of technical events, covering all aspects of the fire protection industry. Presented by leading experts, these webinars provide all the information you might need about relevant fire safety topics.

For anyone who has missed a webinar, recordings are available on our website.

Coming soon will be forums on compliance and auditing, insurance and fire safety assessment.

A full list of upcoming events, and links to previous presentations, can be found at: www.fpaa.com.au/events.aspx.

STATE MINI-**CONFERENCES**

We are developing a series of state mini-conferences, which are planned for late October.

These half-day events will be open to members and non-members alike, and will cover locally relevant topics for the fire protection industry.

Details will be published soon on our events page: www.fpaa.com.au/events.aspx.

AUSTRALIAN BUSHFIRE BUILDING CONFERENCE

The Australian Bushfire Building Conference will be held on 25-27 August 2021 at the Fairmont Resort in the Blue Mountains town of Leura.

The conference will be live and virtual, and is an annual event for industry professionals with a focus on planning and building in bushfire-prone areas.

Presented by Blue Mountains Economic Enterprise (BMEE), and supported by FPA Australia, it will bring a range of professionals together to explore the latest research, policies and practices that will make our communities more resilient and sustainable in the face of bushfire.

To find out more, or to register, visit: https://bushfireconference.com.au.

AFAC

AFAC21: BALANCING IMPACT AND EXPECTATIONS

With an impressive program of over 90 presentations across four days, AFAC21 powered by INTERSCHUTZ will explore the theme 'Balancing impact and expectations' at the International Conference Centre in Sydney in October.

From 5-8 October, delegates will have the opportunity to learn from international and local thought leaders across the multi-streamed conference.

Register now at www.afacconference.com.au.

AFAC21: PROFESSIONAL DEVELOPMENT PROGRAM

The Professional Development Program will be held on the closing day of AFAC21 powered by INTERSCHUTZ, 8 October 2021.

The program offers a number of workshops and field trips to cater to the broad scope of fire and emergency service practice. Select from:

Field trips:

◆ Green Wattle Creek fire 2019–20: multi-agency large-scale operations and the preservation of critical community infrastructure field study Building Remotely Piloted Aircraft System capability in emergency services

CALENDAR OF EVENTS

- Tour of Hawkesbury-Nepean Flood Plain
- NSW State Emergency Service State Command Centre and operational technology tour

Workshops:

- ◆ EMSINA presents: key lessons from our major fire campaigns in the spatial technology space
- Managing extreme wildfires
- Fundamentals of the response of timber buildings to fire
- National Recovery Forum

For details about these trips and workshops, visit www.afacconference.com.au/ professional-development-program-2021.

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Chris Arnol AFSM

After more than 30 years in the fire and emergency services, Chris Arnol has retired from his position of Chief Officer at the Tasmanian Fire Service (TFS), which he held since 2016. He joined TFS in 1985 and advanced to an Executive Fire Officer before moving to WA where he was Assistant Commissioner at the Department of Fire and Emergency Services. He has deployed interstate and overseas on a number of occasions to assist in bushfire management and suppression. Mr Arnol is also a talented painter and has created artworks that capture the fire and emergency experience, as well as portraits of his peers, including Department of Fire and Emergency Services Commissioner Darren Klemm AFSM and Resilience NSW Commissioner Shane Fitzsimmons AFSM.



Joe Buffone

Joe Buffone's role as Director General of Emergency Management Australia—one of multiple roles he has held within the organisation since 2016—has been extended. Previously, Mr Buffone held senior positions such as Chief Officer of the Victorian Country Fire Authority, Deputy Emergency Management Commissioner Victoria and Deputy Emergency Services Commissioner, Victoria. More recently, Joe was deployed to Victoria to establish and lead the Victorian Aged Care Response Centre to coordinate the response to COVID-19 outbreaks in the aged care sector.



Richard Alder AFSM

Richard Alder has retired from the role of General Manager of the National Aerial Firefighting Centre, having led the organisation since its inception in 2003. He leaves with 40 years' experience in environmental management, forestry and fire operations, and is also a certified Air Operations Manager and Air Attack Supervisor. Mr Alder has led and participated in a number of international missions to the USA and Europe for bushfire control. He was awarded the Australian Fire Service Medal in 2000 for his role in bushfire management innovation throughout Australia, especially in the fields of aerial firefighting, information management and training.



Andrew Stark

Andrew Stark is leaving his post as Deputy Chief Officer position at the South Australian Country Fire Service after more than five years of service to the agency. After a long career in public service, he is moving into the private sector. His career to date includes Chief Officer at ACT Emergency Services Agency, Superintendent at NSW Rural Fire Service, and Station Officer at NSW Ambulance Service. Mr Stark has also influenced strategy and policy for the fire and emergency sector through his leadership in in AFAC Collaboration Groups.



Georgie Cornish

Georgie Cornish has been appointed as the latest member of the AFAC Board. She brings her knowledge and experience as Executive Director of Frontline Services Support at the SA Country Fire Service. Ms Cornish has served with SA CFS since 2015, and she has more than 15 years' experience in the emergency management sector. She is committed to influencing better outcomes for communities through connecting and collaborating with people to shape stronger and more resilient communities before, during and after disasters.



Kyle Stuart

Kyle Stuart has stepped into the Deputy
Commissioner Preparedness and Capability
role at NSW Rural Fire Service. He brings
leadership experience from his almost
20-year career at the NSW Police Force,
where he held positions including Assistant
Commission Operational Communication and
Information Command, Assistant Commander
Major Events and Incidents Group, Deputy
State Emergency Operations Controller, and
Local Area Commander posts. In 2019, he
was the Acting Commissioner for NSW State
Emergency Service.







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Talk to our experienced fire protection insurance team for a free no-obligation risk assessment and quote. Or visit our website – wmib.com.au and complete the Get a Quote form.

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Strategic Partner of FPA Australia



FIND THEM ON THE PROVIDERS OF CHOICE SEARCH TOOL

FIRE PROTECTION SERVICE PROVIDERS IN YOUR AREA, OFFERING THE SERVICES YOU NEED. Developed by peak industry body Fire Protection Association Australia (FPA Australia), Providers of Choice makes it easy to find quality fire protection service providers in your area that offer the areas of work you're looking for.

As Corporate Members of FPA Australia, all listed companies:

- Hold a minimum of \$10m in Public and Product Liability insurance;
- Are bound by a stringent Code of Practice; and
- Are required to hold all necessary state and federal licences or certifications.

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