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RESCUE

Emergency Management

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SOUTH AUSTRALIA'S DISASTER RESILIENCE NEWSLETTER

We need a more holistic approach to flood fatalities

Following recent Australian flooding, Macquarie University's Risk Frontiers believes more can be done to reduce vehicle-related flood fatalities.

Flooding in recent months on the Australian east coast has seen nine deaths, large numbers of cars written off and at least 200 people rescued by the emergency services.

Many more people were rescued by bystanders most of them from cars. People often drive into floodwaters, and continue to do so despite educational campaigns that have been conducted in recent years and despite frequent reporting of deaths due to drowning on flooded roads. Most survive, but tragically a few do not. Moreover, the lives of rescuers are put at risk.

Since late 2010, more than 70 people have died as a result of flooding in Australia. Of these, about one-third were cases of floods invading dwellings, notably in the Lockyer Valley in south-east Queensland in early 2011 (22 deaths) and in Dungog (three) in April this year. The remaining two-thirds resulted from people entering floodwaters mostly in vehicles that were swamped or swept away.

Why does this happen? Reasons identified include attempting to maintain normal everyday activities; being in a rush; having driven through floodwater in the past; driving through as a form of 'fun'; evacuating; or simply not thinking about the risk (Becker et al, 2011). Diakakis and Deligiannakis (2013) summarised key factors behind such decisions, as identified in the international literature as:

- age and gender of drivers
- familiarity of drivers with the road network
- mental and physical condition
- blood alcohol levels
- risk perception and previous experience
- vehicle type
- level of flooding, and
- time of day



Traditionally, we have thought the most likely demographic to drive through floodwater as being young males aged less than thirty-five (Becker et al, 2011, Haynes et al, 2009) although the international literature is by no means unequivocal on this point (Diakakis and Deligiannakis, 2013). The Risk Frontiers PerilAus database also shows that of the motorist flood deaths in the last 20 years the majority were driving four-wheel drive vehicles.

What can be done? Education is part of the solution but by itself is not sufficient. The same is true of training SES and other emergency service personnel in rescue techniques. That said, our investment in saving people from floodwaters has been amply justified by the many rescues conducted lately.

So what else? As recommended by the Queensland Floods Commission in 2012, a national educational campaign would be appropriate. Something akin to the recent vivid anti-speeding and anti-smoking campaigns, maybe focused at males who drive 4WD vehicles and concentrating on overcoming manufacturers' sales advertising.

We should consider regulation as well. In Queensland, police have used driving regulations to charge people with reckless behaviour when they have entered floodwaters. Likewise, drivers who remove

temporary barriers so that their vehicles can pass could be charged: in effect, they have opened the road to others and encouraged further risky behaviour.

Preventative barriers that cannot be moved by motorists could be introduced. Roadside gauges should be marked not just with depth indicators but with symbols designed to demonstrate the risk of entering the water. Guard rails at the sides of roads that are known to be covered by floodwaters should be installed to prevent cars from being washed away. And lighting installed in high risk areas would help to ensure motorists can appreciate the dangers at night.

Insurance companies might consider not paying claims when it is clear that vehicles have been driven recklessly into floods. Beyond that, people could be charged for the cost of their rescues when recklessness can be demonstrated. Such revenue could be reinvested in education campaigns.

No single measure is likely to do the trick. The approach needs to be holistic. It should incorporate numerous initiatives and involve non-traditional stakeholders such as insurance companies, peak motorist bodies, road and traffic management agencies, peak water safety organisations and schools.

For further information please contact Andrew Gissing (andrew.gissing@mq.edu.au)



Each decision and action makes us more vulnerable to disasters – or more resilient to them. Thus disaster risk reduction involves every part of society, every part of government, and every part of the professional and private sector." United Nations International Strategy for Disaster Reduction.



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Twin towers of emergency management to retire this month from SAPOL

On 31 July, 2015 sergeants Dennis Mulroney (right) and Peter Schar (left) will retire from South Australia Police (SAPOL) after 43 years, both joining a few months apart as cadets. For over a decade they have worked together and have quietly initiated a number of significant improvements to our emergency management arrangements.

Following his graduation in 1975, Dennis spent most of his career in operational patrols, intelligence and solo motorcycles. In 2001 he commenced an 18-month secondment at SAPOL's Emergency and Major Event Section prior to winning a permanent position there in 2005. As an event planner, Dennis was involved in a number of major traffic operations including the Royal Tour of the Queen, the visits of United States Secretary of State Donald Rumsfeld and the King and Queen of Sweden, and the Tour Down Under.

Many of you will know Dennis through his involvement across the state's emergency management zones. As a SAPOL representative on the Zone Emergency Management Implementation Working Group Dennis has been working across the state to establish and support zone emergency management committees, implement the risk management program and writing and facilitating exercises for Zone Emergency Centres (ZEC).

Following the January, 2005 Black Tuesday Bushfires Dennis was responsible for identifying and following up on actions arising from debriefing meetings of the Police Operations Centre and State Emergency Centre (SEC). He has been a key participant in the analysis of the business needs of these centres (and ZEC), supporting the development and introduction of the electronic Crisis Information Management Systems, re-writing the centre's operations manuals and developing and delivering their training and exercising programs. During operations he has undertaken the role of Operations Manager in the SEC providing leadership and support to the management of activations for most of our significant emergencies (including fires, floods and heatwaves) in recent years.

For six fire danger seasons from 2005 Dennis was responsible for the planning of SAPOL's Operation Nomad, a state-wide bushfire prevention operation that has now been recognised as a national best practice model. The tasks included reviewing outcomes of bushfire-related inquiries, inquiries and royal commissions across the country and instigating improvements to the operation and police bushfire training. His expertise in this area was recognised when he was asked to be a key presenter at "Collaborating for change: Symposium Advancing Bushfire Arson Prevention" which was held in Melbourne in March, 2010.

He has conducted reviews and provided advice to almost every government and non-government agency involved in emergency management and provided ongoing support to numerous national and state plans and committees. His comprehensive all hazards knowledge of the state's emergency management arrangements and other skills were recognised by his selection as a member of the national Emergency Management Assistance Team when it was formed in 2012.

In retirement Dennis looks forward to having more time to engage properly with his current roles in men's lacrosse, officiating at national and international level and, reading and writing military history.

Peter had a different career path. After graduating in 1974 he spent his early years on patrols mainly at Port Augusta and Coober Pedy, becoming a volunteer member of St John Ambulance, CFS and SES. He then became a detective and for the next 20 years worked mainly at Port Adelaide, Major Fraud and Coober Pedy.

When at Coober Pedy CIB he undertook the SES mine rescue training and also became the incident controller for a number of major crashes,



including the Ghan passenger train crash, land searches and mine rescues.

In 1999 Peter took a 'sea-change' and joined the newly formed Emergency and Major Event Section initially planning SAPOL's support to major events and then focusing on emergency management issues.

During his career Peter has investigated a number of major bushfires including the 1980 and 1983 Ash Wednesday bushfires, the 2005 Wangary bushfires, and the recent Sampson Flat bushfire, as well as investigating a number of other emergencies including hazardous materials incidents, and aircraft, bus and train crashes.

A task Peter commenced in 2002 to improve SAPOL's response to emergencies defined the remainder of his police career. He recognised that to achieve a consistent and effective multi-agency response to emergencies required the development of common standards supported by a legislative framework. As a result Peter has instigated a number of improvements to the State Emergency Management Plan (SEMP) including introducing a world first, the 'ten responsibilities of the control agency', which forms the bases of functional management and other incident management processes.

Peter developed SAPOL's Incident Command and Control System (or ICCS), which provides a common system of incident management for not only dealing with emergencies but also managing other police operations including public events and investigations. He was the key author of the 'Common approach to incident management: ICCS Plus', (based on the SAPOL model) which is now the Australian police standard for incident management in a similar way that the Australasian Inter-Service Incident Management System (AIIIMS) is the standard for fire and rescue agencies.

Peter has represented SAPOL on various state and national committees relating to emergency management issues, as well as undertaking the role of operations manager in the SEC.

Initially in his retirement Peter will be busy assisting his sons in house renovations prior to continuing volunteer work including with canoeing and the Australian Institute of Emergency Services. He also intends to publish on aspects of crisis management and the family's military history.

With their significant emergency management knowledge and experience, the departure of Dennis and Peter will not only be a loss to SAPOL but also to the broader South Australian community.



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Bring your lipstick to this year's AFAC conference in Adelaide in September

Have you ever been part of an incident management team where women outnumbered men? How many female incident controllers are in your emergency service organisation? Have you seen a fire crew that was mostly female? Were any of them wearing lipstick? What would you think of them if they were?

Ariana Henderson, Manager Fire and Emergency Recovery, along with Sandra Robinson, Project Coordinator Fire and Emergency from Parks Victoria, will answer these questions of diversity at this year's AFAC and Bushfire and Natural Hazards CRC conference.

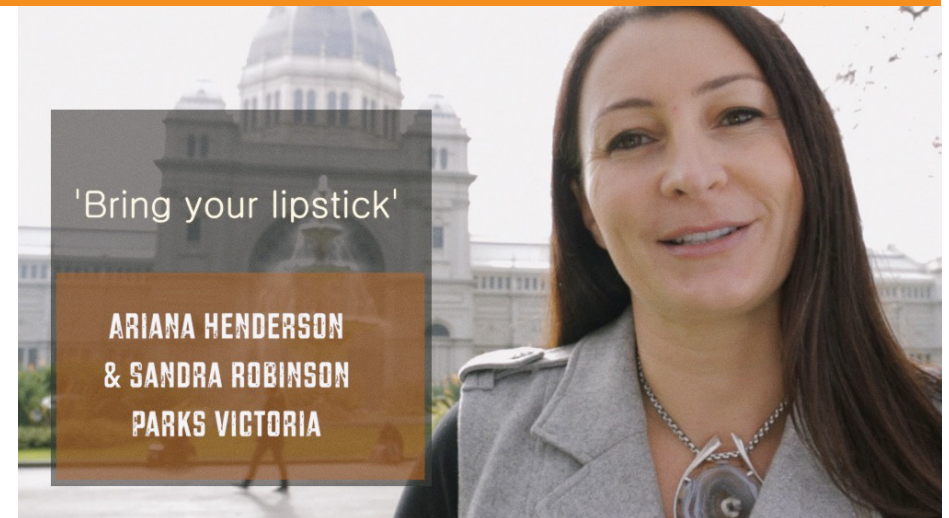
The largest and most important emergency services and public safety event in Australasia, the conference will take place at the Adelaide Convention Centre from Tuesday to Friday, 1-4 September.

This year's theme is *New Directions in Emergency Management*, and Ms Henderson is just one of over 100 speakers on the program. Her presentation, *Bring your lipstick*, with colleague Sandra Robinson, will have a particular focus on the industry's struggles with diversity.

"You don't have to look hard within the emergency services to see a disparity in the representation of men and women, particularly in leadership roles," said Ms Henderson.

The inclusion of women into urban fire services has been slow, and they continue to be under-represented. Participation rates for female firefighters across Australian fire services range from 1.5 percent to 4 percent. So what are the blockers to women becoming leaders in emergency management?

"Some barriers experienced include working conditions and family



commitments; a perceived lack of physical and mental ability to do the job, and an ingrained culture and subconscious bias.

"We are hardwired to adjust our behaviours to fit into communities. The perception of needing to be 'one of the boys' can prevent girls from entering or remaining in the emergency industry long enough to become leaders."

Whilst a number of initiatives and strategies can be implemented which focus on targeting particular cohorts (e.g. women) to apply for firefighter roles, focus also must be on the organisation's culture and ensuring the inclusion and acceptance of diversity within the organisation.

Margaret Allison, who recently conducted the independent review into Queensland Fire and Emergency Services' handling of sexual harassment and workplace bullying, will also be presenting at this year's conference on issues of diversity.

According to Ms Allison both the strong cultural traditions of urban fire services and the lack of effective recruitment and retention strategies can limit women joining and remaining in fire services. Although

there is a relatively low level of formal complaints, it is clear that many women firefighters have been subject to behaviour that is unacceptable in a contemporary workplace.

In her statement to the Queensland Premier, Ms Allison said *"The issues identified in this review have also been identified in recent times in other Australian jurisdictions and in countries such as the US, UK and Canada."*

Similar issues have been found in other uniform organisations with a traditional command and control culture, such as the Australian Defence Force and its Academy."

Further, she wrote these industries "have a long and proud history of service, but some of the traditions of the past must be let go to embrace future opportunities, and to ensure the fire service is staffed with the best and most capable men and women."

But Ms Allison is optimistic that the capacity of the fire service to embrace further change will position them as an industry known as much for its commitment to equity as it is for contributing to community safety. Her session in Adelaide will focus on recommendations for achieving just this.

Launch of Every Day publication

A new publication has been launched which showcases the work of fire and emergency services and acknowledges the significant national capability of our industry which comprises 288,000 fire and emergency service personnel nationally. This is made up of 34,000 paid and 254,000 volunteers and represents a workforce three times the size of the Australian Defence Force. The publication provides an insight into the work the sector undertakes and highlights how our focus has been shifting from solely reacting to emergencies towards working proactively and collaboratively with communities to minimise risk; developing and delivering response capabilities; and providing relief and recovery services. An online version of the publication may be viewed at <http://bit.ly/1vufSa7>





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Grants of up to \$5,000 now available



Do you need equipment to help you respond to fire, flood, extreme weather or other emergency incidents?

Grants of between \$500 and \$5,000 are available to owners and operators of farm fire units, community groups, local government and emergency service agencies to provide safety, communications and other resources to assist your community's front line emergency response.

On 25 June, 2015, The Minister for Emergency Services Tony Piccolo launched the Regional Capability Community Fund (RCCF) to increase community capability to respond to the unique and complex challenges that exist in rural, regional and remote communities.

The funding allocation will take into account the geographical placement of the proposed items, access and distance to and/or time delays from emergency services and other resources and benefit to the wider community.

Further information is available at:

http://www.safecom.sa.gov.au/site/emergency_management/regional_capability_community_fund.jsp

For more information contact Deb Bates on (08) 8463 4070 or email rccfcoordinator@sa.gov.au

Applications close on Friday 24 July 2015.

Five innovators to develop emergency service tracking technology

The South Australian Government has awarded five innovative local firms \$100,000 each to take up the challenge of developing a better way of tracking emergency service workers and equipment during major incidents.

The grants have been made through the *Small Business Innovation Research Pilot Program*, which provides research and development funding for small and medium enterprises to come up with innovative ways to address specific problems faced by SA state government departments.

SA Manufacturing and Innovation Minister Kyam Maher said a technology and software solution being developed for the SA State Emergency Service (SES) would have broader applications outside South Australia.

"The challenge is to develop a solution that will enable emergency service workers to check-in and respond in real time. This would replace the current system of physically

recording the position of vehicles at incidents, and which personnel are on board each vehicle," he said.

The businesses awarded funding in phase one of the program are:

- Auspace
- Cohda Wireless
- elmTEK
- Jackson Care Technologies
- SRA Information Technology

SES Chief Officer Chris Beattie said the recent devastating fires in the Mount Lofty Ranges highlighted the challenges in tracking and managing hundreds of resources from many agencies moving around a major incident.

"An electronic responder tracking tool will significantly increase the safety and welfare of crews while assisting with planning and logistics for those personnel," Mr Beattie said.

CEWT now more than 10 years old

The Central Exercise Writing Team (CEWT) was born in 1984 and currently comprises 10 agencies and groups, who meet on a monthly basis.

One of its functions is to maintain an annual register of all multi-agency exercises conducted across the state. This register gives us all the ability to report on the number of exercises conducted, the time spent, objectives, agencies involved, costs, learning outcomes and debrief actions.

To ensure the exercise register is accurate, it is important that all agencies either advise their agency CEWT representative or the CEWT chairperson of any proposed multi-agency exercise activity.

If you require assistance with the planning or conducting of an exercise please contact your agency CEWT representative or the CEWT chairperson (Pat Lycett at SAPOL on 08 7322 4271). The group is able to provide training, advice, guidance, exercise staff, documentation templates, some funding and feedback.