

Bold thinking is key to resilience



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It is no secret that unique and unpredictable climate and natural hazards-related challenges lie ahead for Australian communities. As I leave Natural Hazards Research Australia (the Centre) as CEO, I reflect on the evidence-informed approach to these challenges that can and will give us the best chance of protecting lives and properties across Australia and beyond.

The Centre supports end-user driven research that bolsters decision making by governments, communities and organisations. This includes those that make up the ever-critical and hardworking emergency management sector. The worsening risks from natural hazards are, in part, driven by climate change, increasing exposure to their impacts, rising wealth, heightened complexity of infrastructure systems and environmental degradation.

We live in a time where natural hazard risk is growing faster than investment to manage it.

Natural hazards are an issue of real significance. Over the past decade, we have witnessed severe-to-catastrophic events that have cost lives and dollars and stretched our national capacity to respond and recover. The focus on natural hazards is no longer just a public safety and resilience issue. They are a far greater economic concern nationally. Rising insurance unaffordability makes natural hazards a cost-of-living issue, and increasing recovery expenditure places further pressure on government budgets. Direct and indirect health effects also grow as communities face compounding events, such as growing exposure to extreme heat and bushfire smoke. The environment also continues to be threatened by climate extremes.

There is an urgent need to address natural hazard risk. We cannot just respond our way out of it; we need to think and act differently. Small incremental changes, too, will not cut it—a transformative approach is required.

History shows that we can achieve the change needed. Global natural hazard deaths, for example, have decreased over recent decades due to advances in early warning systems and global telecommunications technology. Research, science and innovation focused on building safer, resilient and sustainable communities has never been more important to support transformative policy and capability.

Fortunately, the Centre's efforts as a global leader continue to improve the lives of people in Australia. In the past five years, we have created an infrastructure that fosters trust and relationships between researchers and practitioners that have literally brought evidence to life. Our research findings and our thought leadership and research findings have shifted the narrative in the sector. By confronting future challenges, our dedicated efforts to increase uptake of research through an end-user driven model enables agencies and communities to better prepare for the future with research that is useful, useable and used.

The Centre's recent report *The Impact of Natural Hazards Research Australia*, available on our website, highlights how research benefit is rarely direct or immediate, yet case studies capture stories of the research. Just a few examples include the Australian Disaster Resilience Index guiding investment in vulnerable communities, transformative scenarios shaping agency strategic planning,

local First Nations research taking place on Country and strengthening cultural confidence and connection to Country, and volunteer research that informs national strategy to ensure the future sustainability of volunteering. The Centre and its predecessors' work is cited in hundreds of policies globally and informs national doctrine and capabilities, such as the Australian Fire Danger Rating System and Australian Warning System.

The Centre's Education and Capability Program fosters the next-generation research workforce—one that is capable, knowledgeable and connected to the sector. After only five years, it is a proud achievement to have supported 100 postgraduate scholars and a network of around 150 researchers and practitioners through the Early and Mid-Career Researcher and Practitioner Network. The research and capability incubated through this program will yield benefits in years to come and innovative and exciting solutions that could change the game.

An exciting pipeline of research exists, with many more projects designed to generate practical knowledge, solutions and innovation that support efforts to enhance the safety, resilience and sustainability of communities in years to come. These initiatives reflect strong foundations and a commitment to translating research into real-world benefit.

When I first joined the Centre, I wanted it to project boldness to encourage big, agile thinking to inform a research program. By big thinking, I mean: what capabilities and policies will we need in 10 to 20 years' time? We must be thinking about what investments and actions are necessary now, which is why the Centre developed the Be Ahead of Ready® initiative to identify big ideas that will drive a resilient, safe and sustainable future and unleash research and science to help get us there.

There are immense opportunities presented by advances in technology. We are witnessing the acceleration of artificial intelligence (AI), autonomous systems, telecommunication and remote sensing capabilities that will rapidly transform capabilities and science. At the same time, we are faced with rising challenges of managing large-scale disaster risk reduction and recovery programs on unprecedented scales. We must ask if our organisations are ready for such transformation. Does the sector have the right governance, workforce and culture to rapidly transform?

Ultimately, we need a national risk-based disaster risk reduction capability road map informed by research. Approaches to building capabilities to address disaster risk reduction vary across different parts of the sector. Such a fragmented approach does not enable the scaling of innovation that will be necessary to Be Ahead of Ready. This road map could assist in aligning future research priorities to ensure that research and innovation are

actively coordinated to contribute to building required capabilities. It would not need to cover every foreseeable capability but focus on those we know will matter most in the future.

The road map would inform national workforce planning to ensure that an appropriately skilled workforce is available to provide a unity of effort, adopting an approach beyond blue and red lights and embracing a whole-of-community approach to disaster risk reduction. This will certainly mean different skill sets and maturing infrastructure to support workforce development. It will also mean investing further in a research and innovation infrastructure that supports bold thinking and research adoption.

We must strive to Be Ahead of Ready. We must accept that the worst consequences of future emergencies and disasters do not need to be inevitable, as they are ultimately the product of our decisions. The message is clear: we can do it; we can make a real difference, but we need to act and continue to invest in research to support a transformed approach through a strong, evidence-informed emergency management sector. This is something in which the *Australian Journal of Emergency Management* (AJEM) plays an important role. As the publication marks its 40th year in 2026, it continues to showcase research making a true difference in the sector, including projects funded by the Centre.

AJEM remains a critical component of the research landscape by providing a vehicle to publish and promote Australian research. Being an open-access journal means it is widely accessible to academics and practitioners. Its peer-reviewed nature ensures that only high-quality research is considered. A challenge and opportunity for AJEM in the future will be the continued evolution of knowledge management in the age of AI as the way we consume research changes. This means the effects of AI must be considered and planned for.

I thank AJEM for 40 years of influence in the emergency management sector and for promoting, sharing and empowering bold and powerful research—research that forms the knowledge and tools we need for the challenges of the next 40 years.

Good luck—think bold and together we can do more.