

Disaster Challenge final showcases innovative solutions in emergency management

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A concept for young people aged 13–18 to take a leading role in disaster resilience in their local area took out the 2023 Disaster Challenge run by Natural Hazards Research Australia in Melbourne.



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Youth Guardians was the winning concept by Lydia Wardale. The concept responded to the wicked problem posed by the Disaster Challenge: In the midst of disruption, chaos and calamity, how can resources from across society be accessed and connected in new and innovative ways to improve disaster response and link those who have the resources and supports with those that are most in need?

Lydia, a recent Masters graduate in development economics and public policy economics from the University of Queensland said, ‘My solution to the wicked problem empowers teenagers to use their knowledge and experience’.

The inspiration behind the concept comes from Lydia’s own experience as a teenager during the 2011 Brisbane floods, where the family home was flooded.

‘Youth Guardians would be a youth-led engagement program for 13- to 18-year-olds to cultivate disaster resilience in their local area.

‘Youth Guardians would provide young people with knowledge on disaster resilience and climate adaptation, while empowering them to connect and innovate in their communities, building on local strengths and tackling local challenges and adaptation for likely future emergencies’, she said.



Lydia Wardale was the Disaster Challenge winner and received the award from CEO Andrew Gissing.

Image: Natural Hazards Research Australia



Disaster Challenge 2023 finalists, from the left: Kathy Tran, Chloe O'Brien, Maya Walton, Dr Catherine Kim, Lydia Wardale, Dr Kate Saunders, Dr Jess Hopf.

Image: Natural Hazards Research Australia

Held on 12 October 2023, the eve of the United Nations International Day for Disaster Risk Reduction, the Disaster Challenge invited early career researchers, undergraduate and postgraduate students to present solutions to the wicked problem. Natural Hazards Research Australia will work with Lydia over the next 12 months to explore her concept further.

Joint runners-up, Maya Walton, Chloe O'Brien and Kathy Tran, undergraduate students from the University of Technology Sydney, showcased their concept 'Climate Day: Disaster preparedness in high schools', which would build community resilience and emergency preparedness to help alleviate young people's climate anxiety through immersive education experiences with the help of virtual reality.

Dr Catherine Kim from the Queensland University of Technology, Dr Kate Saunders from Monash University/Queensland University of Technology and Dr Jess Hopf from Oregon State University represented their broader team at the final and were also awarded as runners-up for their concept 'Flood vulnerability index for Brisbane City'. The team drew on their experiences of the 2022 flooding in Queensland to tackle the overwhelming amount of data available during an emergency with a concept for an app to give individuals insight into what flooding in their area will personally mean for them and their family.

The Disaster Challenge was adjudicated by an expert judging panel with vast amounts of disaster management expertise, comprising Dr Margaret Moreton, Executive Director at the Australian Institute for Disaster Resilience; Jamie Devenish, Manager Community and Communications at Victoria State Emergency Services and Dr Mittul Vahanvati, senior lecturer in sustainability and urban planning at RMIT University. The day also featured a special keynote from the Australian Red Cross' Andrew Coghlan on the theme for the International Day for Disaster Risk Reduction, Fighting inequality for a resilient future.

The 2023 Disaster Challenge was coordinated by Natural Hazards Research Australia and hosted with support the Australian Red Cross, AFAC, the Country Fire Authority, the Department of Energy, Environment and Climate Action Victoria, Emergency Management Victoria, Fire Rescue Victoria, the Inspector-General for Emergency Management Victoria, Monash University, RMIT University, the University of Melbourne and the Yarra Ranges Shire Council.