



Natural
**Hazards
Research**
Australia

ANNUAL REPORT 2021-22

Natural Hazards Research Australia's staff work from Wurundjeri, Yuggera, Turrbal, Burramattagal and Dharawal Countries. We thank and acknowledge the Traditional Custodians of these lands and all the lands where we work, live and walk, and pay our respects to Elders past, present and emerging. We recognise that these lands and waters have always been places of teaching, research and learning, and that sovereignty has not been ceded. We are committed to strengthening reconciliation and building resilience through respectful and empowering relationships with First Nations communities, peoples and partners.

© Natural Hazards Research Australia

ABN 21 163 137 979

All material in this document, except as identified below, is licensed under the Creative Commons Attribution-Non-Commercial 4.0 International Licence.

Material not licensed under the Creative Commons licence:

- Natural Hazards Research Australia logo
- Australian Government logo
- Any other logos
- All photographs, graphics and figures

All rights are reserved in content not licenced under the Creative Commons licence. Permission must be sought from the copyright owner to use this material.

Publisher: Natural Hazards Research Australia

September 2022

Citation: Natural Hazards Research Australia (2022) *Annual Report 2021–22*.

Accessible at naturalhazards.com.au/corporate-documents.

To contact Natural Hazards Research Australia, email office@naturalhazards.com.au

Natural Hazards Research Australia is funded by the Australian Government and partners.



Australian Government

Contents



31 SIGNED UP
PARTNERS
ACROSS ALL
STATES AND
TERRITORIES

APPROVED
27 NEW
RESEARCH
PROJECTS

PUBLISHED
FULL SET OF
5 GUIDING
CORPORATE
DOCUMENTS

LAUNCHED
7 RESEARCH
PROGRAMS

\$5 MILLION
RESEARCH
AGREEMENTS WITH
CFA AND DELWP

17 STAFF
3 ACROSS
NODES
MELBOURNE
SYDNEY
BRISBANE

ESTABLISHED
9 BOARD OF
INDEPENDENT
MEMBERS
3 BOARD
COMMITTEES
AND

LAUNCHED
BRAND IDENTITY
WEBSITE
27,015 VISITS
SOCIAL MEDIA
3,136 FOLLOWERS
VIEWS 333K
16,639 ENGAGEMENTS

LAUNCHED
EDUCATION
3 PROGRAMS
SIGNED UP
9 POSTGRADUATES
ASSOCIATE **11**
STUDENTS
1 EARLY-CAREER
RESEARCHER

DEVELOPED
REFLECT
RECONCILIATION
ACTION PLAN
GUIDED BY OUR
RECONCILIATION
WORKING GROUP

Introduction

Australia is not alone in its struggle to understand and respond to the changing risks with natural hazards.

Our recent history has seen severe droughts, devastating bushfires, unrelenting floods, severe storms, windstorms and cyclones, all while we have struggled through a pandemic. We are also watching our colleagues around the globe experience summers of intense heat, drought, flood and fire.

After each major Australian natural hazard, there usually follows a formal inquiry. The specifics may change, but the themes that arise are similar – we need a workforce that is better equipped at dealing with constant change, we need better land use planning and mitigation, we need improved situational awareness and resource allocation, we need to work better to understand the knowledge of local communities and First Nations peoples, we need to harness the most appropriate technology, and we need to better inform and warn those directly under threat.

We are getting very good at describing these problems, but we need to get much better at working together on the solutions. This is where Natural Hazards Research Australia comes in. In our first year, we have set about defining the research questions that will deliver solutions around these major themes.

Our purpose is to provide a national natural hazards research capability – one that addresses the complex and difficult questions. As more partners join the Centre, the research becomes enriched by both the depth and diversity of those who contribute.

We are a new Centre with a new vision and mission, but we are building on two decades of research through the Bushfire and Natural Hazards CRC and the Bushfire CRC. What recent history has taught us is that, despite the gains we have made together over the years, we are not working together as well as we need to be on finding new thinking, new knowledge and new understanding to make Australian communities safer. As conditions around us are changing at an alarming rate, so must we change what we think and what we do.

Our strategy is based on utilisation and engagement on a national scale. Everything we do is driven by our partners and the communities they represent. The research is all shaped, developed, monitored and supported by partners, giving it the best possible chance of being relevant and useful. Our new model is more flexible, so that our funding decisions can be responsive to the changing needs of the environment.

As the world changes, so can we. Together, that journey has now begun through Natural Hazards Research Australia, and this Annual Report is an informative account of our first year.

Dr Katherine Woodthorpe AO

Chair, Natural Hazards Research Australia



Who are we?

Natural Hazards Research Australia (the Centre) is Australia's national centre for natural hazard resilience and disaster risk reduction, incorporating the Bushfire and Natural Hazards CRC.

The Centre was funded for 10 years by the Australian Government as a collaborative research organisation to address the major challenges arising from natural hazards, including bushfires, floods, cyclones, heatwaves, storms and other hazards.

The Centre works in the broad emergency management and disaster resilience sectors with partners in all states and territories, comprising research institutes, federal, state and local government departments, key industry bodies, private sector, not-for-profit organisations and more. It builds on the foundations of both the Bushfire CRC and the Bushfire and Natural Hazards CRC.

Natural Hazards Research Australia opened on 1 July 2021 and immediately began establishing research plans, partnerships, governance and promotion, as outlined in Commonwealth Agreement with the Australian Government.

This *Annual Report 2021–22* outlines our progress during our busy establishment year.

Corporate direction

The Centre's Board developed our overarching corporate vision and strategy with its *Strategic Plan 2021–2031*. This is a big-picture document that outlines the vision, mission, partners, principles, plans and strategic themes.

The Board identified seven key result areas for the Centre to focus on over its 10-year funding period:

- undertake leading research
- create and assist knowledge networks
- create national research data frameworks
- build partnerships
- create a national research capability
- provide a trusted and independent voice
- translate research into action.

Vision

That communities will be safer, more resilient and sustainable in the face of natural hazards.

Mission

To work with partners and the community on research that is useful, actionable and supportive of better decision-making to save lives and protect communities.

**WE CREATE
RESEARCH THAT IS
USEFUL, USABLE
AND USED
DEFINED BY USERS
FRAMED BY
NATURAL HAZARDS
CONTEXTUALISED
BY THEMES
INFLUENCED
BY A RANGE
OF FACTORS**



Partners

Our network of partners grew quickly throughout our establishment year, with 31 organisations signing up to contribute to natural hazards research from each state and territory across Australia. Our broad reach of partnerships includes research institutions, agencies, government (federal and state), private sector and other organisation types.

Signed partners (as of 30 June 2022) are shown below.

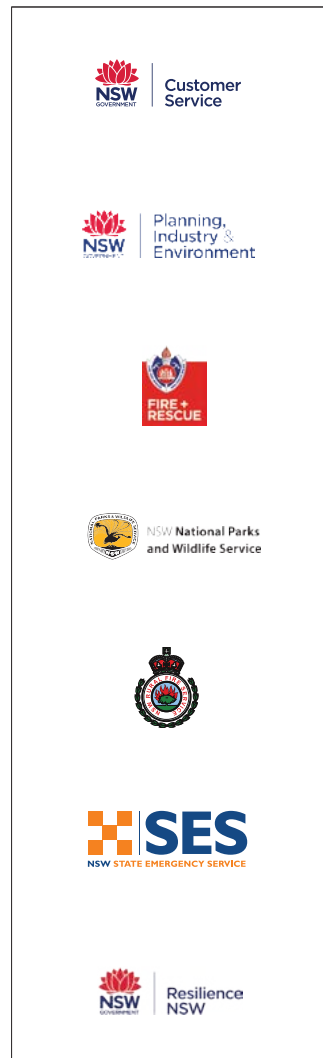
The Centre is in discussions with many organisations to form new partnerships in the coming 12 months, and there is great excitement and enthusiasm for what the Centre can be and the new research questions that can be addressed over the next 10 years. Discussions are ongoing with many agencies, government departments, research institutions, private sector organisations, not-for-profits and others.

Full partners

RESEARCH ORGANISATIONS



NEW SOUTH WALES



QUEENSLAND



SOUTH AUSTRALIA



VICTORIA



TASMANIA



AUSTRALIAN CAPITAL TERRITORY



SUPPORTING PARTNERS



FEDERAL



**31 SIGNED UP
PARTNERS
ACROSS ALL
STATES AND
TERRITORIES
\$5 MILLION
RESEARCH
AGREEMENTS WITH
CFA AND DELWP**

Developing our research strategy

The foundations for a new research portfolio were based in CRC research of the previous 18 years. When the Centre began in July 2021, this was a rare opportunity to collaboratively develop a program of new research that was built on the current knowledge and would deliver on our guiding vision: that communities will be safer, more resilient and sustainable in the face of natural hazards.

The Centre's research portfolio, developed during 2021–22, centres around eight main research themes. The broad themes are not hazard-specific, but focus on high-level, Australia-wide outcomes.

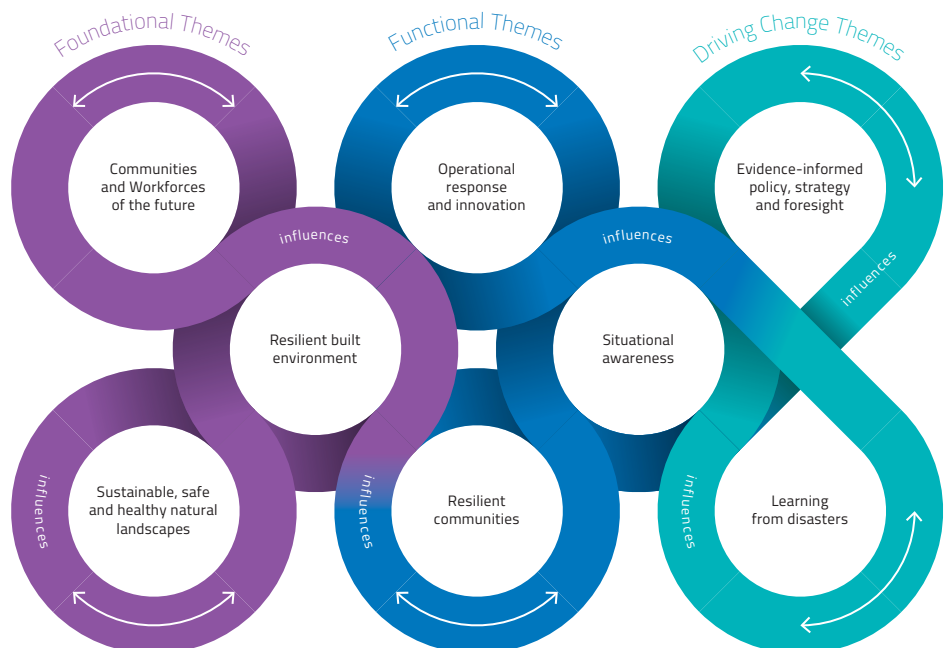
Research priorities workshops

Throughout August 2021, we conducted collaborative research priorities workshops for each of the eight themes. Each workshop brought together key representatives from government, emergency management, private sector and not-for-profit companies to discuss the nation's natural hazards research priorities within each theme. A key outcome of these workshops was the national *Research Priorities* (see right), which were then used to guide the Centre's initial research direction.

Several documents were developed to guide and inform the rollout of research:

- The national *Research Priorities* identify the most significant needs for the direction of Australia's natural hazards research, which are intended to be used by organisations beyond the Centre to shape the future of research.
- The *Strategic Plan 2021–2031* is a big-picture document developed by the Board, specifying the Centre's overarching corporate vision, mission, partners, principles, plans and strategic themes.
- The *10-Year Research Strategy* was developed in collaboration with the sector, detailing the themes and factors that influence the Centre's research focus. As a strategic document, it highlights what we will be trying to achieve over 10 years rather than what specific research will be done.

- The *Data Management Framework* focuses on the creation, curation and accessibility of research data sets and how the Centre will achieve this.
- The *Biennial Research Plans* (the first of which is the *Biennial Research Plan 2022–24*) outline the research funding areas for the coming 12 month-period. They are reviewed annually to make sure the Centre is responding to new knowledge needs, based on unfolding natural hazards, impacts of a changing climate, and other changes that affect risks, vulnerability or resilience to natural hazards.



The Centre's eight research themes, grouped by foundational, functional and driving change themes.

PUBLISHED FULL SET OF **5** GUIDING CORPORATE DOCUMENTS



Our research programs

Our research portfolio is built from different programs of research that all contribute to a balanced, flexible and partner-driven strategy. Throughout 2021–22, the Centre launched seven new research programs:

- 1 CORE RESEARCH**
- 2 COMMISSIONED RESEARCH**
- 3 EDUCATION PROGRAMS:
POSTGRADUATE RESEARCH
SCHOLARSHIPS**
- 4 EARLY CAREER RESEARCH
DEVELOPMENT AND
INDUSTRY FELLOWSHIPS**
- 5 ASSOCIATE STUDENT
PROGRAM**
- 6 POST-DISASTER RESEARCH:
RESPONSIVE DISASTER
RESEARCH**
- 7 QUICK RESPONSE FUND**

LAUNCHED

**7 RESEARCH
PROGRAMS**

A portfolio of projects

The Centre started with a focus on research addressing the ongoing and immediate needs of our partners and Australian communities, including the continuation of funding to address the knowledge gaps revealed during the bushfires of 2019–20. We have since developed a program of research, with new projects being added regularly.

Commissioned research is partner-driven and is developed to meet specific organisational needs. As at 30 June 2022, we had begun a tailored suite of research projects in Victoria with both the Country Fire Authority and the Department of Environment, Land, Water and Planning, through \$5 million agreements with both partners.

As part of the ongoing research development process, our Node Research Managers conduct regular project briefings and research development workshops to ensure that new research is collaborative, tailored to partner needs, and creates outcomes that are useful, usable and ready to use.

In 2021–22, the Board approved 27 new research projects, exploring many important topics such as:

- community-led recovery
- impacts of cascading and compounding events
- severe weather impact prediction
- improved predictions and warnings for flash flooding
- protecting homes from bushfire
- lifelines resilience for regional and remote communities.

The Centre is also funding First Nations-led research that can strengthen collaboration and learnings from First Nations' land management – a major recommendation from the [Royal Commission into National Natural Disaster Arrangements](#).

APPROVED
**27 NEW
RESEARCH
PROJECTS**



Our education programs

Throughout 2021–22, we launched three education programs:

POSTGRADUATE SCHOLARSHIP PROGRAM

provides full and top-up scholarships over three and a half years, and access to industry expertise and support.

EARLY CAREER RESEARCHER DEVELOPMENT AND INDUSTRY FELLOWSHIPS

support recent PhD graduates employed in research or industry positions.

ASSOCIATE STUDENT PROGRAM

supports students conducting research in relevant areas who are not already directly involved with the Centre.

In 2021–22, we welcomed nine postgraduates, one early-career researcher fellow and 11 associate students:

Postgraduates:

- Shauntelle Benjamin (University of New England)
- Saimum Kabir (University of Melbourne)
- Matthew King (Victoria University)
- Wavne Rikkers (University of Western Australia)
- Catherine Ryland (University of Wollongong)
- Kate Simmonds (University of Melbourne)
- Heather Simpson (University of Wollongong)
- Michael Storey (University of Wollongong)
- Simeon Telfer (RMIT)

Early career researcher fellow:

- Dr Phillipa McCormack (University of Adelaide)

Associate students:

- Heba Mohtady Ali (Griffith University)
- Susan Atkinson (University of Canberra)
- Sarah Dickinson-Hoyle (University of British Columbia)
- Suki Jaiswal (University of New South Wales)
- Tony Jarrett (CQUniversity)
- Sheridan Keegan (Griffith University)
- Haydn McComas (Griffith University)
- Danielle O'Hara (University of Queensland)
- Douglas Radford (University of Adelaide)
- Yunjin Wang (Griffith University)
- Eleanor Williams (University of Queensland)



Our first fellow Dr Phillipa McCormack

In May 2022, we welcomed our first early career research fellow, Dr Phillipa McCormack (University of Adelaide). Dr McCormack's research focuses on bushfire mitigation and hazard reduction in Australian law, including analyses of legal mechanisms for the beneficial use of fire. Her work establishes a new collaboration between the United States and Australian fire law scholars and will develop practical recommendations to improve frameworks for bushfire mitigation in Australia. Dr McCormack's fellowship supported her financially and through mentoring, promotion of research and connection with our knowledge network, as well as attending to present her research at both Fire and Climate conferences held in May and June by the International Association of Wildland Fire in Pasadena, United States, and Melbourne.

Dr Phillipa McCormack (right) with Dr Rebecca Miller from the Huntington-USC Institute on California and the West (left).

LAUNCHED
3 EDUCATION
3 PROGRAMS
SIGNED UP
9 POSTGRADUATES
ASSOCIATE 1 1
STUDENTS
1 EARLY-CAREER
1 RESEARCHER

HOW CAN DISASTER PREPAREDNESS ENGAGE WITH THE DISENGAGED, THE MOVING OR THE HARD TO REACH?

The Disaster Challenge

The Disaster Challenge was developed by the Centre as a national challenge to inspire innovative research for wicked problems in natural hazards management. It was launched with a purpose-built website and branded identity in April 2022.

The inaugural Disaster Challenge asked postgraduates and early career researchers to address the social science wicked problem 'How can disaster preparedness engage with the disengaged, the moving or the hard to reach?' Entries opened in April 2022 and closed at the end of June 2022, with 22 entries received from a wide range of postgraduates and early career researchers from academic and industry organisations across Australia.

The Disaster Challenge was hosted with support from universities and emergency management organisations in Queensland: Australian Red Cross, CQUniversity, Griffith University, Healthy Land and Water, Inspector-General Emergency Management Queensland, James Cook University, Office of the Queensland Chief Scientist, Queensland Fire and Emergency Services, Queensland Police Service, Queensland Reconstruction Authority, Queensland University of Technology, University of Queensland, University of Southern Queensland and University of the Sunshine Coast.

Between launch and the end of the 2021–22 financial year, 2,927 people had visited the website. The Disaster Challenge Final will take place in October 2022 in Brisbane, as part of the Centre's inaugural Natural Hazards Research Forum and the United Nations' International Day for Disaster Risk Reduction.



Awards

2021 Resilient Australia Awards – December 2021

Three of our research projects were recognised at the 2021 Resilient Australia Awards, hosted by the Australian Institute for Disaster Resilience:

- Joint winner of Mental Health and Wellbeing Award: *Recovery Capitals* project by Prof Lisa Gibbs, Phoebe Quinn, Alana Pirrone, University of Melbourne; Dr Denise Blake, Emily Campbell, Prof David Johnston, Massey University; John Richardson, Andrew Coghlan, Australian Red Cross; and Natural Hazards Research Australia.
- Highly commended in Mental Health and Wellbeing Award category: *Positive mental health in young adult emergency services personnel* project, a collaboration between the CRC, AFAC, the University of Adelaide, the University of Western Australia, Flinders University, the University of British Columbia (Canada), the Hospital Research Foundation, Military and Emergency Services Health Australia, the Young Volunteers Advisory Committee, and key fire and emergency services.
- Finalist in National Award: *Mapping bushfire hazards and impacts* project for the Australian Flammability Monitoring System, led by A/Prof Marta Yebra, Australian National University.



Honorary Lifetime Membership of Cooperative Research Australia – March 2022

At the March 2022 Collaborate Innovate conference run by Cooperative Research Australia, the Centre's Chair Dr Katherine Woodthorpe AO was honoured with an Honorary Lifetime Membership of Cooperative Research Australia, acknowledging her immense contributions to the cooperative research community through her involvement in 14 cooperative research centres.

Excellence in Emergency Communication – May 2022

Several of our research projects were granted awards at the 2022 Emergency Media and Public Affairs conference:

- Winner of Research category: *Cultural burning in southern Australia* project's booklet and posters, by Dr Jessica Weir (Western Sydney University), Dean Freeman (ACT Parks and Conservation Service), Bhiamie Williamson (Australian National University) and Natural Hazards Research Australia.

- Winner of Recovery category: *Recovery Capitals* project by Prof Lisa Gibbs, Phoebe Quinn, Alana Pirrone, University of Melbourne; Dr Denise Blake, Emily Campbell, Prof David Johnston, Massey University; John Richardson, Andrew Coghlan, Australian Red Cross; and Natural Hazards Research Australia.
- Highly commended of Research category: *The Australian Disaster Resilience Index* project by A/Prof Melissa Parsons, A/Prof Ian Reeve, Dr James McGregor, Dr Graham Marshall, Dr Richard Stayner, Dr Judith McNeill, Dr Peter Hastings, Dr Sonya Glavac and Dr Phil Morley, University of New England; Johan Boshoff, Kassandra Hunt, Julie Fookes, Virginia Cristiani, Dion Gallagher, Brad Scott and Michael Kovacs, Computation, Analytics, Software and Informatics UNE; and Natural Hazards Research Australia.
- Highly commended of Media category: *After the Disaster* podcast by the Australian Red Cross, University of Melbourne and the ABC.



Left: Dr Weir (right) accepting the Excellence in Emergency Communication (Research category) award from EMPA Chair Dr Barb Ryan (left). Photo: EMPA.

Above: The *Recovery Capitals* team at the 2021 Resilient Australia Awards. Photo: AIDR.

Research milestones

The Centre met all of its research milestones that were detailed in the Commonwealth Agreement with the Australian Government.

Milestone		Delivered in quarter ending	Completion status
Quarter 1			
4.1	First stakeholder workshop	September 2021	Complete
5.1	Tranche 1: Transition projects approved by the Board	September 2021	Complete
6.1	Applications open for the Responding to Disasters program	September 2021	Complete
6.2	Applications open for the Responding to Time-Critical Emerging Needs program	September 2021	Complete
7.1	Commissioned research program active	September 2021	Complete
12.1	Domestic and international research support program open for applications	September 2021	Complete
12.2	Conference and related travel support program open for applications	September 2021	Complete
12.3	Postgraduate scholarship program open for applications	September 2021	Complete
12.4	Associate student program open for applications	September 2021	Complete
Quarter 2			
4.2	All stakeholder workshops completed	December 2021	Complete
4.3	Research priorities approved by Board	December 2021	Complete
5.2	Translation & Implementation Panels in place for Year 1, Tranche 1 projects	December 2021	Complete
9.1	Research and utilisation strategy developed	December 2021	Complete
9.2	Work placement program accepting applications	December 2021	Complete
11.1	Board approval of the data and knowledge management and integration plan	December 2021	Complete
12.5	With end-user organisations, identify higher education and vocational training needs that can be informed or enhanced through research (gap analysis)	December 2021	Complete
12.6	Identification of topics for Year 1 Engaging Young Researchers Competition/Challenge	December 2021	Complete

Milestone	Delivered in quarter ending	Completion status
Quarter 3		
5.3 Translation & Implementation Panels in place for Year 1, Tranche 2 projects	March 2022	Complete
5.4 Tranche 2: Foundation research projects approved by the Board	March 2022	Complete
9.3 Commence research translation capability building program	March 2022	Complete
Quarter 4		
5.5 Tranche 3: Finalisation of Year 1 research portfolio approved by the Board	June 2022	Complete
5.6 Translation & Implementation Panels in place for Year 1, Tranche 3 projects	June 2022	Complete
8.1 Call for Year 2, Round 1 projects	June 2022	Complete
9.4 First annual natural hazards research conference (the Centre also successfully ran the Fire and Climate international research conference in June 2022, on behalf of the International Association of Wildland Fire.)	June 2022	Date set for October 2022
9.5 Three subject matter workshops and symposia	June 2022	Complete
9.6 Develop draft scenario-based research-enabled exercise	June 2022	
11.2 Implementation of the data and knowledge management and integration plan	June 2022	Complete
12.7 Pilot higher education course enhancement or development identified in gap analysis	June 2022	Complete
12.8 Completion of Year 1 Engaging Young Researchers Competition/Challenge	June 2022	Complete

Table 1: Research milestones 2021–22.

17 STAFF 3 ACROSS NODES MELBOURNE SYDNEY BRISBANE



Our staff

Since opening on 1 July 2021, the Centre has welcomed 17 staff, some of whom were working at the Bushfire and Natural Hazards CRC when it was incorporated into Natural Hazards Research Australia. The Centre has refreshed its staffing with new positions created, including a Research and Implementation Director and three Node Research Managers, reflecting the need to work closely with partners around Australia.

Vic, Tas, WA

Dr Blythe McLennan,
Node Research Manager



NSW, ACT, SA

Dr Kat Haynes, Node
Research Manager



Resilience
NSW

Qld, NT

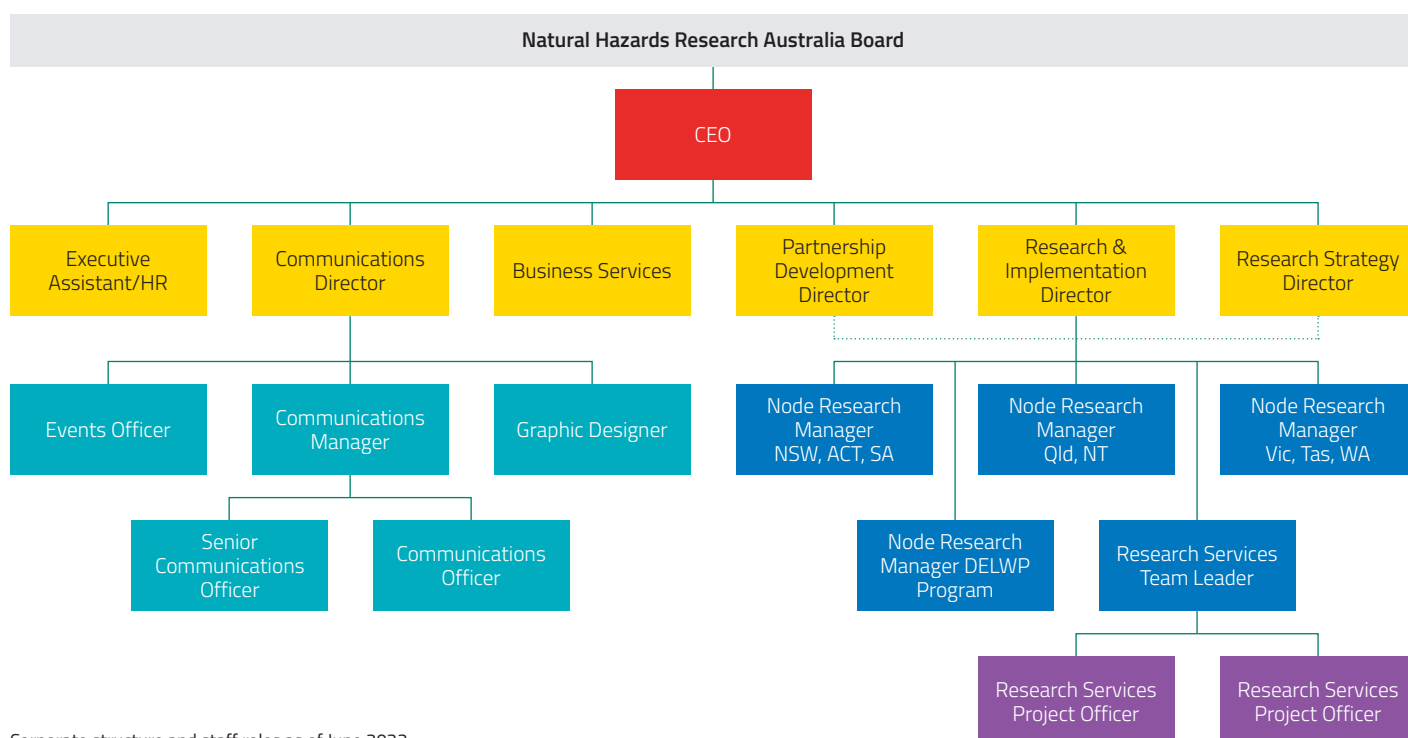
Nicola Moore, Node
Research Manager



Our research nodes

The Centre does not have a headquarters, but rather three research nodes around the country, to ensure that partners and researchers in all states and territories have the same opportunities to connect with the Centre and its research program.

Our nodes are based in Melbourne, Brisbane and Sydney, co-located within partner organisations:



Left: All staff were able to meet for the first time in February 2022 for a planning session in Victoria. Back row (left to right): Dr John Bates, Nathan Maddock, Dr Richard Thornton, Bethany Patch, David Bruce, Dr Blythe McLennan and Friedo Ligthart. Front row (left to right): Dr Shiva Prasad, Nicola Moore, Nicklaus Mahony, Stacey Rosenbrock, Dr Kat Haynes, Sarah Mizzi, Vaia Smirneos, Radhiya Fanham, Lorian Bethune, Vana Demetriou and Supriya Gurung.



Colleagues, friends and family celebrated outgoing CEO Dr Richard Thornton's retirement in Melbourne.

Our Board

A Board of nine independent members was created in 2021 and met ten times this financial year, focusing on establishment, operations and leadership staffing.

As part of a governance refresh during 2021-22, Natural Hazards Research Australia's Board saw five members retire, five new members appointed, and the Chair and three members come across from the Bushfire and Natural Hazards CRC's Board.

The five Board members who retired were Lee Johnson, Kathy Gramp, Naomi Stephens, Karl Sullivan and Mark Crosweller. The five new Board members appointed were Iain Mackenzie AFSM, Kate Vinot, Adj Prof Tim Moltmann, Oliver Costello and Dominique Hogan-Doran SC.



Chair: Dr Katherine Woodthorpe AO



Deputy Chair: Iain Mackenzie AFSM



Dr Greg Ayers



Doug Smith



Sandra Whight



Kate Vinot



Adj Prof Tim Moltmann



Oliver Costello



Dominique Hogan-Doran SC

Our Chief Executive Officer

In February, the Board received notice that CEO Dr Richard Thornton would retire at the end of June 2022. After an extensive interview process, Andrew Gissing was appointed as the new CEO for Natural Hazards Research Australia, commencing 25 July 2022.



Welcoming a new CEO

At the end of June 2022, Centre staff farewelled retiring CEO Dr Richard Thornton (left), who had led the Centre through its busy establishment year. Richard also led the Bushfire and Natural Hazards CRC for eight years and steered the research agenda of the sector for 18 years. At the end of July 2022, staff welcomed new CEO Andrew Gissing (right), joining the team from his role as General Manager (Resilience) of Risk Frontiers.



Board committees and groups

Three Board-reporting committees and one management-level group have been active during the establishment year.

Research and Implementation Committee

This committee met four times during this period. Members include Board members Dr Greg Ayers (Chair), Kate Vinot, Sandra Whight and Adj Prof Tim Moltmann, and the following members from the Centre partners:

- Ricky Archer, CEO, North Australian Indigenous Land and Sea Management Alliance
- Mal Cronstedt, Deputy Commissioner of Strategy and Emergency Management, Department of Fire and Emergency Services, WA
- Anthony Bradstreet, A/Director of Strategy and Programs, NSW Rural Fire Service
- Jennie Fluin, Manager of Science Partnerships, Department for Environment and Water, SA
- Hannah Wandel, Executive Director of Policy and Design, National Recovery and Resilience Agency
- Rob Webb, CEO, AFAC

Risk, Audit and Compliance Committee

This committee met twice during this period. Members include Board members Adj Prof Tim Moltmann (Chair), Kate Vinot and Dominique Hogan-Doran SC.

Education and Training Committee

This committee met once during this period. Members include Board members Iain Mackenzie (Chair) and Doug Smith, and the following:

- Prof Cheryl Desha, Griffith University
- Clare Russell, RMIT University
- Paul Seager, A/Commissioner, NSW Rural Fire Service

Reconciliation Working Group

This management-level group met once during this period. Members include Board members Oliver Costello and Sandra Whight; staff representatives Dr Kat Haynes, Bethany Patch, Nicklaus Mahony and Friedo Ligthart; and the following First Nations members:

- Ricky Archer, CEO, North Australian Indigenous Land and Sea Management Alliance
- Oliver Costello
- Tammy Small, Manager of Indigenous Advancement, University of Wollongong
- Bhiemie Williamson, Australian National University

Two members left during this period: Dr Richard Thornton (former CEO, Natural Hazards Research Australia) and Jade Ritchie (former Director, National Indigenous Australians Agency).

Key challenges

There have been some major challenges during this establishment year which have impacted on the Centre's ability to meet original planned schedules. Despite these impediments, the Centre managed to meet the majority of its milestones, particularly those directly related to the establishment of the core business, research agenda and projects.

Impacts of COVID-19

The establishment of a new national research centre in normal times is an immense task, however the impacts of COVID-19 added to the challenge. Early meetings of the Board were all online, with the first face-to-face meeting only in February, albeit with some members still unable to travel.

Centre staff met at a two-day planning workshop in February – the first time all the staff had been together. This provided the opportunity to plan and discuss the direction and priorities in setting up the Centre.

With the loosening of the COVID-19 restrictions in 2022, staff could also travel and extend discussions with partners around the country. At the Board meeting in Brisbane in April, the Centre held its first face-to-face showcase, attracting an audience of 45 people from across government, academia and the private and not-for-profit sectors.

Staffing

Early in this period, the establishment of new nodes in NSW and Qld was significantly affected by understaffing and delayed recruitment across the Centre. For a substantial period, the research team was reduced to two staff members. Lockdowns then also impacted the ability to interview and evaluate candidates. The recruitment of the key staff, including the Research and Implementation Director and Node Managers, was completed in December.

Forward risks

COVID-19 remains an active risk as variants continue to emerge. The Centre will continue to be cautious with events and meetings. During 2021-22, the Centre saw more than half of its staff either contract COVID-19 or complete self-isolation, some on multiple occasions.



Volunteer Leader Toolkit launch, May 2022.

Promotion

With the establishment of the Centre, it was an important period for communications and promotion. Awareness and engagement with our network were supported by the design and distribution of key Centre publications (including a monthly online newsletter), a social media strategy focused on engagement, and our participation in key events, initiatives and collaborations.

Branding

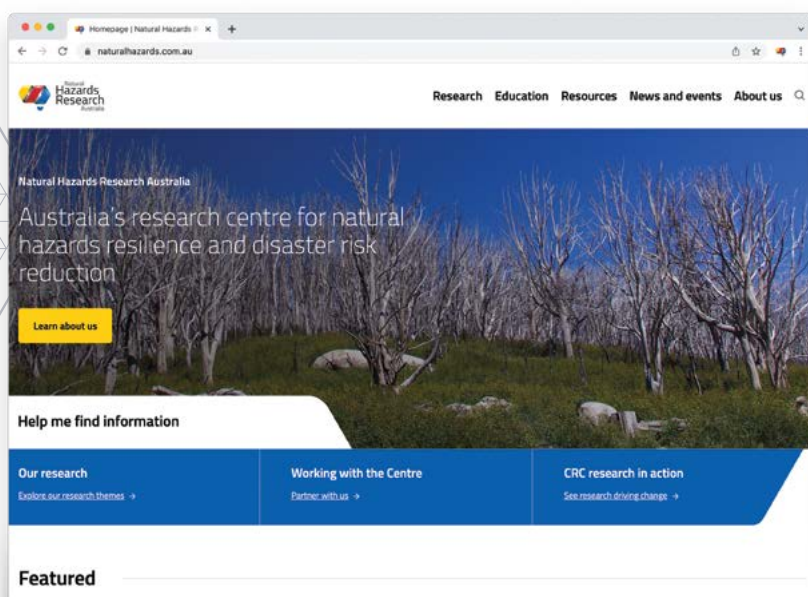
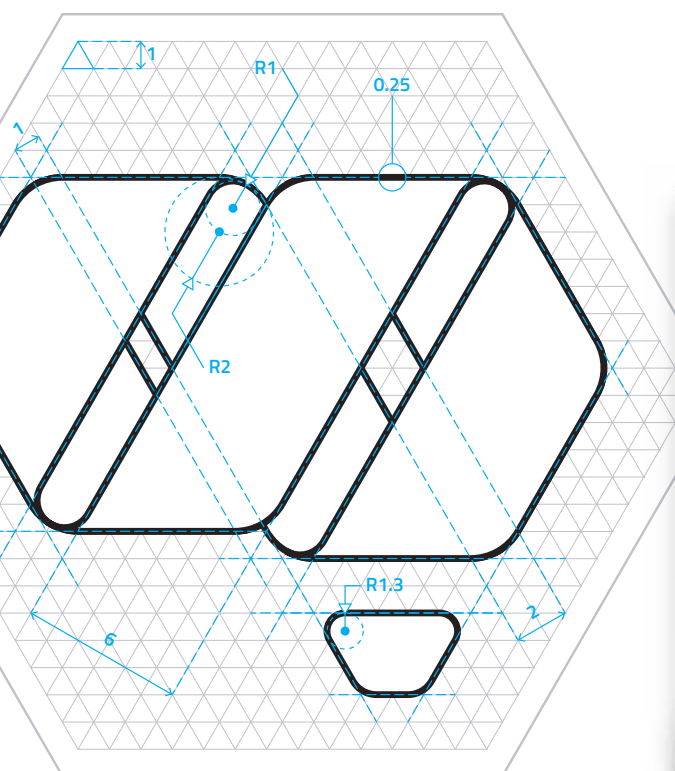
The communications team initiated a comprehensive branding process early in the establishment phase that led to a new visual identity and branding guidelines to support the work of the Centre.

Our logo was created by our graphic designer Friedo Ligthart, in consultation and collaboration with the Centre's staff and Board. The design is centred around the concept of natural hazards research as an infinite loop. This loop is displayed as three distinct segments, each representing a focus for our core research: preparation, response and recovery.

The ribbon design used in the final logo, forming the shape of Australia, symbolises a lived experience that is directing our focus and providing improved outcomes for the broader community. The colours help differentiate each research focus area and represents land, fire and water and also preparation, response and recovery. The logo typography was designed to place stronger emphasis on 'hazards research', conveying our key purpose and core business.

The communications team also developed the Centre's website, initially using a temporary website while extensive work was undertaken to create a fully functional site. The full new website was launched in February 2022 and is being constantly improved in function, integration and content.

Importantly, while publishing content under the new branding, we have continued to publish final materials and reports from the Bushfire and Natural Hazards CRC research projects under the CRC brand, as that research concludes and outcomes become available.





LAUNCHED
BRAND IDENTITY,
WEBSITE
27,015 VISITS
SOCIAL MEDIA
3,136 FOLLOWERS
VIEWS 333K
16,639 ENGAGEMENTS

Publications

In addition to the guiding corporate documents mentioned on page 8, the Centre also:

- distributed a monthly online newsletter, which was read 9,722 times (on average 883 times per newsletter)
- developed a Reconciliation Action Plan

We also regularly contributed to many well-known external publications:

- *Australian Journal of Emergency Management*
- *Fire Australia* magazine
- *Australian Emergency Services Magazine*
- *Asia Pacific Fire* magazine
- *Brigade* magazine (Country Fire Authority)
- *Bush Fire Bulletin* (NSW Rural Fire Service)
- *Phoenix* magazine (Victoria State Emergency Service)
- many external newsletters



Collaborations

Throughout 2021–22, the Centre actively collaborated with many organisations across the disaster risk reduction and emergency management sectors:

- Minderoo's Fire and Flood Resilience, with a focus on using the Australian Disaster Resilience Index
- Resilience Valuation Initiative alongside the Australian Business Roundtable for Disaster Resilience & Safer Communities
- European Union Horizon's FirEURisk project, led by the University of Coimbra
- Member of the Establishment Group for the proposed Queensland Disaster and Resilience Institute



Queensland Government

Social media

The communications team developed and implemented an establishment social media strategy to ensure a strong start to the Centre's social media presence. We launched accounts on LinkedIn, Twitter, Facebook and YouTube in August 2021.

Between launch and the end of the 2021–22 financial year, our social media attracted:



@Natural Hazards Research Australia

- 1,943 followers
- 122,049 impressions
- 7,522 engagements



@Natural Hazards Research Australia

- 373 page likes
- 72,850 impressions
- 4,774 engagements



@HazardsResearch

- 852 followers
- 138,113 impressions
- 4,343 engagements



Events

Disaster and Emergency Management Conference – September 2021

CEO Dr Richard Thornton and Research Director Dr John Bates presented to the Disaster and Emergency Management Conference in Queensland.

United Nations' International Day for Disaster Risk Reduction – October 2021

The Centre ran a special online public event in October in collaboration with the ABC to recognise the International Day for Disaster Risk Reduction.

Latin American bushfire briefing – October 2021

The Centre participated in an online briefing to several Latin American countries on behalf of the Department of Foreign Affairs and Trading, on research relating to bushfire management. This was hosted by the Australian Ambassadors to Colombia and Mexico.

Collaborate Innovate – October 2021 and March 2022

Held in two parts, the Centre participated in Cooperative Research Australia's Collaborate Innovate showcase and conference in Canberra. Centre Chair Dr Katherine Woodthorpe AO delivered the 2021 Ralph Slatyer Address on Science and Society in October at the National Press Club, which was broadcast live on ABC TV. At the March 2022 event, Dr Woodthorpe presented a keynote session and was honoured at the conference dinner with an Honorary Lifetime Membership of Cooperative Research Australia, acknowledging her immense contributions to the cooperative research community through her involvement in 14 cooperative research centres. The Innovation Showcase celebrated the 30th anniversary of the CRC Program, where the Centre featured with a booth at Parliament House to promote its research activities.



Centre Chair Dr Katherine Woodthorpe AO delivered the annual Ralph Slatyer Address on Science and Society at the National Press Club in Canberra. Photo: Cooperative Research Australia.

Community of Practice: Non-Technical Skills for Emergency Management – March, May and June 2022

Held online in partnership with CQUniversity, the Community of Practice drew on CRC research and enabled practitioners to increase their expertise, hear about what other agencies are doing, share ideas and engage in collaborative problem solving.

Transformative scenarios workshop – May 2022

Research Director Dr John Bates ran a workshop with the Queensland Fire and Emergency Services in Brisbane to help decision-makers test their long-term strategies under climate change.

Volunteer Leader Toolkit Launch – May 2022

The Centre and Curtin University launched the Volunteer Leader Toolkit in a well-attended online event for volunteers and their leaders.

Fire and Climate 2022 – June 2022

The Centre partnered with the International Association of Wildland Fire in the delivery of the Fire and Climate 2022 conference in Melbourne, which attracted 363 delegates in-person over five days, including pre-conference workshops and field trips.

From July 2022 onwards, the Centre is actively participating in the planning and delivery of several key industry events, including:

- 2022 Disaster and Emergency Management Conference (represented on the organising committee as a sponsor)
- AFAC22
- Asia Pacific Ministerial Conference on Disaster Risk Reduction

In October 2022, the Centre will host its inaugural Natural Hazards Research Forum, including the Disaster Challenge Final, as well as acknowledging the UN's International Day for Disaster Risk Reduction on 13 October.



Top: QFES Deputy Commissioner Mike Wassing addresses the Centre's Queensland Stakeholder Forum in April 2022.

Middle: QFES staff discussing preparation for different climate scenarios as part of the transformative scenarios workshop in May 2022.

Bottom: One of the Fire and Climate 2022 field trips in June 2022 visited the Wombat Forest to see long-term fire science study sites.

Find supporting research
documents and the portfolio
of projects on our website
naturalhazards.com.au

CONTACT US

Postal address: PO Box 116,
Wurundjeri Country,
Carlton South, Victoria 3053

Phone: +61 3 7032 6309

General enquiries:
office@naturalhazards.com.au

naturalhazards.com.au