

Natural Hazards Research Australia

Australia's centre for research into natural hazard resilience and disaster risk reduction

RESEARCH PROGRAM DEVELOPMENT PROCESS

Draft prepared for research priorities and project identification workshops

21 July 2021

An invitation to contribute to natural hazards research program development

Funding for Natural Hazards Research Australia (the Centre) has begun, with the establishment phase of the Centre now in progress.

During the development of the Centre, we prepared a discussion paper focused on framing a disaster resilience research portfolio. The paper was made available [on the CRC's website](#), and circulated to key groups in late February – seeking feedback from end users and researchers. We also individually briefed many groups, including end users and universities. We are now seeking input from a broad use of end users.

We received valuable feedback on the proposed research themes through that process and this was incorporated into the submission to the Commonwealth for funding of the Centre. In addition, potential research projects were identified, and these will be included in the pool of projects that will be considered for funding.

Before the Centre makes significant investments in new research, it is important for us to understand the priorities of our end user organisations that will frame the research program and will help identify priority research projects from across our end-user groups. The Centre's research program will also be influenced by the outcomes and recommendations from the recent Royal Commission into National Natural Disaster Arrangements and the National Framework for Disaster Risk Reduction.

The transition team has begun the schedule of activities that will be used to develop the initial research program for the Centre.

Research themes

The priorities for research will be developed around the themes that were developed during the preparation of the Centre's initial research plan that was created earlier this year to support the Centre's funding application to the Commonwealth. Based on the feedback received, the eight current research themes are:

1. Workforce and communities of the future
2. Evidence-informed policy and strategy
3. Resilient communities
4. Learning from disasters
5. Resilient and sustainable built environments
6. Sustainable, safe and healthy landscapes in a changing environment
7. Situational awareness
8. Operational response and innovation

Research influences

There are many factors that could have a significant influence over the Centre's research under these themes, as well as the eventual translation of that research into policy and practice. An exploration of each of these influences in greater depth and across the research themes will ensure that the research priorities and the eventual research program will be robust and enduring in the long term.

The following list of influencing variables is not exhaustive; the process to develop the Centre's research program is likely to produce others that are relevant:

- Climate change
- Political will
- Demographics and demographic change
- Financial influences
- Building regulations
- Regulation
- Land use planning
- Technological evolution and revolution
- Community activities and behaviours
- Capacity for organisational change
- Capacity, capability and resourcing in regional areas
- Research, and research translation capacity and capability
- Catastrophic, cascading, concurrent and repeating events
- Ecosystem services
- Reliable access to critical infrastructure and services

More detail about the research themes and influencing factors can be found in ***Research Themes – draft prepared for research priorities and project identification workshops***.

Developing research priorities and initial projects for each research theme

The first stage in developing the Centre's research program is to understand the knowledge needs of end users that will inform a set of national research priorities. To begin the development of the priorities for each research theme, the Centre will start its engagement with its end-users and subject matter experts with a series of surveys and workshops.

This will build on the work of the Bushfire and Natural Hazards CRC, including the [National Research Priorities](#) (updated 2019), and written feedback provided by many partners earlier this year.

This stage will involve:

1. **Three online surveys:** one that covers research themes 1–4, one that covers themes 5–8, and one specifically for northern Australia research priorities. End-users will be encouraged to focus only on the themes that are most relevant to their role and experience, rather than respond to each theme.
 - a. **Survey 1:** <https://www.surveymonkey.com/r/NHRA2021-01> (Open 22 July 2022)
 - b. **Survey 2:** <https://www.surveymonkey.com/r/NHRA2021-02> (Open 29 July 2021)
 - c. **Survey 3:** <https://www.surveymonkey.com/r/NHRA2021-03> (Opens 1 August 2021)
2. The responses to these surveys will then directly inform a set of **nine half-day national end-user workshops (by invitation)** – one for each research theme and one focused on northern Australia. These workshops will help to identify a draft set of research priorities and potential research projects and other activities that could begin to address those priorities. Given the evolving nature of Covid-19 restrictions, the workshops will be online events, allowing for participation from a range of end users. See the proposed schedule for the surveys and workshops below.
3. **Circulation of the draft research priorities** to end-users for review.
4. **Jurisdictional, industry and research sector workshops** to review the research priorities and to identify high priority and specific research needs.

5. **Circulation of updated research priorities** to an end-user leadership group, the Centre's members and the ANZEMC sub-committees for comment.
6. **Finalisation and approval** of the research priorities by the Centre's Research and Translation Committee and Board.

Once finalised, the research priorities will be used to inform the development and prioritisation of the Centre's portfolio of research projects and other activities.

Proposed workshop schedules

The schedule for the surveys and workshops (timings TBC) is:

Theme	Dates (Proposed)	
	Survey	Workshop
Workforce and communities of the future	Survey 1: 3 rd week July	5 th August 2021
Evidence-informed policy and strategy	Survey 1: 3 rd week July	10 th August
Resilient communities	Survey 1: 3 rd week July	12 th August
Learning from disasters	Survey 1: 3 rd week July	17 th August
Resilient and sustainable built environments	Survey 2: 4 th week July	19 th August
Sustainable, safe and healthy landscapes in a changing environment	Survey 2: 4 th week July	24 th August
Situational awareness	Survey 2: 4 th week July	26 th August
Operational response and innovation	Survey 2: 4 th week July	31 st August
Northern Australia ¹	Survey 3: 1 st week August	9 th September

More details of the surveys and the exact timings of the workshops will be shared directly with the Centre's participating end-users, through AFAC collaboration groups and through the CRC's mailing list. If you are a current or interested end-user and would like to contribute to the survey, please use the links above to complete the relevant survey.

Please note that these first series of workshops will be limited to key end-users and subject matter experts whose roles are linked to the relevant research theme.

The subsequent jurisdictional and industry sector workshops to review the draft research priorities and candidate projects will be open to a broader group of participants and will be scheduled through September and October.

¹ An additional workshop has been scheduled to address issues common to Northern Australia.

Translating the research priorities into research projects

The Centre will be investing in new research projects in three allocations during its first year. It is expected that, during the survey and workshop development of the research priorities, initial research projects will emerge that are of a high priority and have strong support from the Centre's end-users. Where these projects are identified, they will be put forward for funding approval.

It is likely that some priorities will have links to two or more research themes. These linkages will be incorporated into the developing research priorities and the research program.

The final mix of research projects funded in the first year will be decided once the research priorities are agreed upon. This ensures that the research program is balanced across the research themes.

In subsequent years, the expectation is that there will be two calls for new projects each financial year – ensuring that the research program is able to respond to emerging needs.

Importantly, the Centre will also have funding available each year to support post-disaster research following significant natural hazard events.

Guide to developing a research project

The Centre's research projects will be end-user driven. This means that the initial concepts will come from end-users and will be expected to clearly identify the need, the expected benefit and an understanding of how the research outcomes will be used, including:

- a) Identification of project need:
 - What would the end-users like to be able to do that they currently cannot do?
 - How would they integrate the research outcomes into their business?
- b) Any known constraints:
 - Consider external influences or current national or state-based initiatives that will affect the project, for example, timing or the need for integration into defined systems.
- c) Agreement from end-users on expected benefits:
 - How would end-users measure the benefit they want to get from the outcomes of the project (the target benefits)?
 - What magnitude, or level of benefit would they need to see to be convinced that the outcomes of the research would be worth adapting and integrating into their business/operations?
- d) How the expected benefits will be communicated:
 - End-users will be asked to consider and describe what evidence or examples they would need to have to effectively communicate the benefits of the research outcomes to their colleagues, peers, managers and other beneficiaries.
- e) Nominate a core group (4–5) of end-users to act as a core review panel for the project and participate in co-development of projects with the research team.

If there are areas of need identified that may better suit the needs of a single or a limited set of organisations, these may be considered for conduct under the Centre's commissioned research program.

A limited number of researchers will be invited to participate with end-users in the research priorities workshops as subject matter experts.

Researchers are encouraged to work with the Centre's end-users, or directly with the Centre, with ideas they would like considered for inclusion in the national research program. Researchers are also encouraged to work with relevant end-users to co-develop potential projects, noting that it is the Centre's end-users that must propose projects for funding.

Next steps

To participate in the surveys, please click on the links earlier in this document.

End-user organisations will be approached directly and asked to nominate their representatives to participate in relevant workshops.

To keep up to date with the Centre's developing research program, you are encouraged [to sign up to our newsletter](#).