

Call for Expressions of Interest

Project T3-A2: Storing and sharing qualitative social data

Expressions of Interest due 8 November 2022 to research@naturalhazards.com.au





Overview

Natural Hazards Research Australia (hereafter the Centre) is seeking Expressions of Interest from project teams for the following project:

T3-A2 Storing and sharing qualitative social data

Project description	Natural Hazards Research Australia (the Centre) is implementing a program to support the effective collection, use, curation and sharing (where feasible) of research data guided by its <i>Research Data Management Framework</i> .
	Under this framework, the Centre expects all research providers and researchers undertaking work funded by the Centre to comply with the FAIR data principles (Findable, Accessible, Interoperable and Recoverable), as well as the CARE Principles for Indigenous Data Governance. When it comes to qualitative social data, however, adhering to the FAIR principles presents ethical, epistemological and methodological challenges and complexities that are different and more significant than for other types of data. Meanwhile, any guidelines developed for the collection, use, curation and sharing of Indigenous research data must uphold the highest principals of Indigenous data sovereignty and governance.
	The Centre aims to be a leader in the careful, ethical, safe and appropriate application of the FAIR and CARE Principles for Indigenous Data Governance to natural hazards and disaster research involving human subjects and qualitative social data.
	This project will support this goal by developing guidance for the Centre, researchers and research ethics committee on applying the principles of the Centre's <i>Research Data Management Framework</i> to research that involves the collection, use, storage and/or sharing of qualitative social data.
Estimated duration	12 months
Budget	The Centre has not specified a budget for this project intentionally. We request applicants to propose a budget for what they think the project requires to meet the outcomes. The research team should note and consider the value for money criteria when proposing their budget.
Related national Research Priorities ¹	 → Evidence informed policy, strategy and foresight → Learning from disasters
Related Centre research priorities for 2022/24 ²	 → Effective data management → Support to national systems and capabilities
Centre contact	For any questions regarding this Call for EOI, please email research@naturalhazards.com.au.
Submission of EOI	EOIs must be prepared using the Centre EOI submission form. EOIs are to be submitted to research@naturalhazards.com.au by 11:59pm AEDT on 8 November 2022.

^{1 &}lt;u>www.naturalhazards.com.au/sites/default/files/2022-05/NatHazResAus ResearchPriorities FA02.pdf</u>

² www.naturalhazards.com.au/sites/default/files/2022-07/Biennial%20Research%20Plan%20 2022%E2%80%9324 Natural%20Hazards%20Research%20Australia_final.pdf



Statement of requirements

Background and context

Natural Hazards Research Australia's Data Management Framework

Natural Hazards Research Australia (the Centre) is implementing a program to support the effective collection, use, curation and sharing (where feasible) of research data.

Under its *Research Data Management Framework*³, all the Centre's research projects will be required to comply with the *Australian Code for the Responsible Conduct of Research 2018*⁴ and relevant privacy provisions, to ensure the protection of personal information. The objective of the framework is to ensure that, to the extent possible, the Centre can support and contribute to accessible national data and knowledge collections. Ultimately, all funded or affiliated research projects will be expected to contribute to accessible, sustainable national research or operational data collections with ongoing agreed access, visibility to others, custodianship, governance and standardised data dictionaries.

These visible and accessible data and knowledge collections will support current and future research initiatives, minimise duplication of research and the loss of valuable contemporary and historic data.

Managing the Centre's research data

As the Centre does not intend to operate, or act as, a repository for research data, it is intended that these functions will be supported by the organisations developing the data, or through agreed third parties. Data security and compliance with national data sovereignty requirements will be the responsibility of the entity acting as the data repository. The Centre will maintain a searchable data catalogue on its website, allowing users to discover available datasets, their content, limitations and how to access the data.

Adhering to data principles

The Centre also expects all research providers and researchers undertaking work funded by the Centre to comply with the following data principles:

- → FAIR⁵⁶ data principles (Findable, Accessible, Interoperable and Recoverable).
- → CARE Principles for Indigenous Data Governance⁷ (Collective benefit, Authority to control, Responsibility, Ethics) and that research is conducted using the AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research⁸.
- → Research data is effectively managed and incorporated into the Centre's research data catalogue.

 $^{{\}tt 3} \quad \underline{www.naturalhazards.com.au/sites/default/files/2022-05/NatHazResAus\%20Data\%20Management\%20Framework.pdf}$

^{4 &}lt;u>www.nhmrc.gov.au/about-us/publications/australian-code-responsible-conduct-research-2018</u>

⁵ https://ardc.edu.au/collaborations/fair-principles/

⁶ www.go-fair.org/fair-principles/

^{7 &}lt;u>www.gida-global.org/care</u>

⁸ https://aiatsis.gov.au/sites/default/files/2020-10/aiatsis-code-ethics.pdf



Security of data is effectively managed and that all storage facilities are compliant with all relevant national and international cybersecurity and national interest obligations.

Qualitative social data and the FAIR data principles

Many different types of research data are collected in the study of natural hazards and the disasters arising from them, and there are significant benefits from having this data be Findable, Accessible, Interoperable and Recoverable. There is a long history of qualitative social research into disasters that has increased our knowledge and understanding of important areas of disaster risk reduction and disaster management, including risk communication, social vulnerability and vulnerability reduction, capacity building, community resilience, and risk perception. In particular, there have been a number of post disaster social science studies within Australia that have made significant contributions to policy and practice for improved community safety. When it comes to qualitative social data, however, adhering to the FAIR principles presents ethical, epistemological and methodological challenges and complexities that are different and more significant than for other types of data.

Qualitative social data are non-numerical, including interview and focus group transcripts, participant observations and researcher journals. Qualitative social data is especially sensitive data as it involves human subjects. Sensitive data is usually subject to additional legal and ethical obligations and restrictions on how it is collected, used, accessed and stored. As a result, it cannot be made openly accessible. The *National Statement on Ethical Conduct in Human Research*¹² clearly outlines the values and principles that apply to all human research conducted by Australian researchers, with two central themes being: the risk and benefits of research, and participants' consent.

Concerns raised with storing and sharing qualitative social data include 13:

- preparing data to share is time consuming for researchers (i.e., anonymising by removing direct and indirect identifiers, digitising, transferring)
- → much qualitative research is context-specific and relationship-dependent, making secondary analysis difficult
- qualitative data can be sensitive, raising concerns for participant privacy, confidentiality and consent
- → there is a risk of potential misuse of data in future, particularly when data comes from vulnerable groups.

In the context of disaster studies, there are additional sensitives around data as the benefits of the research must be carefully balanced with appropriate protection of research participants. In a post-disaster setting, important ethical considerations include people's vulnerability and decisional capacity, the risk of overburdening participants, justice in selection of participants (e.g., whose voices are heard), involvement of local researchers and/or communities, and standards of care in the context of personal trauma.

⁹ https://converge.colorado.edu/research-networks/sseer/social-sciences/

¹⁰ Whittaker, J., Haynes, K., Handmer, J., & McLennan, J. (2013). Community safety during the 2009 Australian 'Black Saturday' bushfires: an analysis of household preparedness and response. International Journal of Wildland Fire, 22(6), 841–849. https://doi.org/10.1071/WF12010

¹¹ Whittaker, J., Haynes, K., Wilkinson, C., Tofa, M., Dilworth, T., Collins, J., Samson, S. (2021). *Black Summer - how the NSW community responded to the 2019-20 bushfire season*. Melbourne: Bushfire and Natural Hazards CRC. www.bnhcrc.com.au/publications/black-summer-nsw-community

¹² www.nhmrc.gov.au/about-us/publications/national-statement-ethical-conduct-human-research-2007-updated-2018

¹³ Antes, A. L., Walsh, H. A., Strait, M., Hudson-Vitale, C. R., & DuBois, J. M. (2018). Examining data repository guidelines for qualitative data sharing. *Journal of Empirical Research on Human Research Ethics* 13(1), 61–73. https://doi.org/10.1177/1556264617744121

¹⁴ Mezinska, S., Kakuk, P., Mijaljica, G., Waligóra, M., & O'Mathúna, D. P. (2016). Research in disaster settings: a systematic qualitative review of ethical guidelines. *BMC Medical Ethics*, 17(1), 62. doi:10.1186/s12910-016-0148-7



The views and knowledges of Indigenous people are increasingly being sought in order to apply and utilise their expertise to bring about resilient landscapes and communities. In particular, the 2019 and 2020 bushfires saw an unprecedented interest from the public and government in Indigenous cultural burning practices, and cultural land management in general, and how they could be 'used' to reduce future risk. While this interest is positive, and long overdue, there is considerable danger in the misappropriation of First Nations peoples' knowledges through extractive research processes. ¹⁵ Any guidelines developed for use by the Centre around the collection, use, curation and sharing of Indigenous research data must uphold the highest principals of Indigenous data sovereignty and governance as defined in the recent publication by Eckford-Williamson, B., et al., (2022).

Due to the above concerns, guidelines for storing and sharing different sorts of qualitative social data require specific instructions, safeguards and considerations that are not required for other forms of data. For data producers, examples include anonymisation, setting access or special handling controls, adherence to requirements of ethics committees, proof of participant consent for data storage and sharing, and information on data collection instruments, process and copies of codebooks. For data users, they include data producer permission, justification for the purpose of data use, adherence to ethics committee requirements, citing and acknowledging data producers.

The Centre aims to be a leader in the careful, ethical, safe and appropriate application of the FAIR and CARE Principles to natural hazards and disaster research involving human subjects and qualitative social data. The project described below is designed to support the Centre, its researchers and partners in achieving this goal.

Project description

This project will develop guidance for the Centre, researchers and research ethics committees on applying the principles of the Centre's Data Management Framework to research that involves the collection, use, storage and/or sharing of qualitative social data.

It is expected that this project will include the following key activities:

- Review and document most recent challenges and approaches to storing and sharing qualitative social
 data in Australia and internationally, with a particular focus on post-disaster research and research with
 Indigenous communities. (This should include consideration of using the CARE Principles for Indigenous Data
 Governance and the Five Safes framework for making decisions about the use of confidential or sensitive
 data. It should also include consideration of potential third-party options for qualitative data custodianship
 and storage.)
- 2. Conduct an empirical study of the benefits and challenges, and the current state of play for storing and sharing qualitative data in natural hazards research, including key informant interviews and/or workshops with research/data managers, leading researchers (including Indigenous researchers), key Indigenous stakeholders, key groups representing the rights of vulnerable people and minorities in disaster management, and community leaders from disaster impacted areas.

¹⁵ Williamson, B., Provost, S., & Price, C. Operationalising Indigenous data sovereignty in environmental research and governance. Environment and Planning F, O(0), 26349825221125496. doi:10.1177/26349825221125496

¹⁶ See www.fivesafes.org/ and www.datacommissioner.gov.au/resources/sharing-data-safety-guide



- 3. Develop a set of plausible, hypothetical research ethics committee applications that include qualitative data storing and sharing relevant to disaster research. Workshop the associated issues raised in the hypothetical applications and their solutions with researchers and ethics committees to inform the guidelines with
- 4. Drawing on the above work, develop a set of guidelines for the Centre/data managers, disaster social researchers, and research ethics committees for applying the Centre's Data Management Framework, including the FAIR and CARE Principles, to qualitative social data. The guidelines should include practical tools targeted to each of these parties, e.g.:
 - a. to assist researchers in completing ethics applications and plain language statements, and choosing appropriate data curation and storage
 - b. to assist the Centre/ethics committees to assess applications to access qualitative social data.
- 5. Prepare a final project report and accompanying communications, e.g., a lesson learned workshop/recorded webinars/professional development material for researchers, and FAQs about storing and sharing qualitative data for researchers/ethics committees/ research partners and participants.

Inclusions:

- → Establish and engage with a project reference group throughout the project in consultation with the Centre.
- Throughout the project, engage with the Centre, leading disaster social researchers, Indigenous leaders, groups representing the rights of vulnerable people and minorities in disaster management, community leaders from disaster impacted areas, representatives of research ethics committees and key industry bodies, i.e., ARDC, ¹⁷ PHRN¹⁸.
- → Engage with the NHRA/ARDC *Research data management* project to align outputs.¹⁹

practical examples. These workshops might take the form of focus groups.

- Consider qualitative social research with a diverse range of groups, including Indigenous communities, disaster-impacted communities, young people and children, vulnerable groups, CALD communities, knowledge experts and government representatives.
- → Identify and consider key challenges for sharing qualitative data such as re-identification risk and participant rights to be named/acknowledged.
- → Consider implications of data sharing for researchers as both initial data collectors and data re-users.
- → Examine potential third party options for qualitative data custodianship and storage.

Expected outputs

Outputs are the products that are expected to be delivered by this project. It is expected that the team will highlight how findings from each core output could translate into practice.

Core outputs

→ Review report (Step 1)

¹⁷ See https://ardc.edu.au/

¹⁸ www.phrn.org.au/about-us

¹⁹ www.naturalhazards.com.au/research/research-projects/research-data-management



- → Report on empirical study (Step 2)
- Hypothetical research ethics committee applications for data storing/sharing and report on workshop outcomes (Step 3)
- → Guidelines for the Centre/data managers, disaster social researchers, and research ethics committees for applying the Centre's data management framework to qualitative social data (Step 4)
- → Final project report

Additional outputs

- → Project plan and 2-page project summary
- → Quarterly progress reports
- → Project evaluation report
- Stakeholder presentation/s and agreed communications products, e.g., lesson learned workshop, recorded webinars, professional development material for researchers, FAQs

Anticipated outcomes

The key outcome of this project is a strong foundation and clear pathways for the Centre and its researchers to implement the effective collection, use, curation and sharing (where feasible) of qualitative social research data.

It will enable the Centre to support its researchers and research ethics committee to apply the FAIR and CARE Principles carefully, ethically, safely and appropriately to qualitative social data, while complying with Australian legal and ethical obligations for research with human subjects and sensitive data.

It will build the Centre's capacity to achieve its wider goal of contributing to accessible, sustainable national research and operational data collections with ongoing agreed access, visibility to others, custodianship, governance and standardised data dictionaries.

In doing this, this project will also support current and future social research initiatives, minimise duplication of research, and minimise the loss of valuable contemporary and historic social data.

Quality control and reporting

The project will be overseen and supported by a Project Management Committee (PMC) comprising the Principal Researcher, a Centre representative and at least one stakeholder representative. Composition of the PMC will be determined in consultation with the Principal Researcher.



Reports

It is the expectation of the Centre that the outputs delivered by this project will meet the highest scientific standards and will be suitable for publication on the Centre website, in end-user newsletters and reports, as well as high quality scientific journals.

The successful research team must prepare a project plan and short project summary/plain language statement which explains to a general audience what the project is about, what questions it hopes to answer and expected practical outputs to make use of the research findings, using the Centre templates. The project plan must be approved by the PMC and will become an attachment to the contract.

Reports (and any supporting material) must be submitted to the PMC's satisfaction and will be subject to review by PMC members. The project team will be required to ensure an internal peer review process is undertaken prior to the final report being submitted.

Milestone reporting

The project team must report all milestone deliverables into the Centre's Project Management System. This will include sufficient justification for the completion of milestones to the satisfaction of the PMC and the Centre.

Communication

To further assist with quality assurance, it is expected that:

- → regular PMC meetings will be held
- → the project team will use a consultative approach, documented in quarterly reports
- the Principal Researcher will give periodic presentations to key stakeholder groups to gain critical feedback on project milestones.

Additional quality control processes may be agreed as part of the project planning process.



Submitting an Expression of Interest

Application and review process

Project selection and approval will be a two-stage process. The first stage is evaluation of the EOIs that are received. The second stage is development of a project proposal, where a preferred provider will be selected and offered an opportunity to co-develop a detailed project proposal with input from key stakeholders.

Key dates

18 October 2022 Call for EOI opens **8 November 2022** Due date for EOIs

22 November 2022 Applicants notified of EOI outcome

16 December 2022 Final date for submitting co-developed project proposal

Submission requirements for this EOI

Project teams responding to this EOI are required to submit their response using the <u>Centre's EOI submission form</u>. Submissions must include:

- → an outline (max 400 words), describing how the project team intends to approach the project, including an indicative methodology
- → an indicative schedule of work and interim milestones/project outputs as described in this document
- → a proposed project budget including details of any in kind contribution from the research organisation/s
- → a clear statement (max 500 words) describing the outputs and outcomes and how the findings could be translated into practice
- → a statement of capability (max 600 words), including the proposed contributions of each research team member to the project
- → a statement demonstrating the project team's relevant research experience and stakeholder engagement (max 500 words)
- → up to two-page CVs for each proposed project team member.

Additional information

Frequently asked questions

Additional information provided to individual respondents will also be published on the Centre's website to ensure access to all interested parties. Respondents are encouraged to check the website for any additional information via these published FAQs, prior to the closing date.



Evaluation criteria

After the closing date, the Centre will review submitted EOIs against the evaluation criteria below. The top ranked submissions may also be reviewed by the lead agency stakeholders when required. The evaluation criteria provide an indication of those matters that should be included in the EOI and supporting material – details are provided in the table below.

The Centre reserves the right not to offer the work, or only allocate a proportion of the available funding, if a proposal does not meet the Centre's needs. The Centre reserves the right to invite any other specific researchers as it sees fit to submit proposals before or after the closing date.

Evaluation criterion % weighting Research capability: the capacity and capability to deliver an excellent 30 research project in an Australian environment **Project approach:** a demonstrated understanding of the project 20 requirements, and a proposed project approach and methodology that is appropriate, feasible and robust Project outcomes and outputs: demonstrate a high-level understanding of 20 the intentions of the project and how outputs/outcomes could translate to Stakeholder engagement: strong track record of industry engagement with 15 the ability to support and influence Australian disaster management at a national or state/territory level through interaction with key stakeholders Value for money: delivery of required outcome within your specified 15 budget along with the ability to leverage the funds provided with in-kind contributions or supplementary opportunities