

We acknowledge the tradition of custodianship and law of the Country on which the University of Sydney campuses stand. We pay our respects to those who have cared and continue to care for Country.



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# Community Risk Assessment

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**Dr Nader Naderpajouh**

Associate Head of School, Senior Lecturer  
The University of Sydney



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# Project Team

## **The University of Sydney**

- Dr Nader Naderpajouh
- Prof David Schlosberg,
- Dr Aaron Opdyke,
- Dr Floris Van Ogtrop,
- Prof Amanda Howard,
- A/Prof Hao Zhang,
- Dr Jodie Bailie,
- Dr Ali Hadigheh,
- Prof Mary Crock,
- A/Prof Petr Matous,
- A/Prof Willem Vervoort
- Ali Zolghadr

## **New South Wales State Emergency Service**

- Sara Morgan
- Melissa Cooper

## **Natural Hazard Research Australia**

- Dr Kat Haynes

# Significance

## **Practical significance – Need to change:**

- Agencies are at different stages of a moderate to significant revision

## **Theoretical significance – Need to reflect complexities:**

- Multi-hazard scenarios
- Multi-stakeholder scenarios
- Dynamic scenarios
- Consideration of vulnerability and resilience

# Systematic literature review

- **Started from key literature to establish the concepts**

- **Keywords used:**

- “community risk assessment” 47 manuscripts

- **Empirical study: interviews with 29 individuals from a range of agencies and organisations across the country**

- Exposure data
    - Hazard data
    - Vulnerability data
    - Data for identified risk elements

# Main Outputs

- **Guideline for community risk assessment development**
- **Alternative approaches**
  - Based on tables of the synthesis of practice and literature
- **Principles**
  - From empirical study
- **Can be used by users based on their needs**
  - What are the range of potential approaches and their capabilities?
  - How can we innovate and do it differently?

# Path Forward

- **Bottom-up approach**
  - Based on input and engagement of local and Indigenous community including rich contextual understanding
- **Top-down approach**
  - Based on technical and scientific input and analysis
- **How to integrate bottom-up and top-down insights**
  - An old age and ubiquitous tension

**Dr Nader Naderpajouh**

Associate Head of School, Senior Lecturer

The University of Sydney

Twitter: @nadernnp

Email: [nader.naderpajouh@sydney.edu.au](mailto:nader.naderpajouh@sydney.edu.au)



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