NATURAL HAZARDS RESEARCH FORUM
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Community Experiences of the 2022-2023 Floods in Victoria, South Australia, and SW NSW

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Natural Hazards Research Australia

Project overview

Aim: Examine community experiences of the 2022 and 2023 floods in Victoria, South Australia, and south-western NSW

Intended outcomes: Evidence-based planning and policy implications for increased resilience of flood-prone communities

Funded by: Natural Hazards Research Australia

Project Reference Group

Victoria

SES

Emergency Management Victoria

EMERGENCY RECOVERY VICTORIA

South Australia

SES RESCUE

Government of South Australia
South Australian Fire and Emergency Services Commission

Government of South Australia
Department for Environment and Water

SOUTH AUSTRALIA POLICE

Government of South Australia
Department of the Premier and Cabinet

New South Wales

SES
NSW STATE EMERGENCY SERVICE

Research team

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Research approach

WP1 (MQ)

Online Surveys

Focused on affected areas in Victoria, SA and SW NSW

452 responses

WP2 (Monash)

In-depth interviews

Focused on **Aboriginal communities** in Vic, SA and NSW

32 people interviewed

WP3 (RMIT)

In-depth interviews

Focused on **CALD and selected flood-affected communities** in SA and Vic

87 in-depth interviews with 96 people

Status of the report (findings)

Current status and next steps

- Shared **draft** report (V2) with Project Reference Group – findings presented today
- Agency review processes and briefings before report can be final

Important context

- Findings are representative of those who participated in the research
- Research focused specifically on community member experiences
- Not meant to serve as an evaluation of the effectiveness/success of agencies or organisations involved in the floods

Information and communication

Broadcast media (radio and television)- Vic (16%), SA (23%), NSW (14%)

Official government websites (**BOM** and VicEmergency) – NSW (11%)

Official social media accounts (SES, BOM) – Vic (9%)

Government reports – SA (16%)

Personal networks and word-of-mouth – SA (16%)

Direct environment observations – Vic (10%), NSW (14%)

SMS text message or VM from emergency services

Social media: community groups / personal connections

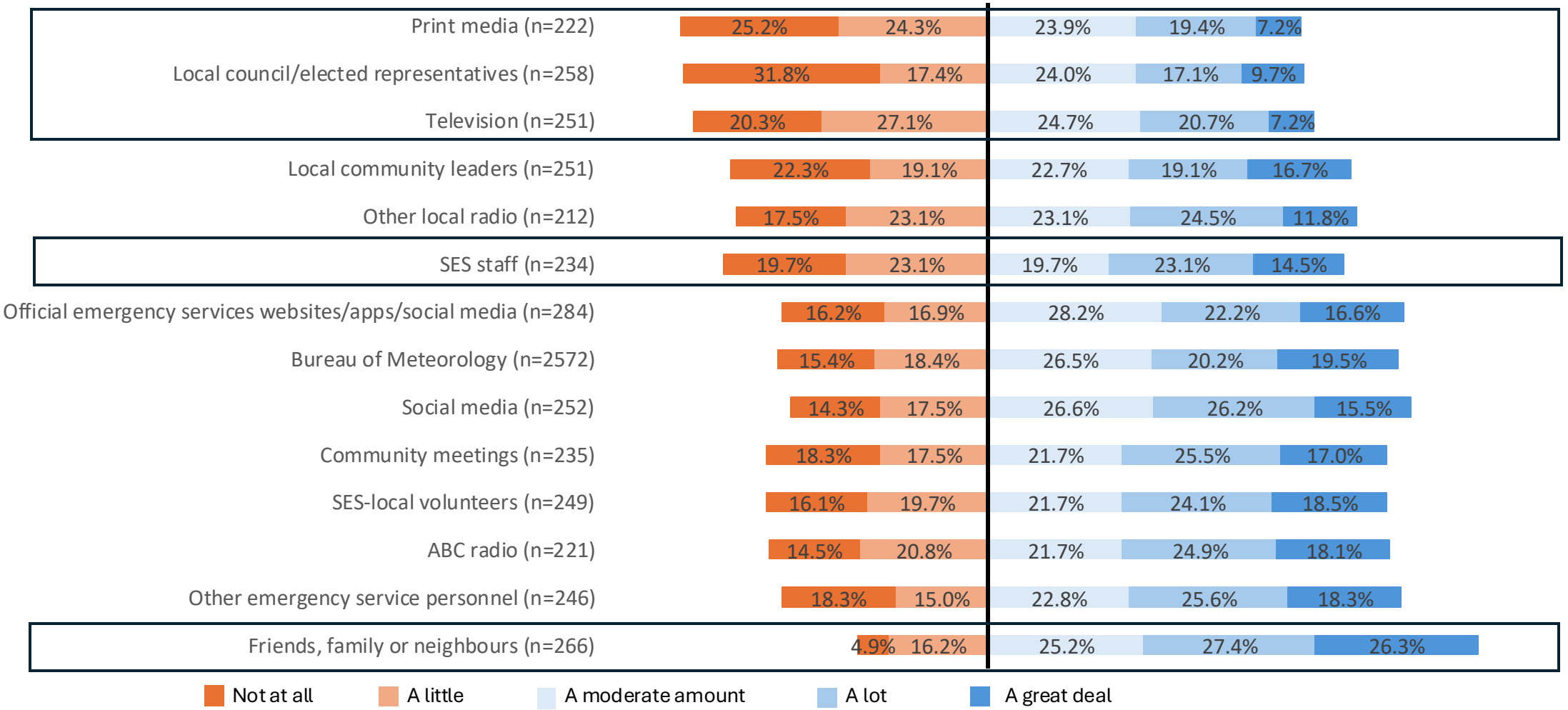
Door-to-door visits

Town meetings

Local council communications

Information and communication, cont.

Level of trust in different sources for help in understanding the likely extent and location of flooding



Information and communication, cont.

Information and communication challenges:

- Changing and inaccurate predictions

  "Unlike 2011, we actually had plenty of warning this time. We knew it was coming. It is just that they had really grossly got it wrong with regard to the height". (WP3:A26)

- Difficulties interpreting technical data (in SA)

  “So we will be given misleading - well, not misleading, but confusing information; because they were dealing in flows; we needed to know, "What does that mean in a height?" (WP3.B17)

- Delayed updates (in Vic)

  “VicEmergency was least two days behind with everything” (WP3.A2)

- Poor communication with ACCOs and Traditional Owner Corporations during preparedness and response phases

  “We were just left out. We never heard really from anyone” (WP2.C2)

Information: CALD community experiences

Communication barriers:

- Language barriers hindered warning access and comprehension
- Terminology issues (flood was misinterpreted)

"It is very hard...so can't read/understand English. … If the flood coming, like it happened last time, so it was unexpected to come; and it was hard to understand what's going on." (WP3.C14)

Community-driven solutions:

- WhatsApp groups for updates
- Community member-led translation on social media
- Cultural centres as agency information hub
- Child interpreters

"The good way I get that information it was to the group; because we have a WhatsApp group for the Congolese community. So there, they update everything; and then you get everything from there" (WP3.C7)

Risk perception

Key factors contributing to lower risk perception:

- Underestimated flood levels
- Shifting flood height predictions

  “The prediction was so strange; they were ever-changing… So the ramifications from not being able to tell people when/where and how bad it would hit, I think caused a lot more trauma; than anyone ever expected.” (WP3.B24)

- Language barriers
- Limited flood experience

Physical impacts

- Household impacts

  "…everything got destroyed. All my kids' clothing and all their personal belongings…" (WP3.A6)

- Cultural damage

  "they were cutting levees through paddocks and on the edges of forests and that's where cultural heritage was impacted. It was just a free for all... cultural heritage is just seen as secondary" (WP2.D1)

- Agricultural losses

  "I have planted over 30,000 trees on our property; which are now - most of them are drowned and dead; because we went 30 metres under water there" (WP3.B16)

Environmental impacts

Positives:

- Revitalised ecosystems and wildlife recovery
- Improved water quality and bird habitats
- Aesthetic and sensory value restoration

  "See, water was so blue; and that was the sky reflected into it (pointing). The sunsets; and the sunrises; you know, just beautiful" (WP3.B21)

Challenges:

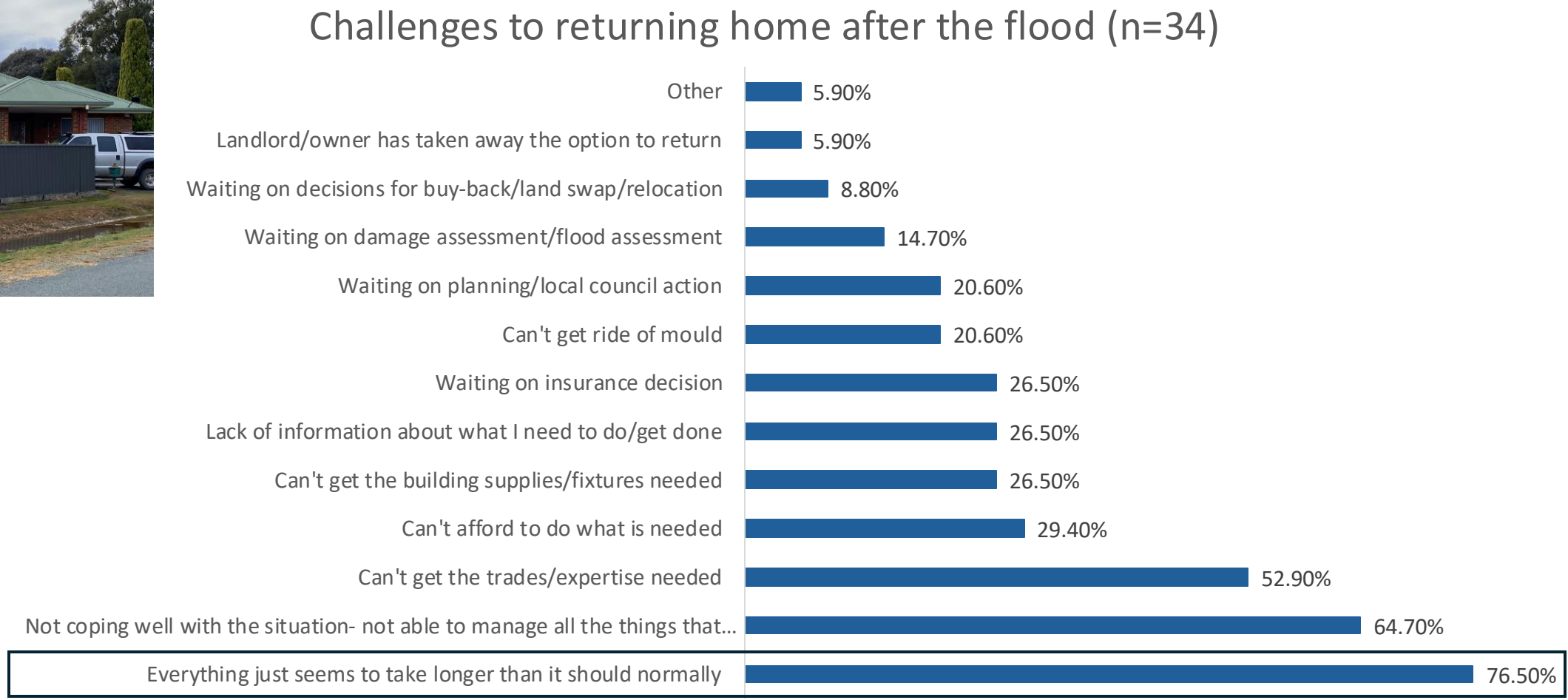
- Ecosystem disruption

  "A lot of fish were dying, there was no oxygen flows so the water turned black, big Murray Cod" (WP2.A2)

- Soil chemistry issues

  "[flood silt] actually suffocates all the nutrients in the ground" (WP3.B25)

Recovery challenges



Recovery challenges, cont.

- Insurance challenges

  “And that's what nearly broke me throughout the whole process. It wasn't necessarily the actual flood coming through. It was the process of insurance and trying to get what was right” (WP3.A14)

- Housing insecurity and displacement

  "We were renting... It was hard. We had to stay at the in-laws for about 11 months. That was hard” (WP2.C5)

- The extended recovery process

  “I’m not understanding how it’s been two years, and we still don’t have access, and there’s significant sites that we still can’t get to” (WP2.B2)

Evacuation and recovery: CALD community experiences

- Showgrounds evacuation centre had significant issues

  “It is not appropriate to have everyone in the same place; like, young people, youth and older; you know, they are from everywhere; and it is not appropriate for us to stay… We been scared to stay there because it was mixed; you know, people from *everywhere. And we went to stay in someone house.” (WP3.C6)*

- Multiple relocations during recovery period disrupted work and children's schooling

  “And I said, ‘It is not helpful for me when I have got to move every bloody two weeks’. I said, ‘I have children that goes to school. I have work here…You want me to live in - an hour/two hours' drive from where I am working?’ I said, ‘It's not good enough.’" (WP3.C2)

- Recovery hampered by inadequate support systems and cultural considerations

The role of community

The role of community-led networks in disaster preparedness, response, and recovery

- Community-based assistance

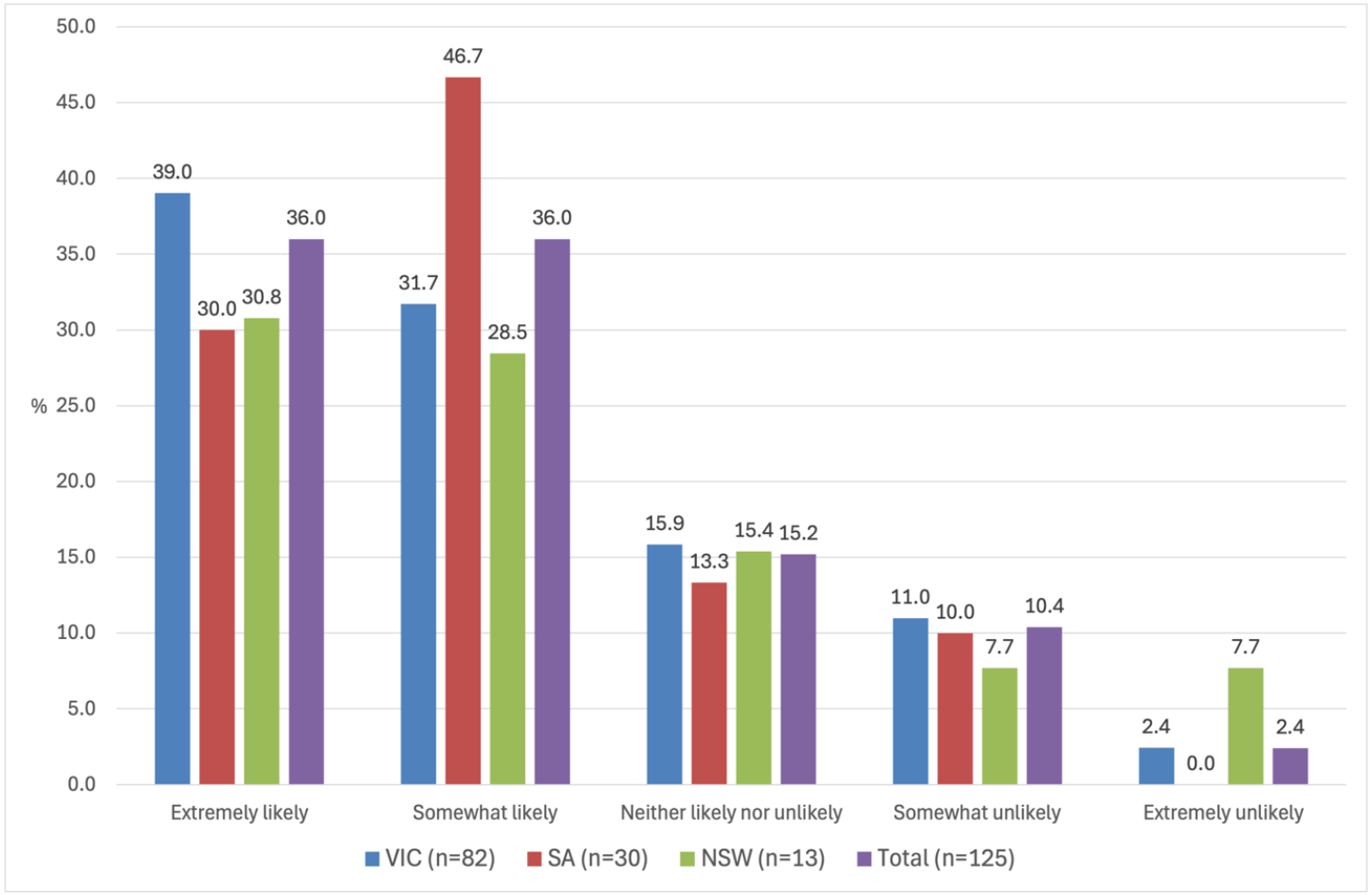
  "community members entered fast-moving floodwaters to retrieve their fellow citizens, using whatever means they had at their disposal; from kayaks, boats, trucks, tractors, by water or even road" (WP3.A25)

- The importance of local knowledge

"The bigger government bodies need to listen to the people on-the-ground…. there's a lot of what you call "historical knowledge" that comes" (WP3.A20).

"[emergency service and land management agencies] come in with the big badges and their big uniforms and 'we know best', they don't know best, we've been around the floods" (WP2.A1).

A resilient future



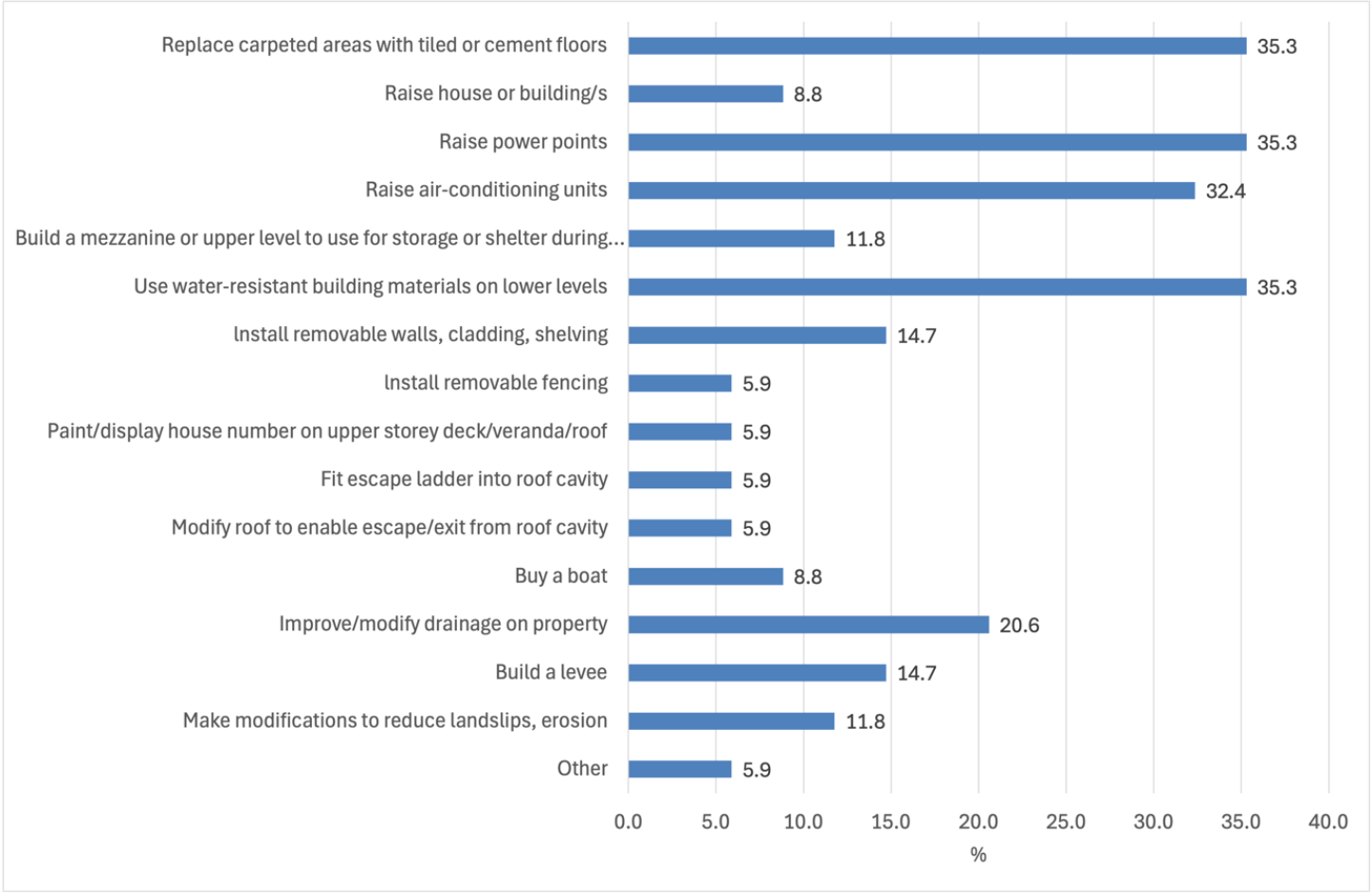
- Across three Australian states, **72%** of residents believe future flooding is likely

Adaptation and mitigation

- Residents across all three states have focused or will focus in the future more on ***minor fixes*** to their home and property

Residents' expectations:

- Government support
- Investments in rebuilds that adhere to flood-adapted building codes
- Improved water management



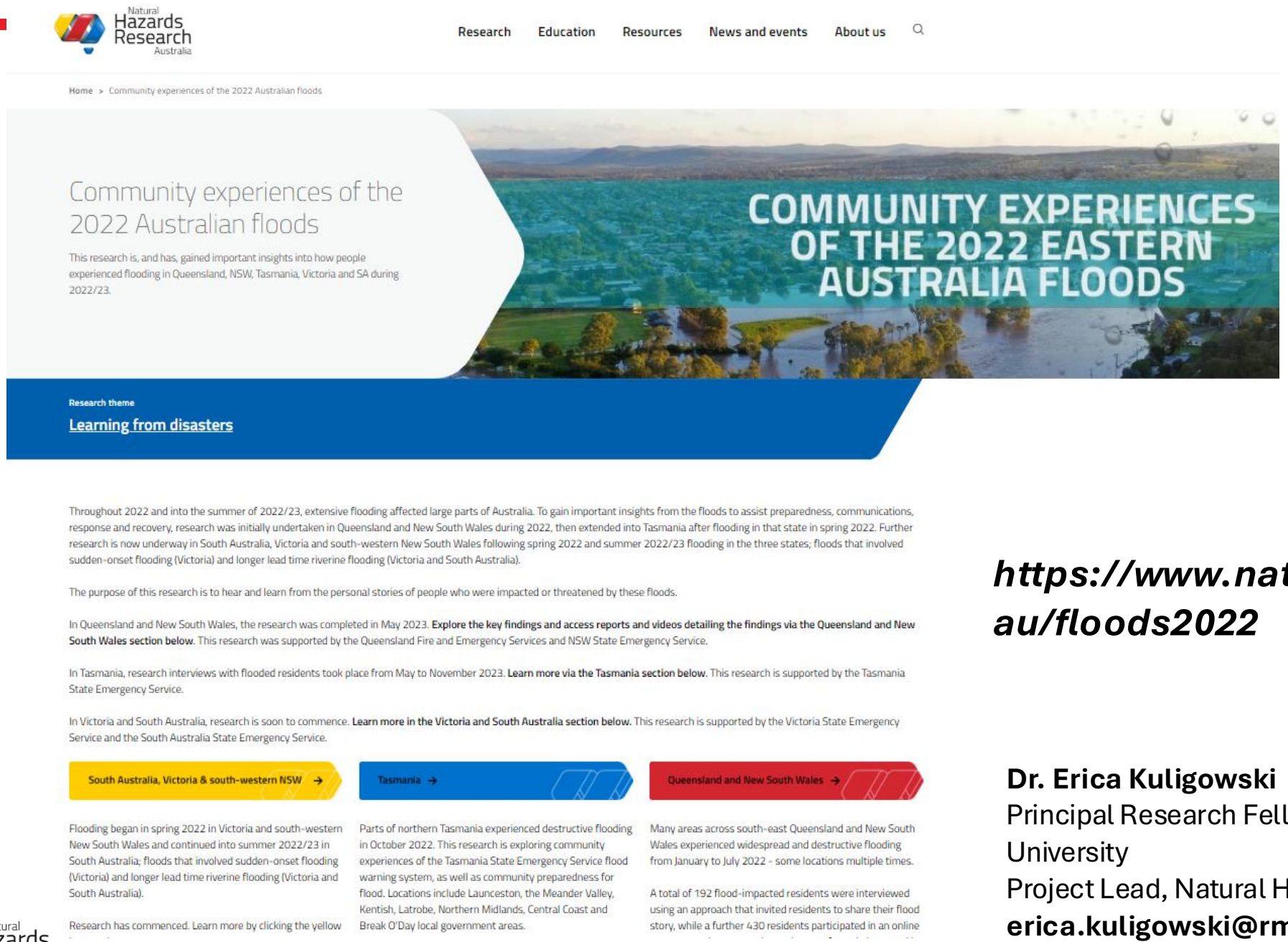
"We are vulnerable with government understanding of our situation… Do they realise that by not fixing that bank, it's adding stress to - and probably adding to what's required for us?" (WP3:B15)

Rapid-onset vs slower-onset flooding

Rapid-Onset (Vic)	Slower-Onset (SA)
Faster water level rises	Gradual water level rises over extended periods
Less warning time	More time to receive information and monitor flood data
Shorter preparation time forced emergency response mode	Extended lead times allowed for extensive preparation
Less anticipation and more immediate shock	Anticipation was often more traumatic than the flood itself due to prolonged uncertainty
Stress originated from unexpected and sudden inundation	Stress originated from the anticipation, uncertainty and prolonged waiting
Severe and immediate damage to personal belongings and homes	Prolonged inundation caused gradual but extensive damage; Challenges in timing recovery support due to slow retreat

Implications

- Developing more **effective communications** strategies/messages during floods
- Facilitating **greater collaboration** between emergency agencies and communities
- Acknowledging and preparing for **different flood types**
- Reforming **the insurance process** for flood-affected communities
- Addressing the disruptive nature of **temporary housing**
- Improving **emergency accommodation and relief centres** (food, transportation, clothing and sleeping quarters), including culturally sensitive evacuation centres
- Addressing the tension between **adaptation and affordability**



https://www.naturalhazards.com.au/floods2022

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