

The Northern Rivers Flood Recovery Study



Adapting

in action:

Building community resilience in the face of natural disasters

Preliminary report compiled by Jacob Birch & Dr Hanabeth Luke

In partnership with Resilient Lismore, Wardell CORE & the Woodburn Recovery Centre



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Background to the study

The Northern Rivers Flood Recovery Survey was implemented by Southern Cross University approximately 8 months after the record flood event on 28th February/1st March 2022. It was shared via social media and promoted by organisations and agencies across the region, with paper copies available at hubs, and phone numbers taken for those who preferred to complete it over the phone.

The survey was designed to help hubs, groups and agencies to best be able to support recovery efforts across the region, in partnership with community hub leaders from Resilient Lismore, Woodburn Recovery Centre and Wardell CORE.

Preliminary results

These preliminary results of this study are compiled from the responses of 800 survey participants. Not every response was answered by all survey participants.

1. Demographics of those who responded to the survey

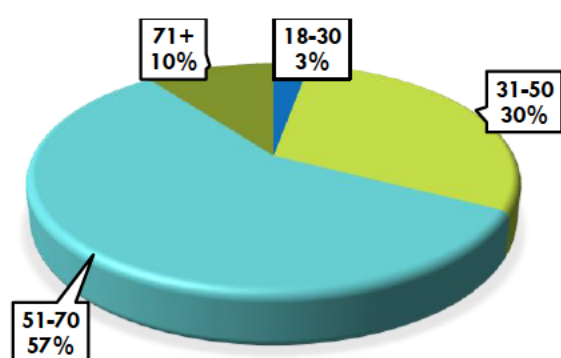


Figure 1. Age groups of survey respondents.

Most respondents (57%) were aged between 51 and 70 years (Figure 1.). The majority of respondents were women (76%), followed by men (22%), non-binary (1%), and those who preferred not to say (1%).

2. Impacts

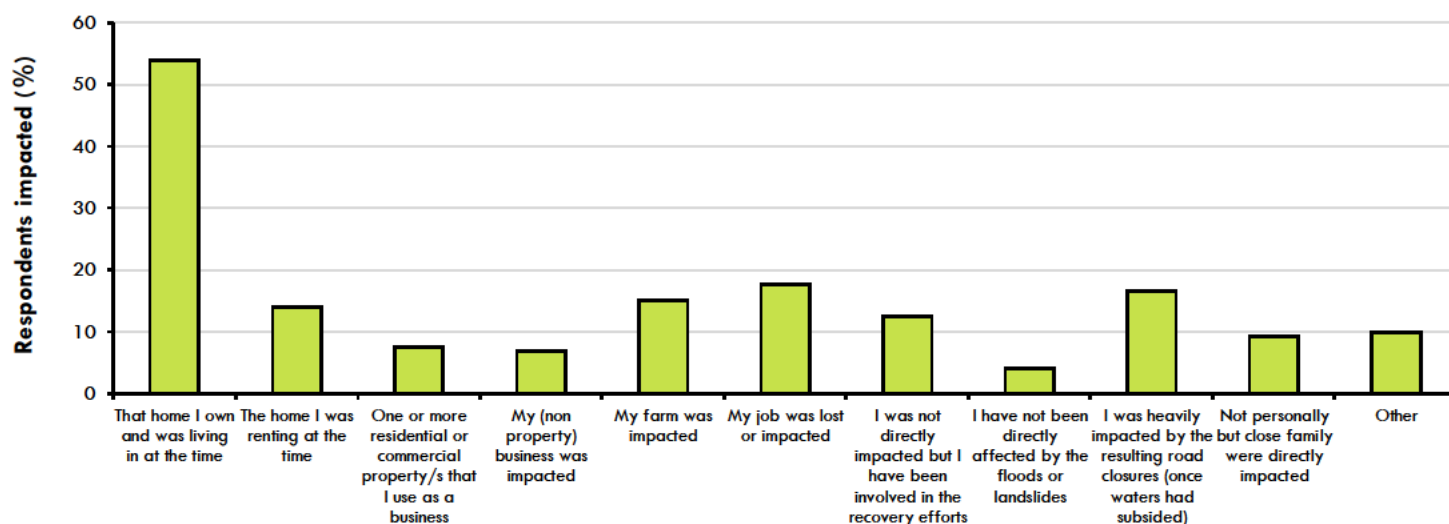


Figure 2. Types of impacts experienced by respondents, expressed as a percentage of total respondents (n=790). Responses to “Other” included impacts to schools, child-care; extended isolation and cut-off services; plus multiple occupancy properties.

Survey respondents collectively represent 93 localities from across the Northern Rivers, from Bonalbo to Grafton to Tweed. Figure 3 shows the areas with the highest representation.

There were 248 respondents who were evacuated and/or rescued during the flood event

(Figure 4.). Figure 4 shows that only 37% of displaced persons used the evacuation centres, demonstrating a challenge for support agencies to be able to access many persons displaced by the flood.

There were a further 77 people who may not have been rescued or evacuated but were severely

impacted, including those in immediate danger during the event, but were not rescued.

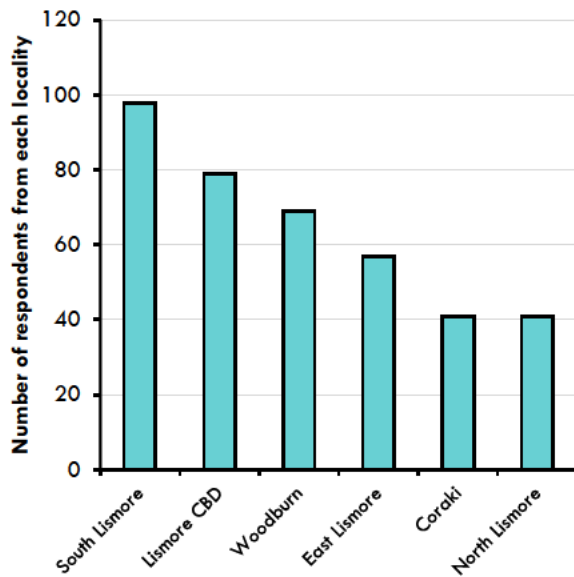


Figure 3. The five highest represented locations.

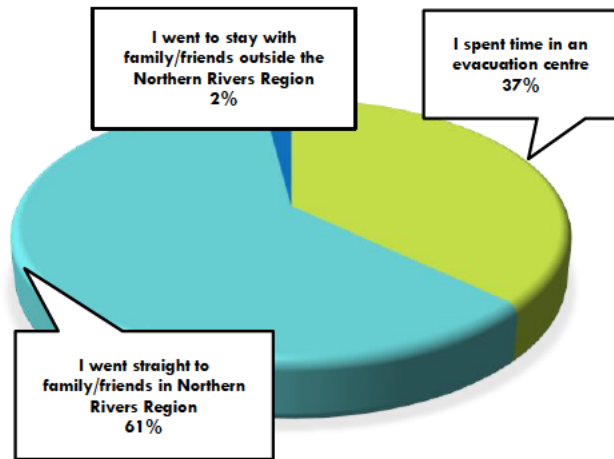


Figure 4. Percentage of respondents who were rescued or evacuated during the flooding and their immediate place of refuge (n = 248).

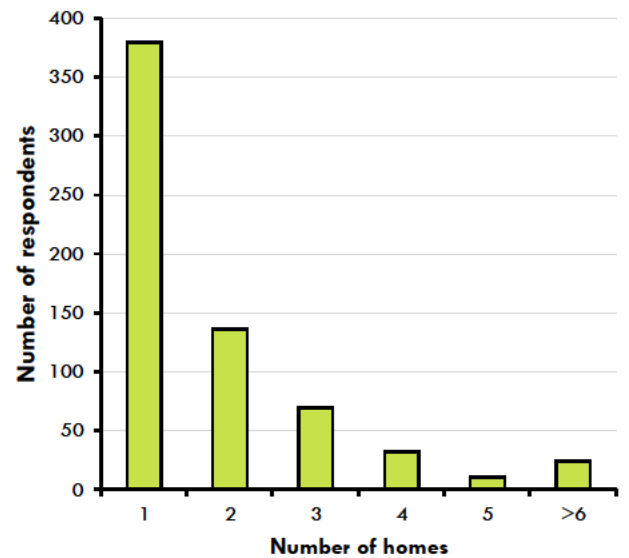


Figure 5. The number of impacted homes lived in by immediate family members of respondents (parents, children, grandparents, siblings).

There were 583 respondents who had the home they were living in, or their farm and home directly impacted by flooding. Of this group, 52% were living back in the home that was flooded at time of the survey. 274 respondents had the homes of their immediate family impacted (Figure 5.).

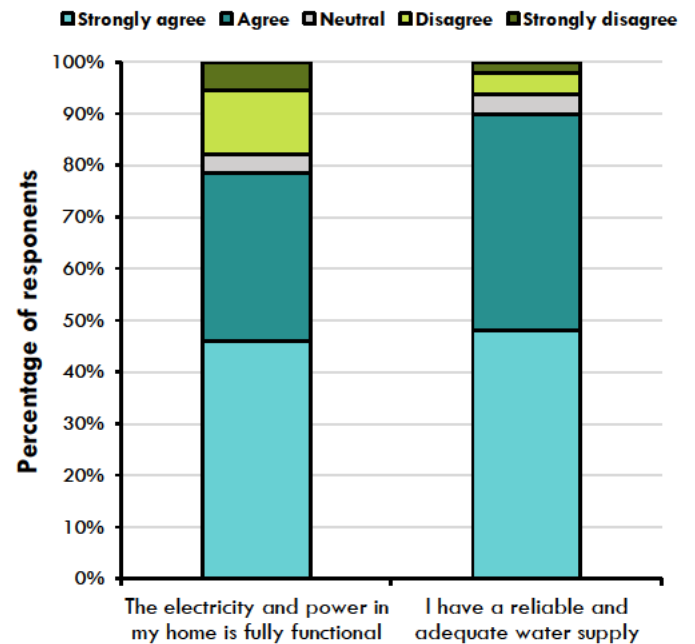


Figure 6. Electricity and water situation for those who had the homes they were living in directly impacted by flooding and are now living back in those flooded homes (n=281). Of these, 17% report to still not have functional power, with 6% reporting that they do not have adequate water

3. On the road to recovery

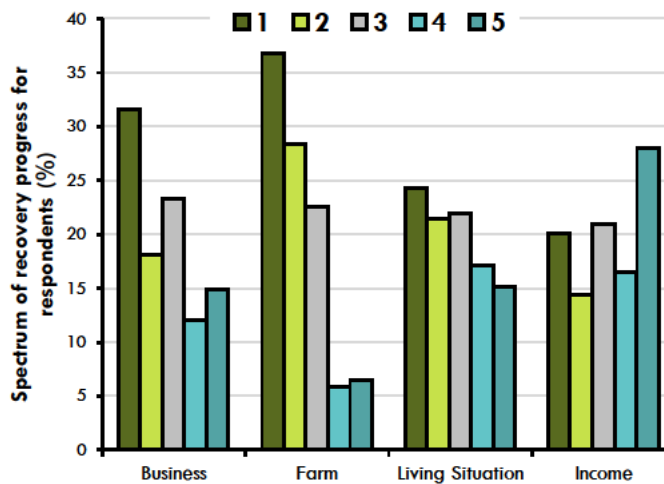
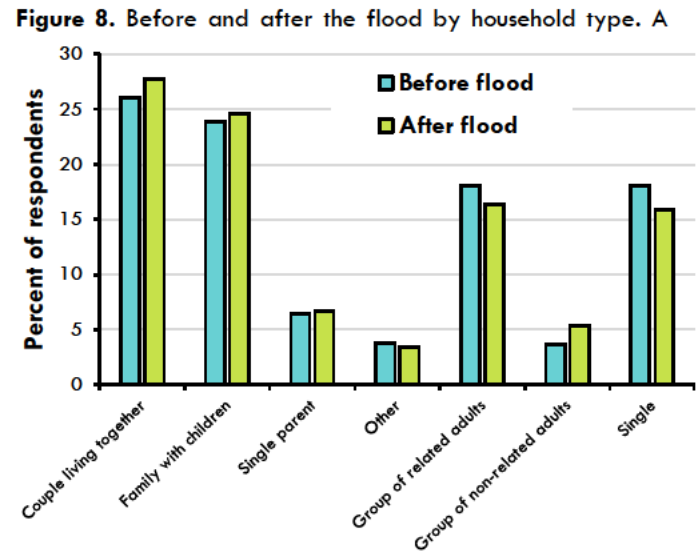


Figure 7. Recovery progress for the business activity (n=226), farm (n=161), living situation (n=577) and income (n=449) of directly impacted respondents where the spectrum of recovery ranges from 1 representing no progress through to 5 – a full recovery.



slight trend can be seen where there are fewer people living alone post -flood, and slightly more couples and non-related adults living together.

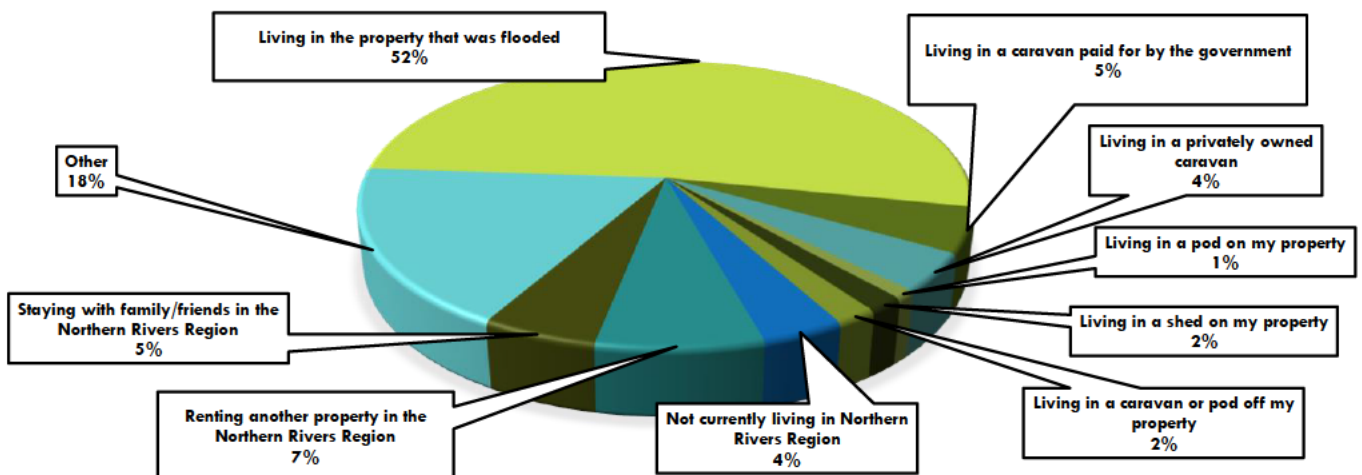


Figure 9. Current living situation for respondents who were directly impacted by flooding. The vast majority of the 18% who responded to 'other' were, at the time of completing the survey, living in emergency or insecure housing, including tents, tarps, 'couch surfing' and temporary rentals.

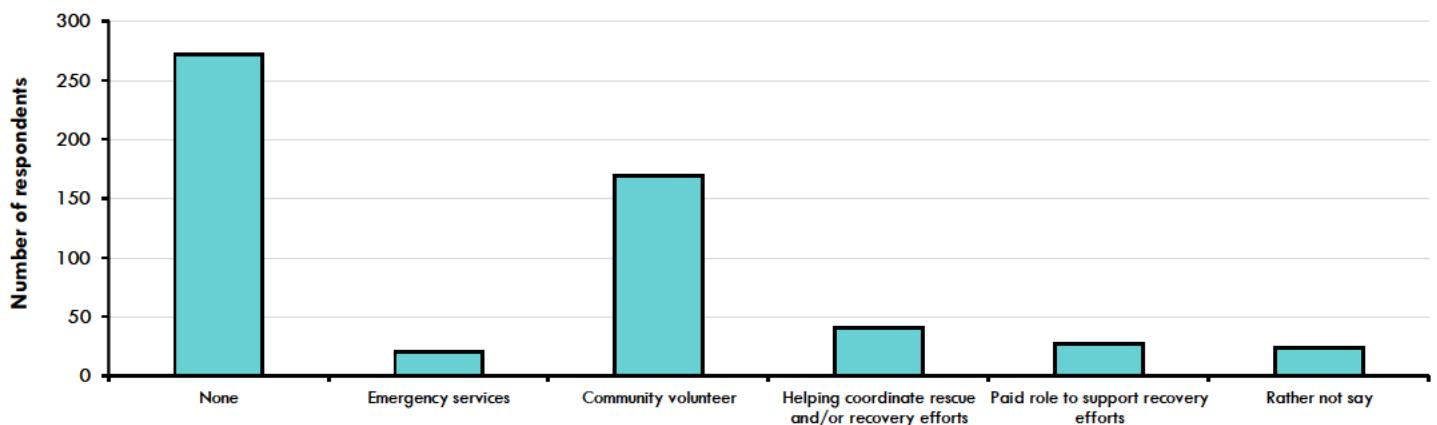


Figure 10. The roles that respondents have played in the flood recovery effort.

4. Support

Residents were asked about the estimated costs, alongside funds received, shown in Figure 11. They were also asked about their level of satisfaction with a range of support groups and agencies (Figure 12).

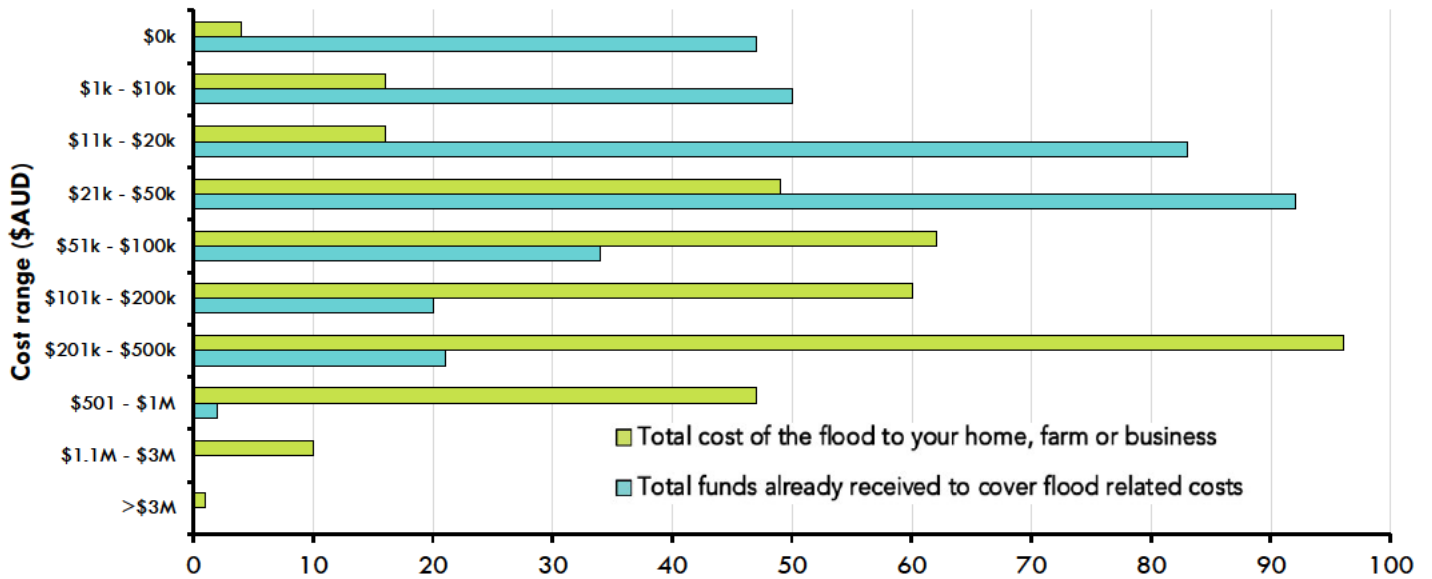


Figure 11. Estimated costs of flood impacts to survey respondents, against estimated funds received.

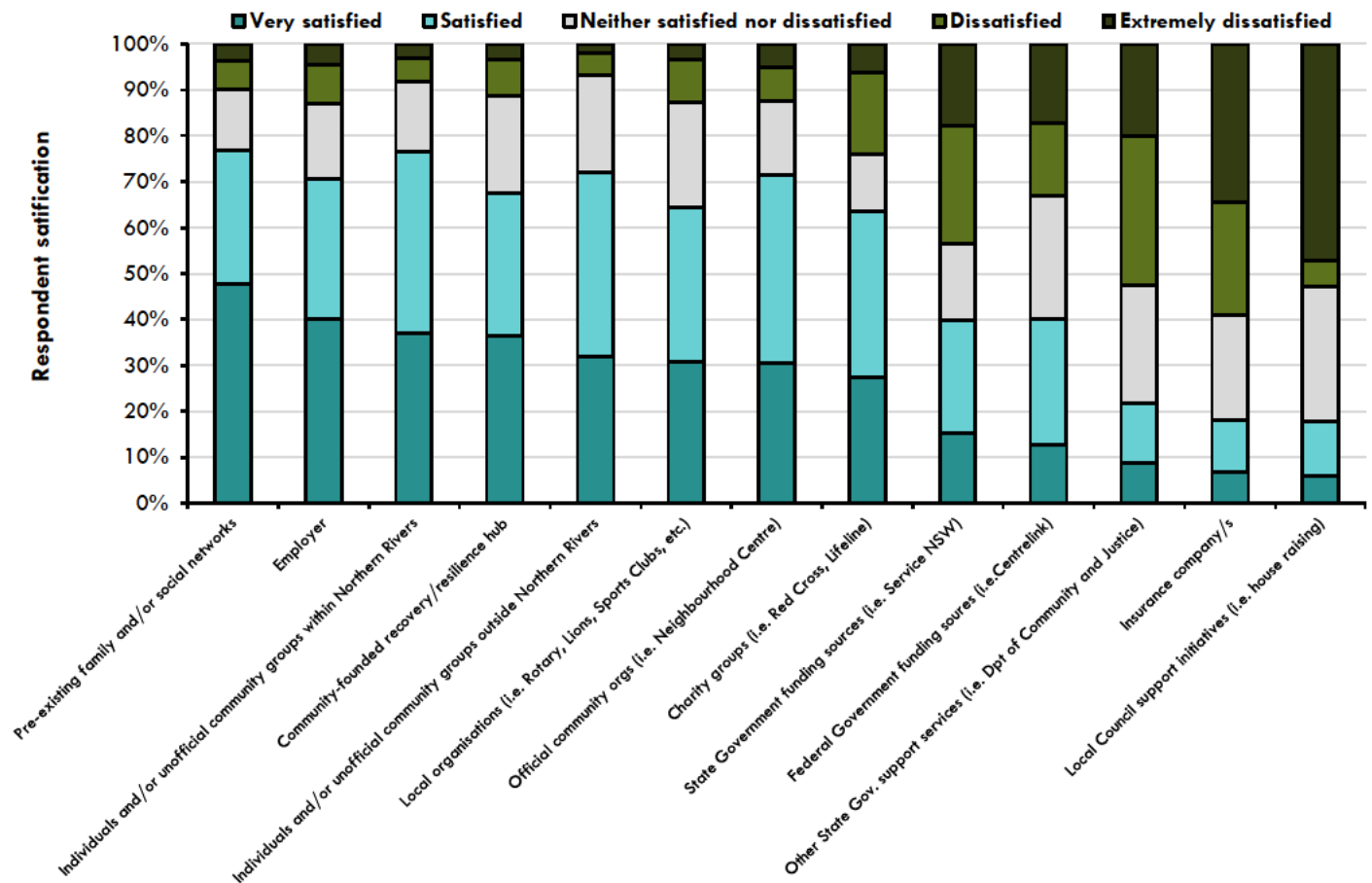


Figure 12. Importance of supporting organisations for respondents who accessed flood recovery support and their level of satisfaction with those organisations.

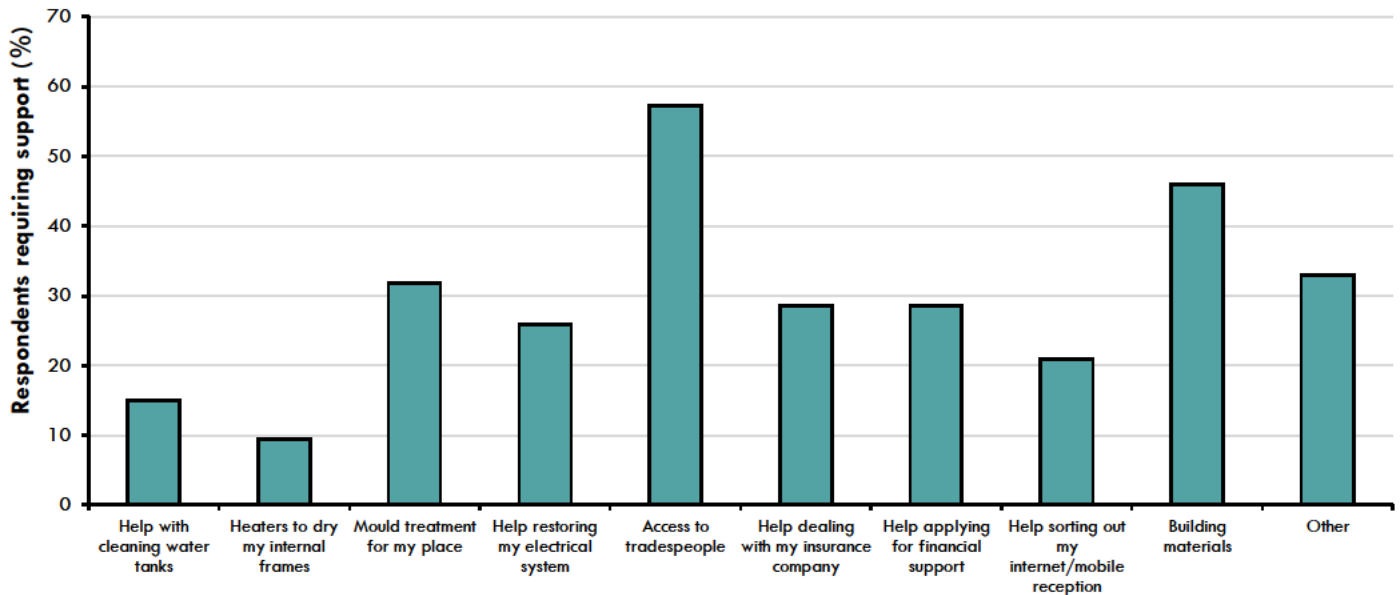


Figure 13. What respondents need ‘right now’ to help in their recovery efforts (closed question).

An open question asked what sort of support that would most aid their recovery at time of survey completion, with a number of common responses, such as: “being able to plan”. Within this, streamlined and supported approval processes (for insurance and financial assistance); access to grants/finance for the rebuild, raising and clean-up of homes and farms; secure, affordable housing; and mental health support were raised as important. Community Hub support for ‘the little things’, such as food and clothing, was raised many times as having been extremely helpful along the recovery journey.

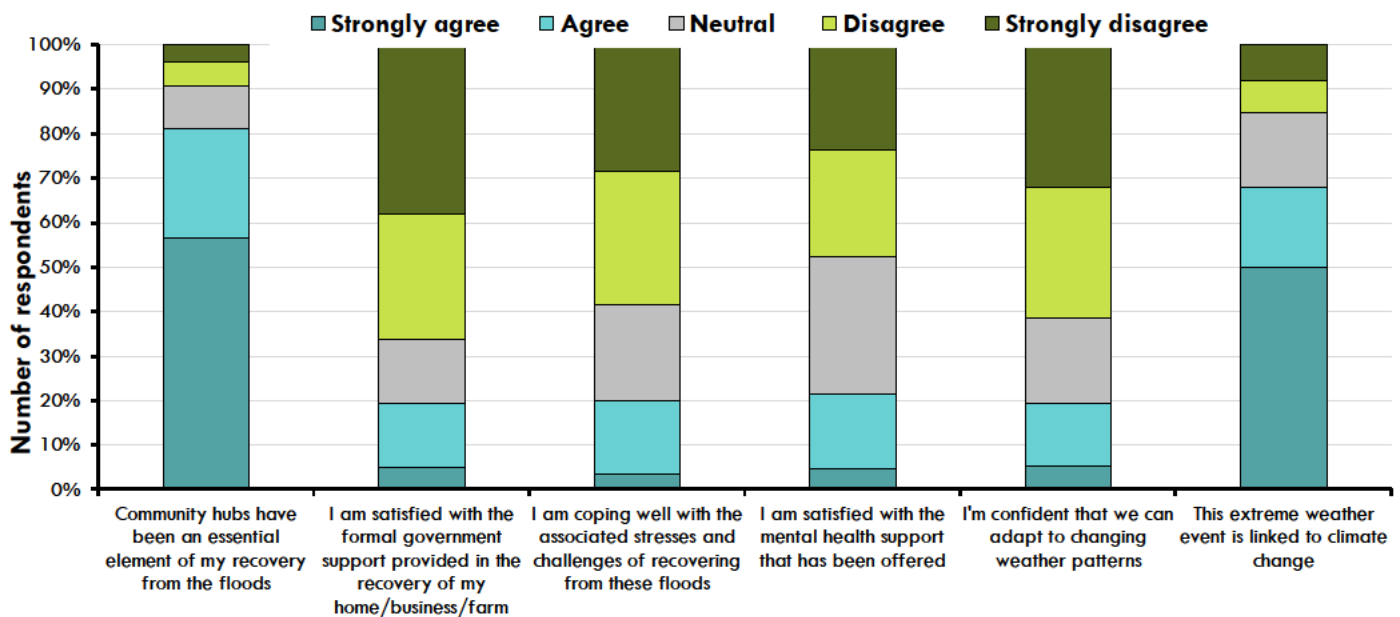


Figure 14. Views and sentiments in relation to community resilience and capacity to respond and recover.

5. Barriers to support

Of the 496 people who sought support in their flood recovery efforts, 74.19% had experienced barriers to accessing and receiving that support. The biggest barrier for people has been the number of forms they need to fill in, averaging between 6-8 forms per person.

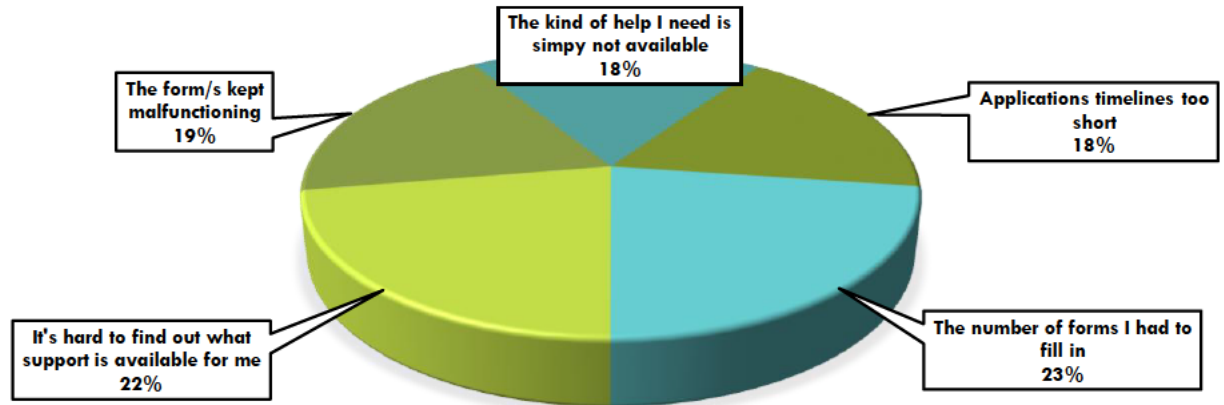


Figure 15. The most commonly experienced barriers for people seeking flood recovery support.

6. Insurance

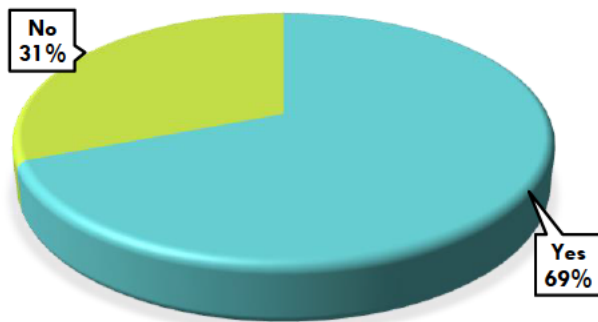


Figure 16. Percentage of respondents insured vs not insured.

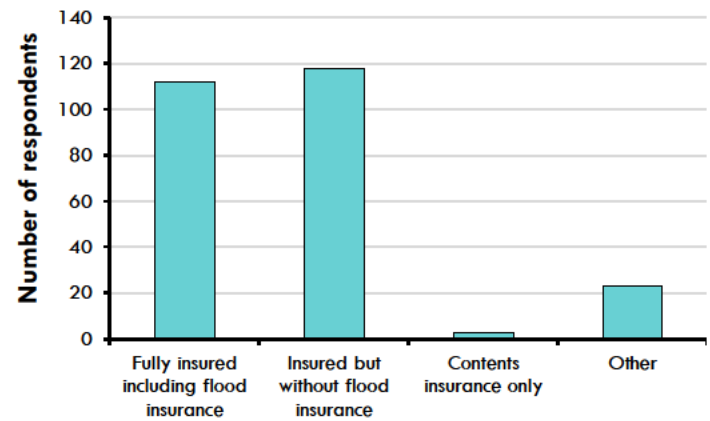


Figure 17. Insurances held by respondents.

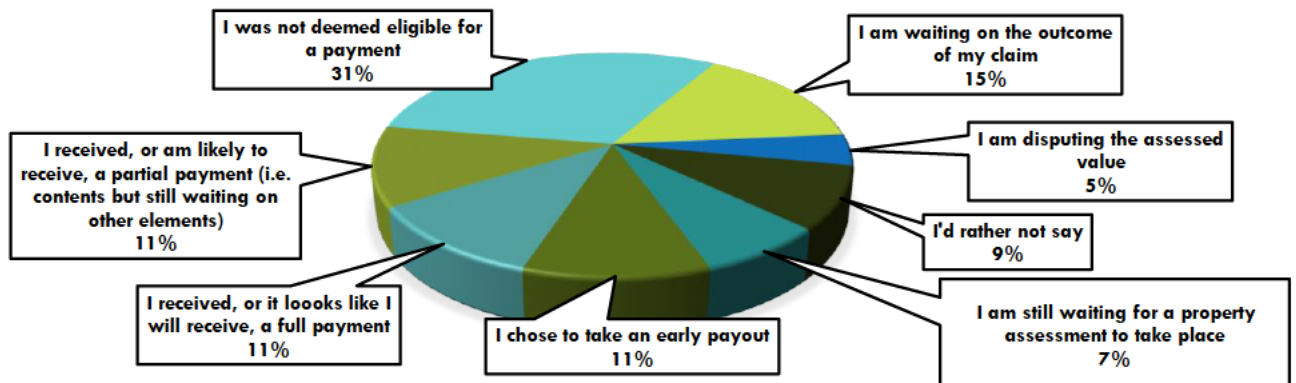


Figure 18. Insurance status for those who held insurance.

7. Recovery and the future

Respondents were asked a series of questions on their future vision for the region (Figures 19 & 20).

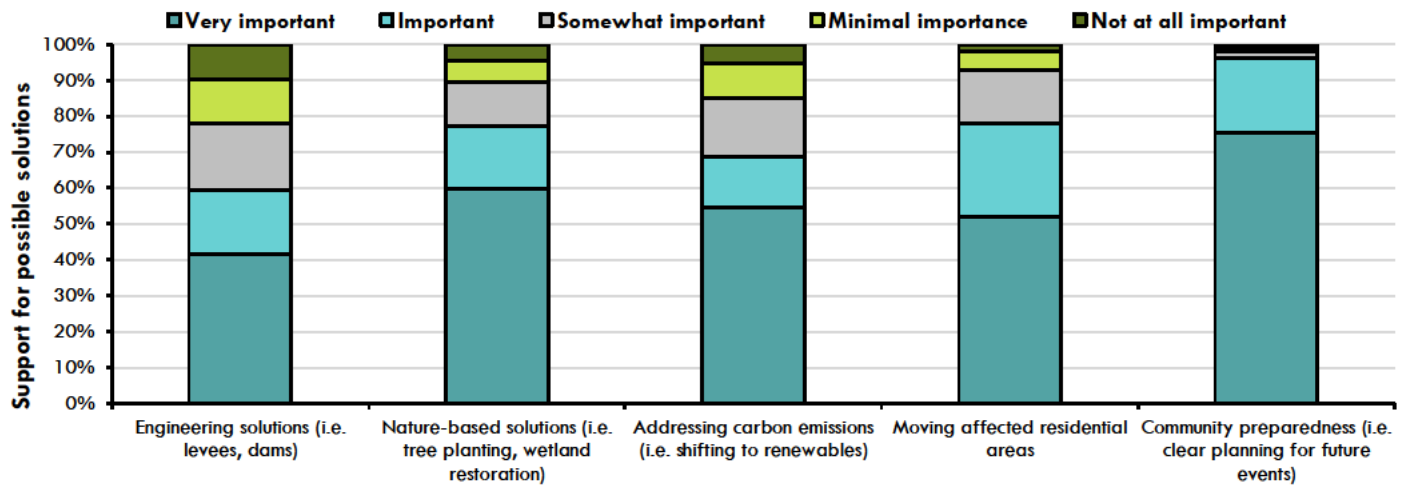


Figure 19. Views on future flood mitigation measures for the region.

An open question was posed on the most important investment to support response and recovery for future natural disasters. Common responses discussed better support for local response and improved preparedness, including better mobile connectivity, early warning systems and improved resourcing for the emergency services. An example of comments provided is: ‘We shouldn’t have to fund search and rescue services by donation!!!’ and “Decentralisation of key agencies e.g. SES, RFS so local knowledge is applied.” Ideas for adaptation included: “Flood resilient planning and infrastructure in the [Lismore] CBD and flood zones,” with “Greater community autonomy to manage on the ground,” and a “Federal government insurance scheme” plus a “well-planned and implemented disaster response and recovery education curriculum. There were calls for the recognition of diverse needs in response and recovery.

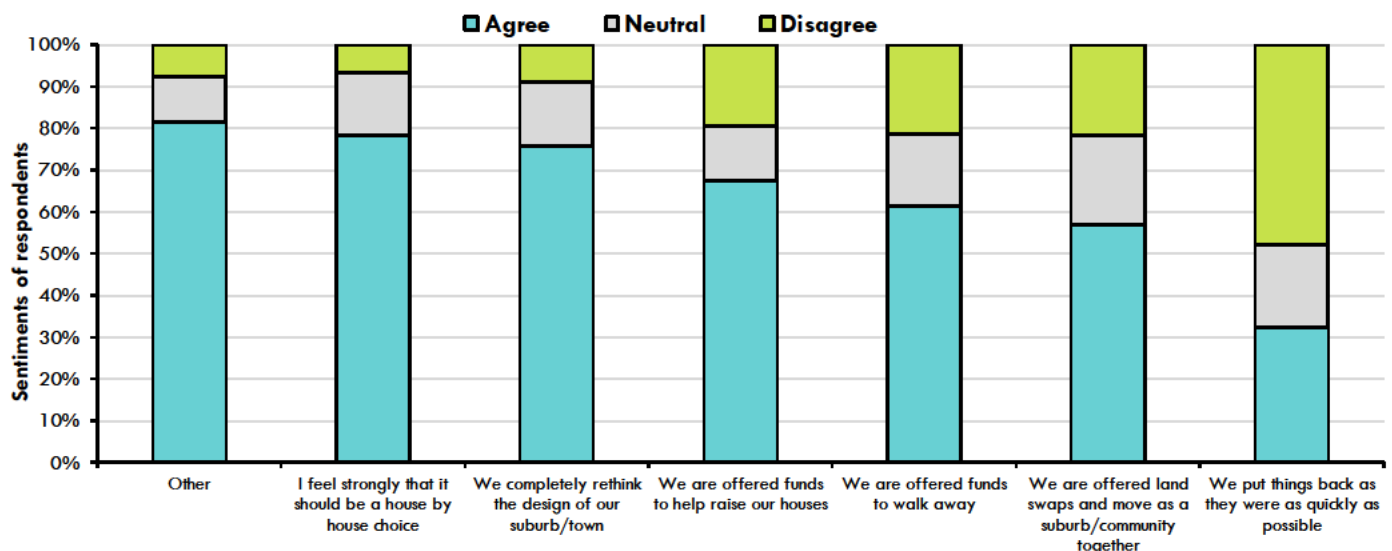


Figure 20. Support for various options for their local suburb/ community going forward. Common comments for those who ticked ‘other’ were that renters often felt left out of the recovery considerations, with worry that interim dwelling solutions will become permanent. Several comments related to improved water-flow management, with many warnings against further development on the flood plain, from Lismore to Yamba. One hope expressed was “that we can find solutions that minimise waste and maximise housing for the region. Destroying homes which are safe 99% of the time and made of irreplaceable timber would be a sad end to the story.”

Here, I outline six actions that can better prepare us for further climate disruption:

#1: Improved modelling to provide a range of likely flood scenarios (hydrology is a fairly predictable science), with risk assessment and resilient communication processes to support planning and evacuation.

#2: Well-funded, connected and decentralised (locally operated) emergency services and resilience agencies that work alongside local communities to improve our capacity to prepare and respond to fires, floods and pandemics. More interagency training would be a great thing and a paid emergency response team would be a very sensible idea.

(good to note this has been happening around

#3: Support for local action and community resilience building efforts. This is essential to being better prepared when disaster strikes and so we can recover more quickly.

#4: Financial incentives for farmers to build resilience into their lands and water through nature-based solutions, so they can pass on healthy, productive farms to the next generation.

#5: Build climate-resilient infrastructure, from housing (re) development and our transport systems, to public buildings and systems of energy supply. Decentralised energy and microgrids make communities less vulnerable to broadscale power cuts

#6: We need a sensible plan to phase out coal and gas, rather than waiting for the rug to be pulled out from another coal project, devastating workers and leaving them with no transition plan. We need to stop throwing public funds at these industries to the tune of 10.3 billion a year. Should we be instead taking a levy from these industries for a Resilient Future Fund?

In the midst of utter devastation, our Northern Rivers communities provide a strong example of how important and possible it is to work together and help each other.

As our recovery begins, I hope that we can work strategically and together across industries and stakeholders to be the best prepared we can for an uncertain future.

I can hear you thinking, what will this look like for Lismore? I don't know. What I do know is that big ideas can happen when you bring a diversity of people around the table. I believe that the communities of the Northern Rivers have the capacity to come up with its own intelligent solutions, which may or may not involve just building a bigger levy wall.

Dr. Hanabeth Luke, March 2022

Commented [HL1]: This has begun locally, which is encouraging

Commented [HL2]: Many quite effective organisations are now struggling for funding

Commented [HL3]: The US has some excellent examples of this that we don't have here, for both farming and conservation response following natural disasters

Commented [HL4R3]: There is the Emergency Conservation and Emergency Forest Restoration Programs: <https://www.fsa.usda.gov/programs-and-services/conservation-programs/emergency-conservation/index>

Commented [HL5R3]: The Nature Repair market will take us some of the way but my views are that this market based approach is too complex.

Commented [HL6]: Main domain of NRRC

Commented [HL7]: Who is leading this?

Commented [HL8]: Yes we do

Commented [HL9R8]: Still waiting to see this be properly enacted.