

**Submission to the NSW Flood Inquiry on behalf of the University Centre for Rural Health,  
The University of Sydney, Lismore, NSW.**

18 May 2022

**The University Centre for Rural Health**

The University Centre for Rural Health (UCRH) is situated within the Northern Rivers region of NSW. It is led and managed through the University of Sydney, in collaboration with Southern Cross University, the University of Wollongong and Western Sydney University. The UCRH is a multidisciplinary centre of excellence which conducts education, research and workforce development relevant to the health needs of rural communities.

**Flood inquiry terms of reference**

This submission focuses on the following aspects of the terms of reference:

**1b** - the preparation and planning by agencies, government, other entities and the community for floods in NSW, including the accuracy and timing of weather forecasts, current laws, emergency management plans, practices and mitigation strategies, their application and effect

**1e** - recovery from floods, including:

- i. immediate housing, clean-up, financial support and community engagement measures; and
- ii. longer-term community rebuilding support

**2b** – preparation and planning for future flood threats and risks;

**2d** - impact on essential services, including electricity supply, water supply and telecommunications;

**2f** - appropriate action to adapt to future flood risks to communities and ecosystems

**Floods and Mental Health**

Whilst some damage to the built and natural environment, and in some instances physical health, from flooding is immediately evident, floods also harm mental health and wellbeing contemporaneously and subsequently. These harms can be substantial.

**UCRH previous research on floods and mental health**

In early 2017 extreme rainfall from ex-Tropical Cyclone Debbie flooded many regions of the Northern Rivers inundating the major population centres of Lismore and Murwillumbah, with extensive damage to housing and infrastructure.

In response to the 2017 flood, the UCRH undertook a cross-sectional survey exploring people's experiences in the flood and their mental health and wellbeing six months after the flood, and with the same respondents two years after the flood. Using an approach which foregrounded

a partnership with the community, the UCRH purposively surveyed a broad cross-section of the community including hard-to-reach population groups. Over 2500 people took part in the baseline survey and around 500 in the two-year follow-up survey.

The quantitative analyses assessed the relationship between severity of flood exposure and mental health measures which included brief measures of depression, anxiety and post-traumatic stress disorder (PTSD) and a more general measure “still distressed about the flood”. There were also extensive content analyses of open comments provided by respondents.

### **Key Learnings from the 2017 Floods**

From the UCRH’s 2017 flood research and other flood research internationally, we can say with a high level of certainty that some people are at particularly high risk of persistent mental health problems (e.g. PTSD, depression, anxiety). Elevated mental health problems in flood affected people were observed at both the 6-month follow-up and 2-year follow-up.

Those at highest risk are:

- (1) Displaced people: people who were displaced from home for a significant period, defined in our 2017 research as displacement for more than 6 months (Matthews et al., 2019)
- (2) People who were terrified during the flood: people who had frightening “peritraumatic experiences” when they thought they or loved ones might sustain significant injury or death during the flood or flood rescue (UCRH research, unpublished)
- (3) People who suffered flood inundation across multiple areas (e.g. suburb, non-liveable areas of home, liveable areas of home, home of a significant other, business/workplace). The more areas, the greater the likelihood of ongoing mental health problems (Matthews et al., 2019)
- (4) People from marginalised communities e.g. Aboriginal and Torres Strait Islander peoples, people with disabilities and carers, people with low incomes, LGBTQ+ community. Many members of these socially disadvantaged communities may have had pre-existing vulnerabilities. In addition, they were more likely to be flood inundated because they were living in areas of poorer housing on the flood plain (Matthews et al., 2019, 2020; Rolfe et al., 2020, Bailie et al., 2022)
- (5) People with ongoing insurance disputes and unsatisfactory insurance outcomes (McKenzie et al., 2022)
- (6) Flood impacted business owners, in particular those experiencing insurance difficulties, and whose income had not returned to normal after 6 months (Fitzgerald et al., 2020)
- (7) Children and young people. The UCRH 2017 studies did not include children and young people, but research from other centres clearly illustrates that children and young people who are flood impacted are at particular risk for mental health problems.

In addition, the UCRH study six months after the 2017 flood found that people who experienced “indirect disruption” due to the flood e.g. difficulties accessing health and social care had an elevated risk of mental health problems compared to those who did not experience disruption (King et al., 2020). For people with disability, disrupted support networks hampered access to essential services and recovery efforts, as paid support staff were affected by floods themselves and unable to support clients. It was reported that further disruption occurred when some paid support staff had to move away from the area because

they were unable to secure affordable accommodation after the 2017 floods (Bailie et al., 2022).

The primary protective factors which reduced the risk of psychological distress for flood-affected communities were informal social connectedness and feelings of belonging (Matthews et al., 2020). Although Aboriginal people and people in financial hardship reported lower levels of social capital, these factors were still important for these communities in enhancing mental health and resilience (Matthews et al., 2020).

Key factors associated with mental health issues reported two years after the 2017 flood were persistent housing problems e.g., visible mould, structural complaints, and general stressors such as relationship issues and illness or injury. About one third of respondents accessed mental health services: psychologists/counsellors (~20% of respondents); GPs (16%); public mental health services (5%); mental health hotlines (2%) during the two-year recovery period with the majority saying their needs were not or only partially met. When asked about challenges accessing support for mental health, the main issue for almost one-fifth of respondents was cost, followed by lack of awareness of services available (14%) and service availability (10%) (UCRH research, unpublished).

### **Comparing and Contrasting the Impacts of 2017 floods with the 2022 floods**

On every metric, the scale and severity of mental health problems following the 2022 floods is likely to be vastly greater than for the 2017 flood. This is because:

- (1) There is a cumulative impact of one flood closely followed by another four weeks later.
- (2) Many more houses and businesses were impacted. Precise numbers are still difficult to ascertain, but one figure (March 12) is that the SES deemed 3396 homes uninhabitable and another 6708 were inundated by flood. About 600 houses were impacted in 2017. Anecdotally some people are now living in damaged homes that have actually been condemned as they have no alternatives.
- (3) Many more people have been displaced from home. Estimates have varied considerably, but probably something like 15,000-20,000 people were displaced in the initial instance. Many of these people will be in the highest risk category: displaced from home for more than 6 months.
- (4) Many more people had very frightening (PTSD-inducing) peritraumatic experiences.
- (5) Many more people had multi-area inundation (homes, business/workplace, suburb etc).
- (6) Marginalised communities have again been disproportionately affected. For instance, the Aboriginal community of Cabbage Tree Island lost all their houses and community facilities and will be displaced for several years. People with disabilities, the LGBTQ+ community and people on low incomes are others who have been severely impacted in the current floods.
- (7) It is already apparent that there are many insurance disputes with the 2022 floods
- (8) Children and young people have been severely impacted. For instance, several schools have had to move premises completely (e.g. Richmond River High School, the Living School). Many students are displaced in temporary accommodation; and have lost study items e.g. personal computers.
- (9) In 2017, there were three 'flood affected' groups of people in Northern NSW:

(i) Those directly disrupted; (ii) those indirectly disrupted; (iii) those who experienced no disruption.

In 2022, there have been two groups only: (i) the directly disrupted and (ii) the indirectly disrupted. In 2022, the whole northern NSW community has experienced some of the following:

- direct disruption to home, business or region;
- friends and/or relatives who have been directly disrupted;
- multiple service failures (e.g. loss of shopping facilities, loss of Wi-Fi/internet services, loss of mobile phone reception including 000 for many, food insecurity, petrol shortages, severe damage and/or loss of roads, reduced access to home/work, disrupted access to health and social services, including disruption to GP services and other health care services etc).

The sense of overwhelm and collective trauma across the northern NSW community is on a scale which hugely surpasses that experienced in 2017.

Comparing and contrasting the impact of the 2022 floods with other Australian disasters, we suggest that while the number of deaths has been considerably higher in some of the bushfires (e.g. 2012, 2019-20), the numbers of people displaced and severity of the trauma experienced is likely to mean that the northern NSW floods create more PTSD than any disaster since Cyclone Tracy in 1974.

**In addition to the issues outline above, there are two additional issues arising from the 2022 floods:**

1. The Need for Accurate, Useful Data on those who have been Flood Impacted

Projecting mental health and other needs (e.g. housing, financial etc.) is critically dependent on good data. UCRH research from the 2017 floods indicates that people who are displaced from home – especially those displaced for more than 6 months – are extremely vulnerable to mental health problems (PTSD, depression, anxiety). It has become apparent that we do not have the tracking systems to determine numbers and needs at an early stage. At the time of writing, 11 weeks after the first flood, no-one is able to answer with any degree of certainty how many people are still displaced, where they are currently residing, and the conditions under which people who've returned to damaged homes are currently living.

Data that have been circulated by Resilience NSW and other agencies are: how many homes have been rendered uninhabitable, severely damaged, or moderately damaged. But this is very different to numbers of people displaced, and people's needs. UCRH understands that Resilience NSW are doing the best they can to assemble such data, but difficulties coordinating information from Service NSW and a host of other services make this very challenging. For instance, while we may know how many people are in government-supported camps or housing pods, we seem to have little or no idea about the numbers of "hidden homeless" or the conditions under which they are living e.g. how many people are living with friends or relatives (often overstaying their welcome with resulting conflicts), or in temporary rental accommodation with 16 week rental subsidies that may soon run out; or have moved out of the region; or have had to move multiple times; or are camping in their own damaged houses or gardens etc. All these people are highly vulnerable to mental health

problems. The least we should be doing is making them aware of services and tracking their needs over time, but if we don't know who or where they are, this is a problem.

In the future – and to do what we can in the present crisis - we are going to need far better tracking and monitoring systems so that we can best determine level of need and offer the most appropriate services to this highly vulnerable group.

The 2017 UCRH studies could be very helpful in projecting future mental health needs and in targeting resources to those most in need. However, without better data on the affected population in 2022, it is very difficult to target resources and make accurate projections.

2. The Need to Avert an Impending Crisis in the northern NSW Health and Social Care Workforce. We suggest that there is an impending crisis in the northern NNSW health and social care workforce in the next 6-12 months unless action and initiatives are taken in the immediate future.

Why?

- Prior impacts of (i) COVID (ii) housing stress had already led to critical staff shortages across a number of services (e.g. aged care, disability services). House prices and rentals have increased by over 40% on the North Coast in the past two years. Now there is an even more critical housing shortage due to housing stock loss and repair as a result of the floods.
- Many health/social care staff have been directly impacted and lost their houses (e.g. 33 local health district mental health staff). These staff are extremely vulnerable to mental health problems.
- Most of the remaining health/social care staff have also suffered multiple impacts. For instance, family and/or friends have lost houses. Many workers have lost their workplaces. Their suburbs and non-liveable areas of home may also have been impacted. Many have colleagues/friends/family living in their own (now overcrowded) homes. Even if their homes have not been inundated, these staff are still highly vulnerable.
- Vulnerability will be increased due to constant exposure to potential vicarious trauma at work, working with deeply traumatised clients, over the coming months. Furthermore, they will be unable to provide satisfying solutions to desperate clients looking for housing and financial solutions and already there are reports that staff are verbally abused on a daily basis.
- There will be a massively increased workload due to trauma, housing, financial and social issues.
- Staff will inevitably leave due to the overwhelming stress. That has already started, for example staff at the hospital are leaving as they do not want to live in an area with such a high flood risk. It will be challenging to attract new staff for many of the issues outlined above.
- Critical staff shortages will put even more pressure on existing staff.

***Possible recommendations to address these issues***

- a) From the outset, much better systems need to be in place to track people affected in future disasters.
- b) The impending crisis in the northern NSW health and social care workforce needs to be recognised by government, and strategies/actions set in motion now.
- c) Particular attention is required to support access of marginalised communities to mental health and wellbeing support, in particular among people with disabilities and their carers, those identifying as Aboriginal and/or Torres Strait Islander, the LGBTQ+ community and people on low incomes.
- d) Growing our own health/social care staff. A counter-balance to the significant loss of staff from health/social care could be to grow our own health/social care staff from northern NSW residents who have lost their jobs in other sectors (e.g. business). Establishing schemes to retrain and provided added supervision for people who choose to re-train into health/social welfare sectors may well be the most cost-effective and practical solution to address this issue.
- e) For more experienced staff to move from other parts of the country, government may need to provide attractive housing/employment packages which may, for example, help to subsidise high rents as part of employment contracts which guarantee that such staff will stay for a minimum of two years.
- f) Providing extra salary support as an incentive for current staff who stay - and recognition of the difficulties they will face.

For further information please contact Dr Jo Longman in the first instance:  
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