

EMPA October Webinar | 25 October 2023, 10.00 AM AEDT

NHRA Research: Community experience before and after flood

Unanswered Q&A – Dr Mel Taylor

Is the government going to address the problem of phone coverage across Australia and coverage during an event?

(Derrick Briggs, WA)

An important question – and one that you already know is an issue for people. I’m aware that there are few things going on in this space, generally.

From Monday: [Government to scope emergency mobile roaming capability during natural disasters | Ministers for the Department of Infrastructure](#)

There was also an announcement a while ago (August 2023) about the Telecommunications Disaster Resilience Innovation (TDRI) program (which will – “accelerate the development and deployment of new and innovative solutions to address communications issues during natural disasters”- [Applications open for new \\$50 million program to boost telco resilience during disasters | Ministers for the Department of Infrastructure](#))

In addition, the thing I initially thought of here was the National Messaging System: [National Messaging System | National Emergency Management Agency \(nema.gov.au\)](#)

“The NMS is intended to reliably deliver telephony-based warning messages to compatible devices, locally, regionally and nationally, in near real-time. Cell broadcast technology enables a point-to-area communication between mobile operator’s radio cell tower(s) and all devices in a specified geographic area. This system will enable prioritised near real-time messages to mobile devices in defined geographic areas during emergencies such as bushfires, floods, and events affecting national security.”

I’m not a ‘techy’ person - prefer the simplicity of the social research (!), so I don’t know how easy this will be, or the timelines, but it was certainly something that affected a lot of people who took part in our research (and was problematic for people that we spoke to post-bushfire in previous years).

Lack of connectivity at an individual/household level was a stressor (during and after the floods) for many. Not only for them, but for their loved ones and friends who couldn’t get in touch to check that they were ok. It also affected those who had lost connectivity and couldn’t complete online applications for support/grants, or complete other online administration, e.g. with insurance companies, or just access online resources, e.g. guidance about clean-up, or post-disaster recovery. The former, meant that people either had to phone up – and often wait on hold to get through on the phone, or get to a relief/recovery centre to speak to someone in person.

Is that a sales board for a new subdivision? If so, will it be rethought given the flood water?

(Deb Parkinson, VIC)

As mentioned in the webinar, I'm not sure where that billboard was positioned (i.e. on the development site, or possibly at the side of the (submerged) road just advertising something locally) – I've thought about this photo often (full view below). Given the attention on future 'planning' you'd hope that nothing would progress on that site – or somewhere that could get isolated/cut-off in a flood.

Sadly, I suspect that the DA would already be approved for the sign to be up – so wherever it is, it's likely to be going ahead. Certainly, in my area there are people in new developments on the floodplain who have paid \$1M+ for homes assuming that council wouldn't have let them be built if there were any risks attached (Infrastructure NSW have been at community events locally and I've seen them dealing with surprised/shocked people).



Note – your question piqued my interest, so I tried a bit of sleuthing. I think this would have been a board for Wallis Creek (!) development, in Gillieston Heights, Maitland. I see there are Council documents online regarding visual impact and other assessments (dated June 23) so it looks like it's still going ahead.

How quickly was power reconnected? Was this not an issue for people 'after'?

(Deb Parkinson, VIC)

Yes, it has been quite an issue for some people, and of course the time power has been off has varied in different places.

I think the utility companies have been good at getting things back up as quickly as possible. I also recall a couple of interviews where people were caught out because electricity supply was cut-off pre-emptively to protect infrastructure or re-connection issues (I believe) later.

I also recall some people having issues with the process of getting their property re-connected (who to contact etc.) – I don't recall the details from memory, but I recall that the person was working on information provided by someone official, but there was a short-cut that neighbours knew, so they waited for a couple of (valuable) days longer before getting their supply back.

Given the rush (often) to clean up and wash off mud/stinky sludge, not having power for hot water/showers/washing, or lighting was a hassle and, of course some people had a lot more damage, so even having a water supply was not possible for some time.

Was there any feedback on how much time people want to be given to act?

I guess I am asking in terms of the areas that are known flood impacted communities, and given that rainfall is an inexact science, warnings and advice when to act are based on predicted rainfall totals and flood modelling.

(Cathy Harding, NSW)

Great question. Wish I had a good answer.

Generally, I would assume, solely from a social psychology/behavioural perspective (not as an organisation with public safety responsibility), there is an optimal time window. Somewhere between giving people enough time to do something in a hurry and not giving them too much time so that they don't feel motivated to act/don't feel a sense of urgency. I'm envisioning an 'inverted U' relationship between time and action.

I suspect that time window is different for different people and for different times of day. Also, for some people we spoke to, who had been through floods before, they weren't going to hang around to 'go through another flood' at home – so they were happy to just leave asap.

For analysis, I have recently been using 6 hours because I heard BOM using that as a cut-off for definition of 'flash flooding' and it felt like it might be a useful value to use to support their use of the data. In the report (before I was aware of 6 hours) I used <2hrs, 2-24hrs, and 24+hr as that divided up the data neatly with the distribution of responses.

Certainly, less than 2 hours wasn't good for people but given that for some this was in the early hours of the morning, 2 hours when you're asleep wouldn't be very helpful.

I recall that in the Hawkesbury Nepean Valley (HNV), certainly where I used to live in Pitt Town, that SES worked on 3 hours to evacuate the area (not sure if that has changed) but I always felt that there were a lot of assumptions associated with expecting people to act quickly/be decisive, behave in an orderly fashion, and there not be an influx of people returning home to get animals/kids/parents etc or sending friends in with horse floats (which we often saw in bushfire situations).

I don't recall people suggesting what a 'good amount of time' is/was/would be. In the data, those with more time did more preparation overall. It will always be a trade-off between forecast accuracy/certainty and giving enough notice and avoiding too many 'cry wolf' scenarios. Because I think a lot about animal emergency management and floods/bushfires, having additional time to relocate animals early is good – especially in the HNV.

Some people (many people?) will wait and see, regardless of the time given, so early alerting seems good to get them engaged and give those who will act and leave some time to be organised.

I do like the bushfire approach that has been in place in the past, where the next day's situation/fire danger rating is forecast and announced at/by 4pm the preceding day – it gives people a regular check-in time and time to make plans for the next day/arrange to get the day off work, etc.

I haven't really answered your question! When research is completed in SA/VIC, hopefully early next year, there might be some useful comparison data, as some communities along the River Murray had days and weeks to prepare. Thinking back to previous riverine flooding in NSW, when there is too much warning (with upstream communities being flooded and knowing the water is coming) there can be a bit of reactance to the messaging to evacuate, giving groups/individuals time to mount an opposing view, question the official messaging and potentially undermine the precautionary approach.

Did you see a difference between the groups that were interviewed closer in time to the floods and a bit longer after the flood, when it came to priority information needs-'after'?

(Emma Saville, VIC)

I can't recall differences in any general sense, only when the passage of time dictated what events had the chance to happen. Specifically, in some places where we interviewed people later on, the support was being withdrawn, e.g. recovery centres, hubs, mobile trailer offices (Resilience NSW) were closing or cutting back, and in some places the local volunteers were really tired/burnt out and numbers were dwindling and they needed support. So, in those examples the priority information was about things like continued access/how can we continue to get support, or what funding is available to keep community hubs running.

Those we interviewed later who still had outstanding insurance assessments or re-building work etc., were often dealing with disputes, or more complex cases for the former, or more significant re-builds, or delays with assessors/trades etc in the latter. Although I don't recall this specifically, it would be reasonable to think that they would be wanting more support with managing dispute or legal support. Some people we spoke to later on also were getting case managers (something that happened after a time) and were generally better served for that connection to services and information.

The other groups that come to mind are those who were waiting for NRRC decisions about buy-backs and who were still waiting when we did the survey too. Many of the groups I just mentioned were held in limbo - managing being displaced/temporary housing and uncertainty - and their priorities were around resolution of their situation and information that could support that.

Another factor that complicates the answer is that it is mixed up with location too: those outside SE QLD and NE NSW mostly had their worst flooding in July and it was earlier in their post-flood experience, but they (often) had experienced multiple floods and had already navigated the various services etc.

I didn't speak with many people in that situation, but I can recall two – one really just wanted to get out (he was renting, so it wasn't too complicated, and I don't recall him wanting anything at that

point, information-wise); the other wanted information and accountability for dam management/operation and had concerns about the potential for additional flooding due to the dam spilling again.

I also recall speaking to someone who wasn't directly affected but ran a business (water tanks) that involved a lot of contact with flood affected people. He talked a fair bit about the financial situation for those affected multiple times and the mental health impacts, so I think that connection to longer term financial planning and mental health support would have been helpful, and support to move out of the area.

You'd probably be aware too, that there is a typical post-disaster cycle where after the 'honeymoon' period there is the low point, and then the blame/questioning accountability for what happened. Information priorities inevitable push towards 'government'/local government to explain what happened/what they're doing to prevent the situation happening again.

When we were in the field (in September I think) there was also the forecast of a third La Nina, so what others/government were doing to reduce the risk of future/further harm was also a priority.

Drawing from your extensive experience in post-event research, could you share insights and perspectives regarding the significance of psychological preparedness in the context of resilience-building for various events and crises?

(Loriana Bethune, VIC)

I think it's reasonable to say that we didn't specifically ask anything about this directly, and the extent to which there was 'psychological preparedness' was more related to having been through flooding before (sometimes multiple times recently) and knowing what to expect.

Some people we spoke to were in places where there was more community preparedness/CRTs etc. but I don't think there was mention of psychological preparedness per se. Possibly a reduction in uncertainty, though, that comes from going through and surviving a flood or bushfire and knowing you can do it.

I recall speaking to a number of what I would call 'strong' people who had a great attitude to what had happened – positive, had framed the impacts in a positive or at least a 'learning' way, had good connections with community, were deeply nice people you felt an instant connection with and admiration for.

Those people who had experienced flooding before and had bad/scary experiences were, arguably, psychologically prepared. The main one I can recall just got out early as soon as she could with her family to avoid the experience. I guess that flood and bushfire are pretty different – the 'stay and defend' mentality in bushfire is a bit different to the more passive 'shelter in place' here. In addition to preparing for the water rising/drowning/noises of things/animals hitting the house structure - there would be the opportunity to get people to 'prepare' for the added challenges of 'staying' – no toilets, water, being 'trapped/isolated' unable to leave for days possibly, seeing and hearing bad things (animals drowning/snakes/spiders climbing up to your (upper) balconies.... It's an interesting question.

I think, given the large proportion of people who stayed and said it was the right decision, as long as the water doesn't go further up than your bottom storey/flood height and you have a dry floor area to retreat to/stay in – then staying is typically a 'winning strategy' – you get to clean up quickly, prevent looters, manage animals, less inconvenience etc. The challenges/hardships are maybe nothing worse than a bad camping trip. But – you could drown – so get yourself a boat and you're probably sorted!

Apologies – not being flippant, but the cultural water vs fire thing comes to mind.

Generally I think that psychological preparedness is every bit as important as practical/physical preparedness. Certainly some kind of psychological preparedness for the post-flood clean-up and recovery would be great. Many of the people we spoke to were (or had been) struggling and for some the clean-up was as traumatic as the flood (I have a great quote if ever you need it) with people 'helping' destroying their home, chucking out things unnecessarily and leaving them far worse off (but because it was 'helping' they were left to try to resolve it in their heads, not wanting to complain but feeling violated and distressed).

I'm wondering if there was a baseline assessment in regards to the 'Trust'/'Satisfaction' questions? Seems to me that the baseline could be established on what a person's expectations were/are.

If people expect to be rescued regardless, or 'it's up to me to do what I can before the event, etc, then the extent to whether their expectations had been met (realistic or otherwise) could offer a sense of balance to the trust satisfaction data.

(Marcus Barbar, VIC)

No. There wasn't a baseline assessment and there are definitely limitations with these questions. I think internal comparisons within the dataset are useful, but it doesn't get to the expectations that people had to start with – just controls a little more for the nature of the flooding experienced, and/or at the full sample level, and provides data for the same group of people that allows internal comparisons of attitudes across the organisations.

In conversations with people there was, as you'd expect, a massive variation. Many strong, organised, self-reliant folks, some with frustrations, were ultimately happy to take responsibility for their actions/inactions and move on. Others, who were angry and emotional, channelled those emotions outwardly and/or inwardly. Of course, there were others who were genuinely 'vulnerable'/higher risk due to age, socio-economic and other issues and those who were absolutely knocked off their feet by the magnitude of what happened and devastated by the 'no one was there to help me in my darkest hour'.

Another factor, of course, is the passage of time. That allows for a fair bit of reflection and self-justification for what had happened (e.g. it wasn't my fault I didn't know), the post-disaster blame phase, and time for some activism in places where people were banding together to take on local government over infrastructure issues. The latter was definitely in the minority.

Regardless of the above comments, it would be good to track trust in organisations over time – but hard to do/decide what the questions should be to capture it. There have been comments from

participants about needing to be more self-reliant and not depending on authorities – possibly not a bad thing. Some of that comes from a position of strength, some anger, and some resignation.

Have you come across the idea of 'double-storied accounts' used in collective narrative practice?

(Mark Trudinger, NZ)

The concept of 'negativity bias' (page 23 of the report) seems like it could run the risk of being seen to cast participants themselves in a negative light. That section of the report also then suggests that the 'negative' content is "due largely to the elaboration and richness of the data as described", rather than how the question/s themselves were asked.

I wonder how we as those who speak with people who have experienced trauma and hardship might be able to take responsibility for the ways that our questions shape the answers we receive?

In surveys, in other projects, I have been aware of the negativity bias and when undertaking work to find solutions and be balanced I have directly asked people to comment on things that worked/were positive, knowing that open text typically invites negative comments. In our interviews, I think we tried to maintain balance with acknowledgement of adversity. In general, we let people speak and lead, and say what they wanted, with minimal interruption – until they dried up. It was good, as an academic, to be independent from the emergency services and not be wedded to having to fish for 'how good' things had been. Artificially 'pushing' for the positive is tricky and can seem insensitive – depending on the situation and the individual concerned (I worked on post-traumatic growth as a concept, post the Bali bombings, with survivors and their families, with some skilled clinical psychologists, and it was tricky to go there).

Being able to wind up the interviews with the 'what have you learned about yourself' and 'what advice or help could you give, through your experiences' was a really great way to ensure we finished with a more positive ending, but also left the participant feeling that their contribution could be of value. We had some great discussions at that point – and we also had the luxury of not being constrained by time. Both of those things helped participants and researchers (I certainly had an occasional cry after a couple of the harder interviews.)

I guess for the reporting, I was constrained to talk about policy-relevant findings – so that tended to lend itself to identifying the problems that needed fixing, and there wasn't the time or opportunity to focus on the upside so much. I think it's good to think about how we can do this sort of research better/well and I appreciate you bringing up some things for me to think about further.