From:	NSW Government
To:	Flood Inquiry
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Attachments:	Submission v1.rtf

Your details

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Submission details

I am making this submission as	A resident in a flood-affected area
Submission type	I am making a personal submission
Consent to make submission public	I give my consent for this submission to be made public

Share your experience or tell your story

Terms of Reference (optional)

The Inquiry welcomes submissions that address the particular matters identified in its Terms of Reference

Supporting documents or images

Attach files	• Submission v1.rtf

I am a resident of the lower Hunter basin, living adjacent to the floodplain in the township of Wallalong (which was isolated by floods for several days in 2015). This is just uphill from the township of Hinton, a high flood island at the confluence of the Paterson and Hunter rivers, which is regularly isolated during minor/moderate flood events. My experiences in 2015 coincided with my creation of CIFAL Newcastle, a United Nations international training centre for disaster risk reduction (DRR), at the University of Newcastle, which I led until 2019. At this time I decided to focus my DRR expertise more locally by volunteering with the New South Wales State Emergency Service (SES), going on to become Deputy Unit Commander for Port Stephens, and then acting Deputy Local Commander for the Northern Hunter Cluster, though this role disappeared in a recent restructure. From the outset my interests were in better flood planning and improving community flood resilience.

During the recent flood event in the Hunter, Hinton was isolated for several days, during which time a small number of SES members resident on the high flood island serviced the needs of this community, including the resupply of life-saving medicines, ferrying of critically ill residents to hospital, as well as other issues of transport and resupply for the broader population. Timely, accurate, and hopefully useful local flood intelligence underpinned these operations.

This SES success story went largely unnoticed and was essentially unaided by the SES hierarchy from Cluster leadership upwards. On one level, this is exactly how it should be, with the Unit performing its functions as envisaged by doctrine and training. However, that the success was achieved in spite of, rather than because of a top-down management of information is telling, and potentially emblematic of organisational culture. There are two issues that have broader implications beyond the Hinton context: firstly, overreliance upon partial or incomplete intelligence; secondly, fundamental distrust of local intelligence generated from within the community.

Flood intelligence concerning the lower reaches of the Hunter River between Belmore Bridge in Maitland and Raymond Terrace, the lower reaches of the Paterson River below Gostwyck Bridge, and the lower reaches of the Williams River below Mill Dam Falls is contingent upon Bureau of Meteorology (BOM) advice, based upon a) river behaviour upstream of these points and, gauge readings at these points. Any precipitation falling in these three catchments below those points are not factored into river behaviour until they are recorded on the Raymond Terrace gauge. This is because the BOM will only make river condition predictions based upon the gauges it manages i.e. gauges that are managed by other authorities are not taken into account. Further, the BOM does not differentiate between the different river systems when it issues its advice, simply referring to all three as the lower Hunter.

This is of significance for communities and farms within/adjacent to the floodplains, some of whom are located behind levee systems, for two reasons:

- Firstly, the inherent complexity of the interaction between the three rivers, all of which are tidal in their lower reaches, together with the potential for localised cloud bursts, which can significantly alter/overwhelm normal land drainage

patterns, means that localised minor flooding can occur long before the upstream BOM-managed gauges would indicate it to be a possibility.

- Secondly, river level rises contained within the lower Hunter levee systems – and importantly, below minor flood level gauge readings – can nevertheless result in significant danger to livestock and equipment that is located on the riverbanks and on low lying pastures not protected by levees.

This generates the following responses:

- The SES is reluctant to issue equipment and livestock warnings without first being informed of their necessity by the BOM.
- The SES is reluctant to utilise local observations, local know-how, and even locally generated flood intelligence based on publicly available, reputable data, from experienced SES volunteers.
- The SES locally utilises the term "nuisance flooding" in a way that is inconsistent with BOM or indeed its own terminology and consequently, the community comes to disregard flood messaging from it since it is neither timely or accurate.
- SES Flood Intelligence Cards (and consequently, Flood Action Cards) do not necessarily reflect recent flood behaviours, and are generally very conservative, potentially dangerously so. For example, recent flood observations at Hinton illustrate that the currently documented level at which SES flood actions should be commenced would require the levee to have been overtopped by 600 mm of water.

I train about 50 municipal and emergency service leaders annually for the UN, to postgrad level, in government approaches to DRR worldwide, and I am leading funded research into community flood resilience for the NSW Government. My extensive work in the DRR domain compels me to make the following observations:

- SES doctrine is – justifiably – heavily driven by emergency response. However, as evinced by last year's circulation of a draft SES DRR policy for comment, there is at least a potential acknowledgement that disaster (where local capacity to cope is overwhelmed) has entered the SES lexicon, though no final policy has yet been published. In essence, current SES doctrine remains that disasters are simply very large emergency response events, to be handled within existing resources.
- Emergency response is predicated on the "likelihood-consequence" model of risk assessment. From a DRR perspective this is wrong, because it tailors all resourcing, messaging, and training outcomes according to the outcome of a likelihood-consequence assessment, instead of conceiving a worst-case scenario and the broadest population it affects, then planning for it.
- Further, this position fails to acknowledge the true risks that the SES itself carries in terms of executing its duties; assuming that members are correctly equipped, trained, and utilise these correctly, these risks are wholly reputational.

No one likes to think about the unthinkable, for when local resources are inevitably overwhelmed. However, failing to plan is planning to fail and therefore ignoring DRR should therefore become the unthinkable.