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Ipswich City Council
Councillor for Division 2



The Honourable Justice Catherine Holmes
Commissioner
Queensland Floods Commission of Enquiry
PO Box 1738
Brisbane QLD 4001

Dear Commissioner

QUEENSLAND FLOODS INQUIRY SUBMISSION

Goodna was the hardest hit suburb in the flooding in southeast Queensland with almost 400 residential properties flooded between 11 - 13 January 2011.

I have been a resident of Goodna for 37 years and an Ipswich City Councillor for 32 years.

I have witnessed at first hand the floods of 1974 and 2011. My wife and I and our two children aged 9 and 11 were victims of the 2011 flood with the water going to the tip of the roof of our 2 storey-home in Goodna.

I shared the heartbreak of the flood first-hand with my constituents.

Whilst many issues will be canvassed in the broader aspects of the Inquiry, I am making this individual submission and recommendations on 5 issues arising from the recent flood at Goodna which I trust will be of specific relevance to the Inquiry. Ipswich City Council will be making its own formal submission to the Inquiry.

1. Q100 FLOOD LEVEL

The Q100 flood level adopted generally across Queensland is often misinterpreted by members of the public and practitioners in local and state government. It is regularly, but mistakenly, referred to as a 1 in 100 year flood level or event. This is quite misleading. Q100 represents a statistical probability of 1 in 100 i.e. a 1% chance that the designated land will flood to that level in any year. The probability remains the same in every year, irrespective of the proximity of any earlier flood.

As a result of the inadvertent misuse of the 1 in 100 descriptor, members of the public have come to believe that the average periodicity of floods is 1 in 100 years and that because of the Wivenhoe Dam it "will never happen again".

In a little over a century, serious to major floods have occurred on the Brisbane River at Goodna in 1893, 1908, 1931, 1955, 1974 and 2011. The average time between such floods is a mere 23.6 years.

Flood alerts to communities along the Brisbane River downstream of Mt Crosby are modelled on the projected river height at the Port Office gauge at the end of Edward Street in Brisbane.

With some help from the Bureau of Meteorology, members of the public are left to extrapolate flood river height data and Q100 predictions to make best guesses as to the projected height of a particular flood at their suburban location.

It would be easier for a member of the public to understand Einstein's Theory of Relativity than to decipher Queensland's flood alert system.

The Q100 notional flood level and the Port Office gauge methodology provide an alert system which is impossible for the average member of the public to understand. It may be appropriate for hydrologists, meteorologists and academics to utilise the data in this fashion for flood modelling purposes but a new system needs to be found to provide meaningful data and alerts to the average person facing the prospect of their home or business being flooded.

A **1 to 5 flood category rating system** should be implemented, based on the severity of predicted flooding, ranging from Category 1 (Minor Flooding) to Category 5 (Extreme or Catastrophic Flooding).

It would be similar to the 1 to 5 alerts system already in place for cyclones and the 1 to 6 bushfire alert categories implemented in Victoria and announced by the Queensland Government on 17 September 2009 as extending to Queensland.

The public readily understands this type of alert system which would enable the Standard Emergency Signal to be broadcast as authorised by the Bureau of Meteorology when an imminent flood was predicted to reach a nominated serious alert level.

Equally, flood modelling for urban areas could also be based on the same 1 to 5 categories of flood inundation, with 5 matching notional flood lines. Category 5 would be the highest line indicating the general upper limit of the most-likely catastrophic flood.

The value of both the alert system and the mapped flood lines being based on the same 1 to 5 scale would mean that flood warnings could be both highly targeted and easily understood.

The theoretical flood modelling and the projected level of a particular flood would use the same, easily understood 1 to 5 categories.

For example, a projected Brisbane River peak of 5.5 metres at the Port Office in the heart of Brisbane means nothing to the people of St Lucia, Jindalee or Goodna but a warning of a Category 5 flood on the Brisbane River with clearly available data on the internet showing the 5 levels of potential flooding would easily enable all people in a Category 5 zone (and below) to evacuate. This data could also be depicted on permanent information boards at local venues such as libraries and shopping centres.

Modern computer programs enable the depth of flooding to be ascertained for each individual property. This should be made available and implemented at State and/or Council level so that imminent floods are predicted on a severity scale of 1 to 5, enabling property owners and occupiers to easily determine the likelihood of flooding during a particular flood event. Residents could determine the likely depth at their location, allowing them to take appropriate action in a timely manner.

Flood warnings are primarily for the ordinary folk in the community and irrespective of what processes or systems are used by professional forecasters to assimilate and interpret the flood data, it needs to be converted into "plain English". Q100 terminology and Port Office gauge estimates conceal rather than reveal projected flood levels in a meaningful way to the community.

RECOMMENDATION 1:

A new flood alert system on a 1 to 5 scale be implemented (with Category 1 representing minor flooding and Category 5 representing catastrophic flooding) similar to the classification categories for cyclones and bushfires and that a parallel system for town planning and flood regulation purposes be adopted, designating flood-prone areas on a similar scale.

2. FLOOD EVACUATION PLAN

There were no local police officers or SES personnel in Goodna in 2011 who were around in 1974. The area north of the railway line at Goodna is bounded to the east and west by Woogaroo Creek and Goodna Creek which both cut Brisbane Terrace around noon on Tuesday 11 January 2011. This left only two evacuation routes for residents viz. the Church Street and Layard Street Railway underpasses. When the Church Street underpass closed mid-afternoon with floodwater, Layard Street became the only available evacuation route which eventually closed at about 5.00pm, trapping two police vehicles behind the Goodna Railway Station, which were later inundated with water. According to long-term local residents, the sequence of these 4 closures was identical to the pattern which occurred in Goodna in 1955 and 1974.

RECOMMENDATION 2:

That appropriate mapping be prepared for use by the Police and other emergency services including the SES which clearly depicts the relevant escape routes and the sequence in which each escape route closes and the approximate time between each closure. This information should be replicated on publicly-available maps and information boards to give residents ready access to such information in the event of a flood emergency.

3. ACTIONS AS FLOOD WATERS RISE AND RECEDE

The first known looting at Goodna occurred at about 9.00pm on Tuesday 11 January 2011 at a house near the corner of Woogaroo and Lowe Streets. This was very early in the flood event when opportunists arrived by boat to loot the home after the residents had evacuated. Police in known flood areas should be provided with boats for use in any future flood emergencies.

Saturday 15 January 2011 was an absolute debacle in Goodna. This was the first day that many people were able to get back to their homes to begin the long clean-up. An estimated 2000-3000 vehicles containing sightseers clogged the streets for hours. At one stage, it took me 30 minutes to travel 5 metres outside my own flood-ravaged home in Goodna.

There was no traffic control or traffic management plan in place. It was heartbreaking to see cars full of people in their air-conditioned vehicles – hiding behind tinted windscreens – touring the most flood affected areas of Goodna, enjoying their day out clogging the streets and making it almost impossible for volunteers to get in, as well as stopping the movement of bobcats and other vehicles needed for the cleanup.

Within a few days, the Army had established military checkpoints which were very effective and highly appreciated, with the only downside that checkpoint individuals understandably followed their instructions to the letter of the “law” and did not allow flood affected residents back to their own homes and forced the media to stay up to 500 metres from the key flood areas – preventing the news of the Goodna tragedy being fully reported to the wider community.

RECOMMENDATION 3:

(A) Police in all known flood areas should be provided with boats for use in all future flood emergencies to assist with evacuations and to prevent looting in the earliest stages of any floods.

(B) In future floods, a pre-determined traffic management plan be implemented no later than the time when the floodwaters have receded significantly and that cordons or checkpoints be established allowing only homeowners’ and emergency cleanup vehicles, as well as police, ambulance and fire units and SES etc to enter the area. No restrictions should be placed on volunteers on foot who are assisting in the cleanup except in the case of an emergency such as a nearby gas leak.

4. USE OF MODERN TECHNOLOGY IN FLOOD EMERGENCIES

Modern technology – such as SMS or fixed phone line alerts – should be employed to disseminate urgent flood warnings in the future. On 11 January 2011, there was very little appreciation in the Goodna area of what was about to unfold. Warnings were short on detail and Ipswich Central on the Bremer River featured more-prominently than Goodna on the Brisbane River in media alerts.

The opportunity exists for mobile phone technology and similar technologies to be utilised in the future to convey urgent flood warnings. This requires the assistance of mobile phone companies and should include warnings to mobile devices whose registered owners have addresses in areas likely to flood. Additionally, the Commonwealth Government should use its powers if necessary to require those companies to also transmit such messages to mobile devices within the coverage of particular mobile phone towers within, or close to, areas which are facing severe flooding.

The usefulness of mobile SMS technology became apparent in Goodna on Tuesday 11 January 2011. I was at a meeting in Ipswich until late morning and unaware of the flooding event slowly engulfing the eastern end of the city around Goodna. My cousin at Bunya who was closely following events on local television could not contact me and sent an SMS message to my wife Liza who was in the mountains around Davao in the southern Philippines. My wife also could not contact me but began texting dozens of members of the large Filipino community around Goodna, many of whom were either in the flood area or had family or friends in the flood area and were totally unaware of what was emerging on the Brisbane River.

It is amazing to think that several hundred people in Goodna received their advice of the approaching flood either directly or indirectly from the foothills of Mt Apo in the Philippines and were able to swing into action as a result of SMS messages sent from 5000 km away in the northern hemisphere. I cite this example simply to show the wonders and abilities of modern communications and what was achieved with mobile technology rather than as a criticism of the local warning system on that day.

RECOMMENDATION 4:

That all available mobile phone, landline and similar technologies be utilised in future flood events to warn residents in areas likely to be inundated.

5. INSURANCE COMPANIES

If insurance is intended to spread the burden of risk, what point is there in just one or two companies taking all the risk over flood insurance? Suncorp must be commended for the exemplary role they have played in providing flood cover and honouring it.

For some reason, there seems to be an underlying feeling in the community that the standardisation of flood definitions will somehow help consumers. Even if every insurance company in Australia adopted a standard definition of what constitutes a "flood", if they are not going to offer flood insurance, how does that help consumers?

One business in Goodna was told by their insurance agent two years ago that they were "covered for flood". What they weren't told by the agent at the time was that this was only for 20% of the value of the building and contents. A million dollars later, they have been left lamenting by this deplorable misstatement.

Even with standard flood definitions, most people will NEVER read the details of their policy. The temptation will still exist for shonky agents to give phony assurances.

What is needed is a fresh approach to this dilemma. All insurance companies offering home and contents insurance should be required by law to provide insurance covering all natural disasters including floods. To ensure that companies don't deliberately price themselves out of the market for such cover in flood prone areas by setting exorbitant premiums, these should be set by some legislative mechanism to ensure that such premiums do not exceed the cost of a "standard" insurance premium by more than a specified amount or proportion.

This would open up flood insurance to all Queenslanders needing it – and who thought they already had it – and would spread the burden across the state and across insurance companies. If this doesn't happen, it is not difficult to see all companies pulling out of the flood insurance market in the future.

RECOMMENDATION 5:

That all insurance companies offering home and/or contents insurance in Queensland be required by law to offer natural disaster insurance including flood and that premiums for such additional insurance be set by law at a fixed maximum above the cost of a "standard" insurance policy.

Yours sincerely



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