

Stephen Muir

From: David Hains [REDACTED]
Sent: Wednesday, 26 October 2011 10:51 AM
To: Info Flood Commission
Subject: Performance of Bureau of meteorology

Good Morning,

For some time I've been concerned at the **Lack of adequate review** by the inquiry of the met bureaus' performance in this disaster. As evidenced by the media, and in reviewing the draft recommendations on the inquiry website. I've been waiting to see if your learned staff will expose this under the mat item, but so far it seems not.

The good points:

The BoM did in fact correctly predict the overall scale and intensity of the weather event, both in the SE corner and in north Qld.

But . . it is self evident that adequate information about the amount of rain falling at a local level was not available in real time. The data reported on the BoM website for rain sensors is updated only at intervals of several hours - absolutely of no use in these situations. In respect of the flood events in particular,

- various spokesmen for the bureau of meteorology admitted on TV interviews that the first they knew of the extreme events in Toowoomba, the Lockyer valley and in the north were the television imagery of the disaster on folding. Particularly, Toowoomba and the Lockyer valley.

- the bureau not only did not have accurate and timely local level event forecasts and rain data available, but did not have any local advisory processes in place to disseminate them.

- the ongoing discussion about why the Brisbane dams were not "released" sooner has very little focus on a clear perception by the dam operators that the weather forecasts for the catchment area bore little resemblance to the rainfall or inflows into the dam. I have a problem with blaming the operators - which is what has happened - of the dam when the severity of a rain event at a local level was unpredicted, unexpected and there was no reliable data immediately available on which to base any timely and effective preventative measures.

- Wivenhoe dam was built first and foremost as a flood control mechanism after the 1973 event. In the latest event, it functioned better than it could have in its absence, but still, not good enough. The dam has 100% storage for floods over and above its rated capacity. If that isn't good enough, then surely the inquiry should be saying so in explicit terms and defining what it would take to manage a repeat event better. Basing those actions on forecasts isn't good enough when the credibility of those forecasts in terms of rainwater in the dams is so poor. There have been 3 monumental floods in the last century and I've lived thru 2 of them. Note that despite all the data showing that despite the population growth inducing more land coverage and greater water runoff over the last 40 years (for example, in 1973 the Amberley airbase flooded; but not recently suburbs in Brisbane that flooded in 2011 were only submerged grass meadows in 1973), none of the last two events reached the recorded levels of the 1893 flood. If the 1893 rain event ever repeats itself, it really will be a disaster of epic proportions.

- there's been no reported analysis of the differences - and thus the learnings about - between at the least the 1973 and 2011 events. For example, the 1973 event was spurred by two large cyclones over Brisbane travelling north-east to south-west (I watched them both on what was - as a secondary capability- a weather radar) from Fraser island within 7-10 days: the first simply soaked the ground. The second ran strait off and the rivers literally rose overnight. As it happens, since the 1973 flood there have been no further cyclones that passed down the coast or overland in the SE corner of the state.

Yet . . the inquiry draft report only makes recommendations of the weather bureau to consult with local authorities for localised advice, and for better local utilisation of warning data the bureau may issue. There seems to be no appreciation by the inquiry that there were failings by the BoM and that they contributed significantly to the consequences of the event. I make the point that the best operating processes, warning and implementation systems in the world will be of little avail if adequate rainfall data is not immediately available on which to base those warnings.

So, why hasn't the inquiry

- investigated and reported on why the bureau is unable to obtain immediate and timely rainfall data on extreme events at a local level?

- why the bureau could not and did not take or make good localised advice?

- improving local advisory networks (in both directions) may be great for the future, but an element of the usefulness of those is why they were not in place years ago? If there's an "attitude" issue within the bureau, it needs to be exposed and modified.

- reviewed and reported on the adequacy of the 1) rainfall sensors around major locations like dam catchments, upstream of city rivers and the like? and 2) the prediction processes that would be necessary to make use of the data in a timely fashion

In my view, a major apparently unreviewed and unreported element of the inquiry has been the balls-up the bureau of meteorology made of rain event forecasting in the timely, detail and local levels. So far, what I've seen of your draft report is weakly phrased alleviatory actions by others without ever focussing the performance of the BoM as a major part of the problem. Unless you do, there unlikely to be any concerted effort or follow-up action within the BoM to fix their issues in a timely and professional manner.

Thank you

David Hains

