

**SUBMISSION** 

## TO THE

## **COMMISSION OF INQUIRY**

## **REGARDING THE QUEENSLAND FLOODS 2011**

Made by:

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## INTRODUCTION

This submission will be brief.

The author has no clients or any particular kind of financial vested interest in the outcome of the Commission of Inquiry. This submission has been prepared on a voluntary basis and for the purpose of assisting the Commissioners and the State of Queensland in learning how to better prepare and minimise risk to people and property and natural resources, in the face of the highly variable weather conditions that come with living in Queensland.

The following submission seeks to bring to the attention of the Commissioners and the Queensland Government some matters pertaining to:

- Best practice landuse planning,
- Natural resource management,
- The potentially beneficial role of acknowledging and sharing socio-cultural heritage handed down from previous European and indigenous generations and
- A fairer, equitable and accountable system of insurance coverage and setting of premiums.

In closing, it also makes the observation/ draws the conclusion that the significant natural events during January 2011 only turned into "disasters" as a result of historic and recent poor landuse planning decisions that appeared to be based on a premise of "she'll be right mate" and, deliberately or otherwise, generated profit for some initial landowners and developers while leaving resultant residents and other landowners highly vulnerable, financially and in terms of personal safety, as a direct consequence of those poor decisions.

This submission also seeks to highlight the many positives, that is, social, economic and environmental benefits, that can come from the learnings and analysis of what went so wrong as a result of these largely poor land use planning decisions that, in effect, can be summarised as not having left room for Mother Nature "just doing her thing". And, that that extra room, now recommended to be found by way of voluntary buybacks and reallocation of much needed public open space and bikeways, can and should now be found.

Note that further information can be provided, upon request, in relation to any aspect of the commentary provided in this submission.



### SUBMISSION

From the Terms of Reference, it is understood the Commission has been asked to inquire into and report on:

1. The preparation and planning by federal, State and local governments; emergency services and the community for the 2010/2011 floods in Queensland.

2. The performance of private insurers in meeting their claims responsibilities.

3. All aspects of the response to the 2010/2011 flood events, particularly measures taken to inform the community and measures to protect life and private and public property, including:

a. immediate management, response and recovery;

b. resourcing, overall coordination and deployment of personnel and equipment;

c. adequacy of equipment and communications systems; and

d. the adequacy of the community's response.

4. The measures to manage the supply of essential services such as power, water and communications during the 2010/2011 flood events

5. Adequacy of forecasts and early warning systems particularly as they related to the flooding events in Toowoomba, and the Lockyer and Brisbane Valleys.

6. Implementation of the systems operation plans for dams across the state and in particular the Wivenhoe and Somerset release strategy and an assessment of compliance with, and the suitability of the operational procedures relating to flood mitigation and dam safety.

7. All aspects of land use planning through local and regional planning systems to minimise infrastructure and property impacts from floods.

This submission will only comment on matters 2, 4, 5 and 7 as listed above.



Given time constraints and, in the interests of being succinct, the comments I wish to make in related to the nominated matters are summarised as follows:

#### Key points for Qld Commission of Inquiry re 2011 Flood and Cyclone Disaster

- Defer to expert advice Kevin Tollhurst, University of Melbourne, as heard on ABC Radio National Background Briefing Sunday 27<sup>th</sup> February 2011 (refer transcript on ABC website).
- 2. Strategic Grading of cropping land as per vineyards in South Australia (e.g. Lakebreeze Estate, Langhorne Creek near Strathalbyn) which are flood prone.
- 3. Insurance issues:
  - Negative impact of Florida example where Insurance industry "was directed" to provide cover insurance to properties that were known to be in *high risk* flood prone areas and directed to keep premiums for these properties "affordable". Surely the fairest, most cost effective and long term most beneficial, strategically effective approach would be to ensure proper standards of urban planning and development assessment? The aim should be to progressively ensure all dwellings are removed and precluded from ever being built in flood (or bushfire) prone sites. (Cyclones are a bit different, in that with better engineering research and design skills, "we" are getting better at designing to cope with Category 5 cyclones, especially if design coincides with strategic site selection, positioning on-site and appropriate adjacent tree planting.)
  - **The best insurance policy is good planning**: proper mapping and clear identification of flood prone areas (i.e. beyond immediate flood plain in open country such as that around the Fitzroy River) and to then adopt best practice planning standards of preserving flood prone land to parkland, bike ways, urban forests, community gardens and other even commercial uses that can benefit from occasional flooding (e.g. garden nurseries, some agriculture/ aquaculture). Unlike some commentators, I am of the view State government insurance coverage costs are far too expensive (e.g. news reports of \$200m p.a.premiums) and that a more financially responsible approach is to zone land and design buildings more appropriately.
- 4. Reference is also made to the Insurance Council of Australia position paper (Improving Community Resilience to Extreme Weather Events, April 2008) and the assumption /claim therein, that as population and urban development expands it is inevitable that cost impacts during natural major events will increase also. This does not necessarily have to be the case at all, if appropriate landuse planning and design controls are put in place. This has clearly not been the case in several parts of Queensland over recent times, as perhaps best expressed by recent residential development being allowed on the banks of the Nagoa River in Emerald, questionable in itself, and then that housing being low-set on a concrete slab, rather than a requirement for all habitable floor levels to be, say, 2m above natural ground level. Similar comments apply to new residential estates in Mackay, though this time, Mackay was spared from what affected all but the rest of Queensland.
- 5. It is silly, quite erroneous to think of natural disasters as "unavoidable", or "the revenge of Mother Nature". Rather, it is invariably the folly of humans, to be frank, overwhelmingly decisions by men, that largely is responsible for the scale of actual damage generated by any scale of natural disaster and certainly in the case of recent events in Queensland.
- 6. Time to question the probity and competence of local government strategic land use planning and development approval decisions: biggest questions posed by flood impacts and clear vulnerability of Emerald, Mackay and Bundaberg but other locations too: e.g. Gracemere near Rockhampton, higher density (and increased site coverage) in suburbs along the Brisbane River.



- 7. Likewise, beware of Australian blind faith in "She'll be right mate" or too much optimistic faith in new technologies.
- 8. Understanding our country and deciding to work with Nature's ways rather than ever deluding ourselves Nature can ever be comprehensively tamed. "If you work with Nature, she will be your greatest friend, If you try to dominate and control her, you will fail, miserably, every time!"
- 9. Teaching people how to "look, really look, and listen, really listen" when it comes to understanding our country.
- 10. The problem with warnings: they come far too late, are prone to misinterpretation and used as excuses to blame others in the aftermath of a destructive event. Rather, pay attention, apply the precautionary principle and don't build in vulnerable locations in the first place. that is the far more socially responsible and cost effective approach right now, and with expectations of increased frequency and severity of extreme weather events in future, such an approach becomes even more obviously "the only way to go".
- 11. The upside of leaving more flood-prone land as open space is creating more attractive and enjoyable suburbs to live in as there will be more local parkland provision, more space to accommodate off road cycle paths and pedestrian networks. See, there is always an upside!
- 12. Following the (almost accidental) example set by Townsville, with the "borrow pits" at the head of the Ross River, subject to more expert hydrological and geotechnical advice, consider the creation of upstream retarding / retention basins in the upper catchments of Mackenzie, Nagoa, Fitzroy and other rivers, for the purpose of distilling and retrieving erstwhile lost topsoil (to ameliorate loss of too precious soil and to prevent excessive flood plume impacts on the Great Barrier Reef well beyond what would naturally occur prior to European settlement). Dredging of the Fitzroy River above the Barrage at Rockhampton, is also considered a better ongoing approach to soil and water management, ideally in partnership with mining companies.
- 13. The Social Psychology of:
  - a. Water Resource Management:

There are many positive cultural and social psychological changes that have come from the 10-12 years of drought much of eastern Australia and its residents have endured up until, in Queensland, the arrival of Cyclone Hamish in early March 2009 and Victoria and South Australia, with the return of "normal" winter rains in July- September 2009.

However, after so many years of severe water deprivation and based on the experience of many rainwater tank devotees, it would appear one of the more complicated legacies of a long drought is to see a full rainwater tank, or indeed a full Wivenhoe Dam, as something of a glorious asset to be treasured, like "money in the bank": a quite valuable capital asset. Indeed, many economists could soundly argue such a "liquid asset" (if you'll pardon the pun" is most definitely something that adds to the financial as well as physiological well being of both the householder and the city reliant on that water supply. It is therefore considered quite understandable that, in the case of the Wivenhoe Dam in particular but also the Fairbairn Dam in Emerald, there may have been some reticence in the months leading up to the events of January 2011 to release what might have been considered "too much" water. Though, does not necessarily excuse or dismiss the concerns held by others as to the more detailed decision making by relevant authorities who, given the very clear and detailed briefing provided by the Bureau of Meteorology that was well reported throughout print, television and radio media back in October 2010, may well have left planned and staged water releases too late or not at all, in the case of the Fairbairn Dam.



In response it is suggested, and again subject to more expert hydrological and ecological investigation, a series of upper and lower catchment retarding / retention basins (that can double as attractive and productive park of farmland in the interim) could provide a better way of responding to the quite extreme variations in weather that literally "goes with the territory" in Queensland in particular, as well as also serving an ameliorating effect during peak flood effects.

#### b. Emergency / Natural Disaster Management:

The community and agency response to the flood impacts in some lesser affected areas, such as Rockhampton – which in the main, but not entirely, flooded in quite the usual manner – was quite different in January 2011, compared with earlier experiences, especially the 1991 flood along the Fitzroy River system which was technically a bigger flood event. Similar comments apply to Emerald, given the more recent big flood event of January 2008.

It remains unclear as to what has changed socially and administratively over the past two decades, to explain why quite so much "drama" and victimhood was cultivated through the media via some commentary by civic leaders. That is to say, there are many parts of Bundaberg, Mackay, Emerald and Rockhampton that "always floods and everybody knows it does", as was much of the local commentary during January 2011. So the question remains, was it too much peace and tranquility for the media desperate for a good story, or too good an opportunity for some civic "leaders" to set the scene for future funding submissions (aka ,crying poor') and to deflect attention from more pertinent questions that ought to be directed to council planning approval processes? (See attached article by me, published in the Fairfax press, 5<sup>th</sup> January 2011 for further illustration of this point).

Also over the past two decades, it would seem "we" have lost or forgotten many of the stories and cultural attitudes that quite literally go with the territory up here in Central Queensland at least. "We" seem to have, consciously or otherwise, traded pride in self-reliance and knowing how to get out of the way and wait out a big flood...for presuming either "she'll be right/ I know what I am doing/ someone will come and save me". Such a change in the social psychology of communities is considered less than helpful and both downright arrogant and dangerous. It not only increases the threat to personal safety of many but increases the safety risk for the many mighty and truly awesome members of the SES and Police and other emergency service workers. Thus, in terms of a future (ideally ongoing) public education strategy, it is recommended we revert to the former attitude to "big challenges", that is a policy of precaution and self reliance, and thereby, significantly reduce the potential scale of any disaster, as well as show more respect for those who are still prepared to put themselves at risk to protect the safety of others.

14. Food security and other strategies to cope with medium term isolation:

- Encouraging more home based vegie gardens and regionalized, rather than centralized, produce markets;
- Encouraging localised energy production as per Townsville Regional Council's Solar Cities initiative, that enabled many council owned buildings, at least, to have uninterrupted power supply, notwithstanding the force of Category 5 Cyclone Yasi;
- Educating people a little further as to what sort of food they should stock up on as part of cyclone and flood preparation: that is, not relying on perishables and instead focussing on nutritious preserved items like long life milk and juice, muesli, tinned baked beans and the like. Ideally such a shopping list could be compiled by recommended experts such as Rosemary Stanton.



#### CONCLUSION

With the greatest respect to those who lost lives and livelihoods during the recent major natural events, it is nevertheless true to say these recent events have brought with them the opportunity for significant learnings that will provide what might be termed a much needed "reality check" and which will help better prepare Queenslanders in future, by making it clear what needs to change about the way we live, use our land and how we factor in preventative measures so that people and property are not left quite so vulnerable to what are essentially entirely predictable natural events.

For example, in banning concrete slab housing design and banning building on flood prone land, "we" could so easily celebrate with great pride "The Queensland Way". Just as those "Queenslander" houses on stilts are cultural and architectural icons of Queensland, so too could be that dry laconic attitude of "*nah, remember Dorothea Mackellar*?"...which is meant to convey ...."No, we know our country and we know how to work with her and, after January 2011, we have decided to stop kidding ourselves that ,she'll be right mate"".

If the Queensland floods have taught us anything it is that, sooner or later we will, definitely, pay for our mistakes! So it's much better, smarter and fairer to be more prudent and adopt the precautionary principle in the first place, rather than risk enormous and escalating insurance costs and exponentially rising premiums to cover the risks posed by inappropriate development that should never have been granted planning approval in the first place.



# Old-timers on a high when water levels rose

### **Bernadette George**

The Age (and Sydney Morning Herald, Brisbane Times), January 5, 2011



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Not for the first time while in Queensland, I have pondered, "how did they get a planning permit for that?" And, "no wonder they can't get insurance coverage" or "it's not surprising everybody's insurance premiums up here have been increasing over the last few years".

Very recent history is repeating itself. I noted during the January 2008 floods in Emerald, all the brand new, low-set houses that had been allowed to be built on clearly flood-prone land. And now they're under water - again.

Sometimes, there might be historic or cultural reasons for such decisions but it is usually "good practice" to require minimum standards such as ensuring floor levels are at least two metres above ground level.

Many older-style houses up on stilts are taking the current floods in their stride. This is the practical and sensible design approach of our parents and grandparents who knew there would be no one coming to save them in a "Big Wet".

Our mothers and grandmothers knew how to plan ahead, keeping a watchful eye on unseasonal wet weather from August to November (which is precisely what we have had up here) and stocking up. In those days it was powdered milk, tea, sugar, flour and preserved fruit and meat, and a stockpile on high and dry land of cut timber for the stove. The rainwater tank was on a strong elevated stand of hardwood timber we can only dream about these days (such tank stands have been demolished or left unused in recent years, deemed unsafe).

Nowadays, with all the low-set homes, it seems there is a lack of good planning from Central Highlands Council, which covers the waterlogged town of Emerald.

And the same can be said of Bundaberg and Mackay regional councils, both towns having been built on river deltas or floodplains. The lessons should have been learnt from the big floods of the early 20th century.



Despite the Bowen Basin mining boom, the region still desperately lacks infrastructure. Moranbah and Clermont, a couple of hours' drive north of Emerald, want to become permanent and sustainable communities but lack a reliable water supply for a growing population.

It must also be remembered there has been an enormous amount of tree clearing over the decades and this has reduced absorption and had an impact on the speed at which floodwater flows. As a result, it is not fair to blame nature alone for the devastation.

It is also a bit rich to claim this is a tragedy of biblical proportions.

Yes, some areas are seeing the biggest floods in 50 or 60 years but in Rockhampton, where upstream flood levels have begun to fall, it is still barely a one-in-20-year event.

The mighty Fitzroy Basin takes in the Dawson, Mackenzie and Isaac rivers and related tributaries and feeds and drains an enormous area. Some of this land is quite marginal and some of it ideal for cropping and grazing cattle.

Right now, and with the greatest respect to those who have had to evacuate their homes, nature is just doing what is entirely predictable and it's a largely beneficial thing.

As well as overland flows, there will be a lot of water seeping into the ground across potentially productive land, not just along rivers and creeks. To follow the calls for a huge dam construction program could well jeopardise this great benefit.

However, I must confess, I am inclined to support building a decent moat/channel around Emerald which would lead to a new dam to support the water needs for agricultural and mining towns to the north such as Capella, Clermont and Moranbah.

What about getting the mining companies to start paying their way in the dam infrastructure stakes?

It's a pity that over the past decade in particular, some councils and communities have chosen to ignore the numerous lessons of the past three to 50 years about where not to build.

If you must build houses here, councils should insist they be on stilts.

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