The Chairman
Flood Enquiry

Sir,

A Brisbane Flood Enquiry Submission.

A few points:

1) Using the 2011 flood level as the baseline for determining which areas have to have changed building codes is very foolish, when we know full well the 1893 and 1842 floods were about three metres higher. The geological record of alluvial flood deposits will give higher levels again, probably, and those could be have been dated at any time since the early 50's, when carbon dating was discovered, but we have never bothered. We have had six floods higher than the 1874 one since the white invasion, so it makes no sense to claim the two big ones were exceptional. Given the volume of water involved, and the need to store water in the dams, the claims that first Somerset and then Wivenhoe were going to save Brisbane forever from flooding were just pollies and civic authorities talking total nonsense. Those dams do not have the capacity to hold the vast amount of water that at times falls in the catchments.

2) The 2011, 1974, 1893 and 1842 flood levels should be painted on several thousand power poles, with hefty fines for painting them out. That will ensure that neither real estate people nor property owners can sell off land that is flood prone without it being known. Having maps showing flood levels hidden away in basements or obscure websites is next to useless and merely facilitates fraud.

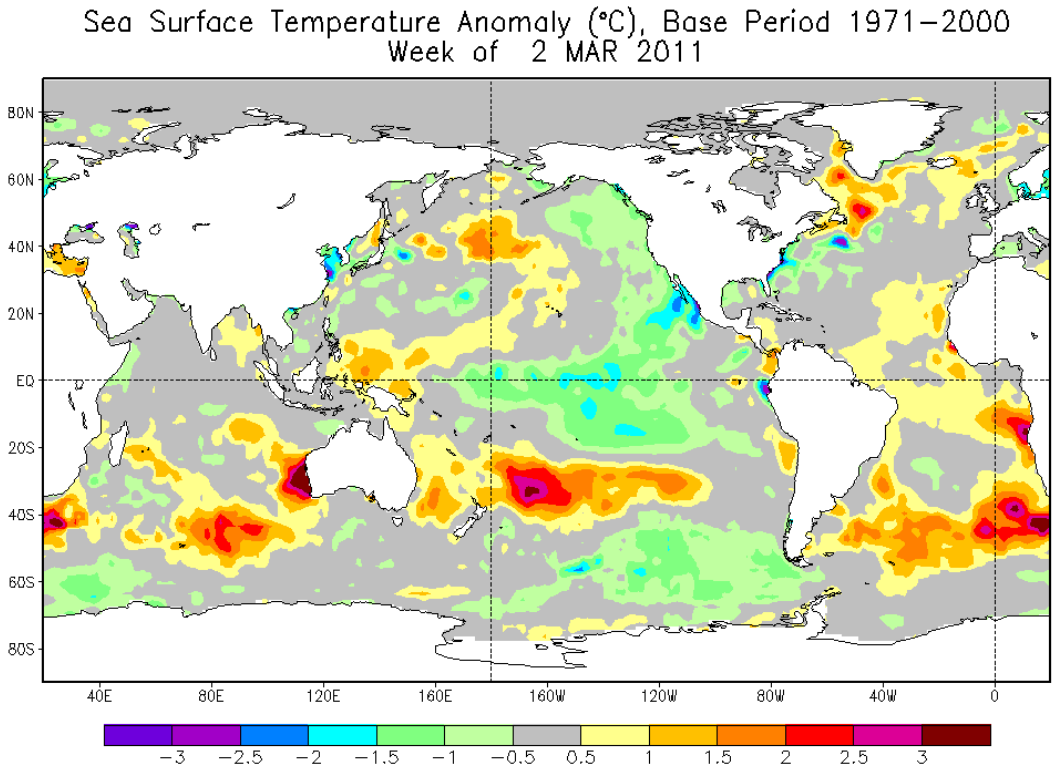
3 It is technically feasible, and quite cheap, to jack up houses that are threatened with flooding and then lower them again. There was a tradition of building on stumps, so those houses can be converted, with stumps being either fitted on telescoping hydraulic jacks, and raised before power is lost using small mains powered hydraulic pumps, or by simple mechanical screw jacks, that with cheater bar leverage, can be raised one by one, in small increments, by hand power The props can have fine threads, so that each turn raises that part of the house a very small amount. Threaded steel is not that expensive That system could also use a single electric or petrol motor, that is moved from stump to stump, and winds up the prop on open gearing. Maybe for once Brisbane can actually pioneer something useful. We could do a test house at public expense. Plumbing and electricity fittings that are flexible and would simply adjust to such raising and lowering are on the market. It will also give people the option of storage and space below, or having the house on the ground to suit, which will be a help to many elderly and infirm folk.

3) Public buildings should be progressively sited on high ground. The Catholic church owns many of the hilltops in Brisbane, and may be happy to sell some of its land as long as it can retain its churches and other buildings. We lost much of the mining record of the state, invaluable data for exploration, when some genius parked the Mines Department records in the basement of the then Mineral House, just in time for the 1974 floods. They have denied it ever

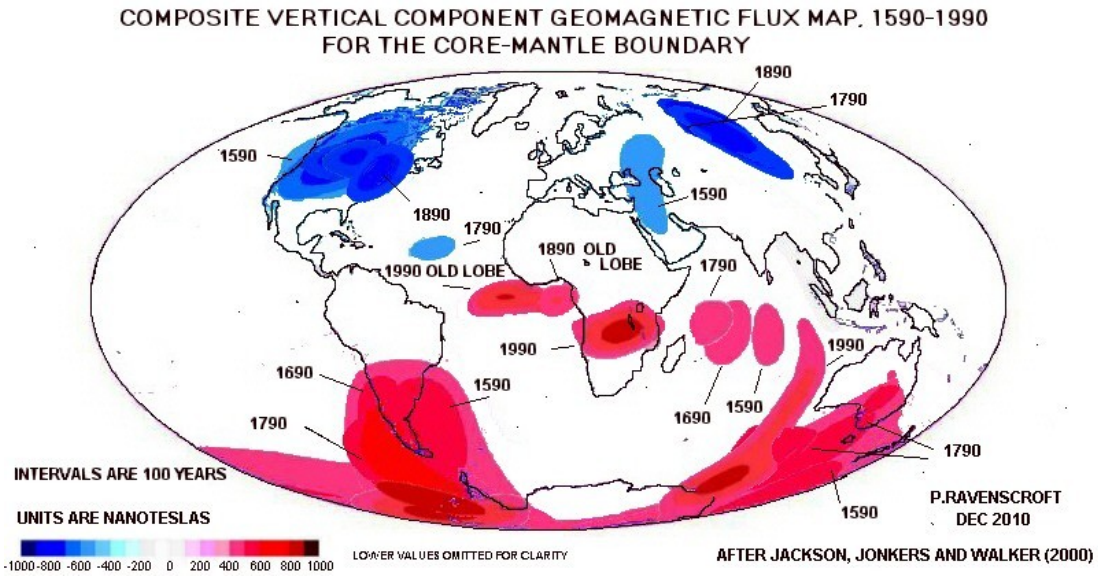
since, but a friend watched the dozer bury the records at the Zillmere core sheds, and rescued some of the publications. Now, we have parked the museum and the state archives right next to the Brisbane River. The parliamentary library is in that building's basement. We do not seem to be very bright, collectively.

4) We are likely to get more floods in the next few years, the reasons being as follows: If you are a devout climate change carbonist, convinced that trace atmospheric CO2 is changing the climate in frightening and unprecedented ways, , you will not easily get your head around this. But right now, there is massive warming of the sea surface all along the WA coast. It fluctuates in strength, but last week was the world's largest sst anomaly. It is the result of a geomagnetic change at the core mantle boundary. A spur of change in the strength of the vertical component of the magnetic field comes up periodically from Antarctica, by-passes Australia, then crosses the Indian Ocean and central Africa. An earlier one is now just starting to heat the sea on the coast of Angola. The spurs are mainstream science, the understanding of their heating effect is new. We have not had such a geomagnetic cmb spur below and off WA or any other part of Australia for at least 400 years. That we know with certainty. The Met Bureau says the reason for the recent flooding is the high sea surface temperatures around Australia. The causes of the east coast heating are quite different, relate to plate tectonics and mantle hotspots, and may or may not persist. But the magnetically induced cmb heating of the WA coast is likely to persist for a very long time, given us a very unfamiliar climate. the flux lobe is moving north at about 28 kms a year, so will be a long time in fading out,. It arrived in 1890 and strengthened till at least 1990, but the associated heat only started to appear on the satellite temperature anomaly maps between 2003 and 2008. So, more serious flooding from Victoria to Cape York is distinctly likely, with bush fires in summer in WA, where the magnetic hotspot touches the coast. The magnetic hotspot that was located below central Australia and was probably the main cause of the last decades drought seems to have died out. In such circumstances, the notion of a hundred year food level or one with any other number you like to dream up, is simply nonsense, as the basic physical conditions are unprecedented.
So, we best plan for the possibility of floods at least as high as those we have seen since 1842. That one, according to the senior government surveyor of the day was seven centimetres above the 1893 peak. It would be better to seriously consider the entire Holocene alluvial deposit record, back for the last 10,000 years.

Here is the most recent sea surface temperature map for the Pacific. I think it is self-explanatory, regarding the anomaly off WA.

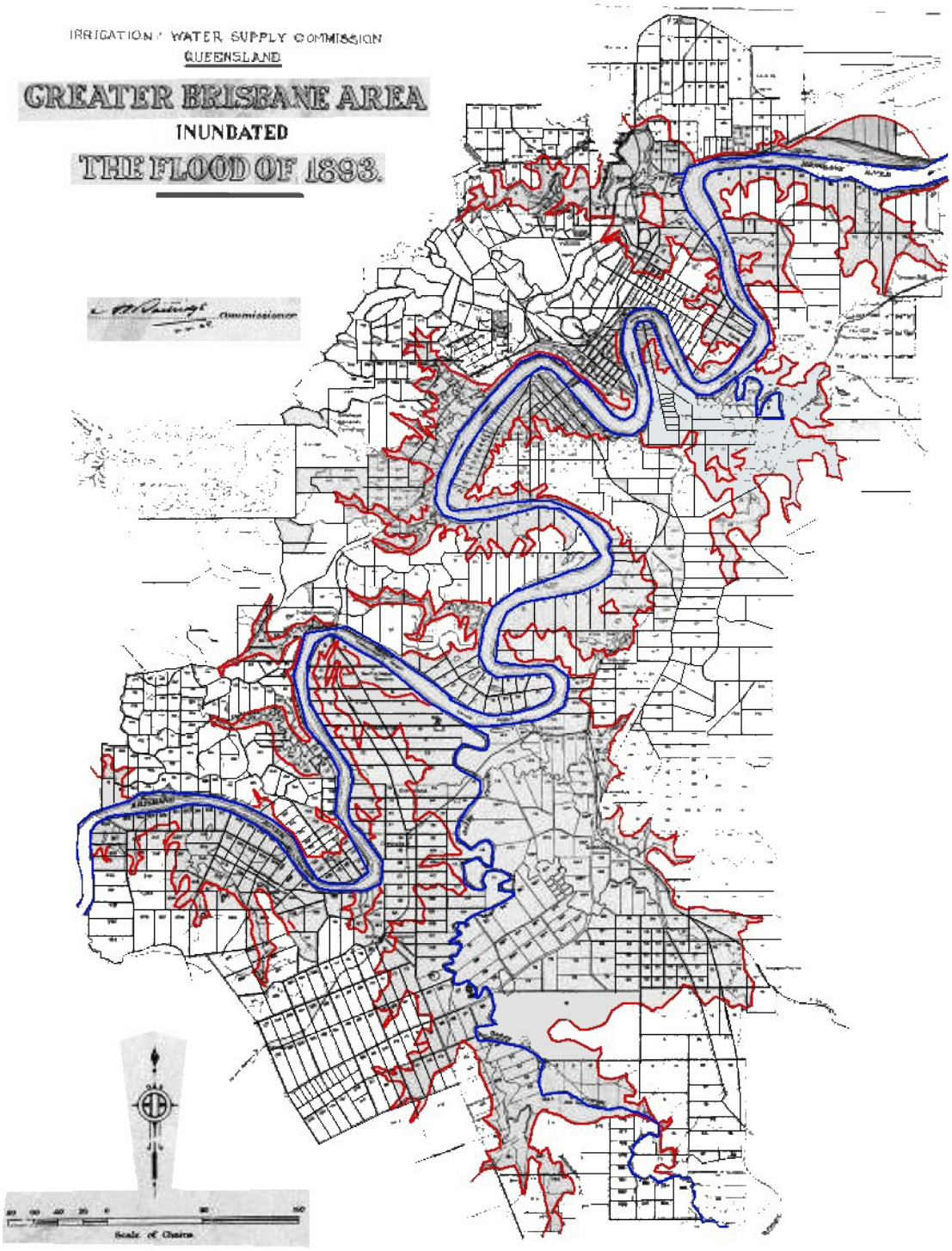


And here is the composite core mantle boundary magnetic vertical component-change map that I have modified to show changes over time in a single map, entirely from the maps of Jackson, Jonkers and walker (2000)



Note that the magnetic core mantle boundary flux lobe deep below (2880 kms down) and off WA in 1990 neatly matches the shape and position of the sea surface heating off that coast now. Such things do not disappear in a year or two.

5) The Commissioner of the Queensland Irrigation and Water Supply Commission, in 1893, published a very detailed map of the extent of the flooding then, the result of meticulous surveying of the maximum flood level across every property lot in Brisbane. We should not waste that work . The original is in the John Oxley Library unless the recent flood got it. I have put in, as best I can, the extent of the flood line, as it is almost illegible in the electronic copy, the result of fading in the original paper map, mainly. The map in the electronic copy is very faded, so my red line will be in error in places and is incomplete in others. The work should be carefully redone from a high quality photo of the original. I have attached the copy I made and modified as an attachment to this emailed submission. It is submitted with some reluctance, because of the errors mentioned, but the time available for submissions has been too short to do a proper job.



6) You may find a recent informative and scholarly publication on the 1893 flood of use It is "Eriksen, E. O.. 2011. A memoir on the 1893 Flood in the Brisbane River System. *Journal of Systematic Historiography, Theoretical and Applied,* Vol II (series reformed) No. 1. The John Oxley library has a copy. It deals in detail with events at the time of the flood. It diplomatically does not mention that the message about the impending disaster was not believed by the authorities, for some time, because of it coming from an unexpected direction. Sound familiar?

7) A neighbour, Neil Bowers, whose idea it was to make it possible to jack up houses, asked me to add this: The media were very alarmist, when what we needed was facts. And, the further up the hierarchy the politicians who got on the media were, the more what they had to say was just social commentary.

8) Last, attempts to prevent the trashing of perfectly OK things, or reparable things, were in some cases treated as looting. A large number of people with little income collect,. repair and resell all sorts of things found on kerbside cleanup days, which is not a bad thing in one of the most wasteful cities in the world. Someone I heard of, who repairs lawnmowers, was ordered by the police to unload several from his ute, which were then doubtless crushed and buried. I suggest the way around that next time is to have a series of places for salvageable items, that can be then sold off cheaply, after say a week's delay, with the money going to the flood appeal. What does not sell quickly can simply be given out free after a few days on offer. The rest can then be dumped. The week's delay will give the original owners time to recover anything that really was looted and will prevent most cases of people looting, delivering the property and then buying their loot back cheaply and so becoming its legal owners.

Regards and thanks to all involved for your work.

Peter Ravenscroft 10 March 2011.
Geologist.