Dear Sir/ Madam,

We wish to lodge a submission with regards to the January 2011 flood impacts on our property in Haig Road, Auchenflower.

On January 12th 2011 our property was, as defined by the State Government's definition, 'inundated'. As you can imagine the event and the time that has followed the flood has been traumatic; firstly to be forced to evacuate your home, then to watch it go under, followed by the slow process to clean it out, and now the long wait while it is stripped and slowly rebuilt. What has made this time worse for us specifically is that in November 2010, we completed a 7 month long renovation of our pre-1946 home and therefore only managed to enjoy our brand new home for 2 months before it was taken away.

Whilst we understand the chain of events that lead to the Brisbane floods, what we cannot understand is the fact that our house was 'inundated'.

I am a qualified town planner and at the time of our renovations was actually employed by Brisbane City Council. As such, I can confirm that our house was built 100% compliant with the Brisbane City Plan 2000, including spending in the order of $80,000 to raise the house to the Brisbane Q100 flood level, which included (or so we were informed) a 600mm freeboard. Whilst I was aware of the risk of renovating a house that was inundated in 1974, I was also confident that given that we had taken all of the necessary measures and expenses to build the house above the Q100 flood level, then even if the area did flood, the actual house and contents would not be at risk from flood damage. Given this knowledge, I am sure you can imagine the devastation we must have felt when at 3am Wednesday 12th January we were evacuated from our home when we realised it was going to go under.

The following outlines the content of our submission and focuses on the following topics:

- Failure of the Q100 flood level
- Closure of the Milton/ Auchenflower Open Drainage Culvert
- Use of Wivenhoe Dam for water storage
- Dredging of the Brisbane River

1. Failure of the Q100 Flood Level

At the time of our renovations, the Q100 flood level for habitable rooms on our property was 5.9m AHD, which included a 600mm freeboard. Not wanting to take any risks, our entire house was raised to 5.92m AHD including all non-habitable rooms. The house was raised prior to the extensive renovations. An approximate cost to raise the existing home including engineering certification, and all necessary water and sewer connections was approximately $80,000. Whilst this is a significant sum of money to spend before even starting a renovation, it was a non-negotiable issue for us given that we knew the original house was inundated in 1974.

With the height of our new flood boards being approximately 3.8m above natural ground level, we were confident that if Brisbane did ever experience another flood, then the actual structure and contents of the house would be protected. Given the amount of work put into ensuring that our

house was consistent with all of Council's rules and regulations, it has been very hard for me to accept that the system has failed us. It is almost harder for me to accept what has happened from a professional stand point when I have been working and approving applications under the flood levels for a decade. I am now questioning how many other people have suffered even though they spent the money and 'did the right thing' and trusted that the information provided by the experts was accurate. We question how is it that the flood levels were so inaccurate? And if they weren't incorrect, why is it that they failed?

In the early hours of Thursday 13th January (the peak of the flood) we believe that the floor boards were inundated by approximately 15cm of water, which means that the Q100 flood level was inaccurate by approximately 750mm. What is scarier however is the reports that the flood levels reached on that morning were in fact 1.0m lower than what was originally predicted, and that the actual flood level did not even reach the 1974 flood levels. If these reports are correct then the Brisbane Q100 levels appear to be inaccurate by almost 2m.

It appears now that Council's easy fix is to relax the 8.5m height limit in flood affected areas so that people can raise their houses higher. I have concerns with this however from a town planning view point as tiny homes raised 5 – 7m above the ground with no requirement to address the under croft is likely to erode the very fabric that makes the inner city intrinsic; I have already seen some unacceptable applications lodged with Council for 13m high single storey dwellings that are unlikely to even been structurally sound in a strong wind. In addition I am concerned about what is the new 'correct' flood height? Do we all spend $80,000 to raise our homes to have them flood again? Who will be liable if once houses are raised they flood again? Home owners pockets are only so deep and in the absence of flood relief assistance for most of those people with inner city mortgages as their 'salaries' are too high, how can they possibly afford to fix their homes, raise them to the new levels, have them flood again and then try and rebuild them again, all the whilst paying their large mortgages and feeding their families?

These questions directly relate to us. Given that we spent $80,000 to raise our house (pre renovation; it will now cost the same or more to raise it again) and that we are not eligible for any of the flood relief money, how is the 'easy solution' to raise the house again reasonable for us? We did what Council requested, we spent the money and we put our trust in the system, now we are left out of pocket and unable to rectify the situation. Given that our renovations are less than 6 months old and were 100% compliant with Brisbane City Council's regulations, if they only way to solve the flooding problem (impact to dwellings) in Auchenflower is to raise our house again, we request that the cost be absorbed by Council as the fact that we were 'inundated' was due to incorrect Q100 flood levels. An alternative to this however, would be to find a substitute solution to stop the flooding i.e. closing the Milton culvert (see issue 2 below).

2. Closure of the Milton/ Auchenflower Open Drain Culvert

From lengthy discussions with both hydraulic and civil engineers it would appear that the major contributing factor to why the Auchenflower, Rosalie and Milton Business Park area flooded was a direct result of the Milton open drainage culvert that connects directly to the Brisbane River near Drift restaurant and terminates near the old Milton tennis court site.

This drain has always been a concern to the residents and businesses in the area due to the risk it poses to children when full of water (at high tide) and due to the fact that a few streets in the area including Torwood Street, Auchenflower are flood affected from it at every king tide. In such a highly urbanised 'progressive' inner city environment it seems perplexing that such a crude form of infrastructure can still be in existence when, even without major flood events, it floods a few streets up to 4 times a year. From the information I have obtained, the Brisbane River did not break its bank anywhere within proximity of the Milton business park area, the Rosalie Village, Milton State Primary and the residents of the area including Torwood Street, Vincent Street and Haig Road. This is also evident in the aerial images uploaded on Nearmap.com.

As such, it is easy to assume that the flooding in this isolated pocket is solely attributed to the fact that the open box culvert drain runs directly to the Brisbane River with no flood gate or flood mitigation devices where is connects to the river. This means that as the Brisbane River rises, so does the water levels in the culvert; if the Brisbane River floods, so does the area around the culvert. I have also received advice that this problem could likely have been rectified by $160,000 of trunk infrastructure in the form of flood gates.

If all of the above advice is correct, we are appalled. Outside the impacts of a major flood event, if the residents of Torwood Street are subject to flooding at every King tide, how is it acceptable that nothing has been done to date to rectify the problem by either:

- Closing the culvert;
- Capping the culvert (covering it); or
- Converting it to an underground drain with flood gates so that water can exit the streets to the river but does not flow back up to the streets from the river flooding entire suburbs.

Flood gates are used in a number of regional and outback Councils and in other inner city areas such as Teneriffe. Why have they, or something similar not been delivered in this area? The 2011 flood damage bill to our private dwelling alone, which received minimal flooding in comparison to the balance of dwellings in the area, will be in excess of $100,000. Most other homes in the area were completely inundated, their combined damage bill along with the millions of dollars of damage, loss of stock and trading that the floods caused to Rosalie Village, Milton State Primary School and the Milton business park area is likely to far exceed the cost for Council to rectify the flooding caused by the culvert. I can understand that assigning money to rectifying the issue may not be supported by people outside the immediate affected area. However if the only reason the area flooded was a result of the open drain culvert, and it can be rectified to ensure it never floods again, then the government has no choice but to action its rectification. The cost alone to repair the damaged Milton State Primary, Council's 2 local parks and damaged government's infrastructure in the area, will most likely exceed the bill to rectify the culvert flooding issues. Isn't is more cost effective to take preventive action now where it can be taken rather than waiting for the area to flood again and then trying to find money when it is already stretched thin? Where mitigation measures to stop or reduce flooding can be implemented, now is the time to do so. So that when Brisbane does experience another flood, available resources and finances can go to areas that simply can not be protected from flood waters.

Whilst we are angry that the culvert was not rectified prior to the 2011 flooding, if the only good thing to come out of the floods is that now the open culvert is closed or made 1 way to ensure the affected suburbs do not flood again, then the loss/ damage we have faced has not been in vain.

3. **Use of Wivenhoe Dam for Water Storage**

Whilst we don't claim to understand the complexities surrounding the water grid and dam management, we were of the understanding that Wivenhoe Dam was built after the 1974 floods to help mitigate future major flood events.

Given that (at the time of the floods) the dam was so full due to it being used for water storage, we understand that it had to be let out to avoid the dam wall's being breached, which would have been catastrophic for Brisbane. Whilst we do not question the actions undertaken, we do question the timing. It was clear well before Christmas that we were going to have a very wet season and it was also evident at this time that the dam was very close to full capacity; perhaps release of water before Christmas and the week leading up to the new year would have lessened the impacts on Brisbane.

Additionally, we also question the appropriateness of using a flood mitigation dam for water storage?

Perhaps the lesson learnt is that a flood mitigation dam can really only have 1 function; take away its capacity to hold excess flood water due to it being already full of drinking water, will only ever result in what was experienced in January 2011.

4. **Dredging of the Brisbane River**

In addition to the above issues raised, we question the appropriateness of dredging the Brisbane River. If dredging had of continued the river would have been deeper, being less constrained by sediment build up and therefore the flood levels experienced would have likely been lower. Whilst we understand that dredging is controversial, we think this is something that should be restarted in a managed way; particularly now as the amount of sediment that would be clogging up the Brisbane River post the flood would have to be significantly higher that what it was before. At low tide, you can clearly see the amount of sediment and mud build up within the Milton open culvert. If we were to have another flood event now, the levels would be that much higher due to the reduced capacity of the culvert to hold water. Reducing the amount of water that the river and culvert can hold will only increase risk of major flooding again.

As such, the sediment build up in the Brisbane River, the Milton culvert and the City's drainage network needs to be reduced as a matter of urgency.

We are grateful for the opportunity to write this submission and we request that at the very least the Milton culvert be closed or fitted with flood gates to ensure that this area never has to go through this heartbreak again. We understand that we are only 1 suburb affected, however, if flooding impacts on suburbs can be reduced or stopped, i.e. if the flooding is not from the river breaking its banks, the authorities must undertake all necessary measures to ensure the protection of that suburb in future flood events.

Regards

Peita & Jake Swenson