

[REDACTED]
New Farm
Brisbane 4005
1 February 2011
[REDACTED]

Dear Sir,

FLOOD COMMISSION SUBMISSION

INTRODUCTION

The Glenfalloch riverside property, and hence its community, experienced virtually no ill effects (other than the results of power outages) during the January 2011 flood event.

This was in contrast with many of our neighbors who occupy less well designed although more recently constructed dwellings many of which are further from the river.



↑ x<

We were well prepared to defend our suitably designed and constructed property, so there was time after flood preparation, to observe and consider what could and should have been around us.

This submission reflects the views of the writer, augmented by private submissions from some of our one hundred and fifty Glenfalloch community residents.

It is offered to provide constructive input into the post flood debate.

It reflects the experiences of a riverside community residing just fifty meters from the destroyed Sydney Street ferry terminal.

A SUITABLE RIVERSIDE PROPERTY DESIGN. (GLENFALLOCH BARRICADE)

The Glenfalloch building is 51 years old, fourteen stories high and served by two under building garage entrances off a cul de sac at right angles to the river. It is built on the Brisbane River flood plain. Each garage is accessed by a separate driveway, and importantly, each driveway has two meter high side walls.



During the 1974 floods, residents of the time, constructed effective, temporary steel and timber barriers across each garage entrance, the flood vulnerable spots for the property. These barriers were retained and suitably stored for 37 years.

This year they were re-erected for the first time with minor modification and little difficulty despite a lack of familiarity.

The Glenfalloch building design excludes any vulnerable openings into the garages other than outlet pipes for our two electric garage sump pumps and of course the driveways.

Consequently, providing these openings could be controlled, there could be little or no water inundation unless the river level exceeded the lowest point of the barricades.

The barricades prevented virtually any water entering the garages and were such that a flood height of about another meter could have been defeated.

This seems surprising for a building so close to the river, so encourages investigation.

Our experiences might be of value to officials and other Brisbane residents.

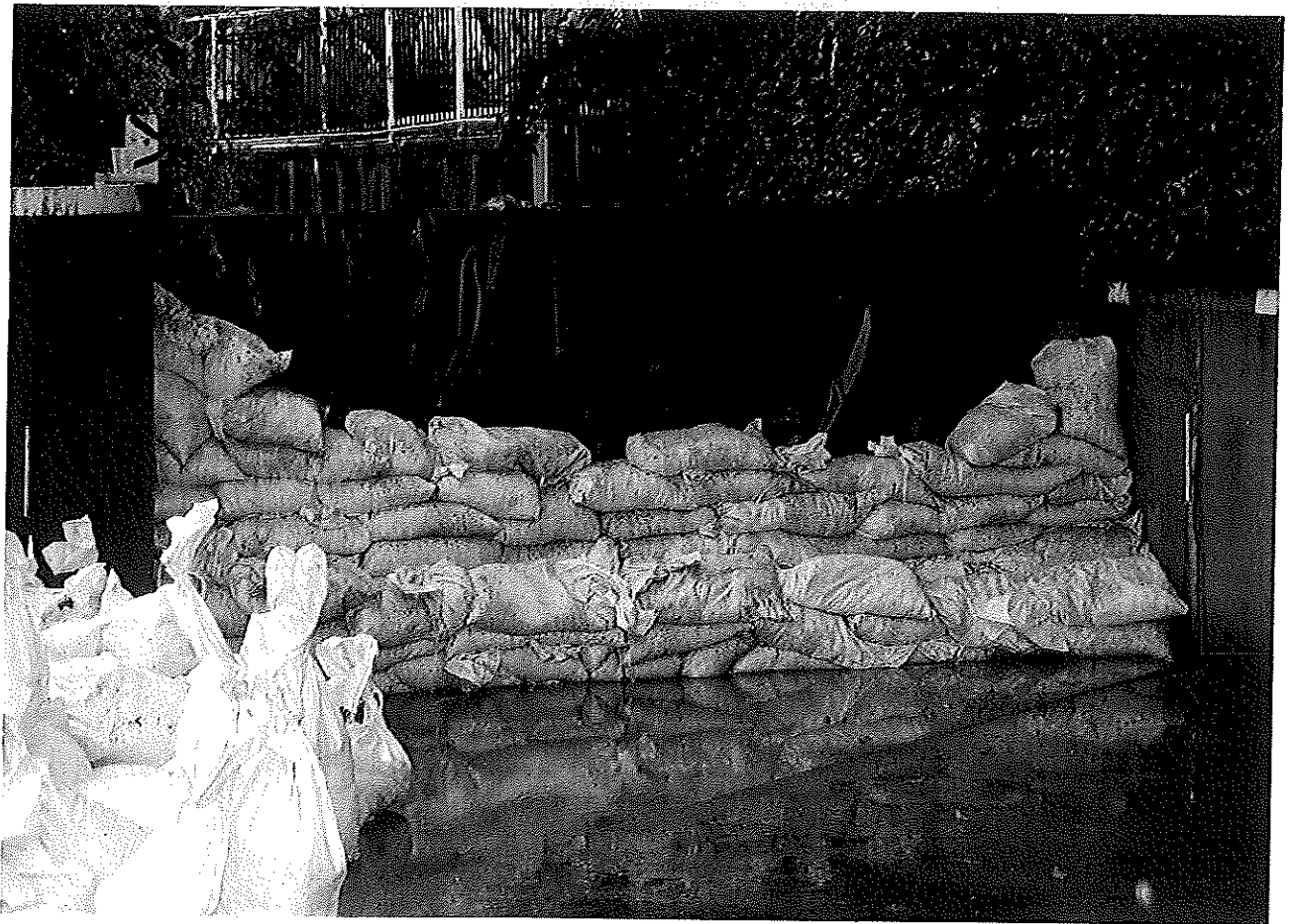


A LOCAL COMMUNITY EXPERIENCE

Our two barricades took about 6 hours to complete in the rain, using a dozen willing volunteers. Now we are familiar with our simple barricades we could probably re erect them in about two hours if necessary.

The task involved moving and sorting timber sleepers, securing steel side supports to driveway walls, fitting and bolting swollen wet timbers, obtaining and filling 150 sand bags and the actual construction of the two timber, plastic sheeting and sand bag barriers.

The cost of the Barricade components is minimal.



Delays/ disruptions occurred because:

Conflicting Warnings: We received conflicting flood warnings (heights and timings) from various sources.

Forecasted flood heights in meters meant little, as different sections of the river experienced differing relative heights. (Did 4 meters mean 4 meters above the last high tide, above a river gauge somewhere or something else?)

Media Contradictions: TV and radio messages were contradictory and hydrologist illustrations displayed on TV to explain specific forecasted levels, displayed other flood height scenarios. Had journalists taken the time to seek depictions of the specific forecasted height, instead of simply going to air with what they happened to have, we would have been much better served.

At least twice, an hydrologist striving to explain and illustrate the likely flood effect along the Brisbane River on TV was interrupted by a cross to a more sensational but uninformative report which simply tugged at the heart strings. This was very frustrating.

Our Need For Better Local Planning: We were also delayed by the difficulty in removing cars from our garages. They included vehicles owned by absent residents and those which failed to start. We should warn residents earlier next time.

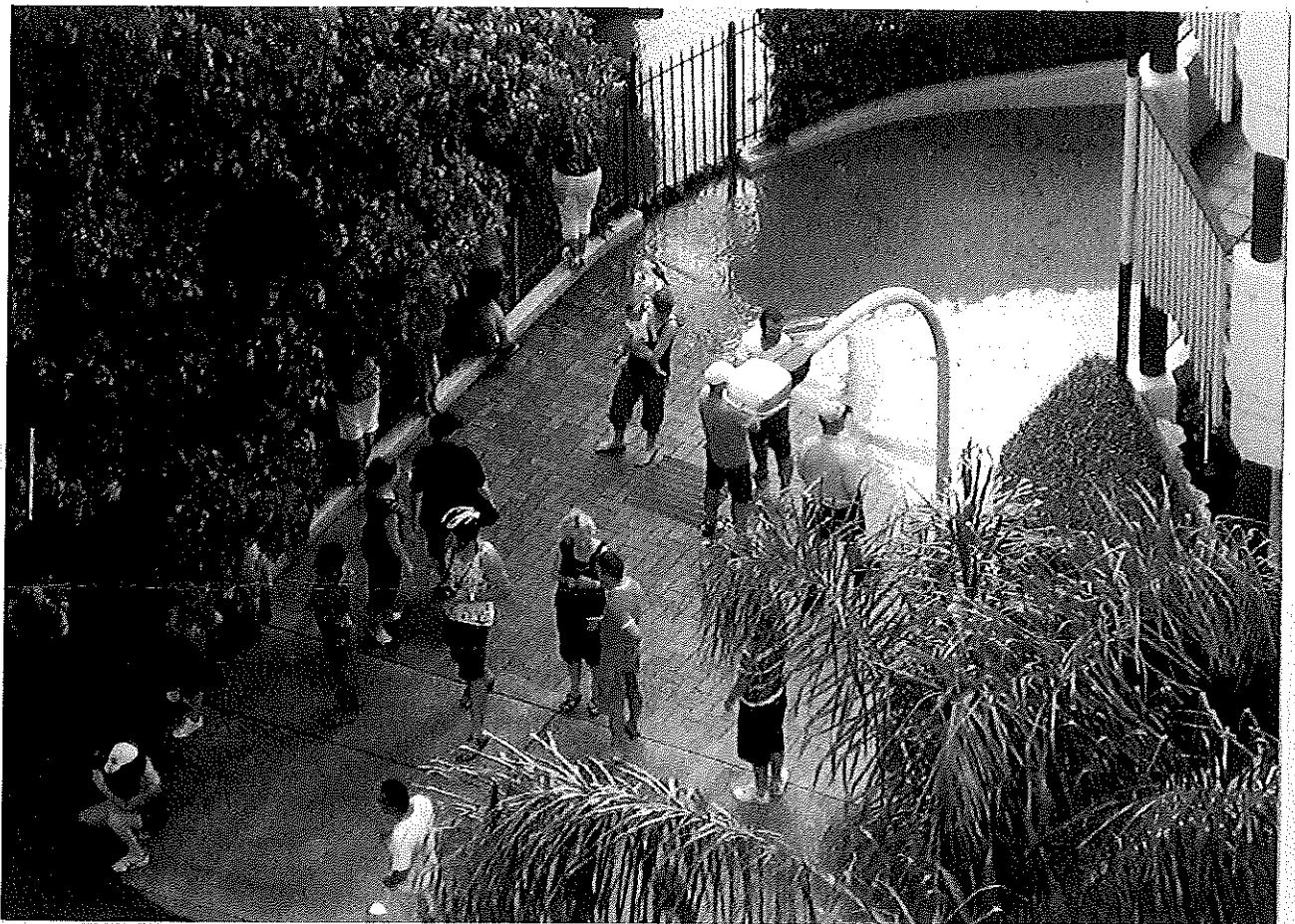
Sightseer Car Obstructions: The obstruction caused by many sightseer's cars parked in our cul de sac, prevented the removal of one of our last vehicles from the garages. This delayed barricade construction. Eventually we borrowed witches hats from an emergency vehicle crew to discourage sightseers from parking their vehicles in this blind street. These had limited effect but did not prevent numerous cars obstructing our preparations and those of our immediate neighbors.

Neighborhood Failings: Many neighbors had obviously left flood prevention planning too late.

Just on dark the evening prior to the forecast highest threat, one neighbor asked where we obtained our sand bags!

Others used ineffective 'sticky tape' to hold up flimsy plastic sheeting while some built sand bag walls without any essential (water sealing) plastic sheeting.

Indeed one property owner used loose sand only, as presumably sand bags had not been obtained. This of course quickly turned to a different shade of mud in the steady rain.



Power Supply: The most vulnerable service 'electricity' was turned off for almost three days. This prevented the operation of our garage sump pumps and of course affected refrigerated food.

For Glenfalloch, it is logical to consider the purchase of a petrol powered generator or portable pump for future major flood events.

AREA OBSERVATIONS

Once the property was as secure as we could make it, there was ample time to observe. With a grandstand view of the river it was interesting and at times annoying to witness the numerous unfolding events.

Ferry Terminal Maintenance: The Sydney Street ferry terminal showed signs of strife very early on. One of the two upstream collars, (one of four collars securing the floating stage to embedded pylons), had seized rendering it unable to slide up the pylon as the river level rose.

This was inspected by a uniformed individual early on, however there was no maintenance response. As a consequence the normally floating platform was slowly dragged under rising river water until it eventually sank, dragging with it the connecting walk way. This was well before any significant floating debris struck the now damaged terminal.

This costly damage could have been prevented or limited by prompt maintenance action.



Ferry Terminal Design: The floating sections of City Cat terminal pontoons were constructed with a blunt bow facing up stream. This flat surface ensured debris large and small simply built up against the pontoon increasing down stream pressure.

At Sydney Street, a section of the concrete floating walkway rammed the wreckage of the terminal, well after the pontoon had been dragged under by the jammed collar. Because of the shape of the now submerged pontoon this concrete section was not deflected away into the main stream, damaged the wreckage further then eventually sank in place taking with it, much of what still remained of the damaged terminal.

A conventional bow shaped pontoon could have deflected much of the floating debris, with a more satisfactory outcome.



Coast Guard Support: On the Tuesday, two yellow Coast Guard boats loitered mid stream opposite the Ferry Terminal for over half an hour while the crews took photos. During this time five of the lighter and softer non concrete landing stages which floated down the river struck the intact moorings protecting two boats on the south side of the river. One of the Coast Guard boats was a thirty foot or so Shark Cat type catamaran. This tough, stable and powerful boat could have nudged each of the floating pontoons back into mid stream, well before they struck, damaged and became lodged within the

otherwise operational moorings. It was very frustrating for all observers to see such inaction.



Sandbag Wall Design: Many neighbors erected sand bag walls without essential water sealing plastic. Consequently water simply trickled in between the loose bags. Many walls were built with sand bags simply thrown together. It is essential for bags to be laid like bricks, carefully and tidily to provide the most substantial and secure barrier.

Basement Storm Drains: Some neighbors have storm water drains in lower garages / basements with openings only a meter or so above normal river high tide mark. In such cases no sand bagging of garage / basement entrances was of any use as inundation was certain as rising water simply entered via these low set storm water drains.

Public Electrical Facilities: Electrical facilities located in Merthyr Park flooded early. An electric Bar B Q and a City Cycle station were both located in low points in the park. Our community was advised that we could not have power reconnected until these public facilities emerged from receding waters. Consequently our community was denied power for an extended period despite being otherwise unaffected. There are many locations

within Merthyr Park which remained above flood level where such vulnerable public facilities could be relocated.

Pilfering / Looting: Pilfering after the event did occur to varying degrees in our district. Many 'visitors' sifted through items dumped on footpaths. While this may be legal it was certainly insensitive. Cleaned items left on front lawns to dry were also taken by individuals who supposed them to be discarded.

RECOMMEDATIONS

Riverside and low lying residents need to be advised of the effective method of constructing water proof barriers. Sand bag walls are ineffective without careful use of plastic sheeting. Bags must be laid with care (like laying bricks), preferably against a firm backing wall, to best defend against inundation. Glenfalloch type garage entrance side walls may provide enhanced defense for many properties.

Publicising a Glenfalloch Wall System: Thought should be given to publicizing the value of approach side walls to vulnerable entrances of low or underground garages or cellars. (This facilitates the easier erection of efficient barricades)



Low Storm Water Drains: That storm water drains with garage / cellar inlets clearly below flood height be replaced by electric sump pumps or if retained be fitted with one way valves.

Flood Height Reference System: That a simple flood height prediction and reference system be standardized and publicized. (Perhaps flood level markers be placed at suitable intervals in vulnerable areas)

Journalist Responsibilities: That radio and TV journalists be encouraged to not comment on issues beyond their competence. (guessing flood heights and inundation projections, the likely effect of drifting objects and adding their interpretations following expert opinion)

Sightseer Vehicles: Riverside cul de sacs be placed 'off limits' to sightseer's vehicles in flood or other emergencies.



Ferry Landing Stage Design: That ferry landing stages be redesigned with their upstream bows shaped to deflect floating debris back into the main stream.



Tasking of Volunteer Organisation Equipment / Personnel: That capable volunteer emergency equipment / personnel be better tasks and used.
(e.g. Coast Guard boats could defend undamaged moorings from floating debris within their capability, when not tasked elsewhere)

Relocation or Isolation of Electric Public Facilities: That electric public facilities (e.g. Bar B Qs and City Cycle terminals) be relocated to proven flood free locations in Brisbane parks. Alternatively, if this is unacceptable that power supply to such facilities, including ferry landing stages, be able to be isolated without detriment to nearby residential properties.

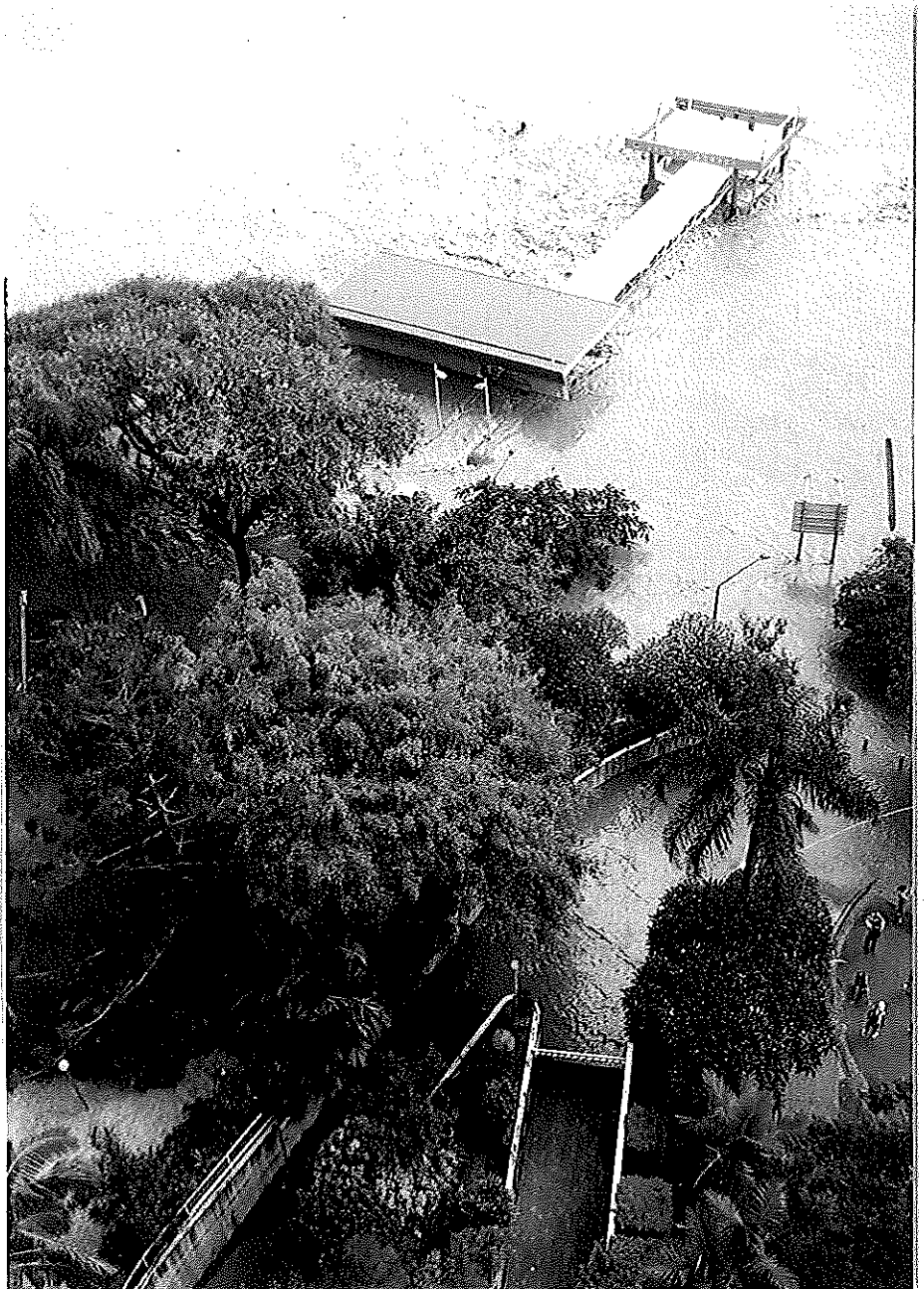
Defining Pilfering / Looting: That a definition of pilfering / looting in urban areas be developed and publicized.

Perhaps interfering with property deliberately placed on public footpaths for disposal be deemed acceptable however, uninvited interference with any items, regardless of state, on private land be defined as 'looting'.

Yours Faithfully



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BRISBANE

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