SUBMISSION RE MANAGEMENT OF FLOODS AND DAMS IN SOUTH EAST QUEENSLAND

FROM: Bruce Page, [redacted]

AREAS OF CONCERN

I believe that the State Government has ignored data collected over the past 70 years in relation to floods in the Stanley and Brisbane Rivers.

Initially the data was collected by the Department of Irrigation and Water; then Water Resources in conjunction with Brisbane City Council who administered Somerset Dam for many years.

Our property on the Stanley River at Peachester has a gauging station on the river which is now automatic; but for many years we manually read the gauge and recorded the heights of the river. When there was a sharp rise in the river we were to phone the Somerset Dam and the Metropolitan Weather Bureau. The principle was to release as much water as possible from the Somerset Dam before the new water reached the dam.

I suggest that you talk to some of the retired Water Resources people who spent a life-time working in the Department.

After the Wivenhoe Dam was built, it was felt that with proper management it would be possible to hold back the water from the Brisbane and the Stanley, and allow the water from the Bremer and lower Brisbane to run down, thereby minimising the peak of any flood.

I feel that the current management of the dams did not heed the information coming from the Early Warning Stations on the Stanley and the head of the Brisbane River.

On the Sunday (9th Jan) I tried to get a message to the Bureau of Meteorology about the sharp rise in the Stanley and the heavy rain which was still continuing. No one was manning the phones – in fact, at several attempts, we kept getting a recorded message saying it was out of office hours. People at Linville were concerned about the rise in the Brisbane River on the same day, and in desperation rang the ABC who showed no interest, in fact did not believe them about the amount of rain they had measured (and did not know where Linville was anyway).

It is essential in a looming flood crisis that people with information are able to pass it on to someone who understands the significance of it.

While the B.O.M. website radar maps on Sunday 9th January showed continuous heavy rain across the Stanley catchment and upper reaches of the Brisbane River, the weather forecasts/warnings were approximately 6 hours apart. This also caused us great concern at the time. Surely during any severe weather event, staff should be monitoring the situation closely, even out of normal office hours.

I am including some print-outs from the B.O.M. website, to draw them to the attention of the Commission. Much more information is available on the website, at www.bom.gov.au.

Attached: map showing the Flood Warning Network for Brisbane, Stanley and Bremer Rivers; and document entitled "Flood Warning System for the Upper Brisbane River above Wivenhoe Dam" (Both from B.O.M website. Please note that there is a similar document for the Brisbane River below Wivenhoe Dam.)

Also attached is a graph from the website showing previous flood heights for Brisbane, with an additional line representing 4.6m at the City Gauge for the 2011 flood. This shows that while a significant flood, the recent event was lower than several other floods, and should have been managed better.

If you refer to the map, especially the Early Warning Stations for the lower Brisbane River, it is clear that people affected by flooding should have had more warning than they received.

There is clearly an urgent need for our existing Flood Warning System to be better utilized.

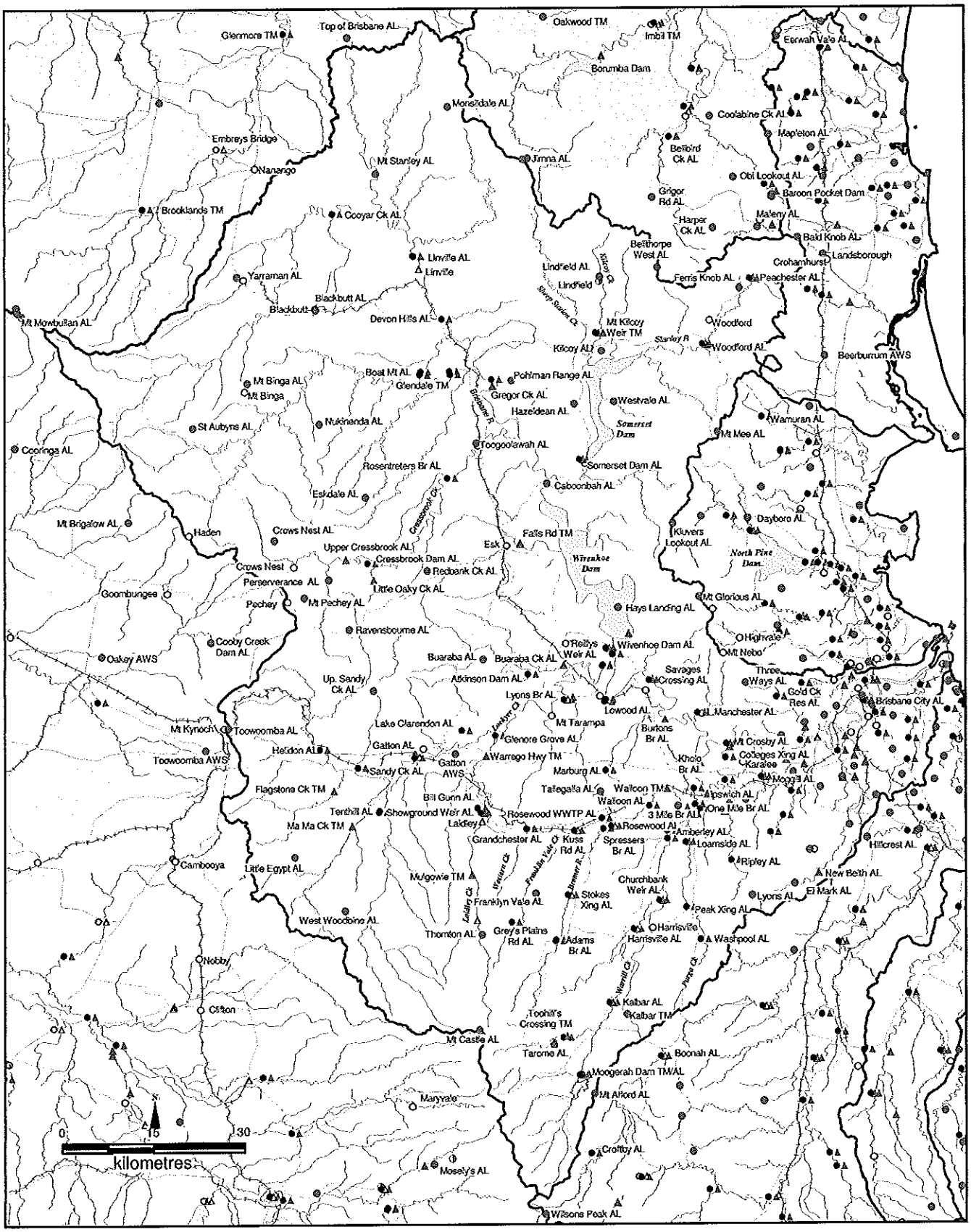
QUESTIONS WHICH NEED TO BE ANSWERED:

1. Was anyone available to receive the information from the Early Warning Stations on Friday night, Saturday and Sunday 7th-9th January?
2. Did the people receiving this information understand the significance of it?
3. Why wasn't this early warning information acted upon?
4. What was the flood mitigation capacity of the Somerset Dam on that weekend? (There had been significant flows in the Stanley River for the preceding two months. TV reports indicated that the Somerset Dam was 100% full, thereby having little if any flood mitigation capacity.)
5. Was the vibration caused by release of water from the Wivenhoe Dam at 195% full within the expectations of the designing engineers, or was it in fact greater, thereby putting the dam at risk?

Signed: [redacted]

Bruce Page

Australian Government
Bureau of Meteorology



- Manual Heavy Rainfall Station
- Daily Reporting Rainfall Station
- Manual River Station
- Telemetry Rainfall Station
- Telemetry River Station

BRISBANE, BREMER & STANLEY RIVERS
FLOOD WARNING NETWORK

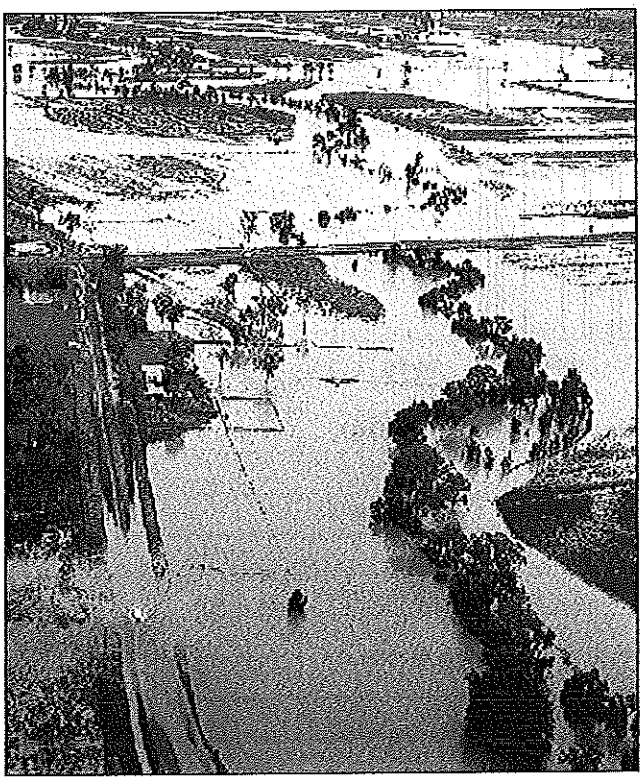
- Major Roads
- Railway

Revised: April 2010

r:/pub/maps/map03/map143_1.wor

FLOOD WARNING SYSTEM for the BRISBANE RIVER ABOVE WIVENHOE DAM

This brochure describes the flood warning system operated by the Australian Government, Bureau of Meteorology for the upper Brisbane River above Wivenhoe Dam. It includes reference information which will be useful for understanding Flood Warnings and River Height Bulletins issued by the Bureau's Flood Warning Centre during periods of high rainfall and flooding.



Laidley Creek, near Glenore Grove
Photo courtesy of Wimera Pty Ltd

Contained in this document is information about:
(Last updated November 2010)

Flood Risk

The upper Brisbane River catchment above Wivenhoe Dam drains an area of approximately 7,000 square kilometres. The Brisbane River rises in the Brisbane Range which is located some 40 kilometres east of Kingaroy. Major tributaries of the upper Brisbane River include Cooyar, Emu and Cressbrook Creeks which all enter the river from the east and travel in a southeast direction eventually passing through into Wivenhoe Dam. Its major tributary, the Stanley River, rises in the Conondale Ranges southeast of Maleny and travels in a southwest direction through one of the heaviest rainfall areas in Australia and into Somerset Dam and then eventually into Wivenhoe Dam.

Heavy rains in the upper reaches of the Brisbane River, particularly the Stanley River catchment, may result in significant local flooding of low lying areas, however, both the Somerset and Wivenhoe Dam's have significantly reduced the frequency of flooding in the lower Brisbane River catchment to Brisbane City, where major flooding can still occur from local area run-off.

Note ← and over page.

Brisbane River ALERT System

The upper Brisbane River ALERT flood warning system above Wivenhoe Dam was completed in the mid 1990's by the South East Queensland Water Corporation (SEQWater) with the assistance of the Bureau and Brisbane and Ipswich City Councils. The system comprises a comprehensive network of rainfall and river height field stations located throughout the catchment. They report via VHF radio to base station computers located in both SEQWater and the Brisbane City Council offices and the Bureau of Meteorology in Brisbane. The field stations send reports for every 1 millimetre of rainfall and every 50 millimetre change in river height.

The base station computers located in the both the SEQWater and Brisbane City Council offices collect the data and have software that displays it in graphical and tabular form. The data is also received by the Bureau's Flood Warning Centre where it is used in hydrologic models to produce river height predictions.

Flood Warnings and Bulletins

In consultation with the SEQWater and the Brisbane City Council, the Bureau's Flood Warning Centre issues Flood Warnings and River Height Bulletins for the upper Brisbane River catchment above Wivenhoe Dam regularly during floods. They are sent to radio stations for broadcast, and to the Councils, emergency services and a large number of other agencies involved in managing flood response activities.

Flood Warnings and River Height Bulletins are available via :

Radio
Radio stations, particularly the local ABC, and local commercial stations, broadcast Flood Warnings and River Height Bulletins soon after issue or as part of their news services.

Local response organisations
These include the Councils, Police, and State Emergency Services in the local area.

Internet/World Wide Web
Flood Warnings, River Height Bulletins and other weather related data is available on the Bureau's Web page at http://www.bom.gov.au . The Queensland Flood Warning Centre website is http://www.bom.gov.au/qld/flood .

Telephone Weather
Flood Warnings are available through a recorded voice retrieval system, along with a wide range of other weather related and climate information.

Main Directory	Phone	1900 955 360
Flood Warnings	Phone	1300 659 219

Telephone Weather Services Call Charges:
1900 numbers: 77c per minute incl. GST; 1300 numbers: Low call cost - around 27.5c incl. GST.
(More from international, satellite, mobile or public phones)

the upper Brisbane River catchment above Wivenhoe Dam.

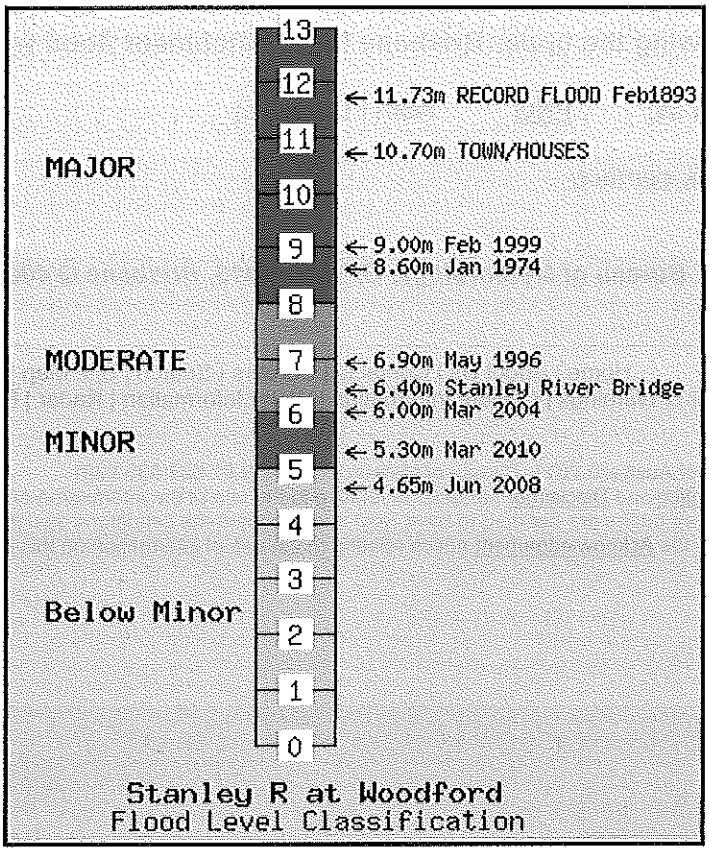
Flood Classifications

At each flood warning river height station, the severity of flooding is described as minor, moderate or major according to the effects caused in the local area or in nearby downstream areas. Terms used in Flood Warnings are based on the following definitions.

Major Flooding : This causes inundation of large areas, isolating towns and cities. Major disruptions occur to road and rail links. Evacuation of many houses and business premises may be required. In rural areas widespread flooding of farmland is likely.

Moderate Flooding : This causes the inundation of low lying areas requiring the removal of stock and/or the evacuation of some houses. Main traffic bridges may be closed by floodwaters.

Minor Flooding : This causes inconvenience such as closing of minor roads and the submergence of low level bridges and makes the removal of pumps located adjacent to the river necessary.

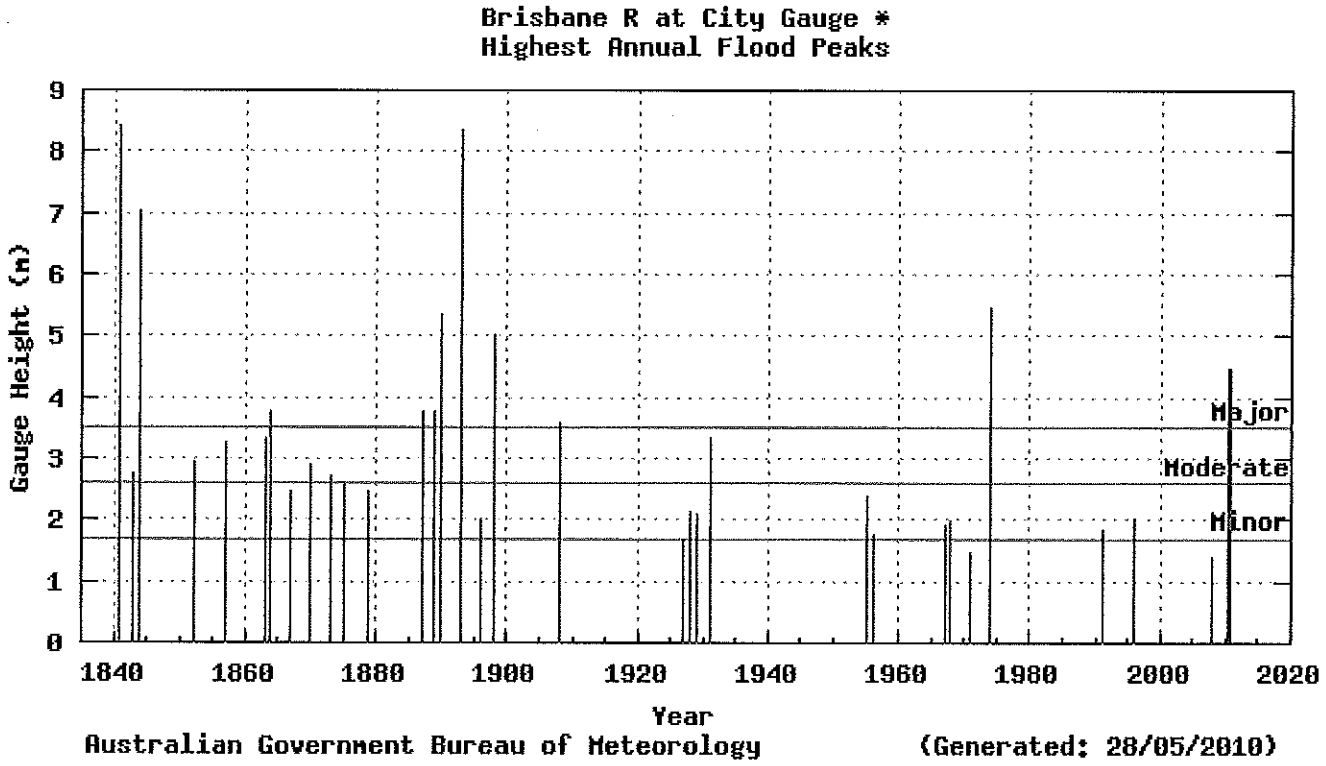


Each river height station has a pre-determined flood classification which details heights on gauges at which minor, moderate and major flooding commences. Other flood heights may also be defined which indicate at what height the local road crossing or town becomes affected by floodwaters.

The table below shows the flood classifications for selected river height stations in the upper BrisbaneRiver catchment above Wivenhoe Dam.

River Height Station	First Report Height	Crossing Height	Minor Flood Level	Crops & Grazing	Moderate Flood Level	Towns and Houses	Major Flood Level
Cooyar Creek	-	-	5.0	-	6.5	-	8.0
Linville	3.0	9.50 (B)	3.0	9.0	7.0 (d/s)	-	8.0 (d/s)
Devon Hills	-	-	2.0	-	6.0	-	7.0
Boat Mountain	-	-	4.5	-	6.0	-	7.5
Glendale	-	-	-	-	-	-	-
Gregor Creek	-	-	3.5	-	4.5	-	7.5
Rosentreters Br	-	-	3.0	-	4.0	-	5.0
Peachester	-	-	5.0	-	8.0	-	9.0
Woodford	3.0	6.40 (B)	5.0	5.0	6.0	10.7	8.0
Mt Kilcoy Weir	-	-	-	-	-	-	-

FLOOD HEIGHTS FOR BRISBANE CITY (From B.O.M. website)



NOTE: This graph was the latest available on the B.O.M. website, but had not been updated to include the recent floods; so a line has been added for January 2011, representing reported height of 4.46m at the City Gauge.