## MBRI Response to WMA Report

This submission to the Flood Commission is in response to the Flood Commission letter of 3 August, 2011 seeking submissions following issue of the WMA Final Report Review of Hydraulic Modelling dated July 2011.

MBRI respectfully submits that the content of this report is seriously flawed, draws conclusions that do not flow from the research, and therefore is unsuitable for being used as the basis for the Flood Commission's final Report due in February 2012.

We set out below our reasons for this view and respectfully request that the Commission give serious thought to ensuring Seqwater provide proper and complete details of all the information in their possession that will accurately define the Flood Event of January 2011. As the conclusions drawn in the Report are based only on the three points below Mt Crosby Weir, is it the case that information on the Lockyer Creek and mid Brisbane River as well as Wivenhoe Dam has not been provided in full to the authors of the WMA Report?

- 1. Version 1 Modelling provided to WMA by Seqwater prior to 6<sup>th</sup> July, 2011 was not fit for purpose (see page 9 WMA Report Model Review). This finding, plus the time that had passed since the flood in which it had taken Seqwater to submit Version 1 to the WMA, demonstrates a serious failure to manage the Dam to professional standards.
- 2. Version 2 The remodelling carried out by SKM was not provided to WMA in a timely manner and was incomplete. Para 7 page 2 of the Model review indicates that Version 2 by SKM is not ideal and the untimely production and incompleteness of Version 2 has limited the analysis available to WMA to respond to the Commission's questions.
- 3. Para 6 page 2 of the Model review indicates that the model was not recalibrated for the Lockyer Creek and Bremer River flows, is only valid downstream of Mt Crosby and is therefore a disconnect with the Report finding that 59% of all flows in the lower Brisbane River came from Wivenhoe Dam. It limits the value of WMA's analysis and qualifies its findings.
- 4. Refer page 1, Questions 2 a) and 2 b) and page 3 Conclusions b) to f) MBRI contests the accuracy of these conclusions and note as follows:
  - On what basis is the 59% relevant when used over the period 9<sup>th</sup> to 16<sup>th</sup> January, 2011 as Brisbane's peak readings occurred 13<sup>th</sup> January, 2011?
  - To claim mitigation is irrelevant if it fails at the peak of the flood. Wivenhoe Dam released 7,500cumecs and backed up the Lockyer Creek and the Bremer River. Eyewitness statements of MBRI members who observed the backing up of the Lockyer Creek will be provided to the Commission in the near future. Having backed up the Lockyer Creek and the Bremer River by the large release volume so that those flows were stopped, is it not the case that the Wivenhoe Dam therefore contributed 75% or

more of the peak (not "roughly equivalent" as WMA state)? MBRI believe that this issue has not been properly explored.

- E-mails from the engineering Officer at Wivenhoe Dam sent on the 9<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup> of January, 2011 clearly indicate that the Dam withheld releases awaiting the peak of the Lockyer Creek. Therefore, downstream flows peaked either before or simultaneously with the major Wivenhoe Dam releases. For Version 2 to indicate approximately 9 hours lapsed between the peak dam releases and the upper tributary peak flows means the Version is flawed or incomplete.
- Based on DERM's alternate readings and MBRI members' observations, MBRI contests
  Seqwater's observations regarding magnitude of flows in the Lockyer Creek.
- 5. Conclusion 16 page 4 of the WMA Report MBRI respectfully suggests that this conclusion is not consistent with the matters reviewed in this Report and cannot be given any weight in assessing Seqwater's response to this flood event. There is no evidence in this Report that allows this conclusion to be drawn.
- 6. What is more significant is that Seqwater have managed a multi million dollar facility which also has a capacity to kill or injure people living below and to cause significant property damage in the community it serves, with Models that have been found unfit for purpose refer para 28 page 10.
- 7. In conjunction with this Report MBRI has also considered the following points:
  - Seqwater was responsible for an Operations Manual described as "a mess" by the Commissioner and breached by the FOC Flood Engineers during the Flood Event.
  - Despite a 3 month early warning from the Weather Bureau and Executive Government Seqwater/Sunwater made not a single change in its training and preparedness to cope with an event of the type that was forecast.
  - Seqwater rejected requests from the Minister and the MBRI for a reduction in the FSL and trigger levels without a considered basis for the rejection. Seqwater subsequently recommended the reduction in a matter of 3 weeks subsequent to the Flood Event when modelling showed that it would have massively mitigated the peak flows.

Acknowledging that the Commission may consider these comments outside what was requested in the Commission's letter of 3<sup>rd</sup> August, 2011, the Sequence of Events page 7 shows that six months post the Flood Event, Seqwater and its consultants remain slow to react. Why does it take six months to revise a model? Is this an acceptable timeframe for a response?

These questions leave MBRI members concerned gravely for their future and that of the 244,000 people downstream.