

Schedule of Flood Event Log entries, Situation Reports and Technical Situation Reports on 8-9 January 2011, contained in 'January 2011 Flood Event – Report on the operation of Somerset Dam and Wivenhoe Dam', 2 March 2011

Rows highlighted in yellow indicate a situation report referred to in the flood event log, but not contained in Appendix E.

Date	Time	Source	Reference	Description
Saturday, 8 January 2011	6:32 am	Flood event log	Appendix M, p81	Situation Report – 06:00 on Saturday 8 January 2011
Saturday, 8 January 2011	6:32 am	Situation Report 8	Appendix E, p13-14	<p>Wivenhoe (Full Supply Level 67.00 m AHD)</p> <p>At 0600 Saturday, Wivenhoe Dam was 68.45 m AHD and rising steadily with all five gates open and releasing about 890 m3/s. River levels upstream of Wivenhoe Dam were rising again, generating further inflow to the dam. It is intended to ramp up the release from Wivenhoe to 1,200 m3/s by midday Saturday 08/01/2011. Further assessments will be undertaken to determine increases above this level. However, given the high likelihood of significant inflows in the next week, this may be increased.</p> <p>...</p> <p>Impacts downstream of Wivenhoe</p> <p>The projected Wivenhoe release of 1,200 m3/s combined with Lockyer flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Colleges Crossing) will be adversely impacted for several days. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected</p>

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Date	Time	Source	Reference	Description
				<p>but they could potentially be affected if the predicted rainfall totals eventuate.</p> <p>The current available assessments indicate that the combined flow in the lower Brisbane R would only add 50mm to an upper limit of 100mm to the recorded water levels in the City Reach of the Brisbane Rive. However, it is noted that tides in the lower Brisbane R will be 0.4 to 0.5 metres higher than predicted tides.</p> <p>Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.</p>
Saturday, 8 January 2011	7:51 am	Technical Situation Report 8	Appendix F, p76-77	<p>Wivenhoe (Full Supply Level 67.00 m AHD)</p> <p>At 0600 Saturday, Wivenhoe Dam was 68.45 m AHD and rising steadily with all five gates open and releasing about 890 m³/s. River levels upstream of Wivenhoe Dam were rising again, generating further inflow to the dam It is intended to ramp up the release from Wivenhoe to 1,200m³/s by midday Saturday 08/01/2011. Further assessments will be undertaken to determine increases above this level. However, given the high likelihood of significant inflows in the next week, this may be increased.</p> <p>...</p> <p>Impacts downstream of Wivenhoe</p> <p>The projected Wivenhoe release of 1,200m³/s combined with Lockyer flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin</p>

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				<p>Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Colleges Crossing) will be adversely impacted for several days. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected but they could potentially be affected if the predicted rainfall totals eventuate.</p> <p>The current available assessments indicate that the combined flow in the lower Brisbane R would only add 50mm to an upper limit of 100mm to the recorded water levels in the City Reach of the Brisbane River. However, it is noted that tides in the lower Brisbane R will be 0.4 to 0.5 metres higher than predicted tides</p> <p>Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.</p>
Saturday, 8 January 2011	8:10 am	Flood event log	Appendix M, p81	Engineer 1 advised Dam Operator 10 (Wivenhoe Dam) on directive #4 and discussed strategy
Saturday, 8 January 2011	10:50 am	Flood event log	Appendix M, p81	Dam Operations Manager rang. Engineer 1 advised current status and strategy.
Saturday, 8 January 2011	12:16 pm	Flood event log	Appendix M, p81	Situation Report – 12:00 on Saturday 8 January 2011
Saturday, 8 January	2:22 pm*	Situation Report 9	Appendix E, p15-16	Wivenhoe (Full Supply Level 67.00 m AHD)

Date	Time	Source	Reference	Description
2011				<p>At 1200 Saturday, Wivenhoe Dam was 68.60 m AHD and rising steadily with all five gates open and releasing about 1,150 m³/s. River levels upstream of Wivenhoe Dam have peaked and are now receding. However the further inflows into the dam has led to elevated levels. It is intended to increase the release from Wivenhoe to 1,250 m³/s by 14:00 on Saturday 08/01/2011. This will maintain flows of up to 1,600 m³/s in the mid-Brisbane River throughout the afternoon.</p> <p>Further assessments will be undertaken to determine increases above this level given the high likelihood of significant inflows in the next few days. The interaction with runoff from the Bremer River and Warrill Creek catchment will also be assessed to determine an appropriate release strategy. Projections based upon the forecast rainfalls suggest flows of up to 1,200 m³/s will emanate from the Bremer River catchment.</p> <p>...</p> <p>Impacts downstream of Wivenhoe</p> <p>The projected Wivenhoe release of 1,250m³/s and combined with Lockyer flows and local runoff will mean that all low level crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Colleges Crossing) will be adversely impacted for several days. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected, but they could potentially be affected if the predicted rainfall totals eventuate and higher releases from Wivenhoe Dam are considered necessary.</p> <p>The current available assessments indicate that the combined flow in the lower Brisbane River would only add 50mm to an upper limit of 100mm to</p>

Date	Time	Source	Reference	Description
				<p>the recorded water levels in the City Reach of the Brisbane River. However, it is noted that tides in the lower Brisbane R will be 0.4 to 0.5 metres higher than predicted tides. The tide level at the Port Office Gauge at 1200 Saturday was 1.56 m and rising.</p> <p>Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.</p>
Saturday, 8 January 2011	5:53 pm	Flood event log	Appendix M, p81	Situation Report – 18:00 on Saturday 8 January 2011
Sunday, 9 January 2011	6:15 am	Flood event log	Appendix M, p81	Situation Report – 06:00 Sunday 9 January 2011
Sunday, 9 January 2011	6:15 am	Situation Report 10	Appendix E, p17-18	<p>Wivenhoe Dam (Full Supply Level 67.00 m AHD)</p> <p>The dam level is currently falling slowly, with the current level being 68.58m AHD. River levels upstream of the dam are receding, however further inflows will result from any additional rainfall. The current gate operation strategy will maintain flows of around 1,600m³/s in the mid-Brisbane River. The current release rate from Wivenhoe Dam is 116,000ML/day. Since the commencement of the event on 02/01/2011 approximately 150,000ML has been released from the dam, with a total of at least 450,000ML to be released based on the currently recorded rainfall. The total release for the event is likely to increase over the next few days based on the current rainfall forecasts. At this stage, releases will continue until at least</p>

Date	Time	Source	Reference	Description
				<p>Wednesday.</p> <p>Impacts downstream of Wivenhoe Dam</p> <p>The current Wivenhoe Dam release combined with Lockyer flows and local runoff will mean that all low level crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Colleges Crossing) will be adversely impacted until at least Wednesday 12 January. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected, but this may be revised if the predicted rainfall totals eventuate and higher releases from Wivenhoe Dam are considered necessary.</p> <p>Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.</p>
Sunday, 9 January 2011	6:50 am	Flood Event Log	Appendix M, p81	Dam Operations Manager rang. Engineer 4 advised Dam Operations Manager on current release strategy based on recent heavy overnight rainfall.
Sunday, 9 January 2011	7:32 am	Technical Situation Report 9	Appendix F, p78-79	<p>Wivenhoe Dam (Full Supply Level 67.00 m AHD)</p> <p>The dam level is currently falling slowly, with the current level being 68.58m AHD. River levels upstream of the dam are receding, however further inflows will result from any additional rainfall. The current gate operation strategy will maintain flows of around 1,600m³/s in the mid-Brisbane River. The current release rate from Wivenhoe Dam is 116,000ML/day. Since the commencement of the event on 02/01/2011 approximately 150,000ML has been released from the dam, with a total of at least 450,000ML to be released based on the currently recorded rainfall. The total release for the</p>

Date	Time	Source	Reference	Description
				<p>event is likely to increase over the next few days based on the current rainfall forecasts. At this stage, releases will continue until at least Wednesday.</p> <p>Impacts downstream of Wivenhoe Dam</p> <p>The current Wivenhoe Dam release combined with Lockyer flows and local runoff will mean that all low level crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Colleges Crossing) will be adversely impacted until at least Wednesday 12 January. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected, but this may be revised if the predicted rainfall totals eventuate and higher releases from Wivenhoe Dam are considered necessary.</p> <p>Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.</p> <p>The current available assessments indicate that the combined flow in the lower Brisbane R would only add 50mm to an upper limit of 100mm to the recorded water levels in the City Reach of the Brisbane River. However, it is noted that tides in the lower Brisbane R will be 0.4 to 0.5 metres higher than predicted tides</p>
Sunday, 9 January 2011	11:02 am	Flood Event Log	Appendix M, p81	Situation Report – 11:00 Sunday 9 January 2011.
Sunday, 9 January	12:00 pm	Flood Event Log	Appendix M, p81	Engineer 1 scheduled meeting of Duty Engineers this afternoon to discuss current situation and forward release strategies.

Date	Time	Source	Reference	Description
Sunday, 9 January 2011	3:30 pm	Flood Event Log	Appendix M, p82	Duty Engineer Conference. Attended by all Duty Engineers (Engineer 4 by Telephone). At this stage operating at top end of W1 and bottom of W2. Storing Approximately 300,000 ML at present (above Wivenhoe Dam) with an additional 500,000 ML expected to flow into the dams from rainfall on the ground. The rainfall producing system is currently in the N-E part of the catchment and expected to travel south over next 24-36 hours according to BoM forecasts. This has the potential to significantly increase flows in Lockyer Creek and the Bremer River which will potentially close Fernvale Bridge and Mt Crosby Weir Bridge and increase the risk of flooding in the Lower Brisbane. Releases will be maintained at current level of 1,400 cumecs. If required, releases from Wivenhoe Dam will be reduced to contain flow in the Mid- Brisbane to 1,600 cumecs. And 3,000 cumecs in the Lower Brisbane. At this stage it is anticipated that levels below 102.5 m in Somerset and 72.5 in Wivenhoe Dam can be attained.
Sunday, 9 January 2011	4:15 pm	Flood Event Log	Appendix M, p82	Engineer 2 called SRC advising that the current strategy was to maintain a flow in the Brisbane River such that the Fernvale Bridge and the Mount Crosby Bridge could be kept open. However, future rainfall could well impact on those roads remaining open. Closure next Tuesday is a real possibility at this stage.
Sunday, 9 January 2011	4:20 pm	Flood Event Log	Appendix M, p82	Engineer 2 phoned ICC advising that the current strategy was to maintain flow in the Brisbane River such that the Fernvale Bridge and the Mount Crosby Bridge could be kept open. However, future rainfall could well impact on those roads remaining open. Closure next Tuesday is a real possibility at this stage.

Date	Time	Source	Reference	Description
Sunday, 9 January 2011	4:27 pm	Flood Event Log	Appendix M, p82	BCC returned phone call. BCC was advised by Engineer 2 that the current strategy was to maintain a flow in the Brisbane River such that the Fernvale Bridge and the Mount Crosby Bridge could be kept open. However, future rainfall could well impact on those roads remaining open. Closure next Tuesday is a real possibility at this stage. Flow in the Lower Brisbane potentially might reach 3,000 cumecs by next Wednesday or Thursday.
Sunday, 9 January 2011	5:25 pm	Flood Event Log	Appendix M, p83	BCC returned call to Engineer 2. Engineer 2 advised potential for releasing up to 2,500 cumecs by Tuesday. With further heavy rainfall, as forecast, the flow in the Lower Brisbane could increase to 3,000 cumecs with potential for closure of Fernvale Bridge and Mount Crosby Bridge by Thursday (possibly Wednesday). Releases from Wivenhoe are dependant on flows from Lockyer Ck and inflow into Wivenhoe. FOC will continue to update BCC.
Sunday, 9 January 2011	5:40 pm	Flood Event Log	Appendix M, p83	Dam Operations Manager phoned Engineer 2 for an update on the current situation.
Sunday, 9 January 2011	5:51 pm	Flood Event Log	Appendix M, p83	Situation Report – 17:00 Sunday 9 January 2011.
Sunday, 9 January 2011	5:51 pm	Situation Report 11	Appendix E, p19-20	Wivenhoe Dam (Full Supply Level 67.00 m AHD) The dam level is currently rising again, with the current level being 68.70m AHD. Estimated peak inflow to the dam just from the Upper Brisbane R is about 5,000m ³ /s and, at this stage, the dam will reach at least 72.5 m AHD

Date	Time	Source	Reference	Description
				<p>during Wednesday morning. River levels upstream of the dam are rising quickly with significant inflow being generated from the intense heavy rainfall. The current gate operation strategy will maintain flows of around 1,600m³/s in the mid-Brisbane River for the next 24 hours. This may mean temporarily reducing releases from Wivenhoe Dam as Lockyer flows increase. However, releases may have to be increased significantly during Monday depending on the rain in the next 12 to 24 hours. The current release rate from Wivenhoe Dam is 1,400m³/s (120,000ML/day).</p> <p>Since the commencement of the event on 02/01/2011 approximately 210,000ML has been released from the dam, with an event total approaching 1,000,000ML (including Somerset outflow) based on the recorded rainfall to date. The total release for the event is likely to increase over the next few days based on the current rainfall forecasts. At this stage, releases will continue until at least Saturday 15th January 2011.</p> <p>Impacts downstream of Wivenhoe Dam</p> <p>The current Wivenhoe Dam release combined with Lockyer flows and local runoff will mean that all low level crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Colleges Crossing) will be adversely impacted until at least Saturday 15 January.</p> <p>At this stage Fernvale and Mt Crosby Weir Bridge will not be affected for the next 24 hours but there is a strong possibility that, if the predicted rainfall totals eventuate in the next 12 to 24 hours, higher releases from Wivenhoe Dam will be necessary. This may adversely impact upon Fernvale and Mt Crosby Weir Bridges as early as Tuesday morning.</p>

Date	Time	Source	Reference	Description
				<p>Water levels in the lower Brisbane R will be impacted by the combined flows of Lockyer Ck, Bremer River, local runoff and releases from Wivenhoe Dam.</p> <p>Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.</p>
Sunday, 9 January 2011	5:58 pm	Flood Event Log	Appendix M, p83	Engineer 2 called BoM to discuss Wivenhoe Dam's release strategy i.e. Major bridge open strategy Vs increased inflow into Wivenhoe resulting from current heavy rainfall. Situation will become clearer in 24 hours time.
Sunday, 9 January 2011	6:35 pm	Flood Event Log	Appendix M, p83	The caretaker from the house at the Colleges Crossing Reserve rang FOC to enquire about predicted flood height at the Colleges Crossing Bridge. Engineer 2 referred him to ICC for an update on flood information affecting the Ipswich area. Advised no change in Wivenhoe releases at this stage and the future options were presently unknown.
Sunday, 9 January 2011	7:10 pm	Flood Event Log	Appendix M, p83	FOC called SRC advising him that high releases from Wivenhoe (3000 cumecs) are expected to be necessary in view of heavy rain over the last 3 hours.
Sunday, 9 January 2011	7:15 pm	Flood Event Log	Appendix M, p83	FOC called Seqwater CEO advising him that high rainfall is expected overnight and releases from Wivenhoe causing damaging flooding are likely to be necessary.
Sunday, 9 January 2011	7:15 pm	Flood Event Log	Appendix M, p83	FOC called Director Dam Safety advising him that FOC is now looking at much larger flows and will have to ramp up releases to around 3000 cumecs as by as early as midnight which is likely to have flooding impacts on low-lying areas of Brisbane.

Date	Time	Source	Reference	Description
Sunday, 9 January 2011	7:20 pm	Flood Event Log	Appendix M, p83	Engineer 2 called BCC advising him of potential for high releases sooner than previously expected.
Sunday, 9 January 2011	8:30 pm	Flood Event Log	Appendix M, p84	ICC returned call and spoke to Engineer 3. He was informed of current situation and the likelihood of high releases tomorrow causing flood damage.

*The time appears to be incorrect – should be 12:16 pm, as indicated in the flood event log.