'Annexure A'

Chronology of Dan Spiller communications 6 January 2011 to 11 January 2011

Thursday, 6 January

- At 12.13pm, I received TSR number 28 from Mr Robert Drury, Dam Operations Manager, Water Delivery, Seqwater. The TSR stated that releases would commence from Wivenhoe Dam. The TSR also stated that the aim was to manage releases so as to not inundate Burtons Bridge (combined flows 450 m³/s).
- At 1.17pm, I distributed TSR number 28 to key stakeholders, as specified in the draft Communications Protocol (see page 1). Those recipients included Minister Robertson, Ms Best (the then Acting Director General, DERM) and Assistant Commissioner Martin, of Queensland Police Service (**Key Stakeholders**). I noted that the release rate would be about 25,000 ML/day, compared to peak of about 115,000 ML/day the previous week. I also noted that the strategy would be reviewed and may change, depending upon rainfall.
- In relation to the water supply emergency, an Alert level incident was declared as a result of planned releases from Wivenhoe Dam.

Friday, 7 January

- At 6.41am, I received TSR number 29 from Mr Drury (see page 9). The TSR stated that releases would commence late Friday/early Saturday and may be as high as 1,200 m³/s. It also stated that, '...at this stage, there are not expected to be any adverse impacts upon Fernvale Bridge or Mt Crosby Weir Bridge'.
- At 8.09am, Mr Paul Bird, Senior Communications Advisor of Seqwater, forwarded a document from the Flood Operations Centre (**FOC**) titled 'Operating strategy over the next week' (see page 19). This formed the basis for comments that I made subsequently, including in emails to Mr Ken Smith, the then Director General of the Department of Premier and Cabinet.
- 6 At 8.27am, I distributed TSR number 29 to Key Stakeholders (see page 21).

- There were a number of water supply emergencies current at this time, including Mt Crosby water treatment plant (WTP) ceasing production due to high raw water turbidity. I chaired separate teleconferences on those topics and provided advice to the Key Stakeholders about them.
- At 4.05pm, I received TSR number 30 from Mr Drury (see page 35). The TSR stated that releases would be slowly increased to about 1,200 m³/sec, and that the Bureau of Meteorology (**BoM**) and Seqwater concurred that they would only add about 50mm to the expected water levels on the City Reach on the high tide.
- 9 At 4.24am, I distributed TSR number 30 to the Key Stakeholders (see page 41).

Saturday, 8 January

10 At 7.46am, I received TSR number 31 from Mr Drury (see page 50). It included the following extract:

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.

- At 9.00am, I distributed TSR number 31 to the Key Stakeholders (see page 58). My covering email included an update on water treatment status.
- At 9.16am, Ms Best forwarded an email to Mr Smith, advising that there was '...a bit of action in SE that you need to be aware of'. Mr Smith asked for advice on the 'likelihood of localised flooding'.
- At 9.48am, I emailed Ms Best that advice (see page 65). As well as responding to the query, my email highlighted that the key risk was if forecast high rainfall occurred, again based on information contained in the TSR.

Sunday, 9 January

At 7.50am, I received TSR number 32 from Mr Drury (see page 76). That TSR included the following statements:

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 02/01/2011approximately 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 Wednesday.

•••

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.

- At 8.14am, I distributed TSR number 32 to the Key Stakeholders (see page 86). My covering email included an update on water treatment status.
- At 4.19pm, I emailed Mr Drury seeking advice as to whether there had been any change to the strategy. He advised that the engineers were meeting that afternoon. At 6.13pm, he emailed me stating that an update would be provided within an hour (see page 95).
- At around 7.00pm, I believe that Mr Drury advised that there was a strong possibility that higher releases from Wivenhoe Dam would be necessary and that this might impact upon Fernvale and Mt Crosby Weir Bridges. I subsequently advised key stakeholders, including Ms Best. I understand this information may have been contained in TSR number 33, however I have no record of receiving or distributing it.
- At 8.56pm, I asked Mr Drury for an update, prior to scheduling a teleconference (see page 100).
- 19 At around 9.00pm, I rang Assistant Commissioner Martin to advise him that the Mt Crosby Weir Bridge and Fernvale Bridge would need to be closed.
- At 9.18pm, I received TSR number 34 from Mr Drury (see page 104). The TSR stated that the strategy was to continue releases until noon the next day when they would be increased to impact Mt Crosby and Fernvale Bridges.

- The TSR also stated that the objective for dam operations would be to minimise the impact of urban flooding in areas downstream of the dam and, at that stage, releases would be kept below 3,500 m³/sec and the combined flows in the lower Brisbane River would be limited to 4,000 m³/sec.
- At 9.30pm, I initiated and chaired a teleconference with Seqwater and Ms Best to discuss the impacts of the increased releases. Mr Drury provided an overview of the current situation and planned releases. He explained that it was possible the increased releases could be delayed until midday the following day, providing time for people to be advised. We discussed communications options and strategies, and had draft material prepared for use by 7.00am the next morning. Water supply mitigations were also agreed, such as increasing the amount of water in storage.
- Over the next hour and a half, I had telephone conversations with a range of stakeholders, including Mr Colin Jensen, CEO Brisbane City Council, and Mr Geoff Stead, media adviser to Minister Robertson.
- At around 10.45pm, Mr Brett Myatt, Manager Water Treatment Operations South, Seqwater, rang to advise that the Mt Crosby Weir Bridge would be closed as a safety precaution due to rapidly rising river levels.
- 25 At 11.07pm, I distributed TSR number 34 to the Key Stakeholders (see page 116).
 My covering email outlined actions to date, including notifying police and councils and increasing treated water storage.
- 26 At 11.23pm, I provided similar advice to Mr Jensen (see page 121).

Monday, 10 January

- 27 At 12.04am, I emailed Mr Dennien, Ms Best and various others advising that the weir bridge was closed. (see page 123)
- At 12.15am, Mr Jensen advised me via email that the weir bridge had closed 10 minutes previously (see page 124)
- At 1.28am, Mr Drury also advised that the weir bridge had closed and that releases from Wivenhoe Dam were now being increased (see page 126).

- At 5.31am, I emailed the Key Stakeholders to advise that the weir bridge had been closed overnight (see page 129).
- At 6.14am, Mr Drury forwarded to me a FOC report from 1.00am that morning. The report included a statement that the objective for dam operations would be to minimise the impact of urban flooding in areas downstream of the dam and, that at this stage, releases would be kept below 3,500 m³/sec and the combined flows in the lower Brisbane River would be limited to 4,000 m³/sec, if possible.
- From 6.00am, I had numerous telephone conversations with Ms Best, Mr Jensen and others.
- At 7.53am, I received TSR number 35 (see page 153). On my initial reading of it, some of the numbers appeared to be superseded. Therefore I rang Mr Drury and asked for confirmation as to some of the numbers.
- At 8.06am, I received TSR number 36 from Mr Drury (see page 161) as a replacement for TSR number 35. Consistent with the FOC report, the TSR stated that the levels of Wivenhoe and Somerset Dams were again rising, due to heavy rain. The TSR explained that the objective for dam operations would be to minimise the impact of urban flooding in areas downstream of the dam and, at that stage, releases would be kept below 3,500 m³/sec and the combined flows in the lower Brisbane River would be limited to 4,000 m³/sec if possible.
- The TSR also stated that the current release rate from Wivenhoe Dam was 1,753 m³/sec (150,000 ML/day) and that this was expected to increase to at least 2,600 m³/sec in the next 12 to 24 hours.
- At 8.13am, I asked Mr Drury via email 'are you now operating under release strategy W2 or W3?'. (see page 167) I did so because I was aware that strategy W1 was no longer in use and that the release rates under higher level strategies would be significantly higher. While I did not generally specify the strategy in my covering emails to the Key Stakeholders, I considered that the step change in release rates warranted some further explanation.
- 37 At 8.23am, Mr Drury replied with 'W2' (see page 169).

At 8.30am, a teleconference was held with the CEOs and other key staff from Seqwater and the Water Grid Manager. The teleconference discussed matters related to dam releases and water supply. In relation to dam releases, the meeting notes stated that:

3.5 and 4

- Seqwater Manual 4, 000m3/s but aiming for 3,500m3/s 4,000m3/s in the river
- o Will adjust timings based on what is happening downstream
- o Release at 3,500m3/s currently at 2,000m3/s
- o 2,500m3/s in next 12-24hrs
- o Objective is to minimise urban impacts
- Barry @ 3,500m3/s comfortable through Moggill. Point between W2 and W3 is critical. Need to engage BCC at highest level when decision is made
- Dan above 3.5 flooding attributable to dam releases Comms need to be clear
- Peter Burrows 8,800-9,000m3/s inflows
- Barry - Team talks to BCC and Born (planned above 3.5), check concerns (not input into model), document any concerns
- Peter how much notice can we give that we are moving from 3,500m3/s to 4,000m3/s at Moggill Key question.

Scenarios -

- W2
- BCC second scenario river at 3,500m3/s with local rainfall causing localised/flash flooding.
- Barry inflows in calcs?
- Dan could it go over 4,000m3/s?
- In particular, it was agreed that Seqwater would subsequently provide confirmation of the release strategy and advice about whether releases may need to be increased to about 4,000 m³/sec and advice about potential higher flow scenarios and the amount of timing that could be provided prior to increasing flows from 3,500 m³/sec to 4,000 m³/sec at Moggill.
- In relation to the water supply emergency, I was appointed Emergency Manager for related water supply emergencies. Risks and mitigations were discussed.
- At 9.46am, I distributed TSR number 36 to Key Stakeholders (see page 171). My covering email included a summary, based on advice from Sequenter by email and in the teleconference.

- At 9.57am, I sent an updated version of TSR number 36 to Mr Borrows and Mr Drury seeking their endorsement (see page 183). The updated version included changes to reflect the strategy outlined by Seqwater at the 8.30am teleconference, prior to my sending it to Council CEOs. Mr Drury replied at 10.05am, accepting those changes and suggesting some others (see page 192).
- At 10.02am, Mr Drury replied to the key questions asked at the 8.30am teleconference (see page 188). The reply was that:
 - The current operational strategy is to aim for a flow of no greater than 3,500cumecs in the lower Brisbane
 River. Accordingly, the current outflow from Wivenhoe Dam will be held at its current level of 2000 cumecs for
 the next 12 to 24 hours to allow for potential high flows from the Lockyer, Bremer and local area catchments to
 pass downstream. However this strategy may need to be revised at short notice if further significant rainfall
 occurs.
 - It would require in the order of 50mm of rain across the Brisbane River Basin (this includes the Brisbane, Stanley, Lockyer and Bremer catchments) to go beyond the current operational strategy, however this depends on the spatial distribution, intensity and duration of the rainfall. This amount of rain is possible under current BOM forecasts.
 - If there is a need to go beyond 3,500cumecs in the lower Brisbane around 24 hours notice should be able to be provided to BOM and BCC.
- At 10.09am, I emailed the updated TSR number 36 to Mr Jensen (see page 200). My covering email explained that:

Seqwater has previously had verbal conversations with BCC staff regarding impacts. However, given the significance of this event, and consistent with the draft protocol, we are seeking formal BCC input to this version. This advice would relate to the impact of releases, based on the type of scenario analysis that you described this morning.

Our preference would be to finalise the report, including your input, before or at the 12.30 teleconference with Council CEOs and the BoM. This timing means that it can underpin all media messaging this afternoon.

- Mr Dennien's executive assistant then forwarded my email to the CEOs of Ipswich City Council and Somerset Regional Council (see page 209).
- At 10.30am, Mr Borrows and Mr Dennien briefed Minister Robertson and Ms Best on the situation. I did not participate in that briefing, but received an email from Mr Dennien following the meeting with the actions listed, including alternate release scenarios that were to be modelled by Seqwater (see page 215).
- At 11.00am, I chaired a teleconference with the six Grid service providers in relation to the water supply emergency. Mr Stevenson (the Acting Executive General

- Manager of Water Delivery, Sequater) and I provided a brief update on releases from Wivenhoe Dam. By that time, treatment at some isolated towns had been interrupted.
- At 12.30pm, a teleconference was held with Minister Robertson, Mr Smith, Mr Borrows, Mr Dennien, Mr Jensen, representatives from the BoM, Ipswich City Council (ICC) and Somerset Regional Council (SRC), and others..
- At the teleconference, Mr Borrows advised that the strategy would need to change to increase releases from Wivenhoe Dam. He also advised that this would be provided within an hour. He flagged that there was a risk of the dam reaching a level from which time dam integrity would become the primary concern.
- At that teleconference, a process was agreed whereby:
 - (a) Seqwater would update its release strategy by 2.30pm;
 - (b) BoM would then update its forecasts of river levels based on that release strategy, in consultation with the FOC and BCC, providing the basis for the BoM flood warning to be issued at about 3.30pm;
 - (c) BCC would separately provide flood inundation maps and advice for the relevant flow rates; and
 - (d) ICC would model impacts of 11m AHD plus, and continue to work with officers from SRC.
- 51 That teleconference was recorded (I understand for the purpose of preparing minutes) by Mr Scott Denner, Director, Risk and Technology of the Water Grid Manager. For the purposes of preparing this statement, the Water Grid Manager lawyers compiled a transcript of that teleconference (see page 216). Having read that transcript, it appears to me to accurately reflect what was discussed at the teleconference. I am not aware of formal minutes having been produced, but am aware that the recording still exists electronically.
- At 3.00pm, Mr Dennien attended a meeting with the Premier and staff from the Premier's office in order to provide an update as to the water releases from Wivenhoe Dam and the communications being managed by the Water Grid Manager at that

- stage, as noted in the Water Grid Manager's submission to the Commission of Inquiry dated 4 April 2011.
- Also at 3.00pm, I chaired a teleconference with Seqwater and Queensland Urban Utilities in relation to the water supply emergency. The meeting addressed supply status of stand-alone towns, several of which were isolated and offline.
- At 3.11pm, I received a copy of a 3pm FOC report via communications officers (see page 238). The report stated that:

The dam level is 72.41m AHD and rising quickly. The rainfall experienced over the last 2 to 3 hours will result in significant further inflows into the dam and releases from the dam will need to be increased in accordance with Flood Mitigation procedures and to ensure that a fuse plug is not initiated. The initiation of a fuse plug will result in a rapid uncontrolled outflow from the dam of 2,000m3/s being added to the gate release outflow. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

Five radial gates are currently open at the dam releasing about 2,000m3/s into the Brisbane River and this will need to be increased steadily to an outflow of 2,800m3/s over the next 9 hours (commencing at 1500). At this stage, the dam will reach about 73.8m AHD during Tuesday morning.

The objective for dam operations is currently to minimise the impact of urban flooding in areas downstream of the dam and to keep river flows in the lower Brisbane River below 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s. If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

- At 3.16pm, I received TSR number 37 from Mr Drury (see page 241). The TSR stated that dam levels were again rising, due to heavy rain. The TSR also contained the text from the FOC report that is quoted above.
- I forwarded the TSR to Mr Dennien for action (see page 247), due to my then being in a teleconference. In accordance with the actions agreed at the teleconference, Mr Dennien then sought advice from BoM. Mr Baddiley of BoM replied with that advice at 4.33pm.
- At 4.00pm, I chaired a teleconference with all Grid participants in relation to the water supply emergency. A general situation update was provided, with a range of water supply incidents discussed.
- At 5.00pm, Mr Dennien attended a meeting of the State Disaster Management Group.
- After that meeting, I understand that Mr Dennien attended a meeting with the Premier and Mr Smith. I understand that, at that meeting, there was a discussion regarding the prospect of an independent review being undertaken with respect to the operation of

- Wivenhoe Dam. Following that discussion, Mr Dennien agreed that he would arrange an independent review.
- Mr Brian Cooper was subsequently engaged to undertake the review, on the recommendation of Mr Borrows and Mr Allen, the Dam Safety Regulator, DERM. Mr Cooper's final report was provided on 13 January to Minister Robertson, copied to the Department of Premier and Cabinet and DERM. Mr Cooper's conclusions were that, in summary:
 - (a) the TSRs complied with the requirements of the new communication protocol introduced in late 2010, but that some more consistency in the information presented could be achieved;
 - (b) the strategies set out in the Flood Mitigation Manual had been followed, allowing for the discretion given to making variations in order to maximise flood mitigation effects; and
 - (c) the actions taken and decisions made during the flood event appear to have been prudent and appropriate in the context of the knowledge available to those responsible for flood operations and the way events unfolded.
- At 5.48pm, I forwarded the updated TSR number 37 to key police contacts (see page 264). I recall that I had a conversation with them about the coordinated advice that had been discussed at the 12.30pm teleconference and that Mr Dennien was then compiling.
- I was aware that Mr Drury and the FOC were in communication with Mr Allen, including by copying him when TSRs were emailed to me.
- By emails at 6.12pm and 6.24pm Mr Smith forwarded to Mr Dennien information from Mr Jensen about the consequences of river flows of 4,000 m³/sec (see pages 267 and 270), .
- At 6.45pm, Mr Dennien distributed to the Key Stakeholders consolidated advice on dam releases, BoM forecasts of river heights and BCC forecasts of properties inundated (See page 419).

Tuesday, 11 January

- At 6.18am, I emailed Mr Drury seeking advice about the impact of the Lockyer Valley flows. (see page 428)
- At 6.17am, Mr Drury provided preliminary advice (see page 272). That advice included that:

Basically the FOC was going to try to slow our releases last night to give a small window for the Lockyer flood to go through however we again received and are still receiving heavy rain in the catchments.

...

The strategy is now to keep releases as is to not worsen the situation downstream as the Lockyer recorded levels higher than any on record. However we may still need to increase releases depending on what happens through the day.

- At 6.19am, I emailed that advice to key contacts, including Assistant Commissioner Martin, Mr Dennien, Ms Best and a Ministerial adviser (see page 272).
- At 6.36am, I received TSR number 38 from Mr Drury (see page 444). He also forwarded the 4.00am BoM flood warning. For the first time, the TSR highlighted the risk of total flows in the Brisbane River approaching or exceeding 5,000m3/sec. It included the following extracts:

Current objectives
Strategy

- Maintain releases to keep Wivenhoe below RL74 at which significant releases need to be made to ensure the dam security and minimise flood impacts downstream if possible
- Maintain current release of 2750cumecs as long as possible but it may need to be increased

. . .

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 73.51m AHD and rising at about 25 mm/hour. Releases from the dam have been held at a rate of 2,750 m3/s since 19:30 hours on Monday 10 January 2011. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

The BoM has provided further advice about the flash flooding experienced in the upper areas of Lockyer Creek. The rainfall responsible for this event was not observed at any rainfall stations but it is considered to be extreme. Flood levels in the Lockyer Creek catchment will exceed maximum recorded levels in some stations in the upper catchment. This flow will result in increases in Brisbane River levels below the junction of Lockyer Creek.

Five radial gates are currently open at the dam releasing about 2,750m3/s into the Brisbane River. At this stage, the dam will reach just over 74.0m AHD during Tuesday evening.

Above EL 74.0m AHD the objective for dam operations is to maintain the security of the dam and minimise downstream flood flows if possible.

If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

- At 7.17am, I distributed TSR number 38 and the BoM flood warning to the Key Stakeholders. I summarised key points from the TSR. I also proposed to Ms Best and Mr Timothy Watts, advisor to Minister Robertson, that a briefing to the Minister would be appropriate.
- At 7.30am, I chaired a teleconference with all Grid participants in relation to the water supply emergency. A general situation update was provided, with a range of water supply incidents discussed. Working groups were expanded and prioritised, due to the range of incidents then being addressed.
- At 8.00am, Mr Dennien attended a meeting of the State Disaster Management Group. During the meeting, BoM representatives forecast that there would be flows of 6,000 m³/sec or greater at the Port Office Gauge and that river level would reach 4 metres. During the meeting, the Premier requested that Mr Jensen be advised immediately. At 8.39am, Mr Dennien emailed this information to me (see page 493).
- I spoke to Mr Jensen around 9.00am, having previously left messages and sent an email. During that conversation, I informed him of the current forecasts. He advised me that BCC had compiled mapping for river flows of 5,000 m³/sec and was commencing work on mapping for flows of 6,000 m³/sec. At 9.27am, Mr Jensen provided the inundation maps for flows of 5,000 m³/sec (see page 285).

- Around that time, I specifically sought advice from Seqwater about potential worst case scenarios for emergency planning purposes. This request is reflected in my email to Mr Dennien at 9.06am, which states that Seqwater was closing out this strategy and would then start work on worst case scenarios for the afternoon. I stated that we would then provide this to BoM to model river levels and then to BCC to model inundation impacts.
- Around that time, I offered to arrange staff to assist Sequater in the preparation of TSRs, working to its officers and from its offices. I made available one of my officers for that purpose. I also confirmed the availability of two experienced consultants and an officer from the Queensland Water Commission. I reiterated this offer of assistance following receipt of TSR number 39.
- At 12.46pm, I received TSR number 39 from Mr Stevenson on behalf of Mr Drury, who was isolated on the road (see page 511). The TSR advised that the strategy was being reviewed every three hours. It also included the following extract:



- Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible
- Maintain current release of 3970cumecs as long as possible but it may need to be increased
- Close sluices at Somerset Dam to store more water however will affect upstream areas.
- Current estimate of peak dam level is between EL74.5 and EL74.8 (assuming no further significant rainfall). However it is noted that rainfall is continuing across the catchment.
- Further rainfall in the next 3 hours will require releases to be increased in accordance with Strategy W4, page 29 of the Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam (Flood Operations Manual)
- At 1.18pm, I distributed TSR number 39 to the Key Stakeholders (see page 290).

 Prior to doing so we had reiterated to Seqwater the need for a worst case scenario for emergency management planning purposes. This is reflected in the statement in my covering email that further inflows would require further releases, and that Seqwater was considering worst case scenarios to provide to BoM and BCC to model impacts.

- At 2.15pm, I chaired a teleconference with representatives from bulk water entities in relation to the water supply emergency. We were advised that Mt Crosby East Bank WTP had been isolated with about two and a half days supply of chemicals onsite, depending upon the rate of production.
- At or about 3.00pm, Mr Dennien received a telephone call from Mr Borrows. During that call, Mr Borrows advised, for the first time, that releases of up to 10,000 m³/sec may be possible in light of developing weather conditions.
- At approximately 3.12pm, immediately after that call concluded, Mr Dennien telephoned Mr Smith to relay this news. At approximately 3.24pm, he was placed on a telephone call to Mr Smith and the Premier at the Disaster Management Centre at Kedron when he passed on this information.
- At 3.58pm, I received TSR number 40 from Mr Stevenson on behalf of Mr Drury (see page 294).



- Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible
- Inflows into Wivenhoe in excess of 12000 curners.
- Maintain current release 5700 currents as long as possible but due to the high level in the dam may change frequently due to inflows, this is being reviewed every 30 minutes and releases adjusted accordingly.
- At 4.19pm, my executive assistant sent TSR number 40 to Key Stakeholders.
- At 4.20pm, Mr Dennien and I received an email from Mr Bob Reilly, General Manager, Office of the Water Supply Regulator. The email stated that Mr Allen '... had asked Seqwater to provide a concise summary of the flood release strategy. I can confirm though that they are taking into account estimated inflows over the next 24 hours and have a release strategy that addresses that scenario'.
- At 5.00pm, Mr Dennien attended a meeting of the State Disaster Management Group.
- At 6.28pm, I received TSR number 41 from Mr Drury (see page 309). It included the following extracts:

| Current objectives Stratogy | * | Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible |
|--------------------------------|---|---|
| | * | Peak inflows into Wivenhoe in excess of 12000 curnecs. |
| | ٠ | Increase releases to maintain fuse plug and dam integrity. |

...

The current expectation is that the dam will reach a sleady state (outflow equals inflow) within the next 3 hours without further significant rainfall. At this time, release from the dam will be about 8,000 m3/s.

if there is no further rainfall, it may be possible to then slowly reduce this release evernight.

- At 6.45pm, my executive assistant distributed TSR number 41 to Key Stakeholders.
- At 7.29pm, I received TSR number 42 from Mr Drury (see page 324). The description of objectives and strategy were unchanged. In addition, it included the following extract:

At 1900 Wivenhoe Dam was 74.97m AHD holding 2,227,000ML and 191.1% and rising slowly and releasing about 7,500m3/s.

Since the last update, there has only been an increase in release to 7,500cumecs. At this stage there is no planned increase in releases unless there are further inflows.

If there is no further rainfall, it may be possible to then slowly reduce this release overnight.

- I did not distribute TSR number 41 to the Key Stakeholders as it was similar to the TSR that had been distributed less than an hour earlier, and because Mr Dennien was providing regular telephone updates to most of those stakeholders.
- At 8.20pm, I received TSR number 43 from Mr Drury (see page 334). The description of objectives and strategy were unchanged. It also stated that:

At 2000 Wivenhoe Dam was 74,97m AHD holding 2,227,000ML and 191,1% and steady and releasing about 7,500m3/s.

The levels have stayed the same for an hour so there are no planted increases in releases.

As soon as the levels show they are dropping, releases will be reduced.

At 8.30pm, Mr Dennien requested that I not distribute TSR number 43 at that time. I understand that he did so because he was in conversation with Mr Borrows and had more recent information.

- At 9.16pm, I received TSR number 44 from Mr Drury. At 9.33pm, I requested that Mr Drury update the advice to specify release rates. At 9.51pm, Mr Drury supplied that updated version (see page 351). In that TSR, the current objective was changed to initiating the gradual reduction of releases from Wivenhoe Dam.
- I did not distribute this TSR, due to the information having become dated while Mr Drury was updating it to specify release rates.
- At 10.07pm, I received TSR number 45 from Mr Drury (see page 361).
- At 10.19pm, I distributed TSR number 45 to the Key Stakeholders (see page 365).
- 94 At 10.44pm, I received the following email from Mr Bradley:

As an axide, I think we need to try to maintain the protocol on these through these most serious of events -1 notice titreps lately have had no comment from born/councils or just "has been advised".

Wouldn't bear much scrutiny in an ex post review, noting recipients (Min, DsG, etc)

Happy to take your and berry's advice as to how this can be achieved.

- 95 At 11.43pm, I distributed TSR number 46 to the Key Stakeholders (see page 379).
- At 11.49pm, I emailed Mr Jensen providing an update on dam operations.