

**John Bradley – Statement and attachment  
dated 1 February 2012**

QUEENSLAND FLOODS  
COMMISSION OF INQUIRY

**STATEMENT OF JOHN NEVILLE BRADLEY**

I, **JOHN NEVILLE BRADLEY**, of c/- 100 George Street, Brisbane in the State of Queensland, Director-General, Department of the Premier and Cabinet (DPC), solemnly and sincerely affirm and declare:

**Requirement from Queensland Floods Commission of Inquiry**

1. I have seen a copy of a letter dated 30 January 2012 from the Commissioner, Queensland Floods Commission of Inquiry ("the Commission") to me requiring a written statement under oath or affirmation, which is attachment **JNB-01** and which details the topics my statement should cover.

**Role**

2. I am the Director-General of Queensland Government Department of the Premier and Cabinet having commenced on 6 June 2011. Before becoming the Director-General of DPC I was the Director-General of the Queensland Government Department of Environment and Resource Management (DERM) from 26 March 2009 when DERM was established.
3. I was on leave from 25 December 2010 to the afternoon of 11 January 2011 when I returned from leave early.
4. I have requested that departmental searches be conducted of my computerised diary, my emails and the records at DERM and DPC to provide the information required by the Commission. I base this statement on this information that has been collected as well as my recollection.

**Item 1: his understanding, in the period between 7 January 2011 to 12 January 2011, of which flood operations strategies, referred to in the 'Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam', were used in the operation of Wivenhoe Dam between 7 January 2011 and 12 January 2011 and the times at which each strategy was in use**

5. As noted above, I was on annual leave during the period until the afternoon of Tuesday 11 January 2011.
6. My understanding of the flood operations strategies which were used at that time commenced upon my return from leave late on the afternoon of Tuesday 11 January 2011. My understanding during this period reflected the information provided in the Technical Situation Reports and other communications occurring

via email. I was not personally in contact with the Seqwater Flood Control Centre during the period in question and relied on the information in the Seqwater reports.

7. The searches referred to above have identified emails that were sent to me and from me about the flood situation and the consequent operations of the dams. A bundle of those emails are attached and marked **JNB-02**. Some of these emails have been taken directly from my statement dated 4 April 2011 as published on the Commission's website. It is my understanding that these emails have been redacted by the Commission prior to their online publication.
8. During the period in question, I accepted the situational assessment provided in these reports for the purposes of my role as the Director General, Department of Environment and Resource Management. My focus during this period was on interpreting the implications of the reports on the outlook for downstream flooding from the Dam.
9. At that time of my return from leave, the Technical Situation Report #41 indicated that Seqwater's current objective was:

*"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."*

10. The report stated that as at 5.30 pm, the level of Wivenhoe Dam had been at 74.92m AHD (or 190% of Full Supply Level) and was releasing 6,700 cumecs.
11. I continued to receive reports in relation to Seqwater's management of the reduction in the release rates as reflected in the Technical Situation Reports.
12. An urgent independent review of the operational releases by Seqwater during the flood event was commissioned by the Government prior to the Commission of Inquiry's establishment and prior to Seqwater completing its own review of the Flood Event as required under the Flood Mitigation Manual. This information has previously been provided to the Commission and is among the emails enclosed at **JNB-02**. On Wednesday 12 January 2011, I was forwarded by the SEQ Water Grid Manager a preliminary copy of the Cooper Report. An updated version was received on Thursday 13 January. I was aware that its findings included statements in relation to compliance with the Flood Strategies in the Manual (*see iii, Attachment A*) and concluded that:

*"The strategies set out in the Flood Mitigation Manual have been followed, allowing for the discretion given to making variations in order to maximise flood mitigation effects. The actions taken and decisions made during the Flood Event appear to have been prudent and appropriate in the context of the available knowledge available to those responsible for flood operations and the way events unfolded."*

13. While recognising the limited time in which the report was produced and that it did not represent an audit, I had no reason to dispute the conclusions of the report.

This report was subsequently superseded by the Queensland Government's announcement on 17 January 2011 that it would establish the Commission of Inquiry.

**Item 2: how, if at all, that understanding changed since 12 January 2011 and the reason for the change in understanding**

14. During the course of the Commission of Inquiry, I was generally aware of evidence put before the Commission of Inquiry without personally reviewing or analysing fine detail. I understood that the conclusion of Emeritus Professor Colin Apelt (Commission Exhibit 410) following his review of Seqwater's submission to the inquiry had been that he could not detect any aspect of the operation of Wivenhoe and Somerset Dam that was not in accordance with the manual. I was aware of the contested views provided in evidence before the Commission as to whether Seqwater had increased release rates early enough in the flood event, given the information available to flood engineers at the time of their decision making. While recognising the Commission's comments at Section 2.8 of its Interim Report, I was not aware of any reason to form a different view to the Interim Report's account of Seqwater's operation of the dam during the event.
15. I am now aware of public reporting contending that various exhibits before the Commission of Inquiry appear to record operating strategies in use by Seqwater during the period which are inconsistent with those recorded in other submissions or testimony provided to the Inquiry.
16. Prior to this public reporting on 23 January 2012, I was not aware of a contention that the Seqwater Report at Commission Exhibit 24 may not be a factually accurate representation of the flood operating strategies in use by Seqwater in the period between 7 January 2011 and 12 January 2011.
17. I was aware of the commentary in the Commission's interim report that there may be erroneous or incorrect statements in some evidence about the event log. I was aware that the Commission had found that mistakes were made in the recording of details in the event log and "no note was made of decisions to change the strategy or their basis" and that these findings led to the Commission's Recommendation 2.18 to 2.20 addressing improved processes for the documentation of significant decisions.

**Item 3: his understanding of any differences between the account of the choice and timing of the dam operations strategies employed to manage the flood event in the SEQ Water Grid Manager and Seqwater Ministerial Briefing Note to the Minister for Natural Resources, Mines and Energy and Minister for Trade that appears as attachment SR-12 to Exhibit 11 before the Queensland Floods Commission of Inquiry ('January Report') and the Seqwater report titled 'January 2011 Flood Event - Report on the operation of Somerset Dam and Wivenhoe Dam' and dated 2 March 2011 that appears as Exhibit 24 before the Queensland Floods Commission of Inquiry ('March Report')**



18. Until the media reporting referred to above, I had not independently been aware of the differences in the account of the choice and timing of the dam operations strategies in the two documents concerned.

**Item 4: when he first became aware of the differences, if any, referred to in paragraph 3 above**

19. I became aware of the apparent difference in the description of strategies used from media reports on and after 23 January 2012.

**Item 5: all discussions, correspondence, meetings or briefings he participated in, in relation to the January Report and the March Report, and in respect of these identifying any that related to the differences between the reports referred to in paragraph 3 above**

20. I received a copy of the January Report as it was Attachment 5 to the Ministerial Briefing Note at SR-12. This briefing note was requested on Saturday January 15 at 10.30 am by the Minister's Office in order to provide information for Minister Robertson prior to the Emergency Cabinet meeting held on 17 January 2011.
21. I convened a 2pm teleconference with Seqwater and the SEQ Water Grid Manager to agree on the contents required from each agency of the Ministerial Briefing Note which became SR-12. The discussion was focussed on arranging background advice on a broad range of topics including the history of the dam and full supply level, the flood mitigation manual, the Cooper report referred to above and the Flood Event report to be provided by SEQ Water. I do not recall this meeting discussing any specific issues in relation to the event log or dam release strategies in use during the flood event.
22. I forwarded the preliminary draft to the Minister's Office via email at 10.33 pm on Sunday night and met with the Minister to discuss the general brief with Seqwater and the SEQ Water Grid Manager at 9 am on Monday 17 January 2011, when the final version of the January report was tabled. My recollection is that the discussion in relation to the material provided by Seqwater related to the preliminary analysis of the potential effects of lower dam levels prior to the flood event. It was also noted that the Cooper report had indicated no issues of concern in relation to the Flood Mitigation Manual at that stage.
23. Seqwater submitted the March Report to DERM in accordance with the requirements of the Manual of Operational Procedures for Flood Mitigation at Wivenhoe and Somerset Dam, indicating that it would form part of Seqwater's forthcoming submission to the Commission of Inquiry. Immediately upon receipt of the document I provided a copy to the Commission and indicated it would be publicly released as a matter of urgency subject to the Commission having no objections to this course of action. On 7 March 2011, the Department of Environment and Resource Management released the report via its website. The DERM media statements in my name indicated that the Seqwater report was expected to be considered by the Commission of Inquiry and that DERM would consider the recommendations in the Interim Report of the Commission of

Inquiry before responding formally to Seqwater's report and implementing any regulatory changes required prior to the next wet season.

24. I am not aware of any discussions, correspondence, meetings or briefings in relation to differences between the two reports occurring prior to the publication of media articles on the 23 January 2012. After the publication of the report in the *Australian* of 23 January 2012, I was forwarded a copy of the Statement which Seqwater provided to the Commission on 23 January 2012 in response to the questions arising from the article. I also received and commented on supporting briefing material in relation to potential media enquiries on the day of the *Australian* article publication of 23 January 2012. Attached at **JNB-03** is the relevant material.

**Item 6: any decision made, or action taken, by him in relation to the differences, if any, referred to paragraph 3 above.**

25. I have not taken any decisions or actions in relation to the differences pending the consideration of the Commission.

I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the *Oaths Act 1867*.

Signed

John Neville Bradley

Taken and declared before me, at Brisbane this first day of February 2012

.....  
Solicitor/Barrister/Justice of the  
Peace/Commissioner for Declarations

"JNB 1"

Our ref: Doc 1837293

30 January 2012

John Bradley  
Director-General  
Department of the Premier and Cabinet  
PO Box 15185  
City East, QLD, 4002

### REQUIREMENT TO PROVIDE STATEMENT TO COMMISSION OF INQUIRY

I, Justice Catherine E Holmes, Commissioner of Inquiry, pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* (Qld), require John Bradley to provide a written statement, under oath or affirmation, to the Queensland Floods Commission of Inquiry, in which the said John Bradley gives an account of:

1. his understanding, in the period between 7 January 2011 to 12 January 2011, of which flood operations strategies, referred to in the 'Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam', were used in the operation of Wivenhoe Dam between 7 January 2011 and 12 January 2011 and the times at which each strategy was in use
2. how, if at all, that understanding changed since 12 January 2011 and the reason for the change in understanding
3. his understanding of any differences between the account of the choice and timing of the dam operations strategies employed to manage the flood event in the SEQ Water Grid Manager and Seqwater Ministerial Briefing Note to the Minister for Natural Resources, Mines and Energy and Minister for Trade that appears as attachment SR-12 to Exhibit 11 before the Queensland Floods Commission of Inquiry ('January Report') and the Seqwater report titled 'January 2011 Flood Event – Report on the operation of Somerset Dam and Wivenhoe Dam' and dated 2 March 2011 that appears as Exhibit 24 before the Queensland Floods Commission of Inquiry ('March Report')
4. when he first became aware of the differences, if any, referred to in paragraph 3 above
5. all discussions, correspondence, meetings or briefings he participated in, in relation to the January Report and the March Report, and in respect of these identifying any that related to the differences between the reports referred to in paragraph 3 above

400 George Street Brisbane  
GPO Box 1738 Brisbane  
Queensland 4001 Australia  
Telephone 1300 309 634  
Facsimile +61 7 3405 9750  
www.floodcommission.qld.gov.au  
ABN 82 696 762 534

6. any decision made, or action taken, by him in relation to the differences, if any, referred to paragraph 3 above.

In addressing these matters, John Bradley is to:

- provide all information in his possession and identify the source or sources of that information;
- make commentary and provide opinions he is qualified to give as to the appropriateness of particular actions or decisions and the basis of that commentary or opinion.

All documents relating to the matters set out in the Statement should be included as attachments to the statement.

The statement is to be provided to the Queensland Floods Commission of Inquiry by 4pm Wednesday, 1 February 2012.

The statement can be provided by post, email or by arranging delivery to the Commission by emailing [info@floodcommission.qld.gov.au](mailto:info@floodcommission.qld.gov.au).



Commissioner  
Justice C E Holmes

" JNB 2 "

Page 1 of 1

Edmonds Rebecca

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Monday, 17 January 2011 8:31 AM  
**To:** 'Geoff Stead'  
**Cc:** Bradley John  
**Subject:** Talking points\_Wivenhoe Dam releases  
**Attachments:** Talking points\_Wivenhoe Dam releases.docx

Geoff,

Updated version including notes about review.

Dan

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

1/04/2011

TRIM reference: D/11/

Enquiry received:

Purpose: Wivenhoe Dam release

## ***Impacts of Wivenhoe and Somerset dams***

- Wivenhoe and Somerset dams reduced the flood peak by 2.5 metres in the City and 5.5 metres at Moggill.
- Without the dams, up to 13,000 more houses would have been flooded. They prevented up to \$1.6 billion of damages.
- Without the dams, major flooding would have lasted for three days.
- Wivenhoe and Somerset dams controlled 2.6 million megalitres of floodwater. This is 1.1 million megalitres more than in 1974.
- The dams controlled these floodwaters, providing time for peak flows from the Lockyer and Bremer to pass.
- Total flow in the Brisbane River in 1974 was 9,500 cubic metres per second. The estimated flow from this event would have been 13,000 cubic metres per second if Wivenhoe did not exist.

## ***Operation of Wivenhoe and Somerset dams***

- The dams were operated strictly in accordance with the approved Operational Procedures.
- The Operational Procedures were developed by Australia's best hydrologists, including:
  - Professor Colin Apelt, Head of Department, Department of Civil Engineering, University of Queensland
  - Mr Eric Lesleighter, Principal Hydraulic Engineer and Chief Engineer Water Resources, Snowy Mountains Engineering Corporation.
- Professor Apelt is Chair of the Brisbane City Council flood taskforce.

## ***Flood report***

- There is a regulatory requirement that Seqwater prepare a flood report.
- By regulation, the report will be submitted within six weeks of the gates closing.

- The report will be a comprehensive summary of all procedures, actions, outcomes and processes during the event. It will consider factors impacting on the protection of urban areas.
- The report will be reviewed by the Dam Safety Regulator and independent experts.
- The report and its review will be submitted to the Government and inform a review of the Operational Procedures.
- The review of Operational Procedures will utilise an expert panel of, including representatives of the Bureau of Meteorology and Councils.

### ***Rainfall forecasts***

- Dam operations were based on forecasts provided by the Bureau of Meteorology.
- The rainfall during the event exceeded all forecasts.
- Rainfall was local and intense, as demonstrated by the tragic events in Toowoomba.
- It is unreasonable to expect that dam operators could foresee these events.

### ***Pre-emptive releases***

- The dam has been designed for both water supply and flood mitigation.
- Detailed Operational Procedures have been developed by leading hydrologists over many years, with a review as recently as 2009. The procedures are based on the current full supply level.
- Water was released from the dam on 20 of the 25 days leading up to this event.
- A total of 1,450 million megalitres was released between October 2010 and this event.
- These releases isolated some residents and inconvenienced many more.
- The clear decision making process in the Manual was set down since 1992 and was reviewed in 2009 to reflect the installation of the Wivenhoe Spillway upgrade. That review included independent experts from the Bureau of Meteorology, Sunwater, Brisbane City Council and the Department of Environment and Resource Management.
- It is a manual which reflects safe operating practices based on detailed hydrological analysis and technical assessments of dam safety.

### ***Peak releases***

- Outflows from Wivenhoe Dam peaked on Tuesday 11 January 2011 at 397,000 ML.
- The impact of these releases was minimised by closing down releases quickly once inflows into the dam had peaked.
- The release rate was higher for three hours, but not sustained.
- These releases accounted for only part of the increase in river levels. The Bureau of Meteorology has stated that, even at their peak, outflows from Wivenhoe Dam contributed slightly more than half the flood arriving in Brisbane (Courier Mail, 14 January).

#### ***Large releases earlier***

- Releasing large volumes of water over the weekend would have had major impacts on the rural communities of the Brisbane Valley. Bridges would have been cut and communities would have been isolated with little notice.
- Over the weekend, neither rainfall forecasts nor the rain on the ground indicated with certainty that urban areas would be impacted.

#### ***Increases to above 200% (level of fuse plugs)***

- Wivenhoe Dam is not designed to overtop. If it did, the dam would fail and the resulting damage and loss of life would be at least 100 to 1,000 times greater than that currently being experienced.
- To ensure that this never occurs, the dam has been designed with plugs that automatically open when it reaches more than 200% of full supply volume.
- Once opened, the rate of release through these plugs cannot be varied.
- The plugs continue to release water at this rate until the dam reaches full supply level.
- The plugs would take four to six months of dry weather to repair, rendering the flood storage compartment useless.

#### ***Changes to dam operations***

- The dam spillway was upgraded in 2007, increasing its release capacity in extreme floods. This upgrade is designed to ensure the structural integrity of the dam during floods significantly worse than the current event.



- A further upgrade of the spillway is scheduled to occur by 2035, in order to comply with ANCOLD upgrade. This upgrade is for even more extreme floods. It would have had no impact on the management of the current flood.
- Options to increase the full supply level have been investigated. Had they been implemented, these options would have reduced the flood compartment, resulting in higher releases earlier.

**Bradley John**

---

**From:** Bradley John  
**Sent:** Sunday, 16 January 2011 10:33 PM  
**To:** Robertson Stephen @ Ministerial  
**Cc:** 'Lance McCallum ( [REDACTED] ); 'Tim Watts'  
**Subject:** FW: Cabinet in confidence - Ministerial brief - Flood event and Wivenhoe Dam  
**Attachments:** Letter\_from\_Stephen\_Robertson\_MP\_RE\_Release\_of\_Water\_from\_Key\_Storages[1].pdf; Letter\_to\_Minister\_-\_flood\_management[1].docx; BrianCooperCV09122010.pdf; Brian Cooper - final report.docx; Brian Cooper - final report attachment.xlsx; Seqwater Ministerial\_Briefing\_Note\_January\_17\_2011\_Final\_Draft\_for\_distribution[1].docx; Seqwater Jan\_2011\_Flood\_Event\_Ver\_1\_draft\_for\_distribution[1].docx; FINAL Ministerial\_Brief\_-\_Wivenhoe\_Operations[3].docx; Talking points\_Wivenhoe Dam releases.docx

Minister and Lance

Apologies for the late hour at which this arrives. SEQWGM will bring hard copies of the assembled folders including all attachments to the 9 am Meeting.

If you DID have time to peruse anything before the meeting I recommend the document "Seqwater Ministerial Briefing Note" which contains some new information of interest.

We will see you at 9 am in your offices at 61 Mary Street,

thanks  
John B

---

**From:** Elaina Smouha [REDACTED]  
**Sent:** Sunday, 16 January 2011 10:14 PM  
**To:** Bradley John  
**Cc:** Dennien Barry @ SEQWGM; spiller daniel @ SEQWGM; WaterGridMedia; Best Debbie; pborrows  
**Subject:** Cabinet in confidence - Ministerial brief - Flood event and Wivenhoe Dam

John

Attached is the Ministerial Brief and accompanying attachments for the Emergency Cabinet meeting scheduled on 17 January 2011.

Regards

Elaina

Elaina Smouha  
Director, Governance and Regulatory Compliance  
SEQ Water Grid Manager

[REDACTED]  
Visit: Level 15, 53 Albert Street Brisbane  
Post: PO Box 16205, City East QLD 4002  
ABN: 14783 317 630

1/04/2011

**Bradley John**

---

**From:** Bradley John  
**Sent:** Sunday, 16 January 2011 7:41 PM  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** Re: Urgent - Cabinet in confidence

Lance

I am sorry for the delay on the brief requested for tonight for Minister - Barry and his team have been working hard all day on this among their other issues - but have had challenges with input from Seqwater.

Seqwater has struggled to provide their input in a congenit form and so Barry, Dan and others are still there awaiting for some stuff and finalising it at the end of a very long week.

We think we are about 60 to 90 minutes away at this point. I will forward it to you and Minister as soon asap and we will talk through at 9 am.

John B

---

**From:** Bradley John  
**Sent:** Saturday, January 15, 2011 10:33 AM  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** Re: Urgent - Cabinet in confidence

Thanks Lance - we have anticipated the need for something like this - seqwgm work underway - I will talk to SEQWGM when out of SDMG now on.

Regards  
John B

---

**From:** Lance McCallum [mailto:[REDACTED]]  
**Sent:** Saturday, January 15, 2011 10:30 AM  
**To:** [REDACTED]; Bradley John  
**Cc:** [REDACTED]  
**Subject:** Urgent - Cabinet in confidence

John/Dan

---

The Minister has asked that preparation be done over the weekend that will enable him to go to the Emergency Cabinet meeting on Monday with a position on how the Govt is going to handle the issues of reviewing operational decisions made by SEQwater and SEQWGM in relation to releases from the dams.

I understand that in further to the recent independent review of the Wivenhoe operations manual the WGM is also undertaking further work by compiling a list of the operational experts who authored the manual.

Happy to discuss further.

Thanks, Lance.

1/04/2011

Edmonds Rebecca

---

**From:** Elaina Smouha [REDACTED]  
**Sent:** Saturday, 15 January 2011 1:42 PM  
**To:** Bradley John  
**Cc:** [REDACTED] Reilly  
Bob  
**Subject:** Cabinet in confidence - discussion points  
**Attachments:** Public inquiry strategy - brief.docx

John

Attached are some discussion points for our 2pm teleconference about Monday's Emergency Cabinet meeting.

Regards

Elaina

1/04/2011

## Discussion points for teleconference

### What is the objective?

- a) Ensuring public transparency
- b) To answer the State's questions on the performance of Wivenhoe Dam operations
- c) Preparation for a public inquiry
- d) Normal and logical course of conduct after the occurrence of a major flood event – Review requirement under the Flood Mitigation Manual

### Background

- 1) Design of Dam – Storages/Spillway upgrade (Responsible: Seqwater)
- 2) How does Wivenhoe Dam work as a flood mitigator? Stats on how much did Wivenhoe Dam knock off the flood peak? Priority to get out to the public (Responsible: Seqwater)
- 3) Development of Flood Mitigation Manual (Responsible: Seqwater/DERM)
  - a. Four strategies
  - b. History of Flood Mitigation Manual updates and peer review
- 4) Responsibility under the *Water Supply (Safety and Reliability) Act 2008* (Responsible: DERM)
  - a. What is the formal reporting process following a major flood event?
- 5) "The Event" – operation of Wivenhoe Dam (Responsible: Seqwater)
  - a. Event report under the Flood Mitigation Manual
- 6) "The Event" – management of the Water Grid emergency under the SEQ Water Grid Emergency Response Plan (Responsible: SEQ Water Grid Manager)
- 7) What next?
  - a. SWOT
    - i. Community feedback
    - ii. A significant (from a national perspective)

### Seqwater report

Flood Mitigation Manual requires a report to the Chief Executive after a significant flood event, on the effectiveness of the operational procedures:

- Get more comprehensive report from Brian Cooper? – review appropriateness of trigger levels – take into account the accuracy of rainfall forecasts provided by BOM at the time – reliability of weather forecasts.
- Set up expert panel for Flood Mitigation Manual review
- Communication Protocol and incorporation into the Flood Mitigation Manual (revisit in the next fortnight)

Seqwater to procure review.

Urgent accelerated review due to anticipated further rainfall.

**Bradley John**

---

**From:** Bradley John

**Sent:** Saturday, 15 January 2011 10:34 AM

**To:** [REDACTED]

**Cc:** [REDACTED]

**Subject:** Re: Urgent - Cabinet in confidence

Thanks Lance - we have anticipated the need for something like this - seqwgm work underway - I will talk to SEQWGM when out of SDMG now on.

Regards

John B

---

**From:** Lance McCallum [REDACTED]

**Sent:** Saturday, January 15, 2011 10:30 AM

**To:** [REDACTED] Bradley John

**Cc:** [REDACTED]

**Subject:** Urgent - Cabinet in confidence

John/Dan

The Minister has asked that preparation be done over the weekend that will enable him to go to the Emergency Cabinet meeting on Monday with a position on how the Govt is going to handle the issues of reviewing operational decisions made by SEQwater and SEQWGM in relation to releases from the dams.

I understand that in further to the recent independent review of the Wivenhoe operations manual the WGM is also undertaking further work by compiling a list of the operational experts who authored the manual.

Happy to discuss further.

Thanks, Lance.

**Lynette Williams**

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 12:35 PM  
**To:** Bradley John; John Bradley @ Home; Dennien Barry @ SEQWGM  
**Subject:** Water quantity management  
**Attachments:** Water quantity management.docx

Brief attached.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

## **Water quantity management: 14 and 15 January 2011**

### **Recommendations**

That Ministers:

- **note** that treated water reservoirs in central SEQ are at critically low levels and reducing, due to current demand versus current production
- **note** that additional facilities will be supplying into central SEQ from midday 14 January 2011
- **note** that, with this additional supply, the Water Grid will be able to meet the expected clean up requirements from the morning of Saturday 15 January 2011. This will be subject to all key assets remaining operational and reservoir storage being increased from 150 to 300 ML overnight
- **note** that all water continues to be safe. A boiled water notice over central SEQ would only be required in the event of a major asset failure (note that a notice applies in western Council areas)
- **approve** media statements encouraging residents outside of the affected areas to conserve water
- **approve** use of recycled water for washdown be maximised, including purified recycled water from the Western Corridor Recycled Water Project (WCRWP). The WCRWP will supply at treatment plants and to certain locations along the pipeline (including at Lowood where water supply is only now being recommissioned from the Lowood water treatment plant)
- **approve** that announcements regarding price discounts for water be deferred until 15 January 2011, when supply is expected to be secure in order to avert a demand trigger
- **note** that operational measures are being implemented to minimise water use, including some minor pressure reductions outside of the impacted areas.

### **Background**

- The flood has impacted on key water treatment plants, resulting in damage and restricting output.
- Even with interconnections, central SEQ relies upon at least 200 ML/day of supply from the two Mt Crosby water treatment plants.
- Both of these plants were impacted by the flood, causing them to be unavailable for extended periods and resulting in reduced reservoir levels be reduced from being full (about 380 ML) on 11 January 2011 to less than 150 ML this morning.
  - The Mt Crosby East water treatment plant was inundated, causing damage to infrastructure and meaning that has been offline until midday today.
  - Production from the Mt Crosby West water treatment plant was constrained due to highly turbid raw water.
  - Production from the North Pine water treatment plant has also been constrained.



- Supply from other sources into central SEQ has now been maximised, including from the desalination facility via the Southern Regional Water Pipeline. The desalination facility is currently operating at full capacity.
- With these supplies, a total of about 400 ML/day was being supplied into central SEQ on the morning of 15 January 2011. At this rate, reservoir levels were continuing to decline at a rate of about 30 ML/day.

#### **Water quality**

- All water supplied to central SEQ meets water quality requirements.
- Adjusted operating parameters were agreed with Queensland Health for the Mt Crosby water treatment plant, based on the risks associated with current catchment conditions, including very high levels of dilution.
- A boiled water notice is highly unlikely to be required due to bulk water supply issues. Notices may be required due to local pipe bursts or if pipes in an area run dry, allowing ingest of stormwater and potential contamination.

#### **Current status**

- Additional supplies are online as of midday:
  - East Bank water treatment plant had just commence supply at 110 ML/day and ramping up to 160 ML/day
  - North Pine water treatment plant will increase production by 50 ML/day to 150 ML/day
- Provided that all key assets remain operational, all clean up requirements should be able to be met.
- Even with this additional production, supply remains highly vulnerable to operational failure of key assets (including any of the water treatment plants and interconnections).
- Resilience will be achieved by refilling reservoirs this evening, using the additional production.

#### **Demand management**

- Until reservoirs have been refilled overnight, water use should be prioritised for household cleanup in impacted areas.
- To conserve available supplies on the afternoon of 14 January 2011, it is strongly recommended that:
  - residents outside the affected areas be immediately asked to "do their bit" by minimising water use
  - recycled water be made available for carting, including purified recycled water from the WCRWP (note that the volumes supplied will be relatively low compared to expected total demand)
  - only key roads be washed down on 14 January, and only as required for health and safety reasons. Consideration should be given to dry methods of clean up

- delay clean up of non-essential public areas, such as parks, until at least Sunday 16 January 2011
  - brief Council and entity call centre staff in affected areas to organise swift response and repairs to water leaks and pressure problems.
- Standpipes are being constructed at key locations along the WCRWP to enable purified recycled water to be supplied for clean up, including at Lowood where potable supplies will only be recommissioned today.
- Water from Lowood WTP should be prioritisation for human consumption.
- Linkwater and Queensland Urban Utilities are implementing basic measures to reduce system losses and consumption, by reducing system pressure. Reductions will occur in areas that have not been impacted by the flood.

#### **Announcement regarding water discount**

- It is recommended that the announcement of the discount for water supply be delayed until the morning of 15 January.
- By this time reservoirs should have been refilled and the risk of supply failure minimal.
- Before that time, there is a risk that the announcement will encourage increased consumption that cannot be met, especially in the event of an asset failure.

#### **Contingency planning**

- A detailed contingency plan has been developed, for implementation should key reservoirs reach critically low levels or there is an asset failure.
- The contingency plan involves:
  - asking major customers to reduce or cease water use (such as the brewery and Coca Cola)
  - further reducing system pressure across central SEQ
  - adjusting supply zones to assist depleted areas
  - isolation of areas that will have minimal customer and network impact (industrial areas)
  - suspend all capital and planned works that may affect supplies (probably already done).
- Were levels to continue to decline, some residential areas would need to be isolated.

**Lynette Williams**

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 9:47 AM  
**To:** John Bradley @ Home; Bradley John; Dennien Barry @ SEQWGM  
**Subject:** Demand update

John,

QUU is coming back with a conservation plan with a range of measures, including pressure reduction. It will be done by 10am.

Reservoir levels are currently holding, without a major increase in demand at bulk level yet.

Some reservoirs are critically low. For example, Wellers Hill has 6.7 hours to failure based on current demand (assuming no inflows to the reservoir). This is a critical risk should we lose production from one of the sources (ie West Bank WTP needs to be wound back to 150 ML/day production) or a mains burst results in water losses.

Regards,  
Dan

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 9:09 AM  
**To:** John Bradley @ Home; Bradley John; Dennien Barry @ SEQWGM  
**Subject:** Status

Current status is as follows.

At East Bank WTP:

- Every electrical is ready to go.
- Isolating thermal coupling interlocks. Second crew in air, due on site at 9am. Require 30 minutes to complete work once on the ground.
- Using manual controls, with some safeguards shutdown.
- Aim to commence production at 10am, subject to any mechanical failures (as occurred twice yesterday).
- If successful, should be able to commence production at 10am.

At West Bank WTP, we have increased production to 220 ML/day (20 ML/day increase).

Linkwater is having a teleconference with QUU now. We will provide advice about demand trends soon.

Teleconference is likely to recommend that pressure be reduced immediately across areas not affected by flooding. We will provide further advice.

Regards,  
Dan

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 8:11 AM  
**To:** spiller daniel @ SEQWGM; 'peter.mcmanamon@seqwg.com.au'; 'Peter Borrows'; 'keith.davies@seqwg.com.au'; [REDACTED]  
**Cc:** Dennien Barry @ SEQWGM; Best Debbie; Bradley John  
**Subject:** RE: Proposed changes to emergency management roles

All,

Thanks for agreement to the proposed changes.

Peter Mc is dedicated to scenario and response planning today, in the event that additional treatment capacity does not become available.

Keith will shadow me today, as part of a handover.

I will send out an email to all entities advising of the change.

Regards,

Dan

---

**From:** Dan Spiller  
**Sent:** Friday, January 14, 2011 12:41 AM  
**To:** 'peter.mcmanamon@seqwg.com.au'; 'Peter Borrows'; 'keith.davies@seqwg.com.au'; [REDACTED]  
**Cc:** Barry Dennien; 'Best Debbie'; 'Bradley John'  
**Subject:** Proposed changes to emergency management roles

All,

The flood response is likely to require ongoing high level involvement by the Water Grid entities over at least a week.

Across all roles, I am anxious that we implement measures to manage staff exhaustion.

As part of this, Barry and I recommend changes to the lead emergency management roles. In particular, we propose that a schedule be implemented with two executives on schedule at all times. These executive would be responsible for:

- Government liaison and media spokesperson
- Emergency manager, as defined in the ERP.

We propose that the liaison and spokesperson role be rotated between Barry and myself and the emergency manager role rotated between Peter Mc and Keith. This rotation would enable Peter B to continue to focus on operational issues.

Below is a draft timetable for your review and comment. I have listed myself as the emergency manager tomorrow, but could transfer responsibility to Peter Mc this morning, should he be available and willing (noting the late notice).

I seek your comments and advice about this approach.

I will also speak to key people tomorrow about options to reduce the number of meetings that are required and to focus those that remain.

Thank you for your ongoing support. Please speak to me if you have any queries or require any further information.

Regards,

Daniel Spiller

		Friday	Sat	Sun	Mon	Tues
Exec 1 (media/gov)	AM	Barry	Dan	Barry	Dan	Barry
	PM	Barry	Dan	Barry	Dan	Barry
Exec 2 (emergency)	AM	Dan	Keith	Peter M	Keith	Peter M
	PM	Dan	Keith	Peter M	Keith	Peter M

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

**Lynette Williams**

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 8:25 AM  
**To:** Bradley John  
**Subject:** FW: Need to talk - We cannot make the free water offer until East Bank is up and going.

**From:** Dan Spiller  
**Sent:** Friday, January 14, 2011 8:25 AM  
**To:** Barry Dennien  
**Subject:** Need to talk - We cannot make the free water offer until East Bank is up and going.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

**Lynette Williams**

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 5:52 AM  
**To:** Bradley John; Best Debbie  
**Subject:** Fwd: Demand management media release

Begin forwarded message:

**From:** Geoff Stead <[REDACTED]>  
**Date:** 14 January 2011 5:46:09 AM GMT+10:00  
**To:** Dan Spiller [REDACTED]  
**Subject:** Re: Demand management media release

Thanks dan, having a lot of problems getting GMU approvals - don't know why - but will continue to pitch them up

---

**From:** Dan Spiller  
**To:** Geoff Stead  
**Cc:** Tim Watts; Barry Dennien ; 'Bradley John' ; [seqwgm](#) [REDACTED]  
**Sent:** Fri Jan 14 00:46:15 2011  
**Subject:** Demand management media release

Geoff,

Given water balance considerations, we believe that there is a need to strongly encourage efficient water use by residents outside the affected area. Attached is an updated version of the previously proposed press release for your consideration and approval.

Regards,

Dan

---

**From:** WaterGridMedia [REDACTED]  
**Sent:** Friday, January 14, 2011 12:36 AM  
**To:** Dan Spiller  
**Cc:** [seqwgm](#) [REDACTED]  
**Subject:**

Dan



Draft Media Release for on-forwarding and approval by Minister Roberston's office and then Government Media Office.

Cheers

John Adcock

This e-mail, including any attached files, may contain confidential and privileged information for the sole use of the intended recipient. Any review, use, distribution, or disclosure by others is strictly prohibited. If you are not the intended recipient (or authorized to receive information for the intended recipient), please contact the sender by reply e-mail and delete all copies of this message. Queensland Bulk Water Transport Authority (trading as LinkWater). This email is copyright. LinkWater is not liable if an attachment is altered without its written consent and does not accept liability in connection with the transmission of information using the internet. This notice should not be deleted or altered.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and /or publication of this email is also prohibited.

Unless stated otherwise, this email represents only the views of the sender and not the views of the Queensland Government.

Please consider the environment before printing this email.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

**Lynette Williams**

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 1:31 AM  
**To:** Bradley John  
**Cc:** Best Debbie; Dennien Barry @ SEQWGM  
**Subject:** Stand alone towns

John,

Will get short report to you this morning. Major progress yesterday means that almost all should be supplied by end tomorrow. As a result, your report template and our process is probably unnecessary.

Dan

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

**Lynette Williams**

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 1:26 AM  
**To:** Bradley John  
**Subject:** 6.30 teleconference

[REDACTED] phone  
[REDACTED] # code

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

**Lynette Williams**

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 12:46 AM  
**To:** 'Geoff.Stead' [REDACTED]  
**Cc:** 'Tim.Watts' [REDACTED]; Dennien Barry @ SEQWGM; Bradley John; seqwgm [REDACTED]  
**Subject:** Demand management media release  
**Attachments:** MEDIA RELEASE\_Residents and Businesses urged to use water wisely\_14 January 2011.doc

Geoff,

Given water balance considerations, we believe that there is a need to strongly encourage efficient water use by residents outside the affected area. Attached is an updated version of the previously proposed press release for your consideration and approval.

Regards,  
Dan

---

**From:** WaterGridMedia [REDACTED]  
**Sent:** Friday, January 14, 2011 12:36 AM  
**To:** Dan Spiller [REDACTED]  
**Cc:** [seqwgm](#) [REDACTED]  
**Subject:**

Dan

Draft Media Release for on-forwarding and approval by Minister Roberston's office and then Government Media Office.

Cheers  
John Adcock

This e-mail, including any attached files, may contain confidential and privileged information for the sole use of the intended recipient. Any review, use, distribution, or disclosure by others is strictly prohibited. If you are not the intended recipient (or authorized to receive information for the intended recipient), please contact the sender by reply e-mail and delete all copies of this message. Queensland Bulk Water Transport Authority (trading as LinkWater). This email is copyright. LinkWater is not liable if an attachment is altered without its written consent and does not accept liability in connection with the transmission of information using the internet. This notice should not be deleted or altered.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.



## Media Release

### **MEDIA RELEASE**

**14 JANUARY 2011 – 0630h**

### **RESIDENTS AND BUSINESSES URGED TO USE WATER WISELY**

Despite significant operational challenges caused by flooding, maintaining clean water for the immediate flood recovery remains one of the highest priorities for the Water Grid.

"It is really important that we all use our precious clean water supplies wisely over coming days" said XXX.

"Our priority must be on the clean-up of areas directly impacted by flooding".

Within flooding affected areas, residents and businesses should wisely use what water is needed to clean-up flood impacts to living areas and essential items.

Sensible water conservation practices are strongly encouraged such as using a high pressure hose or trigger nozzle.

Outside areas directly impacted by flooding, residents and businesses are strongly urged to conserve precious clean water by adopting the same cautious water use practices that saw us through the drought. These include:

- take only short 4 minute showers
- don't water gardens
- don't hose buildings, driveways and footpaths
- delay washing your cars
- don't fill pools
- only use dishwashers when you have a full load
- turn-off taps when you don't need water

"During the drought south-east Queenslanders showed how well we could conserve water. This latest crisis means residents and businesses outside the directly flooded affected areas need to do the same again" XXX said.

"I can assure everyone who has not been directly impacted by flooding that by conserving valuable water over the next few days you will make a real and important contribution to the flood recovery effort" said XXX.

The Water Grid is working closely with local councils to prioritise water use for the cleanup of key roads first, followed by other areas later after water treatment plants are operating normally again.

### **ENDS**

Notes to the editor



## About the Water Grid

Established in June 2008 in response to the crippling Millennium Drought, the Water Grid represents one of Australia's largest investments in water infrastructure.

Through a network of climate resilient water sources, treatment facilities, new two-way pipes and existing pipelines, the Water Grid gives the South East Queensland region the ability to support water demands, water quality, economic prosperity and lifestyle - regardless of climate change and population growth.

For further information visit [www.watergrid.com.au](http://www.watergrid.com.au)

**For further details contact the Water Grid Communications Unit on:**

**Ph: (07) 3247 3000 | Email: [media@segwgm.com.au](mailto:media@segwgm.com.au)**

## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 12:41 AM  
**To:** 'peter.mcmanamor [REDACTED]'; 'Peter Borrows'; 'keith.davies [REDACTED]'  
**Cc:** Dennien Barry @ SEQWGM; Best Debbie; Bradley John  
**Subject:** Proposed changes to emergency management roles

All,

The flood response is likely to require ongoing high level involvement by the Water Grid entities over at least a week.

Across all roles, I am anxious that we implement measures to manage staff exhaustion.

As part of this, Barry and I recommend changes to the lead emergency management roles. In particular, we propose that a schedule be implemented with two executives on schedule at all times. These executive would be responsible for:

- Government liaison and media spokesperson
- Emergency manager, as defined in the ERP.

We propose that the liaison and spokesperson role be rotated between Barry and myself and the emergency manager role rotated between Peter Mc and Keith. This rotation would enable Peter B to continue to focus on operational issues.

Below is a draft timetable for your review and comment. I have listed myself as the emergency manager tomorrow, but could transfer responsibility to Peter Mc this morning, should he be available and willing (noting the late notice).

**I seek your comments and advice about this approach.**

I will also speak to key people tomorrow about options to reduce the number of meetings that are required and to focus those that remain.

Thank you for your ongoing support. Please speak to me if you have any queries or require any further information.

Regards,

Daniel Spiller

		Friday	Sat	Sun	Mon	Tues
Exec 1 (media/gov)	AM	Barry	Dan	Barry	Dan	Barry
	PM	Barry	Dan	Barry	Dan	Barry
Exec 2 (emergency)	AM	Dan	Keith	Peter M	Keith	Peter M
	PM	Dan	Keith	Peter M	Keith	Peter M

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution

## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Friday, 14 January 2011 12:16 AM  
**To:** 'fishiemar' [REDACTED]; 'Claire Moffat' [REDACTED]; 'Janet Cumming' [REDACTED]; 'HEOC PHIC' [REDACTED]; 'Naomia Ford' [REDACTED]; 'SHECC' [REDACTED]; Bradley John; John Bradley @ Home; 'dar' [REDACTED]; 'david.cunliffe' [REDACTED]; Dennien Barry @ SEQWGM; seqwgm [REDACTED]; 'jpruss' [REDACTED]; 'sstevensor' [REDACTED]; 'bmyatt' [REDACTED]; 'acanning' [REDACTED]; mark.crabtree [REDACTED]; 'jeff.browne' [REDACTED]; 'heidigrodecki' [REDACTED]; 'Tim.Watts' [REDACTED]; 'lance.mccallum' [REDACTED]  
**Cc:** Best Debbie; Reilly Bob; smouha elaina @ SEQWGM; Media @ SEQWGM  
**Subject:** RE: Record of teleconference 12 January 2011

All,

The Mt Crosby West Bank WTP has increased production to 180 ML/day, with treated water remaining in the range of 0.4 to 0.8 NTU. It is currently being increased to 200 ML/day, with operators optimistic that at least this level of production can be achieved while remaining within the operating parameters that were agreed at the teleconference last night.

Given the increased output, until decided otherwise, operators will seek to ensure that water treatment plant is operated within the agreed operating parameters. We will continue to seek to increase production to 250 ML/day, but will limit it to less if further increases would result in exceeding the agreed parameters.

There is likely to be an increase in demand tomorrow, as the river level falls and clean-up commences. River levels are currently at 2.75 m at the Port Office gauge, which is below the major flooding level defined by Brisbane City Council. The BoM has verbally advised that it expects levels to fall to 2.3 to 2.4 metres by 5pm tomorrow, which remains within the moderate flooding range.

A teleconference has been arranged with Grid entities for 10am to assess the water balance, including the likely timing of commencement of production at the East Bank WTP and the outcomes of trials to increase the production from the North Pine WTP.

Without this additional production, the Grid will have limited capacity to meet demand that is significantly greater than it was today. Should the additional production not be available, scenarios and responses will need to be quickly agreed with relevant agencies, including consideration of health impacts. A teleconference may need to be urgently called with Queensland Health at about 10.30am to discuss options. Prior to this occurring, entities will update and refine potential supply scenarios.

To minimize these risks, the WGM recommends that residents outside the impacted area be strongly urged to conserve water. Within the affected area, until the East Bank WTP is consistently treating water, we recommend that the use of water to wash down roads and driveways be limited to what is required for health and safety reasons.

Please call me or [REDACTED] if you require any further information.

Regards,  
Dan

---

**From:** Dan Spiller  
**Sent:** Thursday, January 13, 2011 8:28 PM  
**To:** 'fishiemar' [REDACTED]; 'Claire Moffat' [REDACTED]; 'Janet Cumming' [REDACTED]; 'HEOC PHIC' [REDACTED]; 'Naomia Ford' [REDACTED]; 'SHECC' [REDACTED]; 'Bradley John'; 'jbs2000' [REDACTED]; 'dar' [REDACTED]; 'david.cunliffe' [REDACTED]; Barry Dennien;







## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Thursday, 13 January 2011 8:28 PM  
**To:** 'fishiemar' [REDACTED]; 'Claire\_Moffa' [REDACTED]; 'Janet\_Cumming' [REDACTED]; 'HEOC\_PHIC' [REDACTED]; 'Naomia\_Ford' [REDACTED]; 'SHECCO' [REDACTED]; Bradley John; John  
Bradley @ Home; 'dan' [REDACTED]; 'david.cunliffe' [REDACTED]; Dennien  
Barry @ SEQWGM; seqwgm [REDACTED]; 'jpruss' [REDACTED]; 'sstevensor' [REDACTED]; 'bmyatt' [REDACTED]; 'acanning' [REDACTED]; 'mark.crabtree' [REDACTED]; 'jeff.browne' [REDACTED]; 'heidigrodeck' [REDACTED]; 'Tim.Watts' [REDACTED]; 'lance.mccallum' [REDACTED]  
**Cc:** Best Debbie; Reilly Bob; smouha elaina @ SEQWGM; Media @ SEQWGM  
**Subject:** RE: Record of teleconference 12 January 2011

All,

I wish to flag that a teleconference may be required early tomorrow morning.

The Mt Crosby West water treatment plant has been producing at a rate of 150 ML/day today, with water quality in the range of 0.4 to 0.8 NTU. While overall quality was within the agreed specification, two of twelve filters were producing water at above 1.5 NTU. For this reason, and mindful that East Bank WTP was commencing operation, we chose not to increase production. Queensland Health confirmed that continued operation at this levels was appropriate.

With this production, we maintained reservoir levels at about 150 ML. However, without additional production, we are unlikely to be able to match the forecast increase in demand for wash down (estimated at 60 to 80 ML/day).

Unfortunately, we will be unable to meet these increased demands from the East Bank water treatment plant. Due to a series of unrelated mechanical failures, the East Bank water treatment plant will not commence production until at least tomorrow morning.

Without the East Bank water treatment plant being available, I have directed that production be maximized at:

- West Bank water treatment plant, increasing supply by 100 ML/day (total 250 ML/day)
- North Pine water treatment plant, increasing supply by about 50 ML/day with re-valving within the Linkwater network.

The purpose of this email is to highlight that a teleconference may be required early tomorrow morning, should increase production from the West Bank water treatment plant exceed the triggers agreed last night. A teleconference may also be required should water from the North Pine water treatment plant exceed existing operating protocols (noting that much of the logic applying to the Mt Crosby water treatment plant also applies to North Pine).

Please call me on [REDACTED] should you require any further information.

Regards,  
Daniel Spiller

---

**From:** Dan Spiller  
**Sent:** Thursday, January 13, 2011 12:37 AM  
**To:** 'fishiemar' [REDACTED]; 'Claire\_Moffa' [REDACTED]; 'Janet\_Cumming' [REDACTED]; 'HEOC\_PHIC' [REDACTED]; 'Naomia\_Ford' [REDACTED]; 'SHECCO' [REDACTED]; 'Bradley John'; 'jbs2000' [REDACTED]; 'dan' [REDACTED]; 'david.cunliffe' [REDACTED]; Barry Dennien; 'seqwgm' [REDACTED]; 'jpruss' [REDACTED]; 'sstevensor' [REDACTED]; 'bmyatt' [REDACTED]; 'acanning' [REDACTED]; 'mark.crabtree' [REDACTED]; 'jeff.browne' [REDACTED]

**Cc:** 'Best Debbie'; 'Reilly Bob'; Elaina Smouha; SEQWGM Media  
**Subject:** Record of teleconference 12 January 2011

Record of teleconference attached.

Please contact me should you require any further information.

Regards,  
Daniel Spiller

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

**Lynette Williams**

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Thursday, 13 January 2011 11:03 AM  
**To:** Bradley John; Dennien Barry @ SEQWGM  
**Subject:** FW: Stand alone towns update  
**Attachments:** Stand Alone Towns Update - 0730 130111.docx; ATT00001.htm

Notes from 730 meeting.

This is being expanded now to prioritise and include updated information from QUU, as well as water quality issues.

We are aiming to get an updated version to you for midday for a discussion.

WITH HAVE NOT BEEN CONTACTED ABOUT A TELECONFERENCE. SHOULD WE BE CONTACTING SOMEONE?

Dan

---

**From:** Stan Stevenson [REDACTED]  
**Sent:** Thursday, January 13, 2011 10:57 AM  
**To:** Dan Spiller  
**Subject:** Fwd: Stand alone towns update

FYI Dan on the isolated towns

Regards

Stan

Sent from my iPad

Begin forwarded message:

**From:** michael burns [REDACTED]  
**Date:** 13 January 2011 9:57:13 AM GMT+10:00  
**To:** <[stantina](#) [REDACTED]>, <[david.kerry](#) [REDACTED]>  
**Subject:** Stand alone towns update

please acknowledge receipt

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

## Stand Alone Towns - 730am Thursday 13 Jan 2011

Lowood WTP	<p>Lowood CWT – 45% - need to keep majority for plant restart Lowood town Res – 28% est 1 day, can up to 50% if required (7% from onsite CWT)</p> <p>Fernvale Res empty. Balancing storage empty.</p>	<p>Power has been restored to town Operator Mark Congerton accessed raw water pump station 7am this morning Isolated everything Advised: water went to halfway up switchboards, halfway up VFD control box. 2 of 3 pumps are submersible so will be ok. Have organised heli to fly in Peter Pennell's sparky's to survey. He is liaising with Energex.</p> <p>Mark is staying onsite. Operator Trusten can't access site. Will need him there when plant comes on – 24hr online to catch up. Will organise heli to pick him up.</p>
Kilcoy WTP	Est 20% storage in town RES, hard to tell	<p>Power line poles along dirt access rd to weir have washed away, lines down – need to confirm with Energex estimated time to repair.</p> <p>Kilcoy weir pumps have been inundated, probably inoperable Diesel pump , pumping bore water to Wade St, est 3-6 L/s. Filling onsite CWT</p>
Kilcoy – Somerset WTP		<p>Diesel pump container at dam half filled with water. Mal W, John G, Allan George onsite overnight with assistance from local farmers. Ran plant last night for 4 hrs. Pump failed at 3am Working to fix pump at the moment.</p>
Esk WTP	<p>Esk Res 40% Toogoolawah Res 50%</p>	<p>Raw water pumps have power Esk and WTP have no power John G advised that power will try to be reinstated within 3hrs (energex) Operator Lloyd King onsite and has access to home</p>

Jimna WTP	Last Update 930am – Res 65%, est 2 days supply	Operator Rick Hoskings ran plant last night, Rick will try to access Kilcoy today for more chemicals – soda ash/ liquid alum
Linville WTP	Incorrect SCADA res reading at Lowood. Checked onsite yesterday 10am, 50% Res, est 2 days supply at that time	John Granzian advised by Energex 7am today they are working to bring power on today, depends on access to switchgear
Kirkleagh WTP	3m in Res (visual check by helicopter yesterday noon)	Very limited consumption
Wivenhoe WTP	No water in HL res at Wivenhoe WTP Reservoirs at Lumley Hill and Cormorant Bay would be substantially full	Raw water pumps in Dam wall went under, probably inoperable
Dayboro WTP	7am update today. Dayboro town RES: HL = 24% of 0.45ML = 0.11 ML LL = 18% of 1.25 ML = 0.22 ML Consumption yesterday = 0.3ML	Operators, electrician, process engineer onsite, working to scour raw pipeline and reinstate plant  3 * 15 kL tankers – meeting demand currently
Kenilworth WTP	RES level 27% 1 day supply Gained 9% overnight	Plant Running 2ntu raw 0.14 FW dropping 2.2 mg/L Cl2  2 * 20kL tankers



## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Thursday, 13 January 2011 3:31 AM  
**To:** 'ken.smith' [REDACTED]; Bradley John; 'ibs2000' [REDACTED];  
'Martin.PeterJ' [REDACTED]; 'Dunn.KerryG' [REDACTED];  
'Tim.Watts' [REDACTED]; 'lance.mccallum' [REDACTED];  
'Geoff.Stead' [REDACTED]; 'stephen.robertson' [REDACTED];  
**Cc:** Dennien Barry @ SEQWGM; 'Madgwick.Darren' [REDACTED]; Best Debbie;  
seqwgm [REDACTED]  
**Subject:** Update on Water Grid supply situation  
**Attachments:** Water balance\_130111.docx

Update attached for information.

Please call me on [REDACTED] if you require any further information.

Regards,  
Daniel Spiller

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

### Central SEQ water balance

- On 12 January 2011, bulk water storage in central South East Queensland (Brisbane, Ipswich and Logan) reduced by a third from 338 to 215 ML.
- Most of the reduction was due to both of the Mt Crosby water treatment plants being taken offline.
  - The East Bank water treatment plant was partially inundated, forcing it to be shutdown for at least two days. Recovery is underway.
  - Raw water quality reduced during the day, causing treated water from the West Bank water treatment plant to exceed standard operational limits. Raw water quality increased from 1100 to 1700 NTU during the day.
- Without supply from Mt Crosby, key reservoirs around Ipswich would have been depleted on 13 January 2011.
- **Table 1** lists expected production on 13 January. These are maximum production values, excluding any allowance for mechanical or other failures. By comparison, total production on 12 January was less than 200 ML due to Mt Crosby WTP being offline for much of the day and the Northern Pipeline Interconnector supplying north rather than south.
- The table also includes an indication of additional supplies that could potentially become available on 14 January, as the clean up commences. These additional supplies are subject to operational considerations, such as rectification of flood damage. Only some of these supplies are likely to become available.

**Table 1: Supply to central SEQ (Brisbane, Ipswich and Logan)**

Source	Planned production 13 January (ML)	Potential additional production from 14 January (ML)
Northern Pipeline Interconnector	25	
North Pine WTP	100	50
Petrie WTP	0	
Mt Crosby West Bank WTP	150	50
Mt Crosby East Bank WTP	0	100
Eastern Pipeline Interconnector	7	
Logan interconnector	20	
Southern Regional Water Pipeline <sup>1</sup>	100	110
Enoggera WTP and Brisbane Aquifer Project	0	TBD
<b>Total</b>	<b>402</b>	

<sup>1</sup> Includes supply from desalination facility.

- These supplies exceed estimated demand scenarios for the clean up period in central SEQ, as illustrated in **Table 2**. Forecasts are based on:
  - the proportion of residences in the area that are likely to be inundated
  - for impacted areas, demand being about double typical consumption



- for other areas, demand being around current levels.
- The forecasts highlight the importance of water conservation outside of the impacted areas, as a contingency against further operational issues (including an inability to bring on the potential additional supplies listed above).

**Table 2: Estimated demand scenarios for clean up period in central SEQ (Brisbane, Ipswich and Logan)**

Area	Typical	Low	Likely	High
Ipswich	42	55	61	67
Brisbane	270	265	294	324
Logan	48	43	48	53
<b>Total</b>	<b>360</b>	<b>363</b>	<b>403</b>	<b>443</b>

### **Mt Crosby operating arrangements**

- As noted above, Mt Crosby West Bank WTP ceased production on 12 January 2011 due to treated water exceeding critical limits for normal operations.
- Alternative operating arrangements are now being applied, taking into account current catchment risks. These risks are considered to be considerably lessened, for a range of impacts including dilution.
- For the duration of the current flood event, the operating rules for the Mt Crosby water treatment plants are:
  - Minimum production of 150 ML/day
  - Achieve and maintain stable operation
  - Shutdown for operational reasons only, not treated water quality
  - Target of below 1 NTU in treated water
  - Periods of up to 2 NTU in treated water tolerable
  - Disinfection residual maintained at standard operating procedure
  - Note some discolouration may occur
- Queensland Health advised that:
  - Based on these operating rules, water supplied from the Mt Crosby water treatment plants is considered to have taken all necessary precautions to minimise the public health risk.
  - Further advice should be sought from Queensland Health should there be a prolonged trend to above 1.5 NTU in treated water. Production should not cease while this advice is sought. An evaluation will be made at that time to determine if water of above 2 NTU may still be safe to supply.

### **Mt Crosby critical logistics**

- Continued operation of the Mt Crosby West Bank WTP is required to maintain water supplies in central SEQ.

- Chemical supplies are required in order to maintain continued operation. A dirt track is now accessible on the site, however supply routes from Brisbane are still flooded.
- Critical supplies are:
  - hypochlorite (2 days)
  - caustic soda (3 days)
  - alum (5 days).
- **Should supply routes not become open tomorrow, assistance will be required to transport chemicals to the site. Volumes required are relatively large.**
- Recommissioning of Mt Crosby East Bank WTP is a priority, to provide additional production and as a contingency in the event that chemicals are unable to be replenished at the site on the other side of the river.
- The East Bank WTP is both partially inundated and surrounded by flood waters, with access currently only able to be made by helicopter. A helicopter has been hired to transport additional staff to the WTP on the morning of 14 January. **It is critical that this helicopter not be reprioritised by EMQ.**

#### **Western SEQ towns supplies**

- Gatton is expected to run out of water overnight, following the loss of stored treated water.
- Supply is from the Lowood water treatment plant, which is offline due to loss of electricity and some operational issues. Energex has given electricity supply to the site a high priority.
- A number of smaller towns have already run out of supply or are expected to do so soon. QUU has started to supply bottled water to these towns via commercial helicopter.
- Tanker trucks will commence supply to towns as soon as they become accessible. **QUU is seeking advice about potential routes as they become available.**
- A boiled water notice is required when supply recommences after having run dry. A notice is required because of the risk of ingress into the pipelines. A number of these notices will be issued on 13 January 2011 for western towns.

## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Thursday, 13 January 2011 3:03 AM  
**To:** Bradley John: 'ibs2000' [REDACTED]; 'Geoff.Stead' [REDACTED]; 'Tim.Watts' [REDACTED]  
**Subject:** FW: draft Media Release  
**Attachments:** MEDIA RELEASE\_Residents and Businesses urged to use water wisely\_13 January 2011.doc

For your approval.

---

**From:** WaterGridMedia [REDACTED]  
**Sent:** Thursday, January 13, 2011 3:01 AM  
**To:** Dan Spiller  
**Subject:** draft Media Release

Dan

Draft approved by Qld Health for on forwarding and approval to John Bradley and Geoff Stead.

Regards  
John

This e-mail, including any attached files, may contain confidential and privileged information for the sole use of the intended recipient. Any review, use, distribution, or disclosure by others is strictly prohibited. If you are not the intended recipient (or authorized to receive information for the intended recipient), please contact the sender by reply e-mail and delete all copies of this message. Queensland Bulk Water Transport Authority (trading as LinkWater). This email is copyright. LinkWater is not liable if an attachment is altered without its written consent and does not accept liability in connection with the transmission of information using the internet. This notice should not be deleted or altered.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.



## Media Release

**MEDIA RELEASE- 0630h**  
**13 JANUARY 2011**

### **RESIDENTS AND BUSINESSES URGED TO USE WATER WISELY**

The connected Water Grid continues to maintain safe and secure water supplies in the face of unprecedented flooding.

"While some people may see minor discolouration of their tap water, they should not be concerned" said Queensland Premier Anna Bligh.

"Water across Ipswich, Brisbane and the Sunshine and Gold Coasts remains safe to drink" she said.

"The safety of our drinking water is a critical priority. Water Grid suppliers are continually monitoring water quality across the network as well as working closely with Queensland Health".

While drinking water continues to be safe, very high sediment levels have limited production from some key water treatment plants.

Adequate water supplies will be necessary for the clean-up in coming days.

"It is really important that we all use our precious drinking water wisely over coming days" said Premier Bligh.

"Our priority must be on the clean-up of immediately impacted areas" she said.

Within areas affected by flooding, residents should use what water is needed to clean-up immediate impacts. Sensible water conservation practices are strongly encouraged such as using a high pressure hose or trigger nozzle.

Outside immediately impacted areas, residents and businesses are urged to conserve water by adopting the same water use practices that saw us through the drought. These include:

- take only short 4 minute showers
- don't water gardens
- delay washing your cars
- don't fill pools
- only use dishwashers when you have a full load
- turn-off taps when you don't need water

"During the drought we showed how well we could conserve water. During this latest crisis residents outside the directly impacted areas need to do the same again" Premier Bligh said.

**ENDS**

Notes to the editor

## About the Water Grid

Established in June 2008 in response to the crippling Millennium Drought, the Water Grid represents one of Australia's largest investments in water infrastructure.

Through a network of climate resilient water sources, treatment facilities, new two-way pipes and existing pipelines, the Water Grid gives the South East Queensland region the ability to support water demands, water quality, economic prosperity and lifestyle - regardless of climate change and population growth.

For further information visit [www.watergrid.com.au](http://www.watergrid.com.au)

**For further details contact the Water Grid Communications Unit on:**

**Ph: (07) 3247 3000 | Email: [media@seqwgm.com.au](mailto:media@seqwgm.com.au)**



## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Thursday, 13 January 2011 12:37 AM  
**To:** 'fishiemans' [REDACTED]; 'Claire Moffa' [REDACTED];  
'Janet\_Cummins' [REDACTED]; 'HEOC PHIC' [REDACTED];  
'Naomia Ford' [REDACTED]; 'SHECC' [REDACTED]; Bradley John; 'jbs2000'  
[REDACTED]; 'dan' [REDACTED]; 'david.cunliffe' [REDACTED];  
Dennien Barry @ SEQWGM; seqwgm [REDACTED]; 'jpruss' [REDACTED];  
'sstevensor' [REDACTED]; 'bmyatt' [REDACTED];  
'acanning' [REDACTED]; 'mark.crabtree' [REDACTED];  
'jeff.browne' [REDACTED]  
**Cc:** Best Debbie; Reilly Bob; smouha elaina @ SEQWGM; Media @ SEQWGM  
**Subject:** Record of teleconference 12 January 2011  
**Attachments:** Record of teleconference 12 January 2011.docx

Record of teleconference attached.

Please contact me should you require any further information.

Regards,  
Daniel Spiller

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

## **Record of teleconference 12 January 2011**

### **Key attendees:**

Mick Young, Director General, Queensland Health

Dr Jeanette Young, Chief Health Officer, Queensland Health

Sophie Dwyer, Executive Director , Queensland Health

Andrew Wilson, Queensland Health

Arran Hieatt, Senior Environmental Health Scientist, Queensland Health

John Bradley, Director General, Department of Environment and Resource Management

Dr David Cunliffe, SA Department of Health

Dr Dan Deere, WaterFutures

Barry Dennien, CEO, SEQ Water Grid Manager

Dan Spiller, Director Operations, SEQ Water Grid Manager

Jim Pruss, Executive General Manager, Seqwater

Stan Stevenson, Seqwater

Arran Canning, Seqwater

Brett Myatt, Seqwater

Jeff Browne, Linkwater

### **Summary of outcomes**

It was agreed by the Water Grid, Queensland Health and Department of Environment and Resource Management that:

- The primary objective is to maintain supply within the connected area. Production at the Mt Crosby WTP will at least match demand, subject to operational constraints.
- The secondary objective is to maintain drinking water quality, minimising public health risks. However, production will not cease due to treated water quality issues.
- For the duration of the current flood event, the operating rules for the Mt Crosby water treatment plants are:
  - Minimum production of 150 ML/day
  - Achieve and maintain stable operation
  - Shutdown for operational reasons only, not treated water quality

- Target of below 1 NTU in treated water
- Periods of up to 2 NTU in treated water tolerable
- Disinfection residual maintained at standard operating procedure
- Note some discolouration may occur

Queensland Health advised that:

- Based on these operating rules, water supplied from the Mt Crosby water treatment plants is considered to have taken all necessary precautions to minimise the public health risk.
- Further advice should be sought from Queensland Health should there be a prolonged trend to above 1.5 NTU in treated water. Production should not cease while this advice is sought. An evaluation will be made at that time to determine if water of above 2 NTU may still be safe to supply.



## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Wednesday, 12 January 2011 8:34 PM  
**To:** 'stephen.robertson'; 'ken.smith'; [REDACTED] Bradley  
John; 'lance.mccallum'; [REDACTED] 'Tim.Watts'; [REDACTED]  
'Geoff.Stead'; [REDACTED] 'Lauren.Sims'; [REDACTED]  
'Martin.Peter'; [REDACTED] 'Dunn.Kerry'; [REDACTED]; Best Debbie  
**Cc:** Dennien Barry @ SEQWGM; 'Peter Borrows'; 'Rob Drury'; Media @ SEQWGM;  
SEQWGM Emergency; 'Madgwick.Darren'; [REDACTED] Brown Damien; Reilly  
Bob; seqwgm [REDACTED]  
**Subject:** RE: Dam release update  
**Attachments:** Technical\_Situation\_Report\_W51.docx

All,

Attached is an updated Technical Support Report.

Please call me on [REDACTED] if you require further information.

Regards,  
Dan

**Daniel Spiller**  
Director, Operations  
**SEQ Water Grid Manager**

Phone: [REDACTED]  
Email: [REDACTED]  
Visit: Level 15, 53 Albert Street Brisbane  
Post: PO Box 16205, City East QLD 4002  
ABN: 14783 317 630

Please consider the environment before printing this email. It takes 10 litres of water to make one sheet of A4 paper.

### Disclaimer

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

## TECHNICAL SITUATION REPORT

TSR Number	W51	Date of TSR release	12.1.2011	Time of TSR release	6pm
------------	-----	---------------------	-----------	---------------------	-----

### Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

Current objectives	<ul style="list-style-type: none"> <li>Gradual release of stored floodwaters with minimal impact.</li> </ul>										
Strategy	<ul style="list-style-type: none"> <li>Peak inflows into Wivenhoe were in excess of 12000 cumecs.</li> <li>Continue release of water from Somerset into Wivenhoe to reduce impacts upstream in Kilcoy area</li> <li>Maintain reduced release from Wivenhoe until Lockyer flows are reduced and then increase to discharge flood waters over 7 days</li> </ul>										
Key considerations	<table> <tr> <td>Storage levels:</td><td>Above FSL</td></tr> <tr> <td>Inflows:</td><td>Inflows expected well over 2,300,000ML.</td></tr> <tr> <td>Rainfall:</td><td>Continuing</td></tr> <tr> <td>Lockyer/Bremer:</td><td>Monitoring their inflows</td></tr> <tr> <td>Brisbane River:</td><td>Impact as below.</td></tr> </table>	Storage levels:	Above FSL	Inflows:	Inflows expected well over 2,300,000ML.	Rainfall:	Continuing	Lockyer/Bremer:	Monitoring their inflows	Brisbane River:	Impact as below.
Storage levels:	Above FSL										
Inflows:	Inflows expected well over 2,300,000ML.										
Rainfall:	Continuing										
Lockyer/Bremer:	Monitoring their inflows										
Brisbane River:	Impact as below.										

### Rainfall

Rainfall in the last 12 hours is generally below 5mm with a couple of 10mm falls in the Stanley and North Pine catchments. There is no significant rain expected in the next 4 days.

### Somerset/Wivenhoe

Somerset Dam has peaked at 105.11 mAHD at 06:00 on 12 January 2011. One sluice was opened at 1030 12 January 2011 and discharging 1,410 m<sup>3</sup>/s. Sluice gates will be utilised to drain of the flood storage compartment during the next 5 days.

At 5pm Somerset was 104.86m and 702,953ML at 185.1%.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on 11 January 2011 with a corresponding discharge of 7,450 m<sup>3</sup>/s.

The release from Wivenhoe Dam was reduced to 2,500 m<sup>3</sup>/s at 07:30 12 January 2011 to allow the peak of Lockyer Creek to enter the Brisbane River and this release has been maintained since. After the downstream peak in the lower Brisbane River has passed, releases will be increased to maximum of 3,500 m<sup>3</sup>/s. The release is expected to commence Thursday and then be maintained at this level to drain the flood storage component within the required 7 days. The releases will not result in any renewed rises at downstream locations.



At 5pm Wivenhoe Dam was 74.82 m AHD at 2,203,223ML and 189.1% and fluctuating slightly due to the releases coming from Somerset but relatively steady.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be approximately 2.6 million megalitres.

### North Pine

At 17:00 North Pine Dam had all gates open 1 increment, releasing about 80 m3/s. North Pine peaked at 41.11 m AHD at 14:00 on 11 January 2011 with peak release of 2,800 m3/s. The event has a volume of around 200,000 ML

At 5.00pm North Pine Dam was 39.74 m AHD and 217,370 ML and 101.4% and slowly falling. It is expected that gates will be closed Thursday or Friday.

### Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is maintaining close contact with warning agencies and local councils.

### Leslie Harrison Dam:

Gate releases finished late this afternoon.

### Hinze Dam:

A release of around 8,000 megalitres a day is being made through the emergency gates. There is no public access to the spillway.

Seqwater Technical Officer name	Robert Drury
Seqwater Technical Officer position title	Dam Operations Manager

### BoM assessment

*(consisting of references to latest Flood Warning for the Brisbane River and other relevant Bureau forecasts and warnings (e.g. weather/rain forecasts, Tropical Cyclone Warning etc) and other updates/comments if needed)*

BoM has been advised.

BoM Technical Officer name	Peter Baddiley
BoM Technical Officer position title	
BoM Technical Officer contact details	flood.qld

### Brisbane City Council (BCC) assessment

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy

BCC Technical Officer name	Chris Lavin
BCC Technical Officer position title	Disaster Operations Manager
BCC Technical Officer contact details	

### Ipswich City Council (ICC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

ICC Technical Officer name	Tony Trace
ICC Technical Officer position title	Local Disaster Response Coordinator
ICC Technical Officer contact details	

### Somerset Regional Council (SRC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

SRC Technical Officer name	Tony Jacobs
SRC Technical Officer position title	Local Disaster Response Coordinator
SRC Technical Officer contact details	

### Collated and distributed by (Agency)

Contact Officer signature	
Contact Officer name	Rob Drury
Contact Officer position title	Dam Operations Manager

Next TSR due	Date	13.1.2011	Time	8am	or Event	
--------------	------	-----------	------	-----	----------	--



## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Wednesday, 12 January 2011 3:52 PM  
**To:** 'stephen.robertson'; 'ken.smith'; Bradley John; 'lance.mccallum'; 'Tim.Watts'; 'Geoff.Stead'; 'Lauren.Sims'; 'Martin.Peter'; 'Dunn.KerryG'; Best Debbie  
**Cc:** Dennien Barry @ SEQWGM; 'Peter Borrows'; 'Rob Drury'; Media @ SEQWGM; SEQWGM Emergency; 'Madgwick.DarrenT'; Brown Damien; Reilly Bob; seqwgm [REDACTED]  
**Subject:** Dam release update  
**Attachments:** Technical\_Situation\_Report\_W50.docx

All,

Attached is an updated Technical Support Report, including advice about the gate closure process.

The Wivenhoe Dam release rate has been maintained at 2,500 cubic metres per second. Dam levels have reduced slightly.

Please call me on [REDACTED] if you require further information.

Regards,  
Dan

**Daniel Spiller**  
Director, Operations  
**SEQ Water Grid Manager**

Phone [REDACTED]  
Email: [REDACTED]  
Visit: Level 15, 53 Albert Street Brisbane  
Post: PO Box 16205, City East QLD 4002  
ABN: 14783 317 630

Please consider the environment before printing this email. It takes 10 litres of water to make one sheet of A4 paper.

### Disclaimer

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

## TECHNICAL SITUATION REPORT

TSR Number	W50	Date of TSR release	12.1.2011	Time of TSR release	3pm
------------	-----	---------------------	-----------	---------------------	-----

### Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

Current objectives	<ul style="list-style-type: none"> <li>Gradual release of stored floodwaters with minimal impact.</li> </ul>										
Strategy	<ul style="list-style-type: none"> <li>Peak inflows into Wivenhoe were in excess of 12000 cumecs.</li> <li>Continue release of water from Somerset into Wivenhoe to reduce impacts upstream in Kilcoy area</li> <li>Maintain reduced release from Wivenhoe until Lockyer flows are reduced and then increase to discharge flood waters over 7 days</li> </ul>										
Key considerations	<table> <tr> <td>Storage levels:</td><td>Above FSL</td></tr> <tr> <td>Inflows:</td><td>Inflows expected well over 2,300,000ML.</td></tr> <tr> <td>Rainfall:</td><td>Continuing</td></tr> <tr> <td>Lockyer/Bremer:</td><td>Monitoring their inflows</td></tr> <tr> <td>Brisbane River:</td><td>Impact as below.</td></tr> </table>	Storage levels:	Above FSL	Inflows:	Inflows expected well over 2,300,000ML.	Rainfall:	Continuing	Lockyer/Bremer:	Monitoring their inflows	Brisbane River:	Impact as below.
Storage levels:	Above FSL										
Inflows:	Inflows expected well over 2,300,000ML.										
Rainfall:	Continuing										
Lockyer/Bremer:	Monitoring their inflows										
Brisbane River:	Impact as below.										

### Rainfall

Rainfall in the last 12 hours is generally below 5mm with a couple of 10mm falls in the Stanley and North Pine catchments. There is no significant rain expected in the next 4 days.

### Somerset/Wivenhoe

Somerset Dam has peaked at 105.11 m AHD at 08:00 on 12 January 2011 and the dam has been discharging over the spillway. One sluice was opened at 1030 12 January 2011 and the dam is discharging 1,440 m<sup>3</sup>/s. Sluice gates will be utilised to drain of the flood storage compartment during the next 5 days.

At 3pm Somerset was 104.94m and 708,505ML at 186.5%.

Wivenhoe Dam peaked at 74.97 m AHD at 19:00 on 11 January 2011 with a corresponding discharge of 7,450 m<sup>3</sup>/s

The releases from Wivenhoe Dam have been temporarily reduced to 2,500 m<sup>3</sup>/s at 07:30 to allow the peak of Lockyer Creek to enter the Brisbane River. After the downstream peak in the lower Brisbane River has passed, releases will be increased to maximum of 3,500 m<sup>3</sup>/s. This release will then be maintained to drain the flood storage component within the required 7 days.

At 3pm Wivenhoe Dam was 74.81 m AHD at 2,201,636ML and 188.9% and fluctuating slightly due to the releases coming from Somerset but relatively steady.



The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be approximately 2.6 million megalitres.

### North Pine

North Pine peaked at 41.11 mAHD at 14:00 on 11 January 1974 with peak release of 2,800 m<sup>3</sup>/s. The event has a volume of around 200,000 ML.

At 3.00pm North Pine Dam was 39.74 mAHD and 217,370 ML and 101.4% and slowly falling. It is expected that gates will be closed Thursday or Friday.

### Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is maintaining close contact with warning agencies and local councils.

### Leslie Harrison Dam:

Gate releases are underway due to rainfall and inflows.

### Hinze Dam:

A release of around 8,000 megalitres a day is being made through the emergency gates. There is no public access to the spillway.

Seqwater Technical Officer name	Robert Drury
Seqwater Technical Officer position title	Dam Operations Manager

### BoM assessment

*(consisting of references to latest Flood Warning for the Brisbane River and other relevant Bureau forecasts and warnings (e.g. weather/rain forecasts, Tropical Cyclone Warning etc) and other updates/comments if needed)*

BoM has been advised.

BoM Technical Officer name	Peter Baddiley
BoM Technical Officer position title	
BoM Technical Officer contact details	flood.qld [REDACTED]

### Brisbane City Council (BCC) assessment

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy

BCC Technical Officer name	Chris Lavin
BCC Technical Officer position title	Disaster Operations Manager
BCC Technical Officer contact details	

#### Ipswich City Council (ICC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

ICC Technical Officer name	Tony Trace
ICC Technical Officer position title	Local Disaster Response Coordinator
ICC Technical Officer contact details	

#### Somerset Regional Council (SRC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

SRC Technical Officer name	Tony Jacobs
SRC Technical Officer position title	Local Disaster Response Coordinator
SRC Technical Officer contact details	

#### Collated and distributed by (Agency)

Contact Officer signature	
Contact Officer name	Rob Drury
Contact Officer position title	Dam Operations Manager

Next TSR due	Date	12.1.2011	Time	8pm	or Event	
--------------	------	-----------	------	-----	----------	--



## Lynette Williams

---

**From:** Elaina Smouha [REDACTED]  
**Sent:** Wednesday, 12 January 2011 2:15 PM  
**To:** Bradley John; tim.watt [REDACTED] WGMExec [REDACTED]  
**Subject:** Fwd: Wivenhoe Dam Flood Ops  
**Attachments:** SEQ WGM PrelimRep 12012011.docx

John, Tim

Preliminary report as promised by Barry. Final report due COB today.

Regards

Elaina Smouha  
**Elaina Smouha**  
Director, Governance and Regulatory Compliance  
**SEQ Water Grid Manager**  
Phone: [REDACTED]  
Email: [REDACTED]  
Visit: Level 15, 53 Albert Street Brisbane  
Post: PO Box 16205, City East QLD 4002  
ABN: 14783 317 630

----- Forwarded message -----

**From:** Elaina Smouha [REDACTED]  
**Date:** Wed, Jan 12, 2011 at 11:03 AM  
**Subject:** Fwd: Wivenhoe Dam Flood Ops  
**To:** [REDACTED]  
**Cc:** [REDACTED]

Peter, Bob

Attached is a copy of Brian Cooper's preliminary advice which Barry requested that I forward to you.

Regards

Elaina

**Elaina Smouha**  
Director, Governance and Regulatory Compliance  
**SEQ Water Grid Manager**  
Phone: [REDACTED]  
Email: [REDACTED]  
Visit: Level 15, 53 Albert Street Brisbane  
Post: PO Box 16205, City East QLD 4002  
ABN: 14783 317 630

----- Forwarded message -----

**From:** Brian Cooper Consulting [REDACTED]  
**Date:** Wed, Jan 12, 2011 at 10:53 AM

Subject: Wivenhoe Dam Flood Ops

To 

Dear Elaina,

Report attached as requested.

Regards,

Brian Cooper

P.O. Box 205, BELROSE WEST NSW 2085  
phone: [REDACTED]  
mobile: [REDACTED]  
email: [REDACTED]  
ABN: 56154707619

brian  
cooper  
consulting

12 January 2011

Mr. Barry Dennien  
CEO, SEQ Water Grid Manager  
PO Box 16205  
City East QLD 4002

Dear Barry,

This letter report:

- presents my preliminary findings on a review of the operation of Wivenhoe Dam (including controlled releases) for compliance against the Flood Mitigation Manual for the period 12 December 2010 to date (Flood Event), and;
- provides initial advice on the prudence and appropriateness of the decisions and actions taken during the Flood Event regarding the operation of Wivenhoe Dam in light of the Flood Mitigation Manual's requirements and the circumstances of the Flood Event.

The findings and advice are provided on the basis of information provided by SEQ Water Grid Manager which comprised the Flood Mitigation Manual and Technical Situation Reports. The latter were daily (sometimes twice daily) reports for the subject period. They gave a log of rainfall over the dam catchments and the downstream river (Lockyer Ck. And Bremer R.) catchments; inflows to Somerset and Wivenhoe Dams; storage levels; releases from the dams; details of the operation of gates and other outlets (gate openings/discharges); proposed changes in operating strategies and impacts on the various access crossings downstream of Wivenhoe Dam. In reviewing the Technical Situation Reports, I prepared a spreadsheet summarising the reports so that a timeline of the Flood Event could be seen at a glance. This provided a good overview of the Flood Event as it unfolded.

The main aspects of the Flood Mitigation Manual are the various strategies for operating Wivenhoe Dam and Somerset Dam as well as a number of requirements relating to flood operations personnel, flood preparedness and flood training.

At Wivenhoe Dam there are four main strategies for operating the dam (W1 to W4) and at Dam there are three (S1 to S3). These strategies are hierarchical and are based on a number of flood objectives. These in descending order of importance, are:

- Ensure the structural safety of the dams;
- Ensure the structural safety of the dams;
- Provide optimum protection of urbanised areas from inundation;
- Minimise disruption to rural life in the valleys of the Brisbane and Stanley Rivers;
- Retain the storage at Full Supply Level (FSL) at the conclusion of the Flood Event, and;



- Minimise impacts to riparian flora and fauna during the drain down phase of the Flood Event.

Normal procedures require a return to FSL within 7 days of the flood event peak passing through the dams so that the potential effects of closely spaced Flood Events can be allowed for.

It is apparent from the Technical Situation Reports that emphasis has been given to communicating changes in flood operations strategies with local authorities and the Bureau of Meteorology (BOM).

Until the last day or so, Wivenhoe Dam has been below EL74.0 and accordingly, would be operating under Strategy W1 i.e. make releases such that bridges downstream of the dam do not have to be closed prematurely. At various times during the Flood Event some of the downstream bridges have been closed. However, it is evident that action has been taken to vary dam releases such that various bridges could be re-opened as soon as possible. This appears to have been done in accordance with the flood operating strategies.

Over the last couple of days, the storage level in Wivenhoe Dam has increased to above EL 74.0 and the storage level in Somerset Dam is at EL 103.3 and is rising. This situation would demand strategy W3 for Wivenhoe Dam (*limit flow in the Brisbane River at Moggill to less than 4,000m<sup>3</sup>/s*) and strategy S2 for Somerset Dam (*The crest gates are raised to enable uncontrolled discharge. Operations are to target a correlation of water levels in Somerset Dam and Wivenhoe Dam as set out in a graph. The operations target line shown on this graph is to generally be followed as the flood event progresses. The release rate from Somerset Dam is generally not to exceed the peak inflow into the dam*). These strategies have been followed, although there appears to have been some discretion used in varying the releases from Somerset Dam (water has been held back in that dam). The last Technical Situation Report (W39 on 11/1/2011) however, indicated that there may need to be a move to Strategy W4 for Wivenhoe Dam (fuse plug triggering likely).

I conclude then, that the strategies as set out in the Flood Mitigation Manual have been followed, allowing for the discretion given to making variations in order to maximise flood mitigation effects. As a means of reviewing processes followed during a flood, it would be useful to present a timeline of the flood event showing graphs of storage levels, rainfall events, storage inflows, releases made and critical levels and discharges together with strategies adopted and projected strategies. The actions taken and decisions made during the Flood Event appear to have been prudent and appropriate in the context of the available knowledge available to those responsible for flood operations and the way events unfolded. I am informed by the Queensland Dam Safety Regulator (Peter Allen) that the various requirements of the Flood Mitigation Manual relating to requirements for flood operations personnel, flood preparedness and flood training have been adhered to.

Regards,



Brian Cooper

## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Wednesday, 12 January 2011 9:00 AM  
**To:** 'stephen.robertson'; 'ken.smith'; [REDACTED] Bradley  
John; 'lance.mccallum'; [REDACTED] 'Tim Waus'; [REDACTED]  
'Geoff.Stead'; [REDACTED] 'Lauren.Sims'; [REDACTED]  
'Martin.PeterJ'; [REDACTED] 'Dunn.KerryC'; [REDACTED] Best Debbie  
**Cc:** Dennien Barry @ SEQWGM; 'Peter Borrows'; 'Rob Drury'; Media @ SEQWGM;  
SEQWGM Emergency; 'Madgwick.DarrenT'; [REDACTED]; Brown Damien; Reilly  
Bob  
**Subject:** Dam release update  
**Attachments:** Technical Situation Report W48.docx

All,

Attached is an updated Technical Support Report, including advice about the gate closure process.

Note that releases have been reduced to 2,500 cubic metres per second while peak Lockyer Valley flows pass. Increases will then increase to 3,500 cubic metres per second.

Please call me on [REDACTED] if you require further information.

Regards,  
Dan

**Daniel Spiller**  
Director, Operations  
**SEQ Water Grid Manager**

Phone: [REDACTED]  
Email: [REDACTED]  
Visit: Level 15, 53 Albert Street Brisbane  
Post: PO Box 16205, City East QLD 4002  
ABN: 14783 317 630

Please consider the environment before printing this email. It takes 10 litres of water to make one sheet of A4 paper.

### Disclaimer

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.



## TECHNICAL SITUATION REPORT

TSR Number	W48	Date of TSR release	12.1.2011	Time of TSR release	8am
------------	-----	---------------------	-----------	---------------------	-----

### Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

Current objectives	<ul style="list-style-type: none"> <li>Gradual reduction of releases.</li> </ul>										
Strategy	<ul style="list-style-type: none"> <li>Peak inflows into Wivenhoe were in excess of 12000 cumecs.</li> <li>Develop and implement closing plan for next 7 or so days</li> </ul>										
Key considerations	<table> <tr> <td>Storage levels:</td><td>Above FSL</td></tr> <tr> <td>Inflows:</td><td>Inflows expected well over 2,000,000ML.</td></tr> <tr> <td>Rainfall:</td><td>Continuing</td></tr> <tr> <td>Lockyer/Bremer:</td><td>Monitoring their inflows</td></tr> <tr> <td>Brisbane River:</td><td>Impact as below.</td></tr> </table>	Storage levels:	Above FSL	Inflows:	Inflows expected well over 2,000,000ML.	Rainfall:	Continuing	Lockyer/Bremer:	Monitoring their inflows	Brisbane River:	Impact as below.
Storage levels:	Above FSL										
Inflows:	Inflows expected well over 2,000,000ML.										
Rainfall:	Continuing										
Lockyer/Bremer:	Monitoring their inflows										
Brisbane River:	Impact as below.										

### Rainfall

No significant rain has fallen over the catchments in the past twelve hours. Less than 10 to 15 millimeters of rainfall is expected over the next 24-48 hours.

### Somerset/Wivenhoe

Somerset Dam has peaked at 105.11 m AHD at 08:00 on 12 January 2011 and the dam is discharging 1,230 m<sup>3</sup>/s over the spillway. Sluice gates will be utilised to assist the draining of the flood storage compartment commencing later Wednesday. At 8am Somerset was 105.11m and 720,400ML at 189.7%.

Wivenhoe Dam peaked at 74.97 m AHD at 19:00 on 11 January 2011 with a corresponding discharge of 7,450 m<sup>3</sup>/s. Wivenhoe Dam was 74.75 m AHD at 2,192,000ML and 188.1% at 07:30 and generally falling slowly.

The releases from Wivenhoe Dam have been temporarily reduced to 2,500 m<sup>3</sup>/s at 07:30 to allow the peak of Lockyer Creek to enter the Brisbane River. After the downstream peak in the lower Brisbane River has passed, releases will be increased to maximum of 3,500 m<sup>3</sup>/s. This release will then be maintained to drain the flood storage component within the required 7 days.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2 million megalitres.

### North Pine

At 07:00 North Pine Dam was 39.78 m AHD falling and releasing about 105 m<sup>3</sup>/s. North Pine has

peaked at 41.11 mAHD at 14:00 on 11 January 1974 with peak release of 2,800 m3/s. The event has a volume of around 200,000 ML. **It is expected that gates will be close later Wednesday or early Thursday**

### Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is maintaining close contact with warning agencies and local councils.

#### Leslie Harrison Dam:

Gate releases are underway due to rainfall and inflows.

#### Hinze Dam:

A release of around 8,000 megalitres a day is being made through the emergency gates. There is no public access to the spillway.

Seqwater Technical Officer name	Robert Drury
Seqwater Technical Officer position title	Dam Operations Manager
[REDACTED]	

### BoM assessment

*(consisting of references to latest Flood Warning for the Brisbane River and other relevant Bureau forecasts and warnings (e.g. weather/rain forecasts, Tropical Cyclone Warning etc) and other updates/comments if needed)*

BoM has been advised.

BoM Technical Officer name	Peter Baddiley
BoM Technical Officer position title	
BoM Technical Officer contact details	flood.qld [REDACTED]

### Brisbane City Council (BCC) assessment

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy

BCC Technical Officer name	Chris Lavin
BCC Technical Officer position title	Disaster Operations Manager
BCC Technical Officer contact details	[REDACTED]



### Ipswich City Council (ICC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

ICC Technical Officer name	Tony Trace
ICC Technical Officer position title	Local Disaster Response Coordinator
ICC Technical Officer contact details	

### Somerset Regional Council (SRC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

SRC Technical Officer name	Tony Jacobs
SRC Technical Officer position title	Local Disaster Response Coordinator
SRC Technical Officer contact details	

### Collated and distributed by (Agency)

Contact Officer signature	
Contact Officer name	Rob Drury
Contact Officer position title	Dam Operations Manager

Next TSR due	Date	12.1.2011	Time	11am	or Event	
--------------	------	-----------	------	------	----------	--



## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Wednesday, 12 January 2011 8:12 AM  
**To:** Dennien Barry @ SEQWGM; Bradley John  
**Subject:** Water conservation

Barry and John,

We are anxious that there be a water conservation message across SEQ. We can maintain levels at current demands, but will have problems at this stage if demand increases significantly.

The key constraints are:

- The pump station at the Mt Crosby East Bank WTP is likely to be flooded, meaning that it will be offline. The time that it is offline depends upon whether the electrics are flooded
- Output from the Mt Crosby West Bank WTP and North Pine WTP is currently constrained due to poor water quality. We expect that West Bank will be limited to 125 ML/day for several days. This compares to its typical output of about 200 ML/day.

The capacity constraints may be short-term only, but there has not yet been evidence of any improvements in water quality.

Given these constraints, the current water balance in the central area (Brisbane, Logan and Ipswich) is supply of 320 ML/day and typical demand of 340 to 360 ML/day. We can manage this demand based on storage (Linkwater and QUU reservoirs remain high) but any significant increases in demand would be a concern.

There is also confusion about water quality across the region.

DREs are agitating and will go above the line - QUU is proposing to brief the LM. I would prefer a coordinated whole of Grid approach.

Regards,  
Dan

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

**Lynette Williams**

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Wednesday, 12 January 2011 6:06 AM  
**To:** Dennien Barry @ SEQWGM; Bradley John  
**Subject:** Briefed Colin Jensen verbally about Wivenhoe status

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Wednesday, 12 January 2011 5:37 AM  
**To:** stephen.robertson [REDACTED]; ken.smith [REDACTED]; Bradley John;  
lance.mccallum [REDACTED]; Tim.Watts [REDACTED]  
Geoff.Stead [REDACTED]; Lauren.Sims [REDACTED]  
'Martin.Peter [REDACTED]; Dunn.KerryG [REDACTED]; Best Debbie  
**Cc:** Dennien Barry @ SEQWGM; Peter Borrows; Rob Drury; Media @ SEQWGM; SEQWGM  
Emergency; Madgwick.Darren [REDACTED]; Brown Damien; Reilly Bob  
**Subject:** Dam release update  
**Attachments:** Technical Situation Report W47.docx

All,

Attached is the most recent situation report.

There was minimum rainfall in the catchment last night, meaning that dam levels and release rates were reduced.

Wivenhoe Dam is currently at 188%, having peaked at about 191% (74.97m AHD, about 0.6m below the first fuse peak). Somerset Dam is at about 190%, which is its peak level.

Releases are now at 4,300 cubic metres per second (about 370,000 ML/day), having peaked at 7,500 cubic metres per second (about 650,000 ML/day) for a couple of hours.

We will update the report about every three hours. The next report will include more information about the closing sequence, including the broad timeframes for dam levels to be reduced. Note that, while dam levels are reducing, they remain at critical levels.

An update on water treatment will be provided later this morning.

Please call me on [REDACTED] if you require further information.

Regards,  
Dan

**Daniel Spiller**  
Director, Operations  
[SEQ Water Grid Manager](#)

Phone [REDACTED]

Email: [REDACTED]

Visit: Level 15, 53 Albert Street Brisbane

Post: PO Box 16205, City East QLD 4002

ABN: 14783 317 630

Please consider the environment before printing this email. It takes 10 litres of water to make one sheet of A4 paper.

### Disclaimer

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

## TECHNICAL SITUATION REPORT

TSR Number	W47	Date of TSR release	12.1.2011	Time of TSR release	5am
------------	-----	---------------------	-----------	---------------------	-----

### Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

Current objectives	<ul style="list-style-type: none"> <li>Gradual reduction of releases.</li> </ul>										
Strategy	<ul style="list-style-type: none"> <li>Peak inflows into Wivenhoe were in excess of 12000 cumecs.</li> <li>Maintain controlled releases.</li> <li>Keep sluices closed at Somerset Dam to store more water however will affect upstream areas.</li> </ul>										
Key considerations	<table> <tr> <td>Storage levels:</td><td>Above FSL</td></tr> <tr> <td>Inflows:</td><td>Inflows expected well over 1,500,000ML.</td></tr> <tr> <td>Rainfall:</td><td>Continuing</td></tr> <tr> <td>Lockyer/Bremer:</td><td>Monitoring their inflows</td></tr> <tr> <td>Brisbane River:</td><td>Impact as below.</td></tr> </table>	Storage levels:	Above FSL	Inflows:	Inflows expected well over 1,500,000ML.	Rainfall:	Continuing	Lockyer/Bremer:	Monitoring their inflows	Brisbane River:	Impact as below.
Storage levels:	Above FSL										
Inflows:	Inflows expected well over 1,500,000ML.										
Rainfall:	Continuing										
Lockyer/Bremer:	Monitoring their inflows										
Brisbane River:	Impact as below.										

### Somerset/Wivenhoe

Our strategy revolved ensuring dam security and was around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m<sup>3</sup>/s in outflow from the dam in addition to the gate release which could be as high as 10,000m<sup>3</sup>/s at the time.

Only minimal falls occurred overnight in the order of mm.

Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy. Somerset is at 105.1m holding 719730ML and 189.5%. Some flows are going over the Somerset spillway.

Somerset should peak at around 105.2m (1974 peak level was 106.5m).

At 0500 Wivenhoe Dam was 74.77m AHD holding 2,195,287ML and 188%.

The FOC has begun an appropriate closure sequence to reduce releases.

Current release rate is 4,300cumecs.  
Further reductions will occur throughout the week..

Assuming no further rain, the dam peaked around 74.97m AHD which was around 600mm below the first fuse plug initiation level.

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is also maintaining close contact with warning agencies and local councils.



It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m<sup>3</sup>/s

**North Pine Dam:**

Five gates are open and continuing to drop. Releases may still continue until Wednesday 12 January. The event magnitude is estimated to be a 1:10,000 year exceedance probability.

The local Council is being kept informed regarding Youngs Crossing.

**Leslie Harrison Dam:**

Gate releases are underway due to rainfall and inflows.

**Hinze Dam:**

A release of around 8,000 megalitres a day is being made through the emergency gates. There is no public access to the spillway.

Seqwater Technical Officer name	Robert Drury
Seqwater Technical Officer position title	Dam Operations Manager

**BoM assessment**

*(consisting of references to latest Flood Warning for the Brisbane River and other relevant Bureau forecasts and warnings (e.g. weather/rain forecasts, Tropical Cyclone Warning etc) and other updates/comments if needed)*

BoM has been advised.

BoM Technical Officer name	Peter Baddiley
BoM Technical Officer position title	
BoM Technical Officer contact details	flood.qld [REDACTED]

**Brisbane City Council (BCC) assessment**

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy

BCC Technical Officer name	Chris Lavin
BCC Technical Officer position title	Disaster Operations Manager
BCC Technical Officer contact details	[REDACTED]

### Ipswich City Council (ICC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

ICC Technical Officer name	Tony Trace
ICC Technical Officer position title	Local Disaster Response Coordinator
ICC Technical Officer contact details	

### Somerset Regional Council (SRC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

SRC Technical Officer name	Tony Jacobs
SRC Technical Officer position title	Local Disaster Response Coordinator
SRC Technical Officer contact details	

### Collated and distributed by (Agency)

Contact Officer signature	
Contact Officer name	Rob Drury
Contact Officer position title	Dam Operations Manager

Next TSR due	Date	12.1.2011	Time	PM	or Event	
--------------	------	-----------	------	----	----------	--

**Lynette Williams**

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Tuesday, 11 January 2011, 11:49 PM  
**To:** 'ced' [REDACTED]  
**Cc:** Dennien Barry @ SEQWGM; Bradley John  
**Subject:** Dam release update

Colin,

A quick update on dam operations. I understand that the Flood Operations Centre has been speaking to your staff directly.

At 2300, Wivenhoe Dam was at 74.92m AHD (190.4%) and holding. Somerset is at 105.2m AHD (185.8%).

The Flood Operations Centre has commenced a closure sequence. At 2330, releases will be reduced to 6,100 cubic metres per second.

The centre will continue to monitor rainfall and inflows and adjust as necessary.

Please call on mobile if you have any queries.

Regards,  
Dan

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.



## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Tuesday, 11 January 2011 11:43 PM  
**To:** 'stephen.roberts@seqwater.com.au'; 'Ken Smith' [REDACTED];  
Bradley John; 'Lance McCallum' [REDACTED]; 'Tim Watts'  
[REDACTED]; 'Geoff Stead' [REDACTED];  
'lauren.sims@seqwater.com.au'; 'Martin.Peter.Jones@seqwater.com.au';  
'Dunn.Kerry@seqwater.com.au'  
**Cc:** Dennien Barry @ SEQWGM; 'pborrows@seqwater.com.au'; 'Rob Drury'; Media @  
SEQWGM; SEQWGM Emergency: Reilly Bob; Brown Damien;  
'Madgwick.Darren@seqwater.com.au'  
**Subject:** Updated Wivenhoe Dam releases  
**Attachments:** Technical Situation Report W46.docx

All,

Updated report attached.

At 2300, Wivenhoe Dam was at 74.92m AHD (190.4%) and holding.

The Flood Operations Centre has commenced a closure sequence. At 2330, releases will be reduced to 6,100 cubic metres per second.

The centre will continue to monitor rainfall and inflows and adjust as necessary.

With releases having peaked, the next report will be provided at 0500.

Regards,  
Dan

---

**From:** Rob Drury [REDACTED]  
**Sent:** Tuesday, January 11, 2011 11:21 PM  
**To:** Rob Drury; Dan Spiller; Paul Bird; Stan Stevenson; Peter Borrows; [Peter.Allen@seqwater.com.au](#) [REDACTED]  
**Cc:** David Roberts; Duty Seq  
**Subject:** RE: Technical Report

Attached report W46.

Next report will be 5am Wednesday 12.1.2011.

Rob

### Robert Drury

Dam Operations Manager  
Water Delivery  
Queensland Bulk Water Supply Authority trading as Seqwater



## TECHNICAL SITUATION REPORT

TSR Number	W46	Date of TSR release	11.1.2011	Time of TSR release	11pm
------------	-----	---------------------	-----------	---------------------	------

### Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

Current objectives	<ul style="list-style-type: none"> <li>Gradual reduction of releases.</li> </ul>										
Strategy	<ul style="list-style-type: none"> <li>Peak inflows into Wivenhoe were in excess of 12000 cumecs.</li> <li>Maintain controlled releases.</li> <li>Keep sluices closed at Somerset Dam to store more water however will affect upstream areas.</li> </ul>										
Key considerations	<table> <tr> <td>Storage levels:</td><td>Above FSL</td></tr> <tr> <td>Inflows:</td><td>Inflows expected well over 1,500,000ML.</td></tr> <tr> <td>Rainfall:</td><td>Continuing</td></tr> <tr> <td>Lockyer/Bremer:</td><td>Monitoring their inflows</td></tr> <tr> <td>Brisbane River:</td><td>Impact as below.</td></tr> </table>	Storage levels:	Above FSL	Inflows:	Inflows expected well over 1,500,000ML.	Rainfall:	Continuing	Lockyer/Bremer:	Monitoring their inflows	Brisbane River:	Impact as below.
Storage levels:	Above FSL										
Inflows:	Inflows expected well over 1,500,000ML.										
Rainfall:	Continuing										
Lockyer/Bremer:	Monitoring their inflows										
Brisbane River:	Impact as below.										

### Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m<sup>3</sup>/s in outflow from the dam in addition to the gate release which could be as high as 10,000m<sup>3</sup>/s at the time.

Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy. Somerset is at 104.90m holding 705,730ML and 185.8%.

Somerset should peak at around 105.2m (1974 peak level was 106.5m).

At 2300 Wivenhoe Dam was 74.92m AHD holding 2,219,000ML and 190.4%.

The FOC has begun an appropriate closure sequence to reduce releases. Releases will be reduced throughout the night to track dropping levels. Another reduction will commence around 23:30 to 6,100cumecs. Further reductions will occur over night.

Assuming no further rain, the dam peaked around 74.97m AHD which was around 600mm below the first fuse plug initiation level.

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is also maintaining close contact with warning agencies and local councils.

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m<sup>3</sup>/s



**North Pine Dam:**

Five gates are open and continuing to drop. Releases may still continue until Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

**Leslie Harrison Dam:**

Gate releases are underway due to rainfall and inflows.

**Hinze Dam:**

A release of around 8,000 megalitres a day is being made through the emergency gates. There is no public access to the spillway.

Seqwater Technical Officer name	Robert Drury
Seqwater Technical Officer position title	Dam Operations Manager

**BoM assessment**

*(consisting of references to latest Flood Warning for the Brisbane River and other relevant Bureau forecasts and warnings (e.g. weather/rain forecasts, Tropical Cyclone Warning etc) and other updates/comments if needed)*

BoM has been advised.

BoM Technical Officer name	Peter Baddiley
BoM Technical Officer position title	
BoM Technical Officer contact details	flood.qld [REDACTED]

**Brisbane City Council (BCC) assessment**

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy

BCC Technical Officer name	Chris Lavin
BCC Technical Officer position title	Disaster Operations Manager
BCC Technical Officer contact details	[REDACTED]

**Ipswich City Council (ICC) assessment (if required)**

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

ICC Technical Officer name	Tony Trace
ICC Technical Officer position title	Local Disaster Response Coordinator
ICC Technical Officer contact details	

### Somerset Regional Council (SRC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

SRC Technical Officer name	Tony Jacobs
SRC Technical Officer position title	Local Disaster Response Coordinator
SRC Technical Officer contact details	

### Collated and distributed by (Agency)

Contact Officer signature	
Contact Officer name	Rob Drury
Contact Officer position title	Dam Operations Manager

Next TSR due	Date	12.1.2011	Time	AM	or Event	
--------------	------	-----------	------	----	----------	--



## Lynette Williams

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Tuesday, 11 January 2011 10:48 PM  
**To:** Bradley John  
**Cc:** Dennien Barry @ SEQWGM  
**Subject:** RE: Wivenhow Dam update

It warrants a discussion. On phone when suits you.

---

**From:** Bradley John [REDACTED]  
**Sent:** Tuesday, 11 January 2011 10:44 PM  
**To:** Dan Spiller  
**Cc:** Barry Dennien  
**Subject:** Re: Wivenhow Dam update

Thanks Dan

As an aside, I think we need to try to maintain the protocol on these through these most serious of events - I notice sitreps lately have had no comment from bom/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 barry's advice as to how this can be achieved.

John B

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Tuesday, January 11, 2011 10:18 PM  
**To:** [stephen.robertson](#); [stephen.robertson](#); Lance McCallum  
[REDACTED]; Tim Watts  
[REDACTED]; Geoff Stead  
[REDACTED]; [lauren.sims](#)  
[REDACTED]; Bradley John; Best Debbie; [Martin.PeterJ](#)  
[REDACTED]; [Dunn.KerryG](#); [REDACTED]; Ken Smith  
**Cc:** Rob Drury; [REDACTED]; Dennien Barry @ SEQWGM; Peter Borrows  
[REDACTED]; Media @ SEQWGM; SEQWGM Emergency  
[<SEQWGM.Emergency](#); [Madgwick.DarrenT](#)  
[<Madgwick.DarrenT](#)  
**Subject:** Wivenhow Dam update

All,

Attached is the most recent technical situation report.

Note that Wivenhoe Dam levels have stabilised and are now falling slowly. Without further rainfall, release rates will be reduced progressively. The first reduction will be to 7,100 cubic metres per second.

Regards,  
Daniel Spiller

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

## Lynette Williams

---

**From:** Bradley John  
**Sent:** Tuesday, 11 January 2011 10:36 PM  
**To:** jbs2000 [REDACTED]  
**Subject:** Fw: Wivenhoe Dam update  
**Attachments:** Technical Situation Report W44.docx

---

**From:** Dan Spiller [REDACTED]  
**Sent:** Tuesday, January 11, 2011 10:18 PM  
**To:** [stephen.robertson](#); [REDACTED]; Lance McCallum  
[REDACTED]; Tim Watts  
[REDACTED]; Geoff Stead  
[REDACTED]; [lauren.sims](#) [REDACTED]  
[REDACTED]; Bradley John; Best Debbie; [Martin.Peter.J](#)  
[REDACTED]; [Dunn.Kerry](#) [REDACTED]; Ken Smith  
**Cc:** Rob Drury [REDACTED]; Dennien Barry @ SEQWGM; Peter Borrows  
[REDACTED]; Media @ SEQWGM; SEQWGM Emergency  
[REDACTED]; [Madgwick.Darren](#) [REDACTED]  
>  
**Subject:** Wivenhoe Dam update

All,

Attached is the most recent technical situation report.

Note that Wivenhoe Dam levels have stabilised and are now falling slowly. Without further rainfall, release rates will be reduced progressively. The first reduction will be to 7,100 cubic metres per second.

Regards,  
Daniel Spiller

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.



## TECHNICAL SITUATION REPORT

TSR Number	W44	Date of TSR release	11.1.2011	Time of TSR release	8pm
------------	-----	---------------------	-----------	---------------------	-----

### Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

Current objectives	<ul style="list-style-type: none"> <li>Initiate the gradual reduction of releases.</li> </ul>										
Strategy	<ul style="list-style-type: none"> <li>Peak inflows into Wivenhoe were in excess of 12000 cumecs.</li> <li>Maintain controlled releases.</li> <li>Keep sluices closed at Somerset Dam to store more water however will affect upstream areas.</li> </ul>										
Key considerations	<table> <tr> <td>Storage levels:</td><td>Above FSL</td></tr> <tr> <td>Inflows:</td><td>Inflows expected well over 1,500,000ML.</td></tr> <tr> <td>Rainfall:</td><td>Continuing</td></tr> <tr> <td>Lockyer/Bremer:</td><td>Monitoring their inflows</td></tr> <tr> <td>Brisbane River:</td><td>Impact as below.</td></tr> </table>	Storage levels:	Above FSL	Inflows:	Inflows expected well over 1,500,000ML.	Rainfall:	Continuing	Lockyer/Bremer:	Monitoring their inflows	Brisbane River:	Impact as below.
Storage levels:	Above FSL										
Inflows:	Inflows expected well over 1,500,000ML.										
Rainfall:	Continuing										
Lockyer/Bremer:	Monitoring their inflows										
Brisbane River:	Impact as below.										

### Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m<sup>3</sup>/s in outflow from the dam in addition to the gate release which could be as high as 10,000m<sup>3</sup>/s at the time.

Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy. Somerset is at 104.78m holding 697,400ML and 183.6%.

Somerset should peak at around 105.2m (1974 peak level was 106.5m).

At 2100 Wivenhoe Dam was 74.95m AHD holding 2,223,000ML and 190.8% and slowly dropping.

The levels have now stabilized and commenced to fall slowly.

The FOC has begun an appropriate closure sequence to reduce releases. Releases will be reduced slowly throughout the night to track dropping levels. First reduction will be to around 7,100cumecs.

Assuming no further rain, the dam has now peaked around 74.97m AHD which was around 600mm below the first fuse plug initiation level.

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is also maintaining close contact with warning agencies and local councils.

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m<sup>3</sup>/s

**North Pine Dam:**

Five gates are open and continuing to drop. Releases may still continue until Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

**Leslie Harrison Dam:**

Gate releases are underway due to rainfall and inflows.

**Hinze Dam:**

A release of around 8,000 megalitres a day is being made through the emergency gates. There is no public access to the spillway.

Seqwater Technical Officer name	Robert Drury
Seqwater Technical Officer position title	Dam Operations Manager

**BoM assessment**

*(consisting of references to latest Flood Warning for the Brisbane River and other relevant Bureau forecasts and warnings (e.g. weather/rain forecasts, Tropical Cyclone Warning etc) and other updates/comments if needed)*

BoM has been advised.

BoM Technical Officer name	Peter Baddiley
BoM Technical Officer position title	
BoM Technical Officer contact details	flood.qld [REDACTED]

**Brisbane City Council (BCC) assessment**

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy

BCC Technical Officer name	Chris Lavin
BCC Technical Officer position title	Disaster Operations Manager
BCC Technical Officer contact details	[REDACTED]

**Ipswich City Council (ICC) assessment (if required)**

*(to include predicted local inundation areas and depths of inundation based on the information)*



Council has been advised of the current strategy.

ICC Technical Officer name	Tony Trace
ICC Technical Officer position title	Local Disaster Response Coordinator
ICC Technical Officer contact details	

### Somerset Regional Council (SRC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current strategy.

SRC Technical Officer name	Tony Jacobs
SRC Technical Officer position title	Local Disaster Response Coordinator
SRC Technical Officer contact details	

### Collated and distributed by (Agency)

Contact Officer signature	
Contact Officer name	Rob Drury
Contact Officer position title	Dam Operations Manager

Next TSR due	Date	11.1.2011	Time	PM	or Event	
--------------	------	-----------	------	----	----------	--

## Lynette Williams

---

**From:** Petula Martinz [REDACTED] on behalf of Dan Spiller  
**Sent:** Tuesday, 11 January 2011 9:04 PM  
**To:** Ken Smith; spiller.daniel@SEQWGM; 'Martin.Peter.[REDACTED]'; 'Dunn.KerryG [REDACTED]'  
**Cc:** Bradley John; Dennien Barry @ SEQWGM; 'Madgwick.DarrenT [REDACTED]'; 'tim.watts [REDACTED]'; 'lance.mccallum [REDACTED]'; 'dawson.alistaire [REDACTED]'  
**Subject:** RE: Request for logistic support - SEQ Water Grid

Ken,

Seqwater has been able to access a commercial helicopter for the day. That will be sufficient for the survey of reservoirs.

We will still require assistance with the supply of bottled water, and will continue to liaise with SDCC about that.

Thanks for your assistance.

Dan

---

**From:** Ken Smith [REDACTED]  
**Sent:** Tuesday, 11 January 2011 7:06 PM  
**To:** Dan Spiller; 'Martin.Peter.[REDACTED]'; 'Dunn.KerryG [REDACTED]'; 'John.bradley [REDACTED]'; Barry Dennien; 'Madgwick.DarrenT [REDACTED]'; 'tim.watts [REDACTED]'; 'lance.mccallum [REDACTED]'; 'dawson.alistaire [REDACTED]'  
**Subject:** Re: Request for logistic support - SEQ Water Grid

Dan

I will take up these logistical support issues with a/asst commissioner Alistair Dawson

---

**From:** Petula Martinz [REDACTED]  
**To:** Peter Martin <Martin.Peter.[REDACTED]>; Kerry Dunn <[REDACTED]>  
**Cc:** Ken Smith; john.bradley [REDACTED]; Barry Dennien <Barry.Dennien [REDACTED]>; Darren Madgwick [REDACTED]; Tim Watts [REDACTED]; Lance McCallum [REDACTED]  
**Sent:** Tue Jan 11 19:00:36 2011  
**Subject:** FW: Request for logistic support - SEQ Water Grid

All,

As noted below, there are a number of stand-alone towns in the Scenic Rim and Somerset areas that have run out of supply or are expected to do so tomorrow.

Most of these towns are isolated. While we have tanker trucks on standby, these cannot access the areas. We also cannot access the reservoirs to confirm the amount in storage and the need and priority to supply of bottled water.

Our recommendation is that a helicopter be prioritised to early tomorrow to:

- transport operators to the Kilcoy site, which should be able to recommence supply (avoiding the need for air supply of bottled water)
- transport a QUU and a Seqwater officer to other isolated towns, allowing them to confirm remaining reservoir levels and provide advice and the need for supply of bottled water.



We are preparing a proposed itinerary and timetable.

We appreciate that these resources will need to be prioritised against other needs. We appreciate your advice and assistance.

We are receiving good support on a number of other issues.

Regards,  
Dan

---

**From:** Lee Hutchison  
**Sent:** Tuesday, 11 January 2011 6:46 PM  
**To:** sdcclogs [REDACTED]  
**Cc:** SEQWGM Emergency; Dan Spiller  
**Subject:** FW: Request for logistic support - SEQ Water Grid  
**Importance:** High

Further to the below, please find attached the latest update. Please note that Fernvale a sub-district of Lowood is now out of water. It is the highest priority for resupply of potable water within the attached list.

We do not have any internal capacity to carry out the resupply to Fernvale as it is cut off by road.

Please acknowledge receipt and do not hesitate to contact our Emergency Manager on [REDACTED]

Regards,

Scott Denner  
Duty Emergency Executive  
[REDACTED]

---

**From:** Lee Hutchison  
**Sent:** Tuesday, 11 January 2011 4:25 PM  
**To:** 'sdcclog' [REDACTED]  
**Cc:** SEQWGM Emergency  
**Subject:** Request for logistic support - SEQ Water Grid

Per telecom at 1605hr, please find attached a log of requested support tasks consisting of 5 towns requiring the supply of potable water (thru tanker or bottled water), and one water treatment plant requiring a resupply of lime.

The attachment includes detail of the time-line for supply of water to townships, based on what remains within the reservoirs at present.

With regards to the Water Treatment Plant, we have procured some lime, but are unable to get it to the plant. The plant supplies approx 40,000 pers on the Sunshine Coast, and will fail within 24 hours.

Included in the attachment are the contact details for personnel at a local level best able to answer queries and to coordinate movements and local support.

Regards

Scott Denner  
Duty Emergency Executive  
[REDACTED]

## Lynette Williams

---

**From:** Petula Martinz [REDACTED]  
**Sent:** Tuesday, 11 January 2011 6:44 PM  
**To:** Dennien Barry @ SEQWGM; Reilly Bob; Brown Damien; Darren Madgwick; Geoff Stead; Ken Smith; Kerry Dunn; Lance McCallum; Lauren Sims; Peter Borrows; Peter Martin; Rob Drury; SEQWGM Emergency; Stephen Robertson; Wall Terry; Tim Watts ; Media @ SEQWGM; Bradley John  
**Subject:** Updated technical support report  
**Attachments:** Technical Situation Report W41.docx

All,

Updated report attached.

Regards,  
Dan

**Petula Martinz**  
Executive Assistant to Daniel Spiller  
Director Operations  
SEQ Water Grid Manager  
**Phone:** [REDACTED]  
**Email:** [REDACTED]  
**Visit:** Level 15, 53 Albert Street, Brisbane  
**Post:** PO Box 16205, City East Qld 4002  
**ABN:** 14783 317 630

Please consider the environment before printing this email. It takes 10 litres of water to make one sheet of A4 paper.

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.



## TECHNICAL SITUATION REPORT

TSR Number	W41	Date of TSR release	11.1.2011	Time of TSR release	6pm
------------	-----	---------------------	-----------	---------------------	-----

### Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

Current objectives	<ul style="list-style-type: none"> <li>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</li> </ul>
Strategy	<ul style="list-style-type: none"> <li>Peak inflows into Wivenhoe in excess of 12000 cumecs.</li> <li>Increase releases to maintain fuse plug and dam integrity.</li> <li>Close sluices at Somerset Dam to store more water however will affect upstream areas.</li> </ul>
Key considerations	<div>Storage levels: Above FSL</div> <hr/> <div>Inflows: Inflows expected well over 1,500,000ML.</div> <hr/> <div>Rainfall: Continuing</div> <hr/> <div>Lockyer/Bremer: Monitoring their inflows</div> <hr/> <div>Brisbane River: Impact as below.</div>

### Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m<sup>3</sup>/s in outflow from the dam in addition to the gate release which could be as high as 10,000m<sup>3</sup>/s at the time.

Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy. Somerset is at 104.41m holding 671,000ML and 176.6%.

In the last twelve hours totals of up to 370mm have fallen in the area around Wivenhoe Dam. In the last hour, rainfalls between 15 and 30mm have been recorded in the same area. At 1600, the BoM advised that falls between 50 to 100mm are still forecast for the 24hrs to 1600 Wednesday 12 January 2011 for the North Pine and Somerset/Wivenhoe catchments. Current inflows are about 9,000cumecs.

At 1730 Wivenhoe Dam was 74.92m AHD holding 2,200,000ML and 190% and rising slowly and releasing about 6,700m<sup>3</sup>/s.

The current expectation is that the dam will reach a steady 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 m<sup>3</sup>/s.

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

The dam is expected to peak below 75.5m AHD which is 100mmm below the first fuse plug initiation level.

Note that the automatic recorder as indicated on the BoM website is affected by drawdown and is not reflecting the actual lake level and tendency.

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is also maintaining close contact with warning agencies and local councils.

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m<sup>3</sup>/s

**North Pine Dam:**

Five gates are open, and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

**Leslie Harrison Dam:**

Gate releases are underway due to rainfall and inflows.

**Hinze Dam:**

A release of around 86cumecs or 7396 megalitres a day is being made through the emergency gates and this will increase to around 8,000 megalitres per day by 6pm Tuesday 11 January. There is no public access to the spillway.

**Wyalong Dam**

As at 5:00pm today 9,680ML/day was passing over the spillway at Wyalong Dam. This represents a water depth of 0.59m over the spillway. The water level is continuing to rise. Wyalong Dam Alliance will continue to monitor and advise of water levels and flows.

Seqwater Technical Officer name	Robert Drury
Seqwater Technical Officer position title	Dam Operations Manager

**BoM assessment**

*(consisting of references to latest Flood Warning for the Brisbane River and other relevant Bureau forecasts and warnings (e.g. weather/rain forecasts, Tropical Cyclone Warning etc) and other updates/comments if needed)*

BoM has been advised.

BoM Technical Officer name	Peter Baddiley
BoM Technical Officer position title	
BoM Technical Officer contact details	flood.qld [REDACTED]

**Brisbane City Council (BCC) assessment**

*(to include predicted local inundation areas and depths of inundation based on the information)*



Council has been advised of the current status.

BCC Technical Officer name	Chris Lavin
BCC Technical Officer position title	Disaster Operations Manager
BCC Technical Officer contact details	

### Ipswich City Council (ICC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current status.

ICC Technical Officer name	Tony Trace
ICC Technical Officer position title	Local Disaster Response Coordinator
ICC Technical Officer contact details	

### Somerset Regional Council (SRC) assessment (if required)

*(to include predicted local inundation areas and depths of inundation based on the information)*

Council has been advised of the current status.

SRC Technical Officer name	Tony Jacobs
SRC Technical Officer position title	Local Disaster Response Coordinator
SRC Technical Officer contact details	

### Collated and distributed by (Agency)

Contact Officer signature	
Contact Officer name	Rob Drury
Contact Officer position title	Dam Operations Manager

Next TSR due	Date	11.1.2011	Time	PM	or Event	
--------------	------	-----------	------	----	----------	--

## Lynette Williams

---

**From:** Petula Martinz [REDACTED] on behalf of Dan Spiller  
[Daniel.Spiller@seqwgm.com.au]  
**Sent:** Tuesday, 11 January 2011 7:01 PM  
**To:** Peter Martin; Kerry Dunn  
**Cc:** Ken Smith; Bradley John; Dennien Barry @ SEQWGM; Darren Madgwick; Tim Watts ; Lance McCallum  
**Subject:** FW: Request for logistic support - SEQ Water Grid  
**Attachments:** Water Supply outage Isolated town supply support request - 11111 at 1800h.xlsx  
**Importance:** High

All,

As noted below, there are a number of stand-alone towns in the Scenic Rim and Somerset areas that have run out of supply or are expected to do so tomorrow.

Most of these towns are isolated. While we have tanker trucks on standby, these cannot access the areas. We also cannot access the reservoirs to confirm the amount in storage and the need and priority to supply of bottled water.

Our recommendation is that a helicopter be prioritised to early tomorrow to:

- transport operators to the Kilcoy site, which should be able to recommence supply (avoiding the need for air supply of bottled water)
- transport a QUU and a Seqwater officer to other isolated towns, allowing them to confirm remaining reservoir levels and provide advice and the need for supply of bottled water.

We are preparing a proposed itinerary and timetable.

We appreciate that these resources will need to be prioritised against other needs. We appreciate your advice and assistance.

We are receiving good support on a number of other issues.

Regards,  
Dan

---

**From:** Lee Hutchison  
**Sent:** Tuesday, 11 January 2011 6:46 PM  
**To:** [sdcclogs](#) [REDACTED]  
**Cc:** SEQWGM Emergency; Dan Spiller  
**Subject:** FW: Request for logistic support - SEQ Water Grid  
**Importance:** High

Further to the below, please find attached the latest update. Please note that Fernvale a sub-district of Lowood is now out of water. It is the highest priority for resupply of potable water within the attached list.

We do not have any internal capacity to carry out the resupply to Fernvale as it is cut off by road.

Please acknowledge receipt and do not hesitate to contact our Emergency Manager on [REDACTED] 24/7).

Regards,

Scott Denner  
Duty Emergency Executive  
M: [REDACTED]

**From:** Lee Hutchison  
**Sent:** Tuesday, 11 January 2011 4:25 PM  
**To:** 'sdcclog' [REDACTED]  
**Cc:** SEQWGM Emergency  
**Subject:** Request for logistic support - SEQ Water Grid

Per telecom at 1605hr, please find attached a log of requested support tasks consisting of 5 towns requiring the supply of potable water (thru tanker or bottled water), and one water treatment plant requiring a resupply of lime.

The attachment includes detail of the time-line for supply of water to townships, based on what remains within the reservoirs at present.

With regards to the Water Treatment Plant, we have procured some lime, but are unable to get it to the plant. The plant supplies approx 40,000 pers on the Sunshine Coast, and will fail within 24 hours.

Included in the attachment are the contact details for personnel at a local level best able to answer queries and to coordinate movements and local support.

Regards

Scott Denner  
Duty Emergency Executive  
M [REDACTED]

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.



Limited supply towns summary

Updated: 11-Jan-11 12:10pm

A message to conserve water has been issued to all towns in the following regions					
Region	Town	Asset owner	Point of contact	Supply status	Actions
Scenic Rim	Canungra	WTP - Seqwater		* WTP offline * Reservoir level - 94%, 2-3 days supply at current demand	* Monitoring supply
	Beaudesert	WTP - Seqwater		* WTP online * Reservoir level - 86%	* Monitoring supply
	South Maclean	WTP - Seqwater		* Being supplied by Logan City Council	* Supply should continue as normal
	Kooralbyn	WTP - Seqwater		* WTP offline * Reservoirs full - 5-7 days supply	* Monitoring supply
	Rathdowney	WTP - Seqwater		* WTP online, maybe run twice today * Reservoirs full, only 50kL in each though * Break in mains last night, reservoirs re-filled	* Monitoring supply
	Moogerah	WTP - Seqwater		* Rec WTP offline	* Tankering water
	Boonah-Kalbar	WTP - Seqwater		* WTP online and all going OK, river level high	* Monitoring supply
No access to any WTPs. Some workers have been isolated on site.					
Somerset/Lockyer Valley	Jimna	WTP - Seqwater		* Power off, no access * 1m in reservoir, unsure of supply limit	* Requesting bottled water * Monitoring levels * Awaiting access for water tankers
	Linville	WTP - Seqwater		* Power off, no access * Reservoir levels going OK	* Requesting bottled water * Monitoring supply * Awaiting access for water tankers and water transfer pump
	Kirkleagh	WTP - Seqwater		* No access	* Recreational plant, supply OK
	Kilcoy	WTP - Seqwater		* Power off, no access * 50% in town reservoirs - 24hr supply on current demand * No boosting for high level zones, loss of supply for some customers	* Requesting bottled water * SDCC/DDC request in progress * Awaiting Energex and EMQ assistance to gain access to WTP
	Lowood	WTP - Seqwater		* Power off, no access * Unsure of raw water pumps or raw water cells flooded * > 80% reservoir storage  If WTP out due to flooding for moderate period - affected towns and nearby reticulated estates requiring bottled water are Withcott, Helidon, Gatton, Grantham, Laidley, Forest Hill, Fernvale, Lowood Reservoir 1 empty due to burst on Minden main. Likely no supply NOW to the towns and nearby reticulated areas of Minden, Coolana, Tarampa, Brightview, Hatton Vale, Lockrose, Lowood West. Supply volumes held in service reservoirs in the Lowood scheme unknown.	* Requesting bottled water * Town being evacuated * Unable to get close enough to confirm situation * Operator isolated and monitoring reservoir levels  Urgent bottled water supply for drinking will be likely on 12/3/11
	Fernvale	QUU		* Burst main is draining reservoir - unsure of available volume	* Requesting bottled water
	Helensvale Estate Withcott Table Top Estate Murphy's Creek	QUU		* Helidon Water Pump Station lost in floodwaters * Withcott reservoir empty and on supplies Table Top * Helidon P/S normally supplies Helensvale Estate	* Requesting bottled water
	Esk	WTP - Seqwater		* Power off, no access * Seqwater reservoir levels - 98% * QUU pump station to Toogoolawah down - therefore no transfer to town reservoirs * Severe flooding	* Requesting bottled water * WTP maybe available once access is possible
	Toogoolawah	QUU		* QUU pump station to Toogoolawah down - therefore no transfer to Toogoolawah * Severe flooding - can't access pump station	* Requesting bottled water
	Somerset Township	WTP - Seqwater		* Currently offline, no external access	* Will be operated by local dam operators if necessary
Sunshine Coast	Wivenhoe (recreation)	WTP - Seqwater		* Currently offline, no physical access	* Will be operated if necessary
	Kenilworth	WTP - Seqwater		* No power, no access * WTP will not be available, even after access due to loss of raw water pontoon * Reservoir levels - 45%, 48hrs supply max.	* Town isolated - contacting police at 12pm to check access * 3 tankers on stand-by as soon as access is granted
	Woodford	WTP - Seqwater		* WTP offline	* Supply from NPI
	Caboolture	WTP - Seqwater		* WTP offline	* Supply from NPI
	Banksia Beach	WTP - Seqwater		* Currently supplying Bribe Island	* Local workers running plant due to access issues

" JNB 3 "

**Lynette Williams**

---

From: John Bradley  
Sent: Thursday, 26 January 2012 10:19 AM  
To: 'Daniel Spiller' [REDACTED]

Dan

This reflects the statement to Hedley Thomas issued yesterday.

Thanks  
John B

- Daniel Spiller was Operations Manager at the SEQ Water Grid Manager during the period of the 2011 Floods.
- He did not work in Seqwater which was responsible for operating the dam but did incorporate Seqwater's reports in Situation Reports to Government stakeholders.
- The SEQ Water Grid Manager was and continues to have its own legal representation at the Inquiry which is separate from both the State of Queensland and Seqwater.
- Dan Spiller did not work in the Department of Premier and Cabinet during the Commission's preparation of the Interim Report focussed on dam management or the Government's response to the Report which was provided on 23 August 2011.
- Mr Spiller was not involved in the Government's consideration of these matters.
- Mr Spiller did not take up a secondment at DPC until 29 September 2011 to act the role of Executive Director, Environment and Resources Policy.
- He undertook a broad range of policy functions across a number of government portfolios such as Department of Local Government and Planning and Department of Environment Resource Management. In this role, he had some involvement in policy issues related to the second stage of the Commission's review of matters including flood mapping, operational mines and town planning.
- He has not been involved in providing any analysis or advice on Seqwater's operation of the dam in the 2011 Flood event or its compliance with the dam manual.
- Mr Spiller was at no stage in a position of real or perceived conflict in relation to the Commission of Inquiry.
- When the Commission announced late on Tuesday 24 January 2012 that it would conduct further hearings on this matter, Mr Spiller's secondment was terminated and he returned to the SEQ Water Grid Manager the following day to avoid any potential perception of a conflict of interest in future examination of these issues by the Commission.

## Lynette Williams

---

**From:** Daniel Spiller  
**Sent:** Tuesday, 24 January 2012 7:54 AM  
**To:** John Bradley  
**Cc:** Lucinda Kasmer  
**Subject:** FW: Australian follow

---

**From:** Michael Lyons [REDACTED]  
**Sent:** Tuesday, 24 January 2012 7:45 AM  
**To:** Barry Dennien; Daniel Spiller  
**Subject:** FW: Australian follow

---

**From:** Michael Foster [REDACTED]  
**Sent:** Tuesday, 24 January 2012 7:35 AM  
**To:** [kelly.murphy](#) [REDACTED]; [zoe.russell](#) [REDACTED]; [mfoster](#) [REDACTED] Michael Lyons; SEQWGM Media; [pborrow](#) [REDACTED]; [bandrew](#) [REDACTED]  
**Subject:** Australian follow

Kelly,

As discussed Seqwater yesterday provided a detailed response to issues raised by the Australian to the Commission at its request. This response has been provided to DG of Premier and Cabinet for information.

Lines do not change too much from yesterday.

- Documents referred to by the Australian have been previously considered by the Queensland floods Commission of Inquiry in its Interim Report in July 2011.
- Seqwater stands by its statement yesterday that it transitioned to W3 on Saturday 8 January as required by the operations manual.
- The Commission has now advised it is reviewing these issues.

Cheers Mike

---

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network. If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.



**Lynette Williams**

---

**From:** Mike Foster [REDACTED]  
**Sent:** Monday, 23 January 2012 5:50 PM  
**To:** John Bradley  
**Cc:** Peter Borrows; Bill Andrew; 'Ilott, Michael'; Toni Lake  
**Subject:** Seqwater response to COI  
**Attachments:** Document (2).pdf

John,

As discussed, please find attached Seqwater response to latest COI request.

Cheers Mike

**Mike Foster**

Manager - Corporate & Community Relations



PI [REDACTED]  
Level 3, 240 Margaret St, Brisbane City QLD 4000  
PO Box 16146, City East QLD 4002  
Website | [www.seqwater.com.au](http://www.seqwater.com.au)



Important information: This email and any attached information is intended only for the addressee and may contain confidential and/or privileged information. If you are not the addressee, you are notified that any transmission, distribution, or other use of this information is strictly prohibited. The confidentiality attached to this email is not waived, lost or destroyed by reasons of mistaken delivery to you. If you have received this email in error please contact the sender immediately and delete the material from your email system. QLD Bulk Water Supply Authority ABN75450239876 (Trading as Seqwater).

23 January 2012

Ms Kyla Hayden and Ms Susan Hedge  
Queensland Floods Commission of Inquiry  
Level 30  
400 George Street  
Brisbane QLD 4000

**By Email**

Dear Ms Hayden and Ms Hedge

**Seqwater  
Requirement dated 22 January 2012**

We refer to the requirement dated 22 January 2012 addressed to our client.

In the table below, we provide the relevant lists requested by the Commission. As to the second list, we also attach an extract from the detailed submissions we provided to the Commission in June 2011 setting out our client's submissions on the theme pursued by the Fernvale Community Action Group; namely, that greater releases should have been made earlier. We note these submissions address the same substantive question to which the second list is directed.

<b><i>List of references supporting the fact that the transition to Strategy W3 occurred at 8am on Saturday 8 January 2011</i></b>	<b><i>List of references supporting the fact that between 8am on 8 January 2012 and 8am on Monday 10 January, the primary consideration was protecting urban areas from inundation</i></b>
Exhibit 24 (Flood Event Report): pages 13 second column third bullet point; pages 189-190 esp third bullet point on page 190.	Exhibit 24: pages 13-19; pages 191-193.
Exhibit 17 (Witness Statement of Robert Ayre): para 384 (at page 87); Schedule 1A page 1.	Exhibit 17 (Witness Statement of Robert Ayre): paras 380-385 and Schedule 1A.

**Our Ref** MGI:150540

mgib A0119947599v1 150540 23.1.2012

ABN 47 702 595 768

Level 31  
Riverside Centre  
123 Eagle Street  
Brisbane QLD 4000  
Australia

T +61 7 3334 3000  
F +61 7 3334 3444

Correspondence  
PO Box 7082  
Riverside Centre  
Brisbane QLD 4001  
Australia  
DX 210 Brisbane  
www.aar.com.au

Bangkok  
Beijing  
Beijing IP  
Brisbane  
Hanoi  
Ho Chi Minh City  
Hong Kong  
Jakarta  
Melbourne  
Perth  
Port Moresby  
Shanghai  
Singapore  
Sydney



<b>List of references supporting the fact that the transition to Strategy W3 occurred at 8am on Saturday 8 January 2011</b>	<b>List of references supporting the fact that between 8am on 8 January 2012 and 8am on Monday 10 January, the primary consideration was protecting urban areas from inundation</b>
Exhibit 18 (Supplementary Witness Statement of Robert Ayre): paras 34-35.	Exhibit 18 (Supplementary Witness Statement of Robert Ayre): paras 31, 32, 34, 35, 45, 46, 47, 49, 50, 51, 55-57, 58-70, 72-106 including the situation reports referred to in those paragraphs.
Exhibit 51 (Statement of John Tibaldi): para 34.	
Transcript references:  Ayre: T155/32 – 156/29	Transcript references:  Ayre: T137/48-138/17; T158/47-159/4; 170/2-182/9; T192/8-194/23; T255/30-60  Malone: T379/24-381/1
	Reports of independent peer reviewers Emeritus Professor Colin Apelt, Leonard McDonald, Greg Roads and Brian Shannon as to compliance with the manual - see exhibits 410, 412, 413 and 411 respectively.
	The references to evidence referred to in the attached submissions to the extent they are not referred to above.

Yours faithfully

Michael Ilott

Partner

Michael.Ilott@aar.com.au

T

272. This reflects the fact that there is no evidentiary basis for any suggestion that the flood engineers made any error of judgment in their handling of the event.
273. In fact, all of the evidence points to the conclusion that they exercised sound judgment throughout.

#### GREATER RELEASES SOONER

274. This theme was pursued primarily by Mr Rangiah on behalf of a group of residents of Fernvale.
275. The suggestion was that the flood engineers should have increased releases within Strategy W3 sooner or more rapidly than they did in the period from 8am on Saturday, 8 January 2011.
276. The premise of the questioning seemed to be that the flood engineers ought to have appreciated that the magnitude of the coming event was such that they ought to have pre-emptively caused *some* flooding in Fernvale, and probably in Brisbane, in an endeavour to avoid *major* flooding later in the event.
277. This premise should be rejected. The Commission should find that the flood engineers acted appropriately. That is for the following reasons.
278. *First*, the information before the flood engineers at the time did not justify making releases at the rates suggested.
279. Even if one were to have relied on the rainfall forecasts, those forecasts would not have justified the making of additional releases.
280. In its early stages, the event was well under control. The flood engineers had no reason to think that the event would be of the magnitude ultimately experienced. For example, they had no reason to think that they were soon to experience not one flood peak, but rather two distinct flood peaks within the space of 36 hours, with each peak on its own being comparable to the 1974 flood.
281. *Secondly*, the making of releases at the rates suggested would have been contrary to the Manual.



282. The Manual provides that:<sup>108</sup>

When determining dam outflows within all strategies, peak outflow should generally not exceed peak inflow.

283. And Strategy W3:<sup>109</sup>

- (a) provides for a *maximum* flow rate of 4,000m<sup>3</sup>/s at Moggill;
- (b) expressly requires consideration of lower level objectives when making decisions on water releases;
- (c) thus contemplates that one would ordinarily keep the flow rates at the lower end of the range, increasing them only as is adjudged to be necessary to protect urban areas from inundation; when it is adjudged that releases towards the top end of the range are necessary to protect urban areas from inundation, the lower level objectives will be accorded less relative weight (and perhaps no weight) in accordance with the instruction that the primary consideration is protecting urban areas from inundation.

284. Releases at the rates suggested would have entailed:

- (a) peak outflows exceeding peak inflows;
- (b) a failure to give appropriate consideration to lower level objectives; and
- (c) a jump to the maximum release rate before that was justified on the information then available.

285. *Thirdly*, from Sunday night there was a need to moderate releases having regard to conditions in the downstream catchments. That is, there was a need to avoid making additional releases from the dam which would coincide with the significant flows from downstream catchments which:

- (a) had been predicted from Sunday night;
- (b) were in fact experienced as a result of the devastating flash flooding that occurred in the Lockyer on Monday.

286. *Fourthly*, the evidence does not support the proposition that the making of releases at the rates suggested would have avoided major flooding later in the event. In fact, the evidence

---

<sup>108</sup> Page 22.

<sup>109</sup> Page 28.

supports the conclusion that, given the magnitude of the event, major flooding was inevitable. Evidence to that effect was particularly given by Mr Ayre and Dr Nathan.

*Saturday, 8 January 2011 – 8am to midnight.*

287. During this period:

- (a) The lake level rose no higher than 68.65 m AHD<sup>110</sup> – there was thus almost 5 ½ m of storage remaining before the lake would reach 74.0 m AHD.
- (b) Peak inflows rose no higher than 1799 m<sup>3</sup>/s.<sup>111</sup>
- (c) By midnight inflows had tailed off to 899m<sup>3</sup>/s, and the lake level was about to start falling.<sup>112</sup>

288. In these circumstances, there was no justification for increasing release rates to the levels suggested.

289. Mr Ayre dealt with this in his second statement:<sup>113</sup>

I am aware that some commentators have suggested that after the January 2011 Flood Event more water should have been released from Wivenhoe Dam over the course of Saturday 8 January 2011. I reject this suggestion. Over the course of the Saturday, the lake level at Wivenhoe Dam rose from 68.32m AHD to 68.65m AHD. There was a still a significant amount of flood storage would have been available in the Dam if rainfall increased significantly. The lake level was predicted to peak at 68.7m AHD at about 1am on Tuesday 11 January 2011 (more than 48 hours away), by which time the releases from the Dam would need to have been increased gradually to 1,480m<sup>3</sup>/s. By the end of Saturday, releases from Wivenhoe Dam had already been increased to 1,242m<sup>3</sup>/s, which meant that the estimated maximum required release rate of 1,480m<sup>3</sup>/s, which was required to be reached at 1am on Tuesday, was easily obtainable. By 5am Sunday morning, the release rate had already been increased to 1,336m<sup>3</sup>/s.

I also note that rainfall was not significant over the course of the Saturday and that inflow rates into Wivenhoe Dam on the Saturday decreased from the peak rate of 2,144m<sup>3</sup>/s at 7am down to 899m<sup>3</sup>/s by 11pm. Further rainfall had been forecast but as set out in my first statement, and as I had identified in the 5:53pm situation report, it was only if and when further rainfall eventuated that increased releases from Wivenhoe Dam would be necessary and justified.

For these reasons, it was appropriate that releases from Wivenhoe Dam maximised protection to urban areas while still minimising the impact to rural life downstream.

290. The topic also arose during Mr Ayre's questioning:<sup>114</sup>

Now, under strategy W3, it was open to you to release up to 4,000 CUMecs?-- It is. However, that would have made releases in excess of inflows, and therefore not in keeping with an overall flood mitigation strategy.

<sup>110</sup> Ex. 24, pages 155-156.

<sup>111</sup> Ibid.

<sup>112</sup> Ibid.

<sup>113</sup> Ex. 18, paragraphs 55-57.

<sup>114</sup> T158/46-T159/4.

Well, on that basis, it was certainly open to release more than 1,250 CUMecs at that stage?-- On the basis the modelling that was undertaken, and keeping with our operational strategies that we implement, the unnecessary or needless inundation of bridges or property is to be avoided, and that's in keeping with the way we operated on that Saturday afternoon.

But, nevertheless, it was open to you to increase the rate of release at that stage because you were engaging strategy W3?-- I don't believe there is any justification for doing so.

291. Later the following exchange occurred:<sup>115</sup>

Can you ... make any comment on his suggestion that circumstances on Saturday the 8<sup>th</sup> warranted higher outflows? -- Certainly the releases being made at that time were at or near the actual inflows, so if we were making greater releases then we wouldn't be acting as a flood mitigation storage.

292. In responding to a question about one of Mr O'Brien's unfounded assertions, Mr Ayre had explained:<sup>116</sup>

... the very nature of flood mitigation dams means you do store water at the earlier parts of the event to meet predefined release targets. The assertion here that we were storing water so that we can release later in the event, I think, is somewhat misleading. If we have a look at the numbers in terms of flood volumes that occurred over the period from Thursday through to midnight on Sunday, the 9<sup>th</sup>, there was something like -- I will just find it -- 560,000 megalitres of inflow and we had released approximately 230,000 megalitres of water in that timeframe. So, effectively we had actually around about 340,000 megalitres of water in storage during that period and that equates to a lake level of around EL 68.6, which is just above the W1, W2 threshold level. So, effectively we'd only utilised some 22 per cent of the total flood storage capacity available to us.

***The period to 7.00 pm on Sunday, 9 January 2011***

293. During this period the lake level rose no higher than 68.97 m AHD,<sup>117</sup> thus leaving more than 5 m of storage before the lake would reach 74.0 m AHD.

294. However, inflows had started to increase materially in the afternoon.

295. Mr Malone was on shift at the time.

296. In his first statement, Mr Malone said:<sup>118</sup>

I was the Duty Engineer on shift during 0700 to 1900 on Sunday 9 January 2011. During that shift, I undertook an assessment of the potential for runoff volumes into the dams during the next three days. I did this by comparing rainfall and runoff since the commencement of the event up to that time and determining the fraction of rainfall which had been converted to runoff or "conversion rate". I applied this fraction to the lower and upper limits of the forecast rainfall for the following 3 days to determine the potential runoff volumes. After I completed my assessment I sent it to all of the Flood Operations Engineers. A copy of the assessment is shown in the Somerset Wivenhoe Flood Report at page 207 of Appendix K. Following this, Engineer 1 arranged a roundtable meeting of all Duty Engineers in the Flood Operations Centre at 1530. Engineer 4 attended by telephone, but Engineers 1 and 3 joined me in the Flood Operations Centre. We discussed the developing event, the current model predictions, the forecast rainfall and where we thought things might get to if significant rain continued to fall. My best recollection is that it was decided in that meeting that from the next shift (that is, the shift starting 1900 that day) the Flood Operations Centre would be staffed by two Duty Engineers until the situation stabilised.

<sup>115</sup> T255/42-49.

<sup>116</sup> T137/57-T138/12.

<sup>117</sup> Ex. 24, pages 156-157.

<sup>118</sup> Ex. 45, paragraph 21.

297. The developments in the release strategy during the afternoon and evening are evident from Situation Reports 11 and 12.

298. According to Situation Report 11, prepared at about 5pm:<sup>119</sup>

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<sup>3</sup>/s and, at this stage, the dam will reach at least 72.5 m AHD 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 1,600m<sup>3</sup>/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 1,400m<sup>3</sup>/s (120,000ML/day).

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 15<sup>th</sup> January 2011.

299. According to Situation Report 12, prepared at about 9pm:<sup>120</sup>

River levels upstream of the dam are rising quickly with significant inflow being generated from the intense heavy rainfall. Flows in the Brisbane River at Gregor's Ck have already reached 6,700m<sup>3</sup>/s and the river is still rising.

The dam level is rising again, with the current level being 69.10m AHD (1,410,000ML with about 300,00 of flood storage). Estimated peak inflow to the dam just from the Upper Brisbane R alone may reach as high as 7,500m<sup>3</sup>/s and, at this stage, the dam will reach at least 73.0 m AHD during Tuesday morning. Given the rapid increase in inflow volumes, it will be necessary to increase the release from Wivenhoe Monday morning.

The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam and, at this stage, releases will be kept below 3,500m<sup>3</sup>/s and the combined flows in the lower Brisbane will be limited to 4,000m<sup>3</sup>/s. This is below the limit of urban damages in the City reaches.

The current release rate from Wivenhoe Dam is 1,400m<sup>3</sup>/s (120,000ML/day). Gate opening will start to be increased from noon Monday and the release is expected increase to at least 2,600m<sup>3</sup>/s during Tuesday morning.

Since the commencement of the event on 02/01/2011 approximately 220,000ML has been released from the dam, with an event total approaching 1,000,000ML without further rain and as much as 1,500,000ML with forecast rainfall of (both including Somerset outflow). At this stage, releases will continue until at least Sunday 16<sup>th</sup> January 2011.

300. Mr Malone was questioned about this:<sup>121</sup>

And at that stage the current release rate was 1,400? That's what-----

You agree with that?-- Yes, that's what the situation report says.

And it was intended to increase the rate of release to at least 2,600 CUMECS on the Tuesday morning. Now, was the delay in attempting to increase the rates of release until Tuesday morning related to a desire to keep the downstream crossings open for as long as possible?

<sup>119</sup> Ex. 24, Appendix E, page 20.

<sup>120</sup> Ex. 24, Appendix E, pages 21-22.

<sup>121</sup> T380/30-T381/1.



COMMISSIONER: I am not quite sure that's right, Mr Rangiah, because the increases start from noon Monday. It is not as if they have been deferred till Tuesday morning, it is just that's where it will get to by Tuesday morning.

MR RANGIAH: Yes. Well, perhaps I can put it slightly differently. The increase to 2,600 was to take place progressively until it reached 2,600 on the Tuesday morning?-- That was the expectation at the time.

And - but that figure of 2,600 or that release rate could have been reached earlier than Tuesday morning, couldn't it?--Yes, but we would have increased downstream flooding.

And it was that desire to delay downstream flooding that resulted in you not increasing the rate more rapidly to 2,600 at that stage, is that correct?-- No, I don't see that -- how you can draw that conclusion.

301. Also by the time of Situation Report 12, another consideration had emerged. Under the heading "Rainfall", the Situation Report stated:<sup>122</sup>

Very heavy rainfall has been recorded in the upper reaches of the Brisbane and Stanley in the last 6 hours with totals up to 100 to 140mm. Totals for the last 24 hours range from 100 to 300mm.

Rainfall of similar magnitudes is expected in the 12 to 24 hours, especially around the Bremer/Warrill catchments as the system tracks south.

302. Thus there was an awareness from the forecasts that the system was tracking south, with the prospect of significant rainfall over the downstream catchments in the next 12 to 24 hours. As has already been observed, this became a material consideration in determining release strategies from about this time.
303. All of this reveals a proactive and responsible approach to the evolving situation. It does not entail unjustified delay. Rather, it reflects a responsible progression through Strategy W3, bearing in mind lower level objectives, and increasing release rates as was adjudged to be necessary to protect urban areas from inundation.

*The period from 7.00pm on Sunday, 9 January 2011 to 3pm on Monday, 10 January 2011*

304. There was a practical reason why releases could not be ramped up suddenly on the Sunday night. The additional releases would have inundated the Fernvale Bridge and Mount Crosby Weir Bridge. For safety reasons, it was essential that these bridges be closed before releases were increased. By about 11.30pm, police were on site at the Fernvale Bridge.<sup>123</sup> And by about 1.00am on Monday, 10 January 2011, the bridge was closed.<sup>124</sup>
305. However, the concerns about downstream catchments were becoming very real by about this time.

<sup>122</sup> Ex. 24, Appendix E, page 21.

<sup>123</sup> Ex. 18, paragraphs 78-86.

<sup>124</sup> Ex. 24, page 18, second column, third bullet point.

306. Situation Report 13, issued at about 1.14 am on Monday, 10 January 2011, recorded:<sup>125</sup>

Very heavy rainfall has been recorded in the Upper Brisbane and Stanley Rivers in the last 12 hours with totals up to 240mm. Totals for the last 24 hours range from 100 to 300mm.

Rainfall of similar magnitudes is expected in the 12 to 24 hours around downstream catchments as the system tracks south.

...

The projected Wivenhoe Dam releases combined with Lockyer flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Saturday 15 January in varying degrees.

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. If the predicted rainfall eventuates in the downstream tributary catchments the resultant combined flows in the lower Brisbane may exceed the threshold of damaging discharge in the urban areas within the next 24 to 48 hours.

307. Situation Report 14, issued at about 6.30am on Monday, 10 January 2011, recorded:<sup>126</sup>

Moderate to heavy rainfall has been recorded in the Upper Brisbane and Stanley Rivers in the last 12 hours with totals up to 90mm. Totals for the last 24 hours range from 100 to 325mm.

Mt Glorious recorded 100mm in the last 12 hours.

Rainfall of similar magnitudes is expected in the 12 to 24 hours around downstream catchments as the system tracks south.

...

The projected Wivenhoe Dam releases combined with Lockyer flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Saturday 15 January in varying degrees.

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. If the predicted rainfall eventuates in the downstream tributary catchments the resultant combined flows in the lower Brisbane may exceed the threshold of damaging discharge in the urban areas within the next 24 to 48 hours ...

308. Mr Ayre said in his second statement:<sup>127</sup>

The best forecast information (from the BoM's ACCESS models and the WATL website) that was available at that stage indicated that the rainfall producing system was moving south and contracting towards the coast so our expectation at that stage was the metropolitan Brisbane and the Bremer River would bear the brunt of the rainfall on Monday and Tuesday and that was another reason why we did not want to greatly increase the rate of releases considering that downstream Brisbane may well have significant flows from rainfall in the local catchments.

This was a critical issue because if we did release more water on top of the heavy rain in the downstream areas it would have caused more damage than necessary

<sup>125</sup> Ex. 24, Appendix E, pages 23-24.

<sup>126</sup> Ex. 24, Appendix E, pages 25-27.

<sup>127</sup> Ex. 18, paragraphs 100-101. See also T251/30-37.

309. Another issue which arose in this period concerned information received from the Brisbane City Council (the "BCC") to the effect that there would be urban damage at flows of  $3,500\text{m}^3/\text{s}$  at Moggill.
310. For a brief period, the flood engineers attempted to accommodate this information.
311. This was entirely appropriate, and in accordance with the Manual, because it directly promoted the primary objective of Strategy W3, which is to protect urban areas from inundation.<sup>128</sup>
312. In his third statement, Mr Tibaldi said:<sup>129</sup>

This action was taken with the aim of protecting urban areas below Moggill from inundation and followed a conversation with the BCC.

This pause in increasing the flow at Moggill from  $3,500\text{m}^3/\text{s}$  to  $4,000\text{m}^3/\text{s}$  did not, in my opinion, have any impact on the outflows from the dam the following day or on the peak flow at Moggill during the flood event.

The reason for this is that the six hour pause in increasing releases resulted in a maximum of 10,800ML being held in the dam above what would have been released had the pause not occurred. This is a relatively insignificant volume when compared to the total flood event volume of 2,650,000ML and equates to an increase in storage level of less than seven centimetres when the event peaked at a lake level of BL 74.97m. A seven centimetre increase or decrease in lake level at this time or in the period leading up to this time would have had no impact on the decisions to release flood water that were made on 11 January 2011 and therefore would not have increased the flood peak in the Brisbane River below Moggill.

313. Thus, in addition to being appropriate and in accordance with the Manual, the brief pause in increasing flows was of no moment in the scheme of this event.
314. It is possible to draw back and take an overview of the period from 7.00pm on Sunday, 9 January 2011 to 3.00pm on Monday, 10 January 2011. Mr Tibaldi has done this in his first statement;<sup>130</sup>

At 7.00pm on Sunday, 9 January 2011, the predicted peak of Wivenhoe dam was 72.1 m AHD, and the predicted peak flow at Moggill was  $3,300\text{m}^3/\text{s}$ . By 3.00pm on Monday, 10 January 2011, the first of the two distinct flood peaks experienced during the January 2011 Flood Event had entered the dam. At that time, the predicted peak of Wivenhoe dam was 73.6 m AHD, and the predicted peak flow at Moggill was  $3,910\text{m}^3/\text{s}$ . If the second of the two distinct flood peaks (which had not been forecast) had not occurred on Tuesday, 11 January 2011, the flood event would have been contained without exceeding the threshold for urban damage of  $4,000\text{m}^3/\text{s}$  at Moggill. If releases had been ramped up during this period, that would have involved making releases which would have exceeded the threshold for urban damage of  $4,000\text{m}^3/\text{s}$  at Moggill. It would have involved making releases of the kind contemplated by Strategy

<sup>128</sup> Ex. 24, page 19, final column, last dot point; T251/39-T252/2. It is also relevant here that the threshold of  $4,000\text{m}^3/\text{s}$  at Moggill is, in terms of Strategy W3, a maximum or upper bound. The flood engineers did not exceed this upper bound. And they were at liberty to make judgments as to how flows might best be adjusted below the upper bound in pursuit of the primary objective of protecting urban areas from inundation.

<sup>129</sup> Ex. 53, paragraphs 7-9. The text set out above incorporates the correction referred to in Mr Tibaldi's fourth statement (Ex. 54).

<sup>130</sup> Ex. 51, paragraph 49.

W4 before the conditions for adopting Strategy W4 were met. If the second of the two distinct flood peaks had not occurred, the ramping up of releases during this period would have inundated urban areas when that was unnecessary.

315. Thus, by 3pm on Monday, 10 January 2011, the flood engineers had little remaining ability to increase releases within Strategy W3.
316. And, for the reasons developed above, the suggestion that releases should have been increased before this time is without foundation.
317. Indeed, the judgment to refrain from making additional releases during this period, particularly having regard to conditions in the downstream catchments, was sound.
318. The independent expert engaged by the Commission, Mr Babister, observed that:<sup>131</sup>

... the flows from the Brisbane River coincided with the falling limb of the flow in the Bremer River. Earlier releases of dam flow may have increased the peak flood level and inundation extent at Ipswich.

319. Later, Mr Babister opined:<sup>132</sup>

When the Wivenhoe Dam Operational strategy is primarily concerned with flood mitigation (Strategy W1 to W3), there is an objective to prevent the combined flow of dam releases with flows from the Bremer River and Lockyer Creek exceeding damaging levels. This objective was fulfilled in while operating under Strategies W1 to W3.

320. Thus, on Sunday and Monday, the flood engineers successfully avoided the peak flows coinciding, which event would likely have increased peak flood levels and inundation.

***Increasing releases as suggested would not have avoided major flooding later in the event***

321. In his second statement, Mr Malone detailed modelling which he had undertaken to assess the impact of releases being increased from 1,450m<sup>3</sup>/s at 0900 Sunday, 9 January 2011 to 3,000 m<sup>3</sup>/s at 0000 Monday, 10 January 2011, and continuing to be increased until 1500 Tuesday, 11 January 2011.<sup>133</sup>
322. Mr Malone examined the peak flow and the peak height at the Brisbane Port Office Gauge.
323. In terms of peak flow, Mr Malone said:<sup>134</sup>

The modelled release of water from Wivenhoe dam is shown in Figure 1. The reduction in peak discharge from Wivenhoe dam is apparent by comparing the peak of the solid blue line (which is the actual release during the 2011 flood event) with the peak of the dotted blue line (which is the modelled scenario I have outlined above). The volume under the solid blue and dotted blue lines is the same (that is, 2,650,000ML).

<sup>131</sup> Report of Mr Babister, paragraph 106.

<sup>132</sup> Report of Mr Babister, paragraph 165.

<sup>133</sup> Ex. 33, paragraphs 2 and 3.

<sup>134</sup> Ex. 33, paragraphs 3(f)-(g).



## Lynette Williams

---

**From:** Mike Foster [REDACTED]  
**Sent:** Monday, 23 January 2012 12:08 PM  
**To:** John Bradley  
**Cc:** Michael Lyons  
**Subject:** Seqwater media statement  
**Attachments:** DRAFT Seqwater media release 230112.DOC

John,

As discussed. Please find draft Seqwater media statement which has been approved by legal.

Given the issue continues to attract media attention (Ch 7/9, talkback etc and given the implied allegation that our engineers acting dishonestly, the organisation is keen to release the statement.

Release is also with our insurers and the expectation is that they will support release.

Cheers Mike

**Mike Foster**  
Manager - Corporate & Community Relations



Ph [REDACTED]  
Level 3, 240 Margaret St, Brisbane City QLD 4000  
PO Box 16146, City East QLD 4002  
Website | [www.seqwater.com.au](http://www.seqwater.com.au)



Important information: This email and any attached information is intended only for the addressee and may contain confidential and/or privileged information. If you are not the addressee, you are notified that any transmission, distribution, or other use of this information is strictly prohibited. The confidentiality attached to this email is not waived, lost or destroyed by reasons of mistaken delivery to you. If you have received this email in error please contact the sender immediately and delete the material from your email system. QLD Bulk Water Supply Authority ABN75450239876 (Trading as Seqwater).

## Media Release

---

23 January 2012

### Seqwater media statement

Claims in *The Australian* newspaper today suggesting Seqwater breached its operational manual during the January 2011 flood are inaccurate and unfounded.

Further, the implied allegation that Seqwater (and its engineers) gave misleading evidence to the Queensland Floods Commission of Inquiry is baseless and is utterly rejected.

The issue and the documents referred to by *The Australian*, have been investigated by the Commission as part of its Interim Report in July 2011.

The Commission's Interim Report (page 72) found that Seqwater did invoke Strategy W3 at 8am on Saturday 8 January 2011 in accordance with the manual.

From this time, the primary consideration was the protection of urban areas from inundation. In making decisions about the volume of water released, Seqwater also considered the requirement to minimise the impact on rural life and downstream bridges, as the manual requires.

The Commission's Interim Report noted that the flood operations centre logs for 8 January 2011 did not record the transition to Strategy W3 and recommended that all future logs record when decisions are made to transition from one strategy to the next (pages 66 and 67 of the Interim Report). Seqwater has accepted and implemented this recommendation.

Seqwater also notes that the Commission closely scrutinised the rates of release during 8-9 January, the period referred to in *The Australian* (pages 72-75 of the Commission's Interim Report). The Interim Report does not identify any error in these release rates nor any failure to comply with the manual.

The Commission's independent expert has examined Seqwater's management of Wivenhoe and Somerset dams during the January 2011 flood event. The report investigates, amongst other things, the impact of an earlier release strategy, such as that suggested by *The Australian*. The report of the Commission's expert finds that Seqwater's engineers, using the strategies in the manual and the information available to them, achieved close to the best possible mitigation result.

ENDS

### Media contact

Mike Foster, Seqwater Communications Manager  
m: [REDACTED]



## Lynette Williams

---

**From:** John Bradley  
**Sent:** Monday, 23 January 2012 6:00 PM  
**To:** Daniel Spiller  
**Subject:** FW: Seqwater response to COI  
**Attachments:** Document (2).pdf

Dan

Mike Foster has provided this for our information

John B

**From:** Mike Foster [REDACTED]  
**Sent:** Monday, 23 January 2012 5:50 PM  
**To:** John Bradley  
**Cc:** Peter Borrows; Bill Andrew; 'Ilott, Michael'; Toni Lake  
**Subject:** Seqwater response to COI

John,

As discussed, please find attached Seqwater response to latest COI request.

Cheers Mike

**Mike Foster**  
Manager - Corporate & Community Relations



Ph [REDACTED]  
Level 3, 240 Margaret St, Brisbane City QLD 4000  
PO Box 16146, City East QLD 4002  
Website | [www.seqwater.com.au](http://www.seqwater.com.au)



Important information: This email and any attached information is intended only for the addressee and may contain confidential and/or privileged information. If you are not the addressee, you are notified that any transmission, distribution, or other use of this information is strictly prohibited. The confidentiality attached to this email is not waived, lost or destroyed by reasons of mistaken delivery to you. If you have received this email in error please contact the sender immediately and delete the material from your email system. QLD Bulk Water Supply Authority ABN75450239876 (Trading as Seqwater).

23 January 2012

Ms Kyla Hayden and Ms Susan Hedge  
Queensland Floods Commission of Inquiry  
Level 30  
400 George Street  
Brisbane QLD 4000

By Email

Dear Ms Hayden and Ms Hedge

**Seqwater  
Requirement dated 22 January 2012**

We refer to the requirement dated 22 January 2012 addressed to our client.

In the table below, we provide the relevant lists requested by the Commission. As to the second list, we also attach an extract from the detailed submissions we provided to the Commission in June 2011 setting out our client's submissions on the theme pursued by the Fernvale Community Action Group; namely, that greater releases should have been made earlier. We note these submissions address the same substantive question to which the second list is directed.

<b>List of references supporting the fact that the transition to Strategy W3 occurred at 8am on Saturday 8 January 2011</b>	<b>List of references supporting the fact that between 8am on 8 January 2012 and 8am on Monday 10 January, the primary consideration was protecting urban areas from inundation</b>
Exhibit 24 (Flood Event Report): pages 13 second column third bullet point; pages 189-190 esp third bullet point on page 190.	Exhibit 24: pages 13-19; pages 191-193.
Exhibit 17 (Witness Statement of Robert Ayre): para 384 (at page 87); Schedule 1A page 1.	Exhibit 17 (Witness Statement of Robert Ayre): paras 380-385 and Schedule 1A.

Our Ref MG1:150540

mgib A0119947599v1 150540 23.1.2012

ABN 47 702 595 758

Level 31  
Riverside Centre  
123 Eagle Street  
Brisbane QLD 4000  
Australia

T +61 7 3334 3000  
F +61 7 3334 3444

Correspondence  
PO Box 7082  
Riverside Centre  
Brisbane QLD 4001  
Australia  
DX 210 Brisbane  
www.aar.com.au

Bangkok  
Beijing  
Beijing IP  
Brisbane  
Hanoi  
Ho Chi Minh City  
Hong Kong  
Jakarta  
Melbourne  
Perth  
Port Moresby  
Shanghai  
Singapore  
Sydney





<b>List of references supporting the fact that the transition to Strategy W3 occurred at 8am on Saturday 8 January 2011</b>	<b>List of references supporting the fact that between 8am on 8 January 2012 and 8am on Monday 10 January, the primary consideration was protecting urban areas from inundation</b>
Exhibit 18 (Supplementary Witness Statement of Robert Ayre): paras 34-35.	Exhibit 18 (Supplementary Witness Statement of Robert Ayre): paras 31, 32, 34, 35, 45, 46, 47, 49, 50, 51, 55-57, 58-70, 72-106 including the situation reports referred to in those paragraphs.
Exhibit 51 (Statement of John Tibaldi): para 34.	
Transcript references:  Ayre: T155/32 – 156/29	Transcript references:  Ayre: T137/48-138/17; T158/47-159/4; 170/2-182/9; T192/6-194/23; T255/30-60  Malone: T379/24-381/1
	Reports of independent peer reviewers Emeritus Professor Colin Apelt, Leonard McDonald, Greg Roads and Brian Shannon as to compliance with the manual - see exhibits 410, 412, 413 and 411 respectively.
	The references to evidence referred to in the attached submissions to the extent they are not referred to above.

Yours faithfully

Michael Ilott  
Partner

272. This reflects the fact that there is no evidentiary basis for any suggestion that the flood engineers made any error of judgment in their handling of the event.
273. In fact, all of the evidence points to the conclusion that they exercised sound judgment throughout.

#### **GREATER RELEASES SOONER**

274. This theme was pursued primarily by Mr Rangiah on behalf of a group of residents of Fernvale.
275. The suggestion was that the flood engineers should have increased releases within Strategy W3 sooner or more rapidly than they did in the period from 8am on Saturday, 8 January 2011.
276. The premise of the questioning seemed to be that the flood engineers ought to have appreciated that the magnitude of the coming event was such that they ought to have pre-emptively caused *some* flooding in Fernvale, and probably in Brisbane, in an endeavour to avoid *major* flooding later in the event.
277. This premise should be rejected. The Commission should find that the flood engineers acted appropriately. That is for the following reasons.
278. *First*, the information before the flood engineers at the time did not justify making releases at the rates suggested.
279. Even if one were to have relied on the rainfall forecasts, those forecasts would not have justified the making of additional releases.
280. In its early stages, the event was well under control. The flood engineers had no reason to think that the event would be of the magnitude ultimately experienced. For example, they had no reason to think that they were soon to experience not one flood peak, but rather two distinct flood peaks within the space of 36 hours, with each peak on its own being comparable to the 1974 flood.
281. *Secondly*, the making of releases at the rates suggested would have been contrary to the Manual.

282. The Manual provides that:<sup>108</sup>

When determining dam outflows within all strategies, peak outflow should generally not exceed peak inflow.

283. And Strategy W3:<sup>109</sup>

- (a) provides for a *maximum* flow rate of 4,000m<sup>3</sup>/s at Moggill;
- (b) expressly requires consideration of lower level objectives when making decisions on water releases;
- (c) thus contemplates that one would ordinarily keep the flow rates at the lower end of the range, increasing them only as is adjudged to be necessary to protect urban areas from inundation; when it is adjudged that releases towards the top end of the range are necessary to protect urban areas from inundation, the lower level objectives will be accorded less relative weight (and perhaps no weight) in accordance with the instruction that the primary consideration is protecting urban areas from inundation.

284. Releases at the rates suggested would have entailed:

- (a) peak outflows exceeding peak inflows;
- (b) a failure to give appropriate consideration to lower level objectives; and
- (c) a jump to the maximum release rate before that was justified on the information then available.

285. *Thirdly*, from Sunday night there was a need to moderate releases having regard to conditions in the downstream catchments. That is, there was a need to avoid making additional releases from the dam which would coincide with the significant flows from downstream catchments which:

- (a) had been predicted from Sunday night;
- (b) were in fact experienced as a result of the devastating flash flooding that occurred in the Lockyer on Monday.

286. *Fourthly*, the evidence does not support the proposition that the making of releases at the rates suggested would have avoided major flooding later in the event. In fact, the evidence

---

<sup>108</sup> Page 22.

<sup>109</sup> Page 28.

supports the conclusion that, given the magnitude of the event, major flooding was inevitable. Evidence to that effect was particularly given by Mr Ayre and Dr Nathan.

*Saturday, 8 January 2011 – 8am to midnight.*

287. During this period:

- (a) The lake level rose no higher than 68.65 m AHD<sup>110</sup> – there was thus almost 5 ½ m of storage remaining before the lake would reach 74.0 m AHD.
- (b) Peak inflows rose no higher than 1799 m<sup>3</sup>/s.<sup>111</sup>
- (c) By midnight inflows had tailed off to 899m<sup>3</sup>/s, and the lake level was about to start falling.<sup>112</sup>

288. In these circumstances, there was no justification for increasing release rates to the levels suggested.

289. Mr Ayre dealt with this in his second statement.<sup>113</sup>

I am aware that some commentators have suggested that after the January 2011 Flood Event more water should have been released from Wivenhoe Dam over the course of Saturday 8 January 2011. I reject this suggestion. Over the course of the Saturday, the lake level at Wivenhoe Dam rose from 68.32m AHD to 68.65m AHD. There was a still a significant amount of flood storage would have been available in the Dam if rainfall increased significantly. The lake level was predicted to peak at 68.7m AHD at about 1am on Tuesday 11 January 2011 (more than 48 hours away), by which time the releases from the Dam would need to have been increased gradually to 1,480m<sup>3</sup>/s. By the end of Saturday, releases from Wivenhoe Dam had already been increased to 1,242m<sup>3</sup>/s, which meant that the estimated maximum required release rate of 1,480m<sup>3</sup>/s, which was required to be reached at 1am on Tuesday, was easily obtainable. By 5am Sunday morning, the release rate had already been increased to 1,336m<sup>3</sup>/s.

I also note that rainfall was not significant over the course of the Saturday and that inflow rates into Wivenhoe Dam on the Saturday decreased from the peak rate of 2,144m<sup>3</sup>/s at 7am down to 899m<sup>3</sup>/s by 11pm. Further rainfall had been forecast but as set out in my first statement, and as I had identified in the 5:53pm situation report, it was only if and when further rainfall eventuated that increased releases from Wivenhoe Dam would be necessary and justified.

For these reasons, it was appropriate that releases from Wivenhoe Dam maximised protection to urban areas while still minimising the impact to rural life downstream.

290. The topic also arose during Mr Ayre's questioning:<sup>114</sup>

Now, under strategy W3, it was open to you to release up to 4,000 CUMECS?-- It is. However, that would have made releases in excess of inflows, and therefore not in keeping with an overall flood mitigation strategy.

<sup>110</sup> Ex. 24, pages 155-156.

<sup>111</sup> Ibid.

<sup>112</sup> Ibid.

<sup>113</sup> Ex. 18, paragraphs 55-57.

<sup>114</sup> T158/46-T159/4.



Well, on that basis, it was certainly open to release more than 1,250 CUMecs at that stage?-- On the basis the modelling that was undertaken, and keeping with our operational strategies that we implement, the unnecessary or needless inundation of bridges or property is to be avoided, and that's in keeping with the way we operated on that Saturday afternoon.

But, nevertheless, it was open to you to increase the rate of release at that stage because you were engaging strategy W3?-- I don't believe there is any justification for doing so.

291. Later the following exchange occurred:<sup>115</sup>

Can you ... make any comment on his suggestion that circumstances on Saturday the 8<sup>th</sup> warranted higher outflows? -- Certainly the releases being made at that time were at or near the actual inflows, so if we were making greater releases then we wouldn't be acting as a flood mitigation storage.

292. In responding to a question about one of Mr O'Brien's unfounded assertions, Mr Ayre had explained:<sup>116</sup>

... the very nature of flood mitigation dams means you do store water at the earlier parts of the event to meet predefined release targets. The assertion here that we were storing water so that we can release later in the event, I think, is somewhat misleading. If we have a look at the numbers in terms of flood volumes that occurred over the period from Thursday through to midnight on Sunday, the 9<sup>th</sup>, there was something like -- I will just find it -- 560,000 megalitres of inflow and we had released approximately 230,000 megalitres of water in that timeframe. So, effectively we had actually around about 340,000 megalitres of water in storage during that period and that equates to a lake level of around EL 68.6, which is just above the W1, W2 threshold level. So, effectively we'd only utilised some 22 per cent of the total flood storage capacity available to us.

***The period to 7.00 pm on Sunday, 9 January 2011***

293. During this period the lake level rose no higher than 68.97 m AHD,<sup>117</sup> thus leaving more than 5 m of storage before the lake would reach 74.0 m AHD.

294. However, inflows had started to increase materially in the afternoon.

295. Mr Malone was on shift at the time.

296. In his first statement, Mr Malone said:<sup>118</sup>

I was the Duty Engineer on shift during 0700 to 1900 on Sunday 9 January 2011. During that shift, I undertook an assessment of the potential for runoff volumes into the dams during the next three days. I did this by comparing rainfall and runoff since the commencement of the event up to that time and determining the fraction of rainfall which had been converted to runoff or "conversion rate". I applied this fraction to the lower and upper limits of the forecast rainfall for the following 3 days to determine the potential runoff volumes. After I completed my assessment I sent it to all of the Flood Operations Engineers. A copy of the assessment is shown in the Somerset Wivenhoe Flood Report at page 207 of Appendix K. Following this, Engineer 1 arranged a roundtable meeting of all Duty Engineers in the Flood Operations Centre at 1530. Engineer 4 attended by telephone, but Engineers 1 and 3 joined me in the Flood Operations Centre. We discussed the developing event, the current model predictions, the forecast rainfall and where we thought things might get to if significant rain continued to fall. My best recollection is that it was decided in that meeting that from the next shift (that is, the shift starting 1900 that day) the Flood Operations Centre would be staffed by two Duty Engineers until the situation stabilised.

<sup>115</sup> T255/42-49.

<sup>116</sup> T137/57-T138/12.

<sup>117</sup> Ex. 24, pages 156-157.

<sup>118</sup> Ex. 45, paragraph 21.

297. The developments in the release strategy during the afternoon and evening are evident from Situation Reports 11 and 12.

298. According to Situation Report 11, prepared at about 5pm:<sup>119</sup>

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<sup>3</sup>/s and, at this stage, the dam will reach at least 72.5 m AHD 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 1,600m<sup>3</sup>/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 1,400m<sup>3</sup>/s (120,000ML/day).

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 15<sup>th</sup> January 2011.

299. According to Situation Report 12, prepared at about 9pm:<sup>120</sup>

River levels upstream of the dam are rising quickly with significant inflow being generated from the intense heavy rainfall. Flows in the Brisbane River at Gregor's Ck have already reached 6,700m<sup>3</sup>/s and the river is still rising.

The dam level is rising again, with the current level being 69.10m AHD (1,410,000ML with about 300,00 of flood storage). Estimated peak inflow to the dam just from the Upper Brisbane R alone may reach as high as 7,500m<sup>3</sup>/s and, at this stage, the dam will reach at least 73.0 m AHD during Tuesday morning. Given the rapid increase in inflow volumes, it will be necessary to increase the release from Wivenhoe Monday morning.

The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam and, at this stage, releases will be kept below 3,500m<sup>3</sup>/s and the combined flows in the lower Brisbane will be limited to 4,000m<sup>3</sup>/s. This is below the limit of urban damages in the City reaches.

The current release rate from Wivenhoe Dam is 1,400m<sup>3</sup>/s (120,000ML/day). Gate opening will start to be increased from noon Monday and the release is expected increase to at least 2,600m<sup>3</sup>/s during Tuesday morning.

Since the commencement of the event on 02/01/2011 approximately 220,000ML has been released from the dam, with an event total approaching 1,000,000ML without further rain and as much as 1,500,000ML with forecast rainfall of (both including Somerset outflow). At this stage, releases will continue until at least Sunday 16<sup>th</sup> January 2011.

300. Mr Malone was questioned about this:<sup>121</sup>

And at that stage the current release rate was 1,400? That's what-----

You agree with that?-- Yes, that's what the situation report says.

And it was intended to increase the rate of release to at least 2,600 CUMecs on the Tuesday morning. Now, was the delay in attempting to increase the rates of release until Tuesday morning related to a desire to keep the downstream crossings open for as long as possible?

<sup>119</sup> Ex. 24, Appendix E, page 20.

<sup>120</sup> Ex. 24, Appendix E, pages 21-22.

<sup>121</sup> T380/30-T381/1.

COMMISSIONER: I am not quite sure that's right, Mr Rangiah, because the increases start from noon Monday. It is not as if they have been deferred till Tuesday morning, it is just that's where it will get to by Tuesday morning.

MR RANGIAH: Yes. Well, perhaps I can put it slightly differently. The increase to 2,600 was to take place progressively until it reached 2,600 on the Tuesday morning?-- That was the expectation at the time.

And - but that figure of 2,600 or that release rate could have been reached earlier than Tuesday morning, couldn't it?--Yes, but we would have increased downstream flooding.

And it was that desire to delay downstream flooding that resulted in you not increasing the rate more rapidly to 2,600 at that stage, is that correct?-- No, I don't see that - how you can draw that conclusion.

301. Also by the time of Situation Report 12, another consideration had emerged. Under the heading "Rainfall", the Situation Report stated:<sup>122</sup>

Very heavy rainfall has been recorded in the upper reaches of the Brisbane and Stanley in the last 6 hours with totals up to 100 to 140mm. Totals for the last 24 hours range from 100 to 300mm.

Rainfall of similar magnitudes is expected in the 12 to 24 hours, especially around the Bremer/Warrill catchments as the system tracks south.

302. Thus there was an awareness from the forecasts that the system was tracking south, with the prospect of significant rainfall over the downstream catchments in the next 12 to 24 hours. As has already been observed, this became a material consideration in determining release strategies from about this time.
303. All of this reveals a proactive and responsible approach to the evolving situation. It does not entail unjustified delay. Rather, it reflects a responsible progression through Strategy W3, bearing in mind lower level objectives, and increasing release rates as was adjudged to be necessary to protect urban areas from inundation.

*The period from 7.00pm on Sunday, 9 January 2011 to 3pm on Monday, 10 January 2011*

304. There was a practical reason why releases could not be ramped up suddenly on the Sunday night. The additional releases would have inundated the Fernvale Bridge and Mount Crosby Weir Bridge. For safety reasons, it was essential that these bridges be closed before releases were increased. By about 11.30pm, police were on site at the Fernvale Bridge.<sup>123</sup> And by about 1.00am on Monday, 10 January 2011, the bridge was closed.<sup>124</sup>
305. However, the concerns about downstream catchments were becoming very real by about this time.

<sup>122</sup> Ex. 24, Appendix E, page 21.

<sup>123</sup> Ex. 18, paragraphs 78-86.

<sup>124</sup> Ex. 24, page 18, second column, third bullet point.

306. Situation Report 13, issued at about 1.14 am on Monday, 10 January 2011, recorded:<sup>125</sup>

Very heavy rainfall has been recorded in the Upper Brisbane and Stanley Rivers in the last 12 hours with totals up 100 to 240mm. Totals for the last 24 hours range from 100 to 300mm.

Rainfall of similar magnitudes is expected in the 12 to 24 hours around downstream catchments as the system tracks south.

...

The projected Wivenhoe Dam releases combined with Lockyer flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Saturday 15 January in varying degrees.

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. If the predicted rainfall eventuates in the downstream tributary catchments the resultant combined flows in the lower Brisbane may exceed the threshold of damaging discharge in the urban areas within the next 24 to 48 hours.

307. Situation Report 14, issued at about 6.30am on Monday, 10 January 2011, recorded:<sup>126</sup>

Moderate to heavy rainfall has been recorded in the Upper Brisbane and Stanley Rivers in the last 12 hours with totals up to 90mm. Totals for the last 24 hours range from 100 to 325mm.

Mt Glorious recorded 100mm in the last 12 hours.

Rainfall of similar magnitudes is expected in the 12 to 24 hours around downstream catchments as the system tracks south.

...

The projected Wivenhoe Dam releases combined with Lockyer flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Saturday 15 January in varying degrees.

Water levels in the lower Brisbane R will be impacted by the combined flows of Lookyer Ck, Bremer River, local runoff and releases from Wivenhoe Dam. If the predicted rainfall eventuates in the downstream tributary catchments the resultant combined flows in the lower Brisbane may exceed the threshold of damaging discharge in the urban areas within the next 24 to 48 hours ...

308. Mr Ayre said in his second statement:<sup>127</sup>

The best forecast information (from the BoM's ACCESS models and the WATL website) that was available at that stage indicated that the rainfall producing system was moving south and contracting towards the coast so our expectation at that stage was the metropolitan Brisbane and the Bremer River would bear the brunt of the rainfall on Monday and Tuesday and that was another reason why we did not want to greatly increase the rate of releases considering that downstream Brisbane may well have significant flows from rainfall in the local catchments.

This was a critical issue because if we did release more water on top of the heavy rain in the downstream areas it would have caused more damage than necessary

<sup>125</sup> Ex. 24, Appendix E, pages 23-24.

<sup>126</sup> Ex. 24, Appendix E, pages 25-27.

<sup>127</sup> Ex. 18, paragraphs 100-101. See also T251/30-37.



309. Another issue which arose in this period concerned information received from the Brisbane City Council (the "BCC") to the effect that there would be urban damage at flows of 3,500m<sup>3</sup>/s at Moggill.
310. For a brief period, the flood engineers attempted to accommodate this information.
311. This was entirely appropriate, and in accordance with the Manual, because it directly promoted the primary objective of Strategy W3, which is to protect urban areas from inundation.<sup>128</sup>
312. In his third statement, Mr Tibaldi said:<sup>129</sup>

This action was taken with the aim of protecting urban areas below Moggill from inundation and followed a conversation with the BCC.

This pause in increasing the flow at Moggill from 3,500m<sup>3</sup>/s to 4,000m<sup>3</sup>/s did not, in my opinion, have any impact on the outflows from the dam the following day or on the peak flow at Moggill during the flood event.

The reason for this is that the six hour pause in increasing releases resulted in a maximum of 10,800ML being held in the dam above what would have been released had the pause not occurred. This is a relatively insignificant volume when compared to the total flood event volume of 2,650,000ML and equates to an increase in storage level of less than seven centimetres when the event peaked at a lake level of EL 74.97m. A seven centimetre increase or decrease in lake level at this time or in the period leading up to this time would have had no impact on the decisions to release flood water that were made on 11 January 2011 and therefore would not have increased the flood peak in the Brisbane River below Moggill.

313. Thus, in addition to being appropriate and in accordance with the Manual, the brief pause in increasing flows was of no moment in the scheme of this event.
314. It is possible to draw back and take an overview of the period from 7.00pm on Sunday, 9 January 2011 to 3.00pm on Monday, 10 January 2011. Mr Tibaldi has done this in his first statement.<sup>130</sup>

At 7.00pm on Sunday, 9 January 2011, the predicted peak of Wivenhoe dam was 72.1 m AHD, and the predicted peak flow at Moggill was 3,300 m<sup>3</sup>/s. By 3.00pm on Monday, 10 January 2011, the first of the two distinct flood peaks experienced during the January 2011 Flood Event had entered the dam. At that time, the predicted peak of Wivenhoe dam was 73.6 m AHD, and the predicted peak flow at Moggill was 3,910 m<sup>3</sup>/s. If the second of the two distinct flood peaks (which had not been forecast) had not occurred on Tuesday, 11 January 2011, the flood event would have been contained without exceeding the threshold for urban damage of 4,000 m<sup>3</sup>/s at Moggill. If releases had been ramped up during this period, that would have involved making releases which would have exceeded the threshold for urban damage of 4,000 m<sup>3</sup>/s at Moggill. It would have involved making releases of the kind contemplated by Strategy

<sup>128</sup> Ex. 24, page 19, final column, last dot point; T251/39-T252/2. It is also relevant here that the threshold of 4,000m<sup>3</sup>/s at Moggill is, in terms of Strategy W3, a maximum or upper bound. The flood engineers did not exceed this upper bound. And they were at liberty to make judgments as to how flows might best be adjusted below the upper bound in pursuit of the primary objective of protecting urban areas from inundation.

<sup>129</sup> Ex. 53, paragraphs 7-9. The text set out above incorporates the correction referred to in Mr Tibaldi's fourth statement (Ex. 54).

<sup>130</sup> Ex. 51, paragraph 49.

W4 before the conditions for adopting Strategy W4 were met. If the second of the two distinct flood peaks had not occurred, the ramping up of releases during this period would have inundated urban areas when that was unnecessary.

315. Thus, by 3pm on Monday, 10 January 2011, the flood engineers had little remaining ability to increase releases within Strategy W3.
316. And, for the reasons developed above, the suggestion that releases should have been increased before this time is without foundation.
317. Indeed, the judgment to refrain from making additional releases during this period, particularly having regard to conditions in the downstream catchments, was sound.
318. The independent expert engaged by the Commission, Mr Babister, observed that:<sup>131</sup>

... the flows from the Brisbane River coincided with the falling limb of the flow in the Bremer River. Earlier releases of dam flow may have increased the peak flood level and inundation extent at Ipswich.

319. Later, Mr Babister opined:<sup>132</sup>

When the Wivenhoe Dam Operational strategy is primarily concerned with flood mitigation (Strategy W1 to W3), there is an objective to prevent the combined flow of dam releases with flows from the Bremer River and Lockyer Creek exceeding damaging levels. This objective was fulfilled in while operating under Strategies W1 to W3.

320. Thus, on Sunday and Monday, the flood engineers successfully avoided the peak flows coinciding, which event would likely have increased peak flood levels and inundation.

***Increasing releases as suggested would not have avoided major flooding later in the event***

321. In his second statement, Mr Malone detailed modelling which he had undertaken to assess the impact of releases being increased from 1,450m<sup>3</sup>/s at 0900 Sunday, 9 January 2011 to 3,000 m<sup>3</sup>/s at 0000 Monday, 10 January 2011, and continuing to be increased until 1500 Tuesday, 11 January 2011.<sup>133</sup>
322. Mr Malone examined the peak flow and the peak height at the Brisbane Port Office Gauge.
323. In terms of peak flow, Mr Malone said:<sup>134</sup>

The modelled release of water from Wivenhoe dam is shown in Figure 1. The reduction in peak discharge from Wivenhoe dam is apparent by comparing the peak of the solid blue line (which is the actual release during the 2011 flood event) with the peak of the dotted blue line (which is the modelled scenario I have outlined above). The volume under the solid blue and dotted blue lines is the same (that is, 2,650,000ML).

<sup>131</sup> Report of Mr Babister, paragraph 106.

<sup>132</sup> Report of Mr Babister, paragraph 165.

<sup>133</sup> Ex. 33, paragraphs 2 and 3.

<sup>134</sup> Ex. 33, paragraphs 3(f)-(g).

**Lynette Williams**

---

**From:** John Bradley  
**Sent:** Tuesday, 24 January 2012 9:05 AM  
**To:** 'Edmund.Burke'; 'Nicole.Scurrah'; 'Lachlan.Smith'  
**Subject:** Re: Lines - Wivenhoe - for feedback please

Looks OK.

You may choose not to say it but we are confident the email referred to in the Oz today was provided to the Commission in response to its original requests.

----- Original Message -----

**From:** Edmund Burke  
**To:** John Bradley; Nicole Scurrah; Lachlan Smith  
**Sent:** Tue Jan 24 09:00:21 2012  
**Subject:** FW: Lines - Wivenhoe - for feedback please

Just this?

---

**From:** Renee Mickelburgh  
**Sent:** Tuesday, 24 January 2012 8:59 AM  
**To:** John Bradley; Nicole Scurrah; Edmund Burke; Lachlan Smith  
**Subject:** Lines - Wivenhoe - for feedback please

Team

These are yesterday's lines. Please advise of any info to be removed/added

Wivenhoe

The Commission of Inquiry has all the powers of a royal commission.

I urge any-one with any new information about the floods of last January to pass it on to the Commission as it is charged with determining what happened and what improvements to make.

Renee Mickelburgh  
Deputy Director - Government Media Unit  
Office of the Hon Anna Bligh MP  
Premier of Queensland and Minister for Reconstruction  
\* [REDACTED]

P Please consider the environment before printing this email

## Lynette Williams

---

**From:** John Bradley  
**Sent:** Monday, 23 January 2012 4:44 PM  
**To:** Daniel Spiller  
**Subject:** RE: BoM report 23 January 2012

Yes to the latter pls.

---

**From:** Daniel Spiller  
**Sent:** Monday, 23 January 2012 4:39 PM  
**To:** John Bradley  
**Subject:** RE: BoM report 23 January 2012

John,

Beyond your FYI, I think it would be appropriate to seek advice from entities about potential scenarios for dam operations and river levels, (for example, what dam levels and releases currently are; what the bookend release could be based on these BOM forecasts; how does that interact with river flows; etc).

Let me know if this is already in train or not required. Otherwise I will action through Debbie.

Dan

---

**From:** John Bradley  
**Sent:** Monday, 23 January 2012 4:30 PM  
**To:** Daniel Spiller  
**Subject:** FW: BoM report 23 January 2012

Can you pls forward to barry – the email bounced.

---

**From:** John Bradley  
**Sent:** Monday, 23 January 2012 4:29 PM  
**To:** Dennien, Barry [REDACTED]  
**Cc:** Daniel Spiller; [pborrows](#) [REDACTED]  
**Subject:** FW: BoM report 23 January 2012

FYI

---

**From:** SDCC [REDACTED]  
**Sent:** Monday, 23 January 2012 4:04 PM  
**To:** [cc](#) [REDACTED]; John Bradley; [andrew.fraser](#) [REDACTED]; Brian Cox; Bruce Grady; DEPCOMMREGIONALOPS; DepCommRegOps; DEPCOMMSPECIALISTOPS; [DisasterManagement](#) [REDACTED]; Iain Macculloch (EMQ Kedron); Kate Lennox; Kelvin Anderson; Kym Charlton; [nicole.scurrah](#) [REDACTED]; Patrick Byrne; Peta Robertson; QPS Media; SDCC Kedron; Simon Kelly; State Duty Supervisor; Warren Bridson; Alyce Valentine; Caitlin Major; Chantelle Rule; DCS Media; Hayley Gillespie; Helen Ainsworth; Phil Nickerson; Sandy Harris; Tamani Nair; Troy Davies; [Adam.Shortman](#) [REDACTED]; fiona ferrier; Mark Biddulph; Natalie Locke; [Neil.Roberts](#) [REDACTED]; [scott.chandler](#) [REDACTED]; Tim Mulherin; Zac Skyring; Deryck Taylor; Eddie Bennet; Michael Shapland; Peter Twomey; Robert Bundy; Wayne Coutts; Wayne Hepple; Wayne Preedy  
**Subject:** BoM report 23 January 2012

Dear All,

Please see the attached report following today's teleconference with the BoM.

**SDCC Watch Desk**

**Emergency Management Queensland | Department of Community Safety**



## Lynette Williams

---

**From:** John Bradley  
**Sent:** Monday, 23 January 2012 9:40 AM  
**To:** Debbie Best (DERM); 'rachel.nolan' [REDACTED]  
**Cc:** Renee Mickelburgh  
**Subject:** Note re Seqwater  
**Attachments:** Doc3.docx

Minister

As requested by Debbie Best– this is my note on the Seqwater issue. Pls treat as background, I will ask Renee in Prem's office to send you the HIB that they are using.

John b

The Commission of Inquiry has had the legal powers of a Court and has been given the documentation referred to in the Australian, including situation reports.

There is no doubt the move by Seqwater Flood Engineers to "W3" was not formally recorded and the updated strategy was not reflected in the flood event log, leading to incorrect statements in other documents.

However, apart from the Flood Event log, the Commission was able to directly examine the evidence of Engineers under cross examination, outflows from the dam and flood modelling used by engineers.

It took evidence directly on the issue of when Seqwater moved to "W3" and on page 72 of its interim report, the Queensland Flood Commission of Inquiry states that then the trigger level of the dam was exceeded at 8 am on 8 January 2011:

*"The flood engineers moved immediately to strategy W3, which on their understanding required the flow at Moggill to be limited to 4000 m<sup>3</sup>/s."*

*(page 72, Interim Report)*

The Commission noted that the flood operations centre logs for 8 January 2011 did not record the transition to W3 (or indeed when other changes in strategy were made). As a result, the Commission made recommendations in its Interim Report for all future logs to record when decisions are made to transition from one strategy to the next (see pages 66 and 67 of the Interim Report). Seqwater has accepted this recommendation and it has been implemented in flood operations centre procedures.

The Report noted that some of the deficiencies were explicable because the log was being compiled by assistants as the flood engineers were managing the flood.

*"In a number of instances, mistakes were later identified by the flood engineers in the recording of details in the flood event log, including, in some instances, the terms of significant conversations.<sup>298</sup> Some telephone conversations were not recorded at all; in others the participants were incorrectly identified. The log did not record all model runs undertaken or the time at which they were undertaken,<sup>299</sup> and no note was made of decisions to change strategy or their basis.*

*Some of the deficiencies are explicable, although undesirable. The technical assistants recording telephone discussions were often not participants in them.<sup>301</sup> They were not always informed about the flood engineers' actions as they were taken.<sup>302</sup> There was no particular form or process for the recording of information, and the entries were not checked by the flood engineers.*

*(page 66, Interim Report)*

## **BACKGROUND:**

- It's important to understand that even under W3, this does not mean that Seqwater would immediately go to the maximum operating releases under that Strategy. (4000 m<sup>3</sup>/s downstream). While the primary consideration under W3 is the protection of urban areas from inundation, the flood engineers must consider lower level objectives when making decisions on water releases. These lower level objectives include minimising disruption and inconvenience to rural life (including by maintaining bridges immediately downstream of Wivenhoe trafficable).

- For these reasons there isn't an obvious corroboration or 'proof' that W3 had been introduced (eg. releases did not immediately increase to 4,000 m<sup>3</sup>/s and communications to Councils about bridge closures did not occur til that was considered likely the following day).
- Note also, the QFCOI has issued a further request for a statement from Seqwater yesterday concerning the time at which the W3 strategy was introduced. Seqwater has been asked to provide by COB today, so it is expected that it may be further addressed in the Final Report.

## **Lynette Williams**

---

**From:** John Bradley  
**Sent:** Monday, 23 January 2012 9:22 AM  
**To:** Renee Mickelburgh; 'Nicole Scurrah'  
**Cc:** Edmund Burke  
**Subject:** Document3  
**Attachments:** Doc3.docx

Probably too late but note final background dot point about QFCOI request to seqwater for more info on this.

Sorry to get to you so late Renee



The Commission of Inquiry has had the legal powers of a Court and has been given the documentation referred to in the Australian, including situation reports.

There is no doubt the move by Seqwater Flood Engineers to "W3" was not formally recorded and the updated strategy was not reflected in the flood event log, leading to incorrect statements in other documents.

However, apart from the Flood Event log, the Commission was able to directly examine the evidence of Engineers under cross examination, outflows from the dam and flood modelling used by engineers.

It took evidence directly on the issue of when Seqwater moved to "W3" and on page 72 of its interim report, the Queensland Flood Commission of Inquiry states that then the trigger level of the dam was exceeded at 8 am on 8 January 2011:

*"The flood engineers moved immediately to strategy W3, which on their understanding required the flow at Moggill to be limited to 4000 m3/s."*

*(page 72, Interim Report)*

The Commission noted that the flood operations centre logs for 8 January 2011 did not record the transition to W3 (or indeed when other changes in strategy were made). As a result, the Commission made recommendations in its Interim Report for all future logs to record when decisions are made to transition from one strategy to the next (see pages 66 and 67 of the Interim Report). Seqwater has accepted this recommendation and it has been implemented in flood operations centre procedures.

The Report noted that some of the deficiencies were explicable because the log was being compiled by assistants as the flood engineers were managing the flood.

*"In a number of instances, mistakes were later identified by the flood engineers in the recording of details in the flood event log, including, in some instances, the terms of significant conversations.<sup>298</sup> Some telephone conversations were not recorded at all; in others the participants were incorrectly identified. The log did not record all model runs undertaken or the time at which they were undertaken,<sup>299</sup> and no note was made of decisions to change strategy or their basis.*

*Some of the deficiencies are explicable, although undesirable. The technical assistants recording telephone discussions were often not participants in them.<sup>301</sup> They were not always informed about the flood engineers' actions as they were taken.<sup>302</sup> There was no particular form or process for the recording of information, and the entries were not checked by the flood engineers.*

*(page 66, Interim Report)*

## BACKGROUND:

- It's important to understand that even under W3, this does not mean that Seqwater would immediately go to the maximum operating releases under that Strategy. (4000 m3/s downstream). While the primary consideration under W3 is the protection of urban areas from inundation, the flood engineers must consider lower level objectives when making decisions on water releases. These lower level objectives include minimising disruption and inconvenience to rural life (including by maintaining bridges immediately downstream of Wivenhoe trafficable).

- For these reasons there isn't an obvious corroboration or 'proof' that W3 had been introduced (eg. releases did not immediately increase to 4,000 m<sup>3</sup>/s and communications to Councils about bridge closures did not occur til that was considered likely the following day).
- Note also, the QFCOI has issued a further request for a statement from Seqwater yesterday concerning the time at which the W3 strategy was introduced. Seqwater has been asked to provide by COB today, so it is expected that it may be further addressed in the Final Report.

**Lynette Williams**

---

**From:** Mike Foster [REDACTED]  
**Sent:** Monday, 23 January 2012 8:45 AM  
**To:** John Bradley; Zoe Russell; Justine Scarff; Travis Dawson  
**Cc:** Alex Fisher; Jim Pruss  
**Subject:** HIB - The Australian  
**Attachments:** HIB - The Australian and Jan flood event FINAL.DOC

John,

HIB as discussed.

Zoe ...John B is reviewing and may require additional information.

Attached has been signed off by our legals.

Cheers Mike

**Mike Foster**

Manager - Corporate & Community Relations



Ph [REDACTED]  
Level 3, 240 Margaret St, Brisbane City QLD 4000  
PO Box 16146, City East QLD 4002  
Website | [www.seqwater.com.au](http://www.seqwater.com.au)



Important information: This email and any attached information is intended only for the addressee and may contain confidential and/or privileged information. If you are not the addressee, you are notified that any transmission, distribution, or other use of this information is strictly prohibited. The confidentiality attached to this email is not waived, lost or destroyed by reasons of mistaken delivery to you. If you have received this email in error please contact the sender immediately and delete the material from your email system. QLD Bulk Water Supply Authority ABN75450239876 (Trading as Seqwater).



## HOT ISSUE BRIEFING NOTE

<b>HOT ISSUE G.X</b>	<b>The Australian Newspaper article claiming Seqwater breached its operations manual during the January 2011 flood events land</b>
<b>Question</b>	

### Issue:

- The Australian newspaper on Monday 23 January 2011 published a news article claiming Seqwater breached its manual of operating procedures during the January 2011 flood event.
- The article claims there is a discrepancy between the actual flood operation centre logs and the technical reports produced by Seqwater during the Jan 2011 flood event and the final Seqwater flood report and evidence given to the COI in relation to when Seqwater invoked W3 strategy.
- The article misunderstands that although under W3 strategy the primary consideration is the protection of urban areas from inundation, the flood engineers must consider lower level objectives when making decisions on water releases. These lower level objectives include minimising disruption and inconvenience to rural life (including by maintaining bridges immediately downstream of Wivenhoe trafficable) limiting outflows to a maximum of 4000 cumecs at Moggill to avoid flooding in Brisbane.



Answer:

- The issue and the detailed documents referred to by the Australian have been extensively investigated by the Queensland Floods Commission of Inquiry as part of its Interim Report in July 2011.
- Speculation by the Australian today is unfounded and inaccurate.
- The Commission in its Interim Report found that W3 was invoked at 8am on Saturday 8 January as required by the manual (see page 72 of the Interim Report)
- This was based on the flood chronology included in the Seqwater January 2011 Flood Event – Report on the Operation of Somerset Dam and Wivenhoe Dam 2 March 2011 as well as written and oral evidence given by the flood engineers.
- The Commission noted that the flood operations centre logs for 8 January 2011 did not record the transition to W3 (or indeed when other changes in strategy were made). As a result, the Commission and made recommendations in its Interim Report for all future logs to record when decisions are made to transition from one strategy to the next (see pages 66 and 67 of the Interim Report).
- Seqwater has accepted this recommendation and it has been implemented in flood operations centre procedures.
- Further, the Commission closely scrutinised the rates of release during Saturday and Sunday (the period referred to in

the Australian). The Commission identified no error in those release rates nor any failure to comply with the manual. It is important to note that under the manual of operations used during the event, W3 strategy allows from a range of priorities from continuing to minimise the impact on rural life and downstream bridges to the upper limit of the strategy which requires limiting flows to 4000 cumec at Moggill to protect Brisbane from flooding.

- On January 8 when W3 was invoked the strategy focused on minimising impact to rural life as required under the manual.

## Lynette Williams

---

**From:** Renee Mickelburgh [REDACTED]  
**Sent:** Monday, 23 January 2012 9:09 AM  
**To:** John Bradley  
**Subject:** Wivenhoe Lines

**Importance:** High

The Commission of Inquiry has all the powers of a royal commission and it must be allowed to do its job.

That means I will not engage in running commentary or speculation about its outcome.

It is a fact that the Commission's own independent expert found that Seqwater engineers, using the manual of operations, managed to achieve close to the best possible result in relation to the management of Wivenhoe and Somerset dams during the January 2011 flood event.

My advice is that the information in reports today is not new and has been considered by the commissions independent experts.

But I urge any-one with any new information about the floods of last January to pass it on the the Commission as it is charged with determining what happened and what improvements to make.

Renee Mickelburgh  
Deputy Director - Government Media Unit  
Office of the Hon Anna Bligh MP  
Premier of Queensland and Minister for Reconstruction  
\* [REDACTED]

P Please consider the environment before printing this email

**Lynette Williams**

---

**From:** Renee Mickelburgh [REDACTED]  
**Sent:** Monday, 23 January 2012 9:16 AM  
**To:** John Bradley  
**Cc:** Nicole Scurrah; Edmund Burke  
**Subject:** Updated Suggested Lines COI

The Commission of Inquiry has all the powers of a royal commission and it must be allowed to do its job.

That means I will not engage in running commentary or speculation about its outcome.

My advice is that the information in reports today is not new and has been considered by the commissions independent experts.

But I urge any-one with any new information about the floods of last January to pass it on to the Commission as it is charged with determining what happened and what improvements to make.

**Background:**

The COI made recommendations in its interim report for all future logs to record when decisions are made to transition from one strategy to the next.

Renee Mickelburgh  
Deputy Director - Government Media Unit  
Office of the Hon Anna Bligh MP  
Premier of Queensland and Minister for Reconstruction  
\* [REDACTED]

P Please consider the environment before printing this email



**Lynette Williams**

---

**From:** John Bradley  
**Sent:** Monday, 23 January 2012 7:54 AM  
**To:** Daniel Spiller  
**Subject:** spoke to peter and mike - hib coming. call if anything you want to add/say. JB

**John Bradley**  
Director-General  
Department of the Premier and Cabinet

Phone:

Fax: 0

Email:

Tomorrow's Queensland: strong, green, smart, healthy and fair - [www.towardQ2.qld.gov.au](http://www.towardQ2.qld.gov.au)

Please consider the environment before printing this email

**Lynette Williams**

---

**From:** Daniel Spiller  
**Sent:** Monday, 23 January 2012 7:22 AM  
**To:** John Bradley  
**Subject:** Fwd: Mediaportal Alert - Morning Report 6:00am

FYI.

Begin forwarded message:

**From:** Mike Foster [REDACTED]  
**Date:** January 23, 2012 7:01:03 AM GMT+10:00  
**To:** Zoe Russell <[REDACTED]>, Michael Lyons  
[REDACTED], Emma Clarey  
[REDACTED]  
[REDACTED]  
**Cc:** [REDACTED]  
[REDACTED], [REDACTED]  
[REDACTED], [REDACTED]  
[REDACTED], [REDACTED]  
[REDACTED], [REDACTED]  
**Subject:** Re: Fwd: Mediaportal Alert - Morning Report 6:00am

Zoe

Will be closer to 8am. We will need sign off by legal.

Chrs

Mike

**From:** Zoe Russell  
**Sent:** Monday, January 23, 2012 06:48 AM  
**To:** Michael Lyons; Emma Clarey; Justine Scarff <[REDACTED]>; Travis  
Dawson [REDACTED]  
**Cc:** [REDACTED]  
[REDACTED]; Mike Foster; [REDACTED]  
[REDACTED]; [REDACTED]  
**Subject:** Re: Fwd: Mediaportal Alert - Morning Report 6:00am

Any chance we can have it by 730?

---

**From:** Michael Lyons  
**To:** Zoe Russell; Emma Clarey; Justine Scarff; Travis Dawson  
**Cc:** SEQWGM Communications Staff ; Mike Foster ; Barry Dennien ; Daniel Spiller  
**Sent:** Mon Jan 23 06:24:39 2012  
**Subject:** Fwd: Mediaportal Alert - Morning Report 6:00am

Zoe - Seqwater is putting together a detailed HIB. Hopefully by 8. Regards Mike  
Sent from my iPhone

Begin forwarded message:

**From:** Michael Lyons [REDACTED]  
**Date:** 23 January 2012 6:10:08 AM AEST  
**To:** SEQWGM Media [REDACTED]  
**Cc:** Barry Dennien [REDACTED], Grant Horton  
<[Grant.Horton@\[REDACTED\]](mailto:Grant.Horton@[REDACTED])>, Elaina Smouha  
<[Elaina.Smouha@\[REDACTED\]](mailto:Elaina.Smouha@[REDACTED])>, Mike Foster  
<[mfoster@\[REDACTED\]](mailto:mfoster@[REDACTED])>  
**Subject:** Re: Mediaportal Alert - Morning Report 6:00am

Mike F - we are going to need a HIB on this urgently. Pls call. Thanks Mike  
Sent from my iPhone

On 23/01/2012, at 5:54 AM, "SEQWGM Media" [REDACTED] wrote:

Several critical articles within The Australian today in regards to Wivenhoes operation, along with a couple of other Seqwater (dams) related clips...

Full summary to follow.

Regards

AjM

Sent from iPhone

Begin forwarded message:

**From:** "[mediaportal](mailto:[REDACTED])" [REDACTED]  
[REDACTED]  
**Date:** 23 January 2012 5:00:41 AM  
GMT+10:00  
**To:** SEQWGM Media [REDACTED]  
**Subject:** Mediaportal Alert - Morning Report 6:00am

Hi Joanne Fettke

Your folder – Morning Report 6:00am – has been updated with 9 new media items.

To alter the alert settings on this folder please login to Mediaportal - <http://www.mediaportal.com>



**Fassifern Guardian, Boonah QLD**  
General News: 18 January 2012

[View](#)

## State Traffic Campaign Christmas 2011

Local police were generally pleased with the behaviour of motorists throughout the Fassifern area period. Traffic volumes in the local area appeared down on previous years.

### Keywords

SEQ(2),water(4).



## Fassifern Guardian, Boonah QLD

General News: 18 January 2012



## Kerry Blockade - Anatomy of a protest

By: Wendy Creighton

WILL the Kerry blockade at the entry to the Arrow Energy drilling rig off Nmdooimbah Estate Road seam gas mining in the Scenic Rim? Perhaps. Will it draw publicity to local landholder demands the company undertake, and publish the findings, of an independent water quality and supply study prior to drilling?

### Keywords

Beaudesert(4),Scenic Rim(9),supplies(1),supply(1),water(4),Waters(1).



## Australian, Australia

General News: 23 January 2012



## What the floods inquiry didn't hear: Wivenhoe 'breached the manual'

By: Hedley Thomas

A RAFT of official internal documents produced by senior public servants during Brisbane's devastating last year show the Wivenhoe Dam was mismanaged in a serious breach of its manual for two crucial investigations. An investigation by The Australian also shows that, after the flood, dam operator SEQWater adopted a defensive posture about its actions, inconsistent with its own comprehensive documentary evidence of the dam's mismanagement.

### Keywords

Brisbane(9),Dam(29),dams(1),Ipswich(2),safety(1),SEQ(8).



## Australian, Australia

General News: 23 January 2012



## Stakes higher than ever for SEQ Water

By: Hedley Thomas

VEXED questions over whether Queensland's Wivenhoe Dam was managed incompetently and if its manual and whether much of Brisbane's flooding was avoidable largely revolve around the week's events. There is no dispute about whether huge releases from the dam on Tuesday, January 11 when it had been caused most of the inundation early Thursday morning throughout Brisbane, even causing the Brisbane Ipswich.



#### Keywords

Bligh(1), Catherine(1), Commission(1), Dam(6), flood(5), flooded(2), flooding(2), Holmes(1), Inquiry(5), levels



**The Australian**

[www.theaustralian.com.au](http://www.theaustralian.com.au) Date found: 23 January 2012 12:38AM

### **If SEQWater cannot prove it was using the correct strategy, it is likely to ir thousands'**

VEXED questions over whether Queensland's Wivenhoe Dam was managed incompetently and i operating manual - and whether much of Brisbane's flooding was avoidable - largely revolve arou January 8-9 last year. There is no...

[Read full story on source web site](#)

#### Keywords

Queensland (1).



**The Australian**

[www.theaustralian.com.au](http://www.theaustralian.com.au) Date found: 23 January 2012 12:38AM

### **Wivenhoe 'breached the manual'**

A RAFT of official internal documents produced by senior public servants during Brisbane's devas last year show the Wivenhoe Dam was mismanaged in a serious breach of its manual for two cru investigation by The...

[Read full story on source web site](#)

#### Keywords

Wivenhoe Dam (1).



**Courier Mail, Brisbane**

General News: 23 January 2012



### **Long fight protects rare native animals**

By: Brian Williams

AFTER 20 years of battling by community groups, a 563.Ssq km corridor of bushland stretching fr Karawatha Forest to the Wyaralong Dam between Boonah and Beaudesert is protected from dev Government has defined and registered the 56,350ha corridor under the South-East Queensland protecting country from the Karawatha Conservation Area, to the Greenbank Army Reserve, Ipsw Conservation Area, to Flinders Peak and south to Wyaralong Dam between Boonah and Beaudes



**Keywords**

Dam(4),Wyaralong(4).

**Gold Coast Bulletin, Gold Coast QLD**

General News: 23 January 2012

**LNP kicks off without Newman**

BRISBANE: The Liberal National Party has launched its first election campaign television commercial. Campbell Newman was a no-show for the unveiling yesterday, leading Labor to ask where and when the premier. A rush of policy announcements in the last few days has fuelled speculation Premier Annastacia Palaszczuk is ready to announce an election for either February 18 or 25.

**Keywords**

Campbell(2),cost(2),Newman(5),prices(1),water(1).

**Toowoomba Chronicle, Toowoomba QLD**

Letters: 23 January 2012

**Ratepayers entitled to bill TRC**

By: D. Williams

INFORMATION supplied to me by the financial department of the Toowoomba Regional Council (TRC) receiving my access to water bill in November, 2010, I sent the TRC a bill for the same amount as storage fees because the ratepayers of TRC paid for and therefore own the dams

**Keywords**

dams(4),storage(3),water(6).



This email is from Mediaportal @ Media Monitors and is part of your email. Please do not reply directly to the sending email address as your mailbox is an unattended mailbox that is not checked.

The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged information. Any review, retransmission, dissemination or other use of this information without the prior written permission of the sender is prohibited. Taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited.

If you received this unintentionally, please contact the sender and delete the material from all computers.

Media Monitors Pty. Ltd. does not warrant the material contained in this message is free from Computer virus or defect. Loss or damage incurred in use is not the responsibility of Media Monitors Pty. Ltd.

Media Monitors Pty. Ltd. respects your privacy and is committed to protecting it. To view our Privacy Policy please visit:

<http://www.mediamonitors.com.au>

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

-----Safe Stamp-----

--  
Your Anti-virus Service scanned this email. It is safe from known viruses. For more information regarding this service, please contact your service provider.

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and /or publication of this email is also prohibited.

Unless stated otherwise, this email represents only the views of the sender and not the views of the Queensland Government.

Please consider the environment before printing this email.

Important information: This email and any attached information is intended only for the addressee and may contain confidential and/or privileged information. If you are not the addressee, you are notified that any transmission, distribution, or other use of this information is strictly prohibited. The confidentiality attached to this email is not waived, lost or destroyed by reasons of mistaken delivery to you. If you have received this email in error please contact the sender immediately and delete the material from your email system. QLD Bulk Water Supply Authority ABN75450239876 (Trading as Seqwater).