# Statement and exhibits of Phil Hennessy dated 31 January 2012

#### IN THE MATTER OF THE QUEENSLAND FLOODS COMMISSION OF INQUIRY

#### A COMMISSION OF INQUIRY UNDER THE COMMISSIONS OF INQUIRY ACT 1950

#### AND PURSUANT TO THE COMMISSIONS OF INQUIRY ORDER (No. 1) 2011

#### STATEMENT OF PHILIP ARTHUR HENNESSY

On the 31<sup>st</sup> day of January 2012, I, **Philip Arthur Hennessy**, of c/- 240 Margaret Street, Brisbane, state on oath:

- 1. I am the Chairman of the Queensland Bulk Water Supply Authority (Sequater).
- 2. This statement is provided to the Queensland Floods Commission of Inquiry pursuant to a "Requirement to Provide Statement" issued by the Commission dated 27 January 2012 (the *Requirement*). It addresses my best recollection of the communications I was involved in during the period 6 January 2011 to 2 March 2011 regarding the matters listed in the Requirement. I have also attached emails which I have been able to locate in the short time since I received the Requirement which appear to fall within the Commission's request.
- 3. Subject to my following comments, to the best of my recollection, I do not believe I had any communication with any person during the period 6 January 2011 to 2 March 2011 which suggested to me that there was a possibility of non-compliance with the Manual.
- 4. I was aware of media reports that, in broad terms, contained allegations that Wivenhoe Dam had been mismanaged during the event. I cannot now remember if those reports specifically suggested non-compliance with the Manual.
- On becoming aware of these allegations, I recall that there were discussions at Sequater Board meetings about the general nature of the allegations. I cannot now recall the specifics of the discussions.
- 6. I also recall that Ms Leeanne Bond, one of my fellow board members, received some communications (emails and telephone calls) from a Mr Michael O'Brien. I do not know Mr O'Brien. He had suggested that Wivenhoe Dam had been mismanaged by not releasing enough water early in the event. Attached to this statement and marked "PH-1" is a bundle of

correspondence passing between me and Ms Bond and others at the time regarding Mr O'Brien's allegations.

- 7. I directed Mr Borrows' attention to the matters raised by Mr O'Brien and in the press reports generally and asked Mr Borrows to identify whether or not there was any veracity to the allegations. An initial response was provided to Board members on 17 January 2011. Attached to this statement and marked "PH-2" is a copy of an email I received from Mr Borrows on 17 January 2011 attaching answers to the questions raised in the press reports which I had understood were based Mr O'Brien's comments.
- I recall discussing Mr O'Brien's allegations with Board members and it was decided that it was not appropriate, given the announcement of the Commission of Inquiry, to respond directly to Mr O'Brien.
- 9. I recall that during subsequent Board meetings in late January, February and early March we discussed the ongoing press reports regarding the management of Wivenhoe Dam. Again, I cannot now recall the specifics of those discussions other than that Mr Borrows was asked to consider the matters so as to identify whether or not there was any veracity to the allegations.
- 10. On 3 February 2011, I was copied on an email sent by Mr Borrows to Ms Toni Lake which attached a number of emails between Ms Bond and Mr O'Brien. I have produced the email and the attachments to that email electronically given its size on a file marked PH-3. I cannot remember looking at the attachments closely. I do not think I did so as by this time we had decided not to respond directly to Mr O'Brien.

SWORN by Philip Arthur Hennessy on 31 January 2012 at Brisbane in the presence of:





#### IN THE MATTER OF THE QUEENSLAND FLOODS COMMISSION OF INQUIRY

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### STATEMENT OF PHILIP ARTHUR HENNESSY INDEX OF ANNEXURES

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Annexure No.	Document	Date
PH-1	Bundle of emails between myself, Leeanne Bond and others regarding Mr O'Brien	Various
PH-2	Email from Mr Borrows to me and others	17 January 2011
PH-3	Electronic copy of email from Mr Borrows to me	3 February 2011

## llott, Michael

rom:	Hennessy, Phil A
ent:	Frida <u>y, 14 January 2011 3:03 PM</u>
<b>:</b>	lbond
ubjec	t: Re: SEQWater
eanne ho is egard nil	this bloke
il He	ennessy
n 14/	01/2011, at 1:12 PM, "Leeanne Bond"
le	ooks like calmer heads are prevailing.
-	
9 1	From: Leeanne Bond Sent: Friday, 14 January 2011 12:09 PM Fo: 'Mick O'Brien' Subject: RE: SEQWater
	res - the dams are falling too as I understand. They are on track to come back within the 7 ays.
C	From: <u>mick.obrien</u> On Behalf Of Mick D'Brien
្រា	Sent: Friday, 14 January 2011 10:40 AM Fo: Leeanne Bond Subject: Re: SEQWater
	Thanks, I was looking at the SEQWater site; but I will also look at the watergrid ite.
	Yes the river height data came from BOM.
. (	
f	Deviously for Wivenhoe and Somerset the aim will be to get the levels down as puickly as possible without adding to the flooding in Brisbane and Ipswich. At least from the reporting around now it seems that the flooding is abating; but I can't tell if he dams are yet falling.
f t	puickly as possible without adding to the flooding in Brisbane and Ipswich. At least from the reporting around now it seems that the flooding is abating; but I can't tell if
f t N	uickly as possible without adding to the flooding in Brisbane and Ipswich. At least rom the reporting around now it seems that the flooding is abating; but I can't tell if he dams are yet falling. Mick
f t N	puickly as possible without adding to the flooding in Brisbane and Ipswich. At least from the reporting around now it seems that the flooding is abating; but I can't tell if he dams are yet falling.

announcements go through here - Sequater doesn't separately make announcements to make it simpler for the media. BOM would also have some public info I assume. I don't know how quickly the dam levels on the website are updated so I think the media releases might be the best reference.

I have every confidence in the flood control centre operations but of course will follow through with your concerns. My main concern right now is that we are prepared for any future weather patterns - any insight into that?

Sent from my iPad

On 14/01/2011, at 7:24 AM, "Mick O'Brien"

wrote:

Leeanne, I am happy for you to give it to SEQWater; but you probably can't give me any response or additional data. And I would not want to be compromised in who I can send the data to anyway. If SEQWater did want to respond it would probably be better if I sent a copy directly to an SEQWater officer in which case you might want to direct me to the most appropriate guy.

Yes the dams (Somerset and Wivenhoe) were probably within 1.5 days of filling with no releases. But the apparently very high rate of release through Tuesday afternoon and night would have made little fundamental difference to the levels in the dams on Wednesday morning. I don't have the timings; but even if SEQWater released at the low 215,000ML, which is the rate it was reduced to at 07:30 Wed rather than a maximum rate of 645,000ML/d for the whole time from 14:57 on Tues it would have used only 306,000ML of the available free capacity in both dams of apparently 859,000ML.

I find it very difficult to come to any other conclusion other than SEQWater were very slow to respond over the weekend and then had a minor panic on Monday followed by a major panic Tuesday afternoon and then some cooler heads looked at it over Tuesday night.

I do have some suspicion that the maximum level in Wivenhoe of 191% apparently given to the media and then reported is low; because the timings do not quite tie up with the river height data. The SEQWater site temporarily stopped posting dam heights during this period so I have nothing to check it against. But even still, it does not look like Wivenhoe even got close to its maximum potential capacity of 224%.

If there was any potential issue for collapse of Wivenhoe (or Somerset as I have seen on some blogs) below this 224% level that would be a separate issue and just as significant.

Mick

On 13 January 2011 23:40, Leeanne Bond

> wrote:

Hi Mick,

We will have a full review in due course but what I do know is that until Tuesday night we had significant inflows. I interpreted that it was reduced rainfall that enabled reduction in discharge on Tuesday night

which certainly saved many houses. When I flew home from Perth I heard that ongoing rain for 1.5 days would fill the dam (i can't remember if that was the news or from Sequater). The consequences of any structural breach of the dam are unimaginable.

Are you happy for me to ask Sequater to respond to this or provide accurate figures to you? Or are you going to submit it yourself?

The flood operations centre has expertise from Seqwater, SunWater, the dam safety regulator, bureau of meterology and others like emergency services and local government.

Sent from my iPad

On 13/01/2011, at 8:25 PM. "Mick O'Brien" - - - - - - - - - - wrote:

> Leeanne, I think you should have trouble at SEQWater. The people in charge up until early Wednesday 12th ought to go.

> >

> Mick

> <What went on in Brisbane.pdf>

Thanks

Mick

Thanks

Mick

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31/01/2012

#### llott, Michael

From:	Hennessy, Phil A
Sent:	Wednesday, 19 January 2011 12:09 AM
То:	Ibone
Cc:	Peter Borrows

Subject: Re: Brisbane Flooding

Let's think about it-it should be a Board decision how we respond if at all.

This ??? has caused a lot of grief-right now my view is to leave him alone and treat him with the contempt he probably deserves.

Regards Phil

1 1111

Phil Hennessy

On 18/01/2011, at 9:31 PM, "Leeanne Bond"

wrote:

On Behalf Of Mick

received this tonight from Mick - I didn't see it before I got on the plane home. I hear he was on the TV tonight but haven't seen it.

I suggest that he talk to us if anyone rather than Barry. I don't think they would get on very well in the circumstances.

please call me when you get this email otherwise I will try you in the morning.

From: <u>mick.obrien</u> O'Brien Sent: Tuesday, 18 January 2011 4:34 PM To: Leeanne Bond Subject: Brisbane Flooding

Leeanne, do you want to put me in touch with someone from SEQWater. If I even had a credible answer to my concerns, I would pull my head in very quickly.

However nothing that I have seen subsequently in the press attributed to SEQWater gives me any cause for a rethink.

The major threads that I have seen in the response are: -

- 1. We managed the dam levels in accordance with our operating procedures
- 2. The inflow was 2.6 million ML
- 3. That even with this, Wivenhoe prevented a more serious flood of Brisbane
- 4. The releases from Wivenhoe was match with peak releases from other streams

Item 1 does not really affect my concern, and even if the procedures had been followed 100% to the letter, it would just mean that my concerns related to the procedures

The second point may be significant, but it would depend over what period this inflow occurred and whether it was into both dam catchments. For instance the

combined flood storage volume for both Somerset and Wivenhoe is 1.97 million ML and so we are talking about needing to release 630,000 ML over several days. This would be easily achievable. Even if this was inflow to Wivenhoe only, it still meant that total release of 1.15 million ML was required. Again not difficult over the period that we are talking about if managed properly. So the issue would be the rate of inflow over the various periods of concern – not just the overall rate.

I believe that the Brisbane flood could have been more "severe" without Wivenhoe; but that is not based on any data and I have a residual concern that the peak rate of release at 645,000ML/d exceeded the rate of inflow to the dam at that time and hence the height of the peak in Brisbane might have been higher than otherwise. But I am convinced that the peak was shorter with the dam. But there is no way I can make any assessment of this.

Item 4 just does not seem to be the case and on a lot of the information that I have, it looks like the peak release from Wivenhoe actually corresponded with high flows from downstream streams.

There is also the other possibility that there is a totally different reason for decisions made that is not being discussed. Again I would be very happy to understand and again I would pull my head in.

I have thought of contacting Barry Dennien directly, and may still do that; but he probably could not talk to me. The apparent selective release of information to the Courier mail by Barry also does not inspire me with a lot of confidence.

If you want me to stop contacting you I can also understand.

Thanks

Mick

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#### Hennessy, Phil A

From: Sent: To: Subject: Hennessy, Phil A Wednesday, 19 January 2011 12:38 AM Peter Borrows Re: Brisbane Flooding

Peter

I have responded to Leanne. It seems to me our friend is starting to second guess himself- your view??

I think that we ignore him and stand by our record at the appropriate time Regards Phil

Phil Hennessy

On 18/01/2011, at 9:39 PM, "Peter Borrows"

wrote:

Phil, could you ring Leeanne please.

Neither Seqwater nor WGM can talk to him now that the enquiry is announced.

His facts/analysis are incorrect.

This will come out in the enquiry supported by our expert review I'm sure and we see what happens from there.

From: Leeanne Bond		•
To: phennessy	phennessy	; Peter Borrows
Sent: Tue Jan 18 21:30:36 20	011	
Subject: FW: Brisbane Floodin	ng	

received this tonight from Mick - I didn't see it before I got on the plane home. I hear he was on the TV tonight but haven't seen it.

I suggest that he talk to us if anyone rather than Barry. I don't think they would get on very well in the circumstances.

please call me when you get this email otherwise I will try you in the morning.

From: mick.obrier Sent: Tuesday, 18 January 2011 4:34 PM To: Leeanne Bond Subject: Brisbane Flooding On Behalf Of Mick O'Brien

64

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Thanks

Mick

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#### Leeanne Bond

From: Sent: To: Cc: Subject: Hennessy, Phil A Monday, 17 January 2011 8:55 AM Leeanne Bond Peter Borrows Re: Seqwater status

Peter has a Miniterial briefing this morning and has forwarded to us the details making up that briefing. Apparently the Australian refers to your mate as the reporters source and to the fact he sent a report to a Sequater director(I haven't seen it yet)Peter is unpacking the contents of that article.

I have spoken to John Bradley and ensured we are on the same page as the Govt-at that stage we were Seqwater has email and access to premesis I will speak to Peter post the Ministerial with a view to setting an appropriate time for a briefing Regards Phil

**Phil Hennessy** 

On 17/01/2011, at 8:06 AM, "Leeanne Bond'

wrote:

7

> is there any update from Peter? Could we have a briefing?

> In particular, are they back on email? Do they have a temporary brisbane office? Is the pool next to our office putting our building at risk?

>

خ

> Sent from my iPad

From: Peter Borrows Sent: Monday, 17 January 2011 11:15 AM To: Duty Seq; John Tibaldi; Rob Drury Cc: 'barry.dennie Subject: FW: Brisbane Flooding

John R, as discussed.

Regards, Peter.

Peter Borrows Chief Executive Officer Queensland Bulk Water Supply Authority *trading* as Seqwater



Ph

Level 3, 240 Margaret St, Brisbane City QLD 4000 PO Box 16146, City East QLD 4002 Website | www.seqwater.com.au



From: Hennessy, Phil A Sent: Monday, 17 January 2011 10:55 AM To: Peter Borrows Subject: Fwd: Brisbane Flooding

Cam you confirm our people are using the latest data

Phil Hennessy

Begin forwarded message:

From: "Leeanne Bond" Date: 17 January 2011 10:41:55 AM GMT+10:00 To: "Peter Borrows" henness Subject: FW: Brisbane Flooding Reply-To: <lbon

I rang Mick and asked if there had been another email that I missed as the newspaper article indicated that he had worked the weekend on it. He said he had updated his documents with more accurate references and he has now sent me the same version that he sent Hedley Thomas. He has also given me the backup data he used to reach his conclusion.

He said he is very angry as he believes that Brisbane would not have been flooded if action was taken to increase releases on Sunday when the met data said there would be substantial rainfall. This is his key point.

He says releases should have been 300,000ML per day on Sunday, Monday and Tuesday and that would have allowed water to get away before the Lockyer waters reached Brisbane and flooding to be more like current inundation levels. He says even on Tuesday morning releases were only 212,000 indicating a slow response to the situation. that meant on Tuesday afternoon there was a sudden increase which caused the widespread flooding.

He is happy to talk to Segwater and I can give you his contact details (mobile , I've told him there are lots of operational issues (water email mick.obrien treatment, buildings etc) so you might not get back to him straight away.

Leeanne Bond Director Breakthrough Energy Pty Ltd PO Box 225, Wilston Qld 4051 Phone mobile

From: mick.obrie

Sent: Monday, 17 January 2011 10:22 AM To: Leeanne Bond Subject: Brisbane Flooding

On Behalf Of Mick O'Brien

Leeanne, attached is an updated version of the paper that I sent through to you - called Rev 1A - Hedley Thomas has this.

A spreadsheet called Release, which is the data I collated from the web sites on the weekend so that I could confirm the release rates that I had pulled from newspapers.

And then a third spreadsheet which contains all the data plus some workings.

Thanks

Mick

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#### Leeanne Bond

From:	Peter Borrows	
Sent:	Monday, 17 January 2011 5:31 PM	
To:	Hennessy, Phil A; lbonc	
	Tom Fenwick; Ian Fraser	
Cc:	Peter Borrows	
Subject:	FW: Australian Questions 17-Jan & Mr O'Brien	
Attachments:	Australian Questions 17-Jan & Mr O'Brien (31.4 KB); Australian Questions 17-Jan with answers.doc	

FYI – Confidential at this stage.

These have now been held pending legal advice given the announcement of the Royal Commission.

I have also added some comments from Bob Reilly that will be incorporated in the answers – we want them packaged for when they are necessary. Bob's message is that we used almost all of the flood compartment and the dam was rising at between 4.5% and 5% per hour at the time – good indicators that the operations of the dam was appropriate given the circumstances.

There will also be some amendment to the comment about agreement with BoM, not because they disagree, rather, they only talk in river levels and not flows.

Regards, Peter.

#### Peter Borrows

Chief Executive Officer Queensland Bulk Water Supply Authority trading as Seqwater



Pt Level 3, 240 Margaret St. Brisbane City QLD 4000 PO Box 16146, City East QLD 4002 Website | <u>www.segwater.com.au</u>



From: Peter Borrows
Sent: Monday, 17 January 2011 2:46 PM
To: 'barry.dennien
Cc: 'daniel.spiller@
Tobb.reilly
'bob.reilly
'peter.allen
Rob Drury; John
Tibaldi; Jim Pruss

Subject: FW: Australian Questions 17-Jan & Mr O'Brien

Barry.

First 4 questions are answers to Mr O'Brien.

The rest are the Australian.

Regards, Peter.

#### Peter Borrows

Chief Executive Officer Queensland Bulk Water Supply Authority trading as Sequater



Sent: Monday, 17 January 2011 2:36 PM To: Peter Borrows Cc: Arnou Pruden Subject: Australian Questions 17-Jan (subject to BOM confirmation on one number)

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#### Leeanne Bond

From:	Reilly Bob Monday, 17 January 2011 4:02 PM
Sent: To:	Peter Borrows; Dennien Barry @ SEQWGM
Cc:	spiller daniel @ SEQWGM; Allen Peter, Rob Drury; John Tibaldi; Jim Pruss
Subject:	RE: Australian Questions 17-Jan & Mr O'Brien

#### Hi Peter

I suggest that we incorporate into theses answers, where relevant, the flood capacity value which we actually reached i.e 191% (I think) You could also think about including the rate of increase, expressed in these terms, in the peak inflow events on Tuesday. Taken together, these two figures demonstrate that the dam was being operated appropriately, given the circumstances.

Regards

Bob

From: Peter Borrows Sent: Monday, 17 January 2011 2:46 PM To: Dennien Barry @ SEQWGM Cc: spiller daniel @ SEQWGM; Reilly Bob; Allen Peter; Rob Drury; John Tibaldi; Jim Pruss Subject: FW: Australian Questions 17-Jan & Mr O'Brien

Barry.

First 4 questions are answers to Mr O'Brien.

The rest are the Australian.

Regards, Peter.

#### Peter Borrows

Chief Executive Officer Queensland Bulk Water Supply Authority trading as Seqwater



Ph

Level 3, 240 Margaret St. Brisbane City QLD 4000 PO Box 16146 City East QLD 4002 Website | www.segwater.com.au



From: John Tibaldi Sent: Monday, 17 January 2011 2:36 PM To: Peter Borrows Cc: Arnou Pruden Subject: Australian Questions 17-Jan (subject to BOM confirmation on one number)

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# JANUARY 2011 FLOOD EVENT QUESTIONS AND ANSWERS

Why did Seqwater not allow the total available flood storage capacity of Wivenhoe to be utilised during this period?

- 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 fuse plugs that automatically open when it reaches more than 200% of full supply volume.
- Once triggered, 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 fuse plugs would take four to six months of dry weather to repair, and severely restrict the capability to manage further flood events during this period.
- Flood operations were managed to ensure a buffer below 200% to allow for possibilities of further extensive inflows to ensure that the dam does not fail.

What justification was there for the substantial increase in discharge from Wivenhoe to 645,000ML/d when a release rate of 215,000ML/d has been demonstrably sufficient to stop the levels in Wivenhoe rising and while there remained substantial capacity in Wivenhoe for additional flood storage?

At the peak of the event a discharge rate of 215,000ML/d would not have been sufficient to stop the levels in Wivenhoe rising.

The reasons why the remaining flood storage capacity in Wivenhoe Dam was not used at the peak of the event are contained in the answer to the previous question.

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# Was this increase to 645,000ML/d the sole reason for the significant flooding in Brisbane?

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). Segwater agrees with this assessment.

Based on the fact that the current event was one meter lower than the 1974 event, BOM and Seqwater have agreed that the flow in the Lower Brisbane River at the peak of the event was in the order of 690,000ML/d. Accordingly outflows from Wivenhoe Dam contributed around 350,000ML/d to the total flow at this time. The difference between this flow and the peak outflow from Wivenhoe Dam during the event is due to attenuation effects along the length of the river as would be expected in such an event.

# Why did it initially take SEQWater 6 days to respond to the gradually increasing water levels in Wivenhoe which reduced its flood control capacity?

Seqwater responded immediately to increases in storage level by commencing releases from Wivenhoe Dam at the commencement of the flood event. When managing a flood event using Wivenhoe Dam, the primary objectives in order of importance are:

- 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. Primarily this involves minimising inundation of the seven bridges below the dam upstream of Moggill.

The most recent four flood events (commencing October 2011), demonstrate the importance of following these objective to minimise overall downstream flood impacts.

2 | Page

# Why did Seqwater permit the flood storage capacity to build up so much over the weekend?

Seqwater commenced releases from Wivenhoe Dam at the start of the flood event on 7 January 2011. When managing a flood event using Wivenhoe Dam, the primary objectives in order of importance are:

- 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. Primarily this involves minimising inundation of the seven bridges below the dam upstream of Moggill.

The most recent four flood events (commencing October 2011), demonstrate the importance of following these objective to minimise overall downstream flood impacts.

### Why did Seqwater not release significantly greater volumes on Friday, Saturday and Sunday, prior to the freak rainfall event on Monday over the Toowoomba escarpment?

No agency or person was able to forecast the freak rainfall event on Monday over the Toowoomba escarpment prior to it occurring. Therefore it was not possible to ramp up releases to cater for this freak event before it actually occurred.

3 Page

What does Seqwater say to the suggestion that its strategy to limit the releases on the weekend meant its storage buffer was limited, necessitating a massive outflow on Tuesday of 645,000 megalitres?

The peak outflow that occurred for three hours of 645,000 ML/d (total volume of 80,625 megalitres) does not reflect the impact at Brisbane due to the attenuation effects of the river. 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). Seqwater agrees with this assessment.

Based on the fact that the current event was one meter lower than the 1974 event, BOM and Seqwater have agreed that the flow in the Lower Brisbane River at the peak of the event was in the order of 690,000ML/d. Accordingly outflows from Wivenhoe Dam contributed around 350,000ML/d to the total flow at this time. The difference between this flow and the peak outflow from Wivenhoe Dam during the event is due to attenuation effects along the length of the river as would be expected in such an event.

What does Seqwater say to the suggestion that this 645,000 megalitres release was responsible for more than 80 per cent of the peak flow rate (which you advised me last Friday was about 9000 cubic metres per second in Brisbane)?

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). Sequater agrees with this assessment.

Based on the fact that the current event was one meter lower than the 1974 event, BOM and Seqwater have agreed that the flow in the Lower Brisbane River at the peak of the event was in the order of 690,000ML/d. Accordingly outflows from Wivenhoe Dam contributed around 350,000ML/d to the total flow at this time. The difference between this flow and the peak outflow from Wivenhoe Dam during the event is due to attenuation effects along the length of the river as would be expected in such an event.

4 Page

What does Seqwater say to the suggestion that its delay in responding to the increasing water levels at Wivenhoe forced its management to take rash action on Tuesday, which produced the flood in Brisbane?

No rash action was taken at any time during the flood event in managing releases from Wivenhoe Dam. Wivenhoe dam reduced flood levels in Brisbane by up to 2.5 metres in Brisbane city and a metre from the BOM peak flood level forecast. This was achieved by following carefully considered objectives and procedures.

Seqwater commenced releases from Wivenhoe Dam at the start of the flood event on 7 January 2011. When managing a flood event using Wivenhoe Dam, the primary objectives in order of importance are:

Ensure the structural safety of the dams;

•

- Provide optimum protection of urbanised areas from inundation;
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The most recent four flood events (commencing October 2011), demonstrate the importance of following these objective to minimise overall downstream flood impacts.

5 Page



From: Peter Borrows
Sent: Thursday, 3 February 2011 3:24 PM
To: Toni Lake
Cc: Hennessy, Phil A; Leeanne Bond
Subject: FW: email history for commission

Toni, I discussed this with Leeanne this afternoon and said we would need to send this to Allen's to review, and that they may need to then interview her at some stage.

Leeanne was wanting this to be sent to our Legal team.

Could you please send it to Allen's.

Thanks.

Regards, Peter.

**Peter Borrows** Chief Executive Officer Queensland Bulk Water Supply Authority *trading as* Seqwater



Ph Level 3, 240 Margaret St, Brisbane City QLD 4000 PO Box 16146, City East QLD 4002 Website | <u>www.seqwater.com.au</u>



From: Leeanne Bond [mailto: Sent: Thursday, 3 February 2011 8:35 AM To: Peter Borrows

#### Subject: email history for commission

#### Hi Peter

Attached are the emails that I exchanged with Mick O'Brien during the aftermath of the flood, as well as to yourself and Phil. I know that email was disrupted so I've put them together so you can pass them on to whoever is managing the response (Jim Pruss?). Some of the emails include my responses - there are 3 key emails from Mick with attachments (Thursday, Monday and Tuesday).

At the board meeting tomorrow I'd like to understand the answers to the questions he raised (or when we will have the info), and know that we have a response prepared even if we choose not to respond but wait for the commission. I know we have already had some responses.

Mick did ring me and would be happy to be contacted if we wanted to talk to him but we had decided it would not help and could make things worse. In one of his emails he said "Leeanne, do you want to put me in touch with someone from SEQWater. If I even had a credible answer to my concerns, I would pull my head in very quickly. However nothing that I have seen subsequently in the press attributed to SEQWater gives me any cause for a rethink."

I have declined to try to convince Mick that he is wrong (as per discussion with the board members) but we can discuss again tomorrow. I do need to be in contact with him in another capacity (LNG Limited is the major shareholder of Metgasco where he is GM Operations), but I can just say I can't talk about Seqwater during the commission and while there is threat of legal action.

I haven't read the latest news so don't know if this has dropped off the Australian or is still being fed.

I'm so glad Yasi didn't bring rain south. Are you still OK for lunch at 1pm? I am flexible between 1pm and 4pm if you need to change the time.

best regards,

Leeanne Bond Director Breakthrough Energy Pty Ltd PO Box 225, Wilston Qld 4051 Phone: mobile:

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Page 1 of 3

From: Lee anne Bond [ Sent: Friday, 14 January 2011 1:12 PM

**To:** Pe ter Borrows; phennessy

Subject: FW: SEQWater

looks like calmer heads are prevailing.

From: Leeanne Bond Sent: Friday, 14 January 2011 12:09 PM To: 'Mick O'Brien' Subject: RE: SEQWater

yes - the dams are falling too as I understand. They are on track to come back within the 7 days.

From: mick.obrier Sent: Friday, 14 January 2011 10:40 AM To: Leeanne Bond Subject: Re: SEQWater

Thanks, I was looking at the SEQWater site; but I will also look at the watergrid site.

Yes the river height data came from BOM.

Obviously for Wivenhoe and Somerset the aim will be to get the levels down as quickly as possible without adding to the flooding in Brisbane and Ipswich. At least from the reporting around now it seems that the flooding is abating; but I can't tell if the dams are yet falling.

Mick

On 14 January 2011 11:03, Leeanne Bond

> wrote:

I'm not aware of any structural concerns but of course it is a key component to ensure the dam doesn't overtop to prevent this and to keep some control over releases.

Which site are you referring to for info? If you haven't already, have a look at the water grid media releases which give you timings and flows. <u>www.watergrid.com.au/media</u>. There is an rss feed too. All water grid announcements go through here - Seqwater doesn't separately make announcements to make it simpler for the media. BOM would also have some public info I assume. I don't know how quickly the dam levels on the website are updated so I think the media releases might be the best reference.

I have every confidence in the flood control centre operations but of course will follow through with your concerns. My main concern right now is that we are prepared for any future weather patterns - any insight into that?

Sent from my iPad

On 14/01/2011, at 7:24 AM, "Mick O'Brien" <

> wrote:

On Behalf Of Mick O'Brien

Leeanne, I am happy for you to give it to SEQWater; but you probably can't give me any response or additional data. And I would not want to be compromised in who I can send the data to anyway. If SEQWater did want to respond it would probably be better if I sent a copy directly to an SEQWater officer in which case you might want to direct me to the most appropriate guy.

Yes the dams (Somerset and Wivenhoe) were probably within 1.5 days of filling with no releases. But the apparently very high rate of release through Tuesday

13/02/2012

afternoon and night would have made little fundamental difference to the levels in the dams on Wednesday morning. I don't have the timings; but even if SEQWater released at the low 215,000ML, which is the rate it was reduced to at 07:30 Wed rather than a maximum rate of 645,000ML/d for the whole time from 14:57 on Tues it would have used only 306,000ML of the available free capacity in both dams of apparently 859,000ML.

I find it very difficult to come to any other conclusion other than SEQWater were very slow to respond over the weekend and then had a minor panic on Monday followed by a major panic Tuesday afternoon and then some cooler heads looked at it over Tuesday night.

I do have some suspicion that the maximum level in Wivenhoe of 191% apparently given to the media and then reported is low; because the timings do not quite tie up with the river height data. The SEQWater site temporarily stopped posting dam heights during this period so I have nothing to check it against. But even still, it does not look like Wivenhoe even got close to its maximum potential capacity of 224%.

If there was any potential issue for collapse of Wivenhoe (or Somerset as I have seen on some blogs) below this 224% level that would be a separate issue and just as significant.

Mick

On 13 January 2011 23:40, Leeanne Bond < > wrote: Hi Mick,

We will have a full review in due course but what I do know is that until Tuesday night we had significant inflows. I interpreted that it was reduced rainfall that enabled reduction in discharge on Tuesday night which certainly saved many houses. When I flew home from Perth I heard that ongoing rain for 1.5 days would fill the dam (i can't remember if that was the news or from Seqwater). The consequences of any structural breach of the dam are unimaginable.

Are you happy for me to ask Seqwater to respond to this or provide accurate figures to you? Or are you going to submit it yourself?

The flood operations centre has expertise from Seqwater, SunWater, the dam safety regulator, bureau of meterology and others like emergency services and local government.

Sent from my iPad

On 13/01/2011, at 8:25 PM, "Mick O'Brien" <

> wrote:

> Leeanne, I think you should have trouble at SEQWater. The people in charge up until early Wednesday 12th ought to go.

>

> > Mick

> <What went on in Brisbane.pdf>

--

Thanks

Mick

--

Thanks

Mick

From: Hennessy, Phil A
Sent: Friday, 14 January 2011 3:03 PM
To: Ibon c
Subject: Re: SEQWater
Leanne Who is this bloke Regards Phil
Phil Hennessy
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From: mick.obrien O'Brien Sent: Friday, 14 January 2011 10:40 AM To: Leeanne Bond

**Subject:** Re: SEQWater Thanks, I was looking at the SEQWater site; but I will also look at the watergrid

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--

Thanks

Mick

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From: Lee anne Bond |

Sent: Monday, 17 January 2011 8:32 AM

To: Pe ter Borrows

Subject: did you receive my 3 emails?

Hi Peter

can you please confirm that you have received my 3 emails? I sent them from my iPad and hope they got to you.

- 1. one has the 1 page 'report' written by Mick and sent to me on Thursday night.
- 2. I replied on Friday and sent you the original email and my reply on Friday. I tried not to get defensive or to engage in a debate but to calm him down and point him to accurate information as he was making very big assumptions.
- 3. Then I sent another email to you after my last communication with Mick I thought he was cooling down.

I called Phil on Friday morning and made sure he was aware of it as I figured he was in contact with you. I tried your mobile but could not get through due to congestion.

I'm happy to intercede with Mick if it helps. As background, I worked closely with him at WorleyParsons - he ran the pipelines group and I ran everything else. He is now the GM Operations for Metgasco (coal seam methane). He is a chemical engineer.

regards,

Leeanne Bond Director Breakthrough Energy Pty Ltd PO Box 225, Wilston Qld 4051 Phone: mobile:

From:	mick.obrien	on behalf of Mick O'Brien
Sent:	Monday, 17 January	2011 10:22 AM
To: Lee	anne Bond	
Subject: Brist	oan e Flooding	

Attachments: What went on in Brisbane - Rev 1A.pdf; Release.xlsx; What is happening in Brisbane - Rev 3.xlsx

Leeanne, attached is an updated version of the paper that I sent through to you - called Rev 1A - Hedley Thomas has this.

A spreadsheet called Release, which is the data I collated from the web sites on the weekend so that I could confirm the release rates that I had pulled from newspapers.

And then a third spreadsheet which contains all the data plus some workings.

Thanks

Mick

From: mick.obrier

on behalf of Mick O'Brien

Sent: Friday, 14 January 2011 10:40 AM

To: Lee anne Bond

Subject: Re: SEQWater

Thanks, I was looking at the SEQWater site; but I will also look at the watergrid site.

Yes the river height data came from BOM.

Obviously for Wivenhoe and Somerset the aim will be to get the levels down as quickly as possible without adding to the flooding in Brisbane and Ipswich. At least from the reporting around now it seems that the flooding is abating; but I can't tell if the dams are yet falling.

### Mick

On 14 January 2011 11:03, Leeanne Bond I'm not aware of any structural concerns but of course it is a key component to ensure the dam doesn't overtop to prevent this and to keep some control over releases.

Which site are you referring to for info? If you haven't already, have a look at the water grid media releases which give you timings and flows. <u>www.watergrid.com.au/media</u>. There is an rss feed too. All water grid announcements go through here - Seqwater doesn't separately make announcements to make it simpler for the media. BOM would also have some public info I assume. I don't know how quickly the dam levels on the website are updated so I think the media releases might be the best reference.

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I find it very difficult to come to any other conclusion other than SEQWater were very slow to respond over the weekend and then had a minor panic on Monday followed by a major panic Tuesday afternoon and then some cooler heads looked at it over Tuesday night.

I do have some suspicion that the maximum level in Wivenhoe of 191% apparently given to the media and then reported is low; because the timings do not quite tie up with the river height data. The SEQWater site temporarily stopped posting dam heights during this period so I have nothing to check it against. But

Page 2 of 2

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Mick

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	Are you happy for me to ask Seqwater to respond to this or provide accurate figures to you? Or are you going to submit it yourself?
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	> Leeanne, I think you should have trouble at SEQWater. The people in charge up until early Wednesday 12th ought to go.
	> > Mick > <what brisbane.pdf="" in="" on="" went=""></what>
-	
]	hanks
ľ	lick
Thanks	
Mick	

From: Sent:	Hennessy, Phil A Wednesday, 19 January 2011 12:09 AM
To: Ibon	c
Cc: Pe	ter Borrows
Subject	Re: Brisbane Flooding
This ???	nk about it-it should be a Board decision how we respond if at all. Thas caused a lot of grief-right now my view is to leave him alone and treat him with the of he probably deserves.
Phil Her	nessy
On 18/0	1/2011, at 9:31 PM, "Leeanne Bond" > wrote:
	ceived this tonight from Mick - I didn't see it before I got on the plane home. I hear he as on the TV tonight but haven't seen it.
	suggest that he talk to us if anyone rather than Barry. I don't think they would get on very ell in the circumstances.
ple	ease call me when you get this email otherwise I will try you in the morning.
	rom: <u>mick.obrien</u> On Behalf Of Mick Brien
	ent: Tuesday, 18 January 2011 4:34 PM
-	: Leeanne Bond Ibject: Brisbane Flooding
Le	eeanne, do you want to put me in touch with someone from SEQWater. If I even

However nothing that I have seen subsequently in the press attributed to SEQWater gives me any cause for a rethink.

had a credible answer to my concerns, I would pull my head in very quickly.

The major threads that I have seen in the response are: -

- 1. We managed the dam levels in accordance with our operating procedures
- 2. The inflow was 2.6 million ML
- 3. That even with this, Wivenhoe prevented a more serious flood of Brisbane
- 4. The releases from Wivenhoe was match with peak releases from other streams

Item 1 does not really affect my concern, and even if the procedures had been followed 100% to the letter, it would just mean that my concerns related to the procedures

The second point may be significant, but it would depend over what period this inflow occurred and whether it was into both dam catchments. For instance the combined flood storage volume for both Somerset and Wivenhoe is 1.97 million ML and so we are talking about needing to release 630,000 ML over several days. This would be easily achievable. Even if this was inflow to Wivenhoe only, it still meant that total release of 1.15 million ML was required. Again not difficult over the period that we are talking about if managed properly. So the issue would be the rate of inflow over the various periods of concern - not just the overall rate.

I believe that the Brisbane flood could have been more "severe" without Wivenhoe; but that is not based on any data and I have a residual concern that the peak rate of release at 645,000ML/d exceeded the rate of inflow to the dam at that time and hence the height of the peak in Brisbane might have been higher than otherwise. But I am convinced that the peak was shorter with the dam. But there is no way I can make any assessment of this.

Item 4 just does not seem to be the case and on a lot of the information that I have, it looks like the peak release from Wivenhoe actually corresponded with high flows from downstream streams.

There is also the other possibility that there is a totally different reason for decisions made that is not being discussed. Again I would be very happy to understand and again I would pull my head in.

I have thought of contacting Barry Dennien directly, and may still do that; but he probably could not talk to me. The apparent selective release of information to the Courier mail by Barry also does not inspire me with a lot of confidence.

If you want me to stop contacting you I can also understand.

Thanks

Mick

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From:	mick.obrien	on behalf of Mick O'Brien
Sent:	Tuesday, 18 January 2011 9:16 PM	
To: Lee	anne Bond	
Subject:	Re: Brisbane Flooding	

Attachments: Peter Allen.docx

Leeanne, you will be able to check whether the data that are claiming to be incorrect is so incorrect as to render the conclusion wrong. I know some of the data in the large spreadsheet is not right; for instance there is a lot of inconsistency in the media reported data and the times associated with the media data is the date/time of the media report not the event. But I have not just relied on a single piece of data.

Some of the calculations are estimates only based on the best data that I could find; but again I don't think that any of that affects the conclusions. But am interested to get feedback and will be happy to change my view if it is a fundamental error.

I have started to try and see if the operation is likely to have complied with the operations manual. The flood operating rules for Wivenhoe have been taken from a paper presented by **Peter Allen,** Director Dam Safety DERM Qld to 34th Annual Qld Water Industry Operations Workshop on 16 to 18 June, 2009. Now I understand that these may have changed in the interim.

But I have attached a preliminary comparison of these requirements against what was reported by WaterGrid. And at least on the surface, it looks to me like there could have been a lack of compliance over the weekend.

You should also be aware that additional data is now being provided by others; who are obviously better informed than I am. While you might believe that SEQwater are not responding publicly, Barry Dennien appears to be selectively briefing journalists.

Mick

On 18 January 2011 19:04, Leeanne Bond

We are discussing with the board tomorrow as it is likely I will come back to you with our data. I'll try to get back to you asap.

Sequater have a response and say your figures are incorrect. Due to royal commission we are not responding publically.

Can you hold off til tomorrow afternoon - I'm on the tarmac in melbourne about to fly back to Brisbane.

Sent from Leeanne Bond's iPhone

On 18/01/2011, at 17:34, "Mick O'Brien" <

> wrote:

> wrote:

Leeanne, do you want to put me in touch with someone from SEQWater. If I even had a credible answer to my concerns, I would pull my head in very quickly.

However nothing that I have seen subsequently in the press attributed to SEQWater gives me any cause for a rethink.

The major threads that I have seen in the response are: -We managed the dam levels in accordance with our operating procedures The inflow was 2.6 million ML

That even with this, Wivenhoe prevented a more serious flood of Brisbane The releases from Wivenhoe was match with peak releases from other streams Item 1 does not really affect my concern, and even if the procedures had been followed 100% to the letter, it would just mean that my concerns related to the procedures The second point may be significant, but it would depend over what period this inflow occurred and whether it was into both dam catchments. For instance the combined flood storage volume for both Somerset and Wivenhoe is 1.97 million ML and so we are talking about needing to release 630,000 ML over several days. This would be easily achievable. Even if this was inflow to Wivenhoe only, it still meant that total release of 1.15 million ML was required. Again not difficult over the period that we are talking about if managed properly. So the issue would be the rate of inflow over the various periods of concern - not just the overall rate.

I believe that the Brisbane flood could have been more "severe" without Wivenhoe; but that is not based on any data and I have a residual concern that the peak rate of release at 645,000ML/d exceeded the rate of inflow to the dam at that time and hence the height of the peak in Brisbane might have been higher than otherwise. But I am convinced that the peak was shorter with the dam. But there is no way I can make any assessment of this.

Item 4 just does not seem to be the case and on a lot of the information that I have, it looks like the peak release from Wivenhoe actually corresponded with high flows from downstream streams.

There is also the other possibility that there is a totally different reason for decisions made that is not being discussed. Again I would be very happy to understand and again I would pull my head in.

I have thought of contacting Barry Dennien directly, and may still do that; but he probably could not talk to me. The apparent selective release of information to the Courier mail by Barry also does not inspire me with a lot of confidence.

If you want me to stop contacting you I can also understand.

Thanks

Mick

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Thanks

Mick

From:	mick.obrien	on behalf of Mick O'Brien
Sent:	Thursday, 13 January 2011 8:26 PM	
To: Ibon	c	
Subject: SE	QWater	

Attachments: What went on in Brisbane.pdf

Leeanne, I think you should have trouble at SEQWater. The people in charge up until early Wednesday 12th ought to go.

Mick