# Statement of Bill Stephens dated 5 April 2011

#### QUEENSLAND TO WIT

I, RICHARD WILLIAM (BILL) STEPHENS, of c/- SunWater Limited (SunWater), Level 10, 179 Turbot Street, Brisbane in the State of Queensland do solemnly and sincerely declare as follows:

#### INTRODUCTION

- This statement is given in response to a notice dated 31 March 2011 requiring me to give a statement for the purpose of the Queensland Floods Commission of Inquiry.
- This statement has been provided without any knowledge of the contents of other evidence that will or may be adduced, or the submissions that have or will be made to the Commission of Inquiry. I will supplement this statement with addendum statements if it is necessary.
- I will provide any further information or explanation required by the Commission of Inquiry.

## QUALIFICATIONS, EXPERIENCE AND CURRENT POSITION

# Qualifications and experience

- I have worked at SunWater, and its predecessors, for over 20 years and have worked within the State Government for 30 years.
- In 1977 I completed a Bachelor of Science degree majoring in environmental studies from Griffith University.

## Current position

- 6 My current position at SunWater is as a Senior Project Manager, Project Development in the Infrastructure Development division of SunWater.
- In addition to my role as a Project Manager, I also work as a technical assistant in the Flood Operations Centre (**FOC**) during flood events.

## Training and my role as a technical assistant

- 8 I began working as a technical assistant in the FOC in about November 2009.
- 9 Starting in about late 2008, I underwent formal training as a technical assistant at SunWater prior to commencing my role.
- The training included an introductory workshop and one-on-one practical training with other, current, technical assistants.

- The workshop component occupied approximately half a day during which I was given the 'Seqwater Data Collector Training' Manual. The Training Manual is also used as a reference guide when working in the FOC.
- The Training Manual provides a position description for a technical assistant (data collector) as follows:

'In addition to their day to day responsibilities as technical officers and engineers, all Data Collectors shall perform the following duties:

- 1. To mobilize to the Flood Control Centre during a declared flood event (as indicated below) when directed by Duty Flood Operations Engineer;
- 2. To carry out daily updates of the Real Time Flood Operations Model FLOOD on a roster basis;
- Report ALERT sensors which are 'Out of Action' or 'Suspect' to the Duty Flood Operations Engineer and to implement corrective action to fill in the data;
- 4. To have a rudimentary knowledge of the basic requirements of the flood operations procedures as set out in the following documents-
  - Standing Operating Procedures
  - Manual of Operational Procedures for Flood Releases
  - Emergency Action Plans
- 5. Be 'On Call' for flood operations on a rostered basis in accordance with the Schedule that is maintained by the Senior Duty Flood Operations Engineer.

  All Data Collectors will mobilize in the Flood Control Centre when directed by the Duty Engineer.
- 6. Once mobilized, the data Collector will-
  - Operate Flood—COL the data collection module of the real time flood operations model
  - Support the Duty Engineer as required
  - Monitor incoming data
  - Contact other data sources as and when required
  - Report data and communication problems to Duty Flood Operation Engineer and implement remedial action as directed
  - Formally hand over to replacement Data Collectors at completion of shift
  - Record details of operations analyses and directions in Operating Log [sic].
- 7. Take part in debriefing at the end of a flood event.'

13	The one-on-one practical training involved a number of different elements, which were required to be completed. The training I completed included:			
	(a)	Dam characteristics training for Wivenhoe, Somerset and North Pine Dams;		
	(b)	Training in the Wivenhoe and Somerset Dams Operations Manual and the North Pine Dam Operations Manual;		
	(c)	Data collection network training in:		
		(i) ALERT data types (original, raw, translated and trashed);		
		(ii) Rainfall network;		
		(iii) River height network; and		
		(iv) Bureau of Meteorology Services (Quantitative Precipitation Forecasts);		
	(d)	Real Time Flood Operations Model training in:		
		(i) Administration;		
		(ii) Configuration;		
		(iii) Editing data; and		
		(iv) Viewing data;		
	(e)	Documentation training in sensor investigation and repair forms;		
	(f)	Administration;		
	(g)	Configuration;		
	(h)	Editing data (sensor data);		
	(i)	Viewing data (sensor data);		
	(j)	Rainfall;		
	(k)	River stream; and		
	(1)	Data records, including:		
		(i) Sensor investigation form; and		
		(ii) Current sensor comments.		

- In October 2009, I was required to take a practical proficiency test, which required me to answer a number of questions. The questions, although answered by each individual, were answered in a group setting while under time pressure.
- After passing the proficiency test I commenced work as a technical assistant in November 2009.
- My primary role as a technical assistant is to check the data (namely, rainfall and river heights data) that comes into the FOC's systems. It is also a part of my role to:
  - (a) make entries into an event log during a flood event (see below for further details);
  - (b) provide general administration support to the Duty Flood Operations Engineers, for example, by managing the correspondence coming in and going out of the FOC; and
  - (c) provide communications support to the Duty Flood Operations Engineers, for example, by answering phones and calling dam operators.
- Generally, each technical assistant is on close call for one week in a month, but may be called on at other times subject to availability should the need arise (i.e. during a flood event).
- During the week I am on close call, I will go into the FOC for approximately two hours on one day during that week and check the data coming in and the functionality of the equipment. When I check the data I am looking to see if there has been any rainfall or discharges within the catchment area and I am performing general checks to make sure that the system is operating satisfactorily. For example, that ALERT gauges are capturing rainfall, that data is being transmitted by those gauges and captured by the FOC computers and also I am checking to see that the data that is being transmitted is consistent with expected data trends across the catchment areas of Wivenhoe, Somerset and North Pine Dams. I also edit out any obvious errors, for example, spikes in data.
- 19 I am required to be within two hours of the FOC at all times I am on close call.
- Since being a technical assistant, I have worked during flood events in October 2010 (two 12 hour shifts) and December 2010 (two 12 hour shifts) when the FOC was mobilised and the Dams were operated.

## THE EVENT LOG

As part of my role as a technical assistant, I record entries into an event log, which is kept during a flood event. Since I have been working as a technical assistant in the FOC an event log has always been kept.

- The technical assistants endeavour to record in the event log the main events that take place during a flood event, including telephone calls made and received and directives issued to the dam operators.
- 23 Keeping the event log is a fairly straightforward process, which involves the recording of information in an Excel spreadsheet.
- I am not aware of any set procedure or manual which sets out the requirements for keeping an event log. I was aware that the event log was designed to capture significant events or telephone calls during a flood event. I saw the event log as simply a reference tool to assist the Duty Flood Operations Engineers in the preparation of situation reports sent during flood events and also in the preparation of the final flood report at the conclusion of the flood event, rather than a verbatim account of conversations.
- In respect to telephone calls, generally, I make an entry based on what I overhear while listening to a Duty Flood Operations Engineer speaking on the telephone. When on the telephone, the Duty Flood Operations Engineer is usually close to the computer where I input the entry into the event log, but is sometimes on the far side of the room housing the FOC. I cannot hear the other side of the conversation, as usually the telephone call is not made over speaker-phone.
- When I make an entry into the event log, I record my initials, 'BS', next to the entry I have made.
- The entry I make into the event log is a summary of what I have overheard. If I am not sure about some of the information I have put into the event log, I will generally ask the Duty Flood Operations Engineer if I have recorded the information correctly. At times during the January 2011 Flood Event this may not have occurred due to the amount of activity in the FOC. For instance, at times there were three Duty Flood Operations Engineers in the FOC. I also had other tasks to perform including, taking telephone calls, performing data checks, sending out the flood directive facsimiles prepared by the Duty Flood Operations Engineers and following up on those directives and filing correspondence in the event folder.
- I do not consider that an event log is a definitive record of what actually occurred during a flood event because the technical assistants may not record all communications that take place during a flood event. For example, if there are a number of telephone calls happening at one time, the technical assistants may not be able to record all of the conversations or may enter the event log information after the telephone call has ended. There is usually only one technical assistant rostered on at any one time during a flood event.
- It is also possible that the technical assistants may mishear or misunderstand the information that they have overheard during a telephone call that is taking place.

That being said, I did my best to capture the conversations as I heard them during the January 2011 Flood Event. I am not aware of any conversations I did not record, however, I may not have heard every conversation and may not have interpreted every conversation correctly.

## **JANUARY 2011 FLOOD EVENT**

- I worked as a technical assistant in the FOC during the January 2011 Flood Event in the following shifts:
  - (a) Approximately 7pm (Sunday 9 January 2011) to 7am (Monday 10 January 2011); and
  - (b) Approximately 7am to 7pm on Sunday 16 January 2011.
- An event log was kept during for the January 2011 Flood Event (the Event Log).
- While I was on shift, the Event Log was kept using an Excel spreadsheet in the manner that I have described above.
- While I was on shift in the FOC, I made entries directly into the computerised Event Log (in Excel) and I did not keep notes of phone conversations.
- I have been requested by the Commission of Inquiry to provide a statement in relation to a number of telephone conversations recorded in the Event Log on Sunday 9 January and Monday 10 January 2011.

## Sunday 9 January 2011

- On 9 January 2011, I commenced my shift as a technical assistant at about 7pm.
- I note that the Event Log contains entries for three telephone calls made between 7:10pm and 7:15pm. Those entries are:

Time	Action	Category	Initials
7:10 PM	FOC called Tony Jacobs (SRC) advising him that high releases from Wivenhoe (3000 cumecs) are expected to be necessary in view of heavy rain over the last 3 hours.	Correspondence	BS
7:15 PM	FOC called Peter Burrows (Seqwater) advising him that high rainfall is expected overnight and releases from Wivenhoe causing damaging flooding are likely to be necessary.	Correspondence	BS

7:15 PM	FOC called Peter Allen advising him that	Correspondence	BS
	FOC is now looking at much larger flows		
	and will have to ramp up releases to		
	around 3000 cumecs as by as early as		
	midnight which is likely to have flooding		
	impacts on low-lying areas of Brisbane.		

- I believe, from the fact that the entries contain my initials 'BS', that I made those entries to the Event Log.
- I recall that shortly after I started my shift at about 7pm, there were a series of fairly short telephone calls. I have done my best to recall who made these phone calls but I cannot recall who made them.
- I have no recollection now as to who made which calls, to whom the calls were made or what was discussed.
- I cannot recall who made the calls where the entries refer simply to 'FOC' (for example, 7:10pm "FOC called Tony Jacobs (SRC)").
- I recall that, when I arrived on shift, there had been a large amount of rainfall, and that the telephone calls were to do with the rainfall. However, I accept that my recollection may be influenced now by what I read in the event log in relation to those telephone calls.
- I can say, however, that these phone calls were not made on speaker-phone, as none of the phone calls I recorded in the event log were made using speaker-phone and, therefore, I was not privy to the other side of the conversation.
- I usually include the initials of the person making the call when I record an entry of this nature. I do not recall why, in some of these entries, I used the term 'FOC' instead of a person's name, there is no particular reason for that. I have a vague recollection of observing that other technical assistants had used the term 'FOC' in the Event Log but I cannot recall why I switched from using 'FOC' to a person's initials when recording some of the entries.

## Monday 10 January 2011

- I note that the Event Log refers to an entry made at 12:55am on Monday 10 January 2011.
- The entry has my initials, 'BS', recorded next to it so I believe that I made that entry.
- The entry refers to a telephone conversation between 'JR', which is the initials of John Ruffini, and Rob Drury of Seqwater. The entry states:

Time	Action	Category	Initials
12:55 AM	JR called Rob Drury to discuss Ken's view on damaging flow. JR confirmed that if flows were kept below 3500 the fuse plug would be triggered. Agreed that situation reports will not allude to damage levels – the councils can make decisions on what to report in this regard.	Correspondence	BS

- I do not have a clear recollection of this conversation, but having looked at the Event Log, I do recall that there was a conversation between John Ruffini and Rob Drury. I can recall that John Ruffini had had a similar conversation, immediately before this phone call, with the Brisbane City Council (BCC), which is noted at 12:45am in the Event Log.
- Although I cannot recall what was specifically discussed in each conversation, I can generally recall that both conversations were in relation to the situation reports and what was actually included in the situation reports. I can also recall that there was some discussion about different flow rates and what constitutes the damaging flow in Brisbane.
- My recollection of these conversations was that it was a discussion about whether the FOC would state in the situation reports the point at which flows would become damaging in Brisbane, or leave that to the BCC to make a call on what they believed to be the damaging flow level.
- I recall that the gist of these discussions was about the flow rates at which damage would be caused in Brisbane and that the Flood Operations Manual refers to the damaging flow rate as 4,000m³/s, whereas BCC's opinion was that the damaging flow rate was 3,500m³/s. I can recall that these conversations were about how information from the FOC was disseminated.
- I do not have any recollection of the fuse plugs being mentioned.
- I have done my best to recall these conversations but I cannot say whether I have an independent recollection of these conversations or whether I have been influenced by what I have read in the Event Log in preparing this statement.

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

Affirmed and Declared at Brisbane	)
this $5^m$ day of April 2011 in the	)
presence of:	)



Signature of the declarant

Justice of the Peace/ Solicitor/
Gommissioner for Declarations