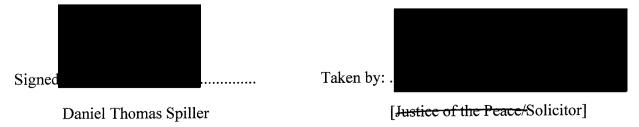
In the matter of the Commissions of Inquiry Act 1950, Commissions of Inquiry Order (No. 1) 2011 Queensland Floods Commission of Inquiry

First Statement by Daniel Thomas Spiller, sworn on 13 May 2011

- 1. I, Daniel Thomas Spiller of Level 15, 53 Albert Street, Brisbane, Queensland, the Director, Operations, of the SEQ Water Grid Manager (**Water Grid Manager**), state the following on oath.
- 2. In this statement to the Queensland Floods Commission of Inquiry, as required in the letter to me dated 26 April 2011 (letter), I:
 - a. have provided all the information in my possession and identify the source or sources of that information; and
 - b. make commentary and provide opinions I am qualified to give as to the appropriateness of particular actions or decisions and the basis of that commentary or opinion,

in relation to the matters outlined in Topics 1, 2, 9 and 10 of that letter. The balance of the topics outlined in the letter will be addressed in a supplementary statement.

- 3. I address each of the topics to be dealt with in this first statement separately below.
- 4. In the request to me dated 26 April 2011, I have been asked to provide all documents, including emails, in relation to a broad number of issues. Given the volume of documents which have had to be searched in connection with the request (in excess of 15,000) and the time available (given that I was on leave when the request was received on 26 April 2011 and only returned to Brisbane on the evening of 5 May), I have done as thorough search as possible. However, I would like to make it clear that I have had to rely on the assistance of staff members of the Water Grid Manager to help me locate these documents. I have annexed the documents to the original of this statement in various Annexures. They are specifically referred to below and will be supplied with the hard copy of this statement.



5. In this statement I have also been asked to provide details of many discussions and other communications. I have done so to the best of my recollection, given the breadth of the requests and the time available. I do not have an exact or verbatim recollection of the words used in any of the discussions referred to herein. However, what I have done is to record my recollection about the effect of those discussions as best I can, where possible indicating who said what in any discussion.

TOPIC 1: MY QUALIFICATIONS AND PROFESSIONAL BACKGROUND

MY TERTIARY QUALIFICATIONS

- 6. I obtained a Bachelor of Built Environment (Urban and Regional Planning) in 1995 from the Queensland University of Technology.
- 7. I obtained a Master of Urban and Regional Planning in 1998 from the Queensland University of Technology. I spent most of 1996 studying for that Masters degree on a full time basis, prior to starting work with the Brisbane City Council in approximately November 1996 (see below).
- 8. I obtained a Master of Professional Economics in 2000 from the University of Queensland.
- 9. I obtained a Graduate Certificate in Applied Finance and Investment from the Securities Institute of Australia in 2005.

MY PROFESSIONAL BACKGROUND

10. I set out a chronology of my professional experiences below. In overall terms, my professional experience has involved examining what infrastructure exists (for each of my employers), examining what that infrastructure does and its objectives, what the



Taken by:



Daniel Thomas Spiller

[Justice of the Peace/Solicitor]

2

cost of the infrastructure is and how best to utilise the infrastructure in the most costeffective manner. That can also involve planning for additional assets or for different institutional arrangements. In that sense, my planning and economics backgrounds are synthesised in the roles that I have held. In my current role (which is discussed further below) I complement the professional skills of the Water Grid Manager's Chief Executive Officer, Mr Barry Dennien, who has a very strong operational and engineering background.

- 11. From November 1996 to May 1999 I was employed as a Planning Officer with the Local Planning and Design Department at the Brisbane City Council.
- 12. I continued to be employed by the Council until March 2003. In June 1999, I was transferred to the Infrastructure Coordination Department as a Planning Officer. During this time, I was sent on secondment to Sinclair Knight Merz between July and September 2000 as a Planning Consultant.
- 13. Between April 2003 and July 2005, I was employed as an Economic Analyst by the Queensland Competition Authority.
- 14. Between August 2005 and September 2006, I was employed as a Senior Infrastructure Coordinator by the Office of Urban Management.
- 15. Between October 2006 and April 2008, I was employed as a Project Director (Special Projects) for the Queensland Water Commission (**QWC**).
- 16. Between May 2008 and July 2009, I was the Acting Executive Director, Regional Planning and Policy, for the QWC.
- Between July 2009 and February 2010, I was the Acting Chief Executive Officer of the Queensland Water Commission.



Taken by:

[Justice of the Peace/Solicitor]

Daniel Thomas Spiller

- Between February 2010 and June 2010, I returned to my role as the Acting Executive Director, Regional Planning and Policy, for the QWC.
- 19. On 5 July 2010, I commenced in the employment of the Water Grid Manager in my current role (discussed further below).

TOPIC 2: MY CURRENT POSITION AT THE SOUTH EAST QUEENSLAND WATER GRID MANAGER, A DESCRIPTION OF THAT ROLE AND MY RESPONSIBILITIES IN THAT POSITION

- 20. I am currently employed by the Water Grid Manager. My current position description is 'Director, Operations'.
- 21. The roles and functions of the Water Grid Manager are described in its second submission to the Commission of Inquiry.
- 22. My role is to ensure that the Water Grid Manager complies with requirements relating to the operation of the South East Queensland Water Grid (**Water Grid**). The Strategic Plan summarises these requirements as being to direct Water Grid operations to ensure a safe, secure and efficient water supply to South East Queensland (**SEQ**).
- 23. My role relates to the efficient and effective operation of the Water Grid as a system. It does not include direct responsibility for the operation of individual assets within that system, as the Water Grid Manager does not own or operate infrastructure.
- 24. I have overall operational responsibility, reporting directly to the Chief Executive Officer, Mr Dennien.
- 25. My responsibilities include:



Taken by:

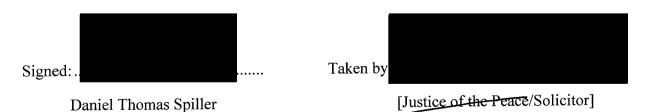


Daniel Thomas Spiller

- a. approval of monthly Grid Instructions for Grid Participants (being entities that provide bulk water services to the Water Grid Manager or purchase bulk water from it);
- b. preparation and implementation of the Water Grid Operating Strategy, which describes the expected operation of the Water Grid over a 12 month to five year period;
- c. ensuring that the water quality delivered by the Water Grid is effectively and consistently managed, monitored and tested, including through the Water Grid Quality Management Plan;
- d. identifying asset performance requirements and capability gaps, including through the preparation of an annual Water Grid Capability Assessment; and
- e. development of short to medium term demand forecasts, for operational and financial purposes.
- 26. My role involves working and communicating with a broad range of stakeholders, including the appropriate responsible Ministers for the Water Grid Manager, the Board of the Water Grid Manager, Grid Participants, and the QWC.

TOPIC 9: THE PERFORMANCE OF THE SOUTH EAST QUEENSLAND WATER GRID MANAGER'S EMERGENCY ACTION ROOM DURING THE 6 TO 19 JANUARY 2011 FLOOD EVENT

27. From December 2010, the Water Grid Manager has managed all incidents using the OCA Incident Manager system. The OCA Incident Manager is an emergency management system that supports the management of contact information, incident logging, action tracking, communications, assets and mapping during an emergency.



- 28. I attach as **Annexure** E to this statement, a copy of the OCA Incident Manager information log. That document shows all of the relevant communications of the Emergency Management Team during the 6 to 19 January 2011 flood event.
- 29. A Water Grid Emergency Management Team (EMT) managed the whole of Water Grid response in accordance with the Water Grid Emergency Response Plan (ERP) (which is discussed in more detail below in the next topic and annexed at that point). The EMT is located in an Emergency Management Room at the Water Grid Manager's premises.
- 30. The EMT had no responsibility in relation to dam operations.
- 31. Grid Service Providers and Distribution Service Providers managed the asset specific issues in accordance with any instructions from the EMT and with their own emergency response plans.
- 32. The Water Grid ERP specifies six steps of an emergency response. My recollection of the relevant events and of the performance of the EMT for each of the six steps is as follows.

Step 1: Identify and assess incident severity

- 33. A range of incidents had been declared prior to 6 January 2011 and were still active at that time. I had been involved in the management of most of these incidents, having been the Water Grid Manager Duty Executive Manager from 28 December 2010 to 4 January 2011.
- 34. On 6 January 2011, an Alert level incident was declared as a result of planned releases from Wivenhoe Dam. At that time, advice from Seqwater was that releases would ramp up to about 300 cubic metres per second. Seqwater advised that this would limit



Taken by: .

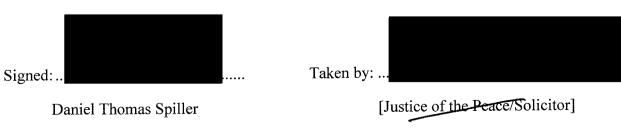
Daniel Thomas Spiller

total flows to just under 400 cubic metres per second. At these rates, the releases were not expected to result in a high level water supply emergency. An incident was declared so that potential risks were formally monitored.

- 35. On 10 January 2011, the incident related to dam releases was escalated from Alert to Level 3. This decision followed advice from Seqwater that releases were expected to increase to at least 2,600 cubic metres per second. Seqwater advised that, at that stage, releases would be kept below 3,500 cubic metres per second and that the combined flows in the lower Brisbane River would be limited to 4,000 cubic metres per second. Seqwater advised that this was below the limit of urban damage in the City reaches.
- 36. This escalation followed teleconferences at 9.30pm on 9 January 2010 and 8.30am on 10 January, which I chaired. Discussions related to landslips, accessibility of sites and the need to maximise reservoir storages. Representatives from Seqwater and the DERM participated.
- 37. On 10 January 2010, separate Level 3 incidents were declared due to asset inundation, including interruption to power supply power to the Kilcoy Water Treatment Plant and asset inundation at Linville and Withcott.
- 38. On 11 January 2011, the incident related to dam releases was escalated to a Level 4 Emergency. This escalation reflected the increasing risk of water supply and water quality issues.

Step 2: Notify

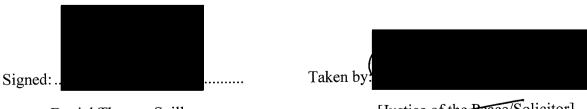
39. Key stakeholders were formally notified of incidents by email from OCA Incident Manager. Emails were distributed to the Minister and his key advisers and representatives of DERM, Treasury and the QWC.



- Key stakeholders were also notified by phone call. I cannot now recollect all of those 40. phone calls.
- I participated in a briefing to the Minister and his advisers on 10 January 2010. I 41. provided updates to his advisers throughout the events that occurred in that week.
- Written and verbal updates were provided throughout the event, including by Mr 42. Dennien to Mr Bradley and to the State Disaster Management Group as appropriate. These emails are reflected in the OCA Incident Manager logs. Separate detailed briefings were prepared by officers of DERM, who were located with the EMT.

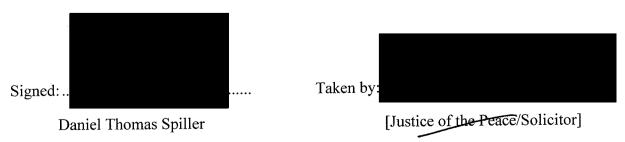
Step 3: Establish command and control

- From 6 to 10 January 2011, the Alert level incident for dam releases was monitored 43. through the Water Grid Manager Duty Manager process.
- I was in regular communications with Mr Rob Drury throughout this period, in relation 44. to functions of the Water Grid Manager under the final draft Communications Protocol.
- On 10 January 2011, an EMT was established to manage the incidents outlined above. 45.
- The structure of the EMT was generally agreed at the teleconference at 0830 on 10 46. January 2011 and was formalised through emails from OCA Incident Manager and myself.
- The structure of the EMT as of 11 January 2011 is illustrated in the diagram at 47. Annexure E. The EMT was based on the structures described in the ERP, with some adjustments to reflect the extent and severity of emerging water supply impacts.
- In relation to the functions of the Emergency Manager, the Chief Executive Officer of 48. the Water Grid Manager, Mr Dennien, determined that:



Daniel Thomas Spiller

- a. I would be the Emergency Manager, with responsibility for the technical and operational elements of the role defined in the ERP;
- b. he would be responsible for the external communications elements of the role defined in the ERP, including interface with the State Disaster Management Group as appropriate; and
- c. Mr Scott Denner, Director, Risk and Technology, would be the Executive Coordinator, responsible for the operation of the Emergency Management Room and for coordinating input from the various Technical Coordination Teams outlined below.
- 49. In relation to the technical coordination function, it was determined that multiple teams would be required in order to address multiple issues concurrently. These teams were:
 - a. Water quality;
 - b. Stand-alone towns;
 - c. Chemical supplies management;
 - d. Water balance;
 - e. Resource coordination; and
 - f. Communications and demand management.
- 50. The technical coordination groups were primarily resourced from the Water Grid Manager and Service Providers, based on capacity and availability. For example, the water quality and water balance groups were chaired by officers of LinkWater. From



13 January 2011, officers of DERM and QWC provided assistance in relation to standalone towns.

- 51. The extent of involvement of individual groups varied during the event, depending upon current and emerging issues. The most active were water quality and stand-alone towns.
- 52. The EMT structure was reviewed and adjusted as appropriate, in consultation with key stakeholders. Changes reflected a range of factors, including roles, hours worked, expertise and developing events. Key changes include:
 - a. from 13 January 2011, as part of relief arrangements, I handed over responsibility as Emergency Manager to the Chief Executive Officers of LinkWater and WaterSecure (working on a shift basis);
 - b. from 14 January 2011, I shared responsibility for external communications functions of the Emergency Manager with Mr Dennien; and
 - c. from 16 January 2011, Mr Denner assumed all responsibilities of the Emergency Manager.
- 53. Representatives of Seqwater, LinkWater and Queensland Urban Utilities were located in the EMT for key periods.
- 54. Other key stakeholders were represented on the EMT or participated in technical coordination groups. At various times, this included representatives of DERM (to Deputy Director General level) and Queensland Health.



Taken by			
Taken by		~	

Daniel Thomas Spiller

- 55. From 10 January 2011, the EMT was structured for 24/7 operation as required. Staff were rostered to key roles, through the Emergency Room Coordinator and Communications Coordinator (refer diagram at Annexure E1546).
- 56. On the morning of 11 January 2011, the EMT was relocated from the offices of the Water Grid Manager to the offices of LinkWater due to flood impacts. LinkWater made available a large conference room, a meeting room, break out areas and desks. Interconnection and teleconference facilities were available, ensuring that the activities of the EMT were interrupted for a short period only.
- 57. The OCA Incident Manager system was operational throughout the event, ensuring ongoing communications despite some interruptions to the Water Grid Manager email system.

Step 4: Manage the emergency

- 58. On 11 January 2011, key issues being managed across the Water Grid included:
 - a. A range of water treatment plants (**WTPs**) being off-line, due to power supply being interrupted or the plants being isolated. WTPs impacted included Canungra, Kooralbyn, Jimna, Linville, Kilcoy, Lowood, Esk, Somerset, Kenilworth, Woodford and Caboolture plants. Water conservation was prompted in these areas, through the media.
 - b. Emerging chemical shortages where WTPs were not accessible due to route inundation. WTPs impacted included Mt Crosby and Landers Shute. Disaster management groups provided assistance with deliveries.
 - c. Treated water in storage was maximised, subject to available water treatment plants and by way of instruction of Distribution Service Providers.

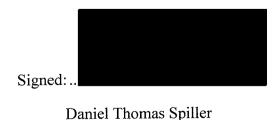


Taken by [Justice of the Peace/Solicitor]

Daniel Thomas Spiller

11

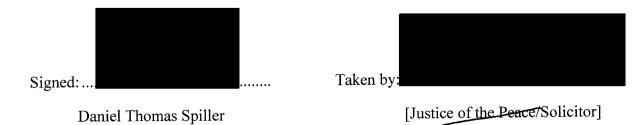
- 59. By 12 January 2011, waters within the Lockyer and Somerset regions began to recede. Crews and bottled water were flown into Withcott and other isolated towns. Boil Water Notice requirements for the Somerset and Lockyer local government areas began to be considered as a pre-emptive measure, in consultation with Queensland Health.
- 60. From 13 to 15 January 2011, issues that were being managed included:
 - a. Turbid raw water quality resulted in potential quality issues for treated water from the Mt Crosby West Bank WPT. While overall quality was within the management limits, two of twelve filters were not. Following urgent high level teleconferences, Queensland Health confirmed that continued operation at this level was appropriate.
 - b. Production from the Mt Crosby WTPs was restricted, due to the turbid raw water and a mechanical issue at the Mt Crosby East Bank WTP. These interruptions resulted in treated water storages being depleted to critical levels, despite water being transferred into central SEQ from the Sunshine and Gold Coasts. Contingency planning was commenced, for implementation in the event that supply could not be maintained.
 - c. Production from the North Pine WTP was restricted due to poor raw water quality.
 - d. A diesel pump was installed at Lowood to provide a temporary supply of raw water to the plant, which supplies some parts of Somerset Regional Council area and the entire Lockyer Valley Regional Council area.
 - e. Bottled water continued to be supplied to towns without reticulated supplies, often by air.



Taken by: ..

- 61. The response involved all elements of the Water Grid. Without infrastructure delivered since 2005, it is highly unlikely that water could have continued to be supplied to the areas of Brisbane, Logan and Ipswich without interruption or the need for a boiled water notice. Key actions included:
 - a. maximising transfers into the central area through the Northern Pipeline Interconnector, Eastern Pipeline Interconnector and Southern Regional Water Pipeline;
 - b. operating the desalination plant at or near full capacity, supplying high quality water for transfer into the central area; and
 - c. establishing standpipes along the Western Corridor Recycled Water Scheme to supply recycled water for clean-up purposes, including in areas where supply from the Lowood WTP had been interrupted.
- 62. The EMT managed this response by way of a schedule of meetings with relevant Grid Participants and agencies. Many representatives participated in these meetings by way of teleconference. The team also established links with the State Disaster Coordination Group, District Disaster Management Groups and Local Disaster Management Groups.
- 63. The conferences initiated by the EMT are summarised below. This summary excludes meetings arranged by other parties, such as disaster management groups.

Date and time	Participants	Subject
1/01 – 11am	Water Grid Manager (WGM), Queensland Urban Utilities (QUU), LinkWater,	Current incidents regarding Capalaba and Mt Crosby WTPs.



. S**a**

• •

Date and time	Participants	Subject
	Seqwater, WaterSecure	
2/01 – 11am	WGM, QUU, LinkWater, Seqwater	Current incidents regarding Capalaba and Mt Crosby WTPs.
2/01 – 2pm	WGM, QUU, LinkWater, Seqwater	Current incidents regarding Capalaba and Mt Crosby WTPs.
3/01 – 9am	WGM, QUU, LinkWater, Seqwater	Current incidents regarding Capalaba and Mt Crosby WTPs. Mt Crosby WTP incident to close.
9/01 – 11am	WGM, QUU, WaterSecure, Seqwater, LinkWater, Allconnex Water	Impact of rainfall events on Water Grid operations. Turbidity being experienced in raw water at Mt Crosby WTPs. Lowood WTP turbidity high. Watching brief to be maintained.
9/01 – 9:30pm	WGM, Seqwater, DERM	Dam releases and flooding. Discussion had around Seqwater release strategy and potential impacts.
10/01 – 8:30am	WGM, Seqwater	Dam releases and flooding. Discussion had around Seqwater release strategy and potential impacts. EMT established.
10/01 – 11am	WGM, Seqwater, QUU, WaterSecure, LinkWater, DERM	For Grid connected WTPs, impacts from increase turbidity associated from extreme weather. General situation update regarding production, demand and storage. Chemical deliveries discussed with alternative routes assistance requested from EMT.
		For stand-alone supplies, current status discussed and actions agreed. EMT requested to assist prioritization of helicopter to provide access to the Kilcoy supply. Need for boil water notices reinforced where required.



14

Date and time	Participants	Subject
10/01 – 12:30pm	WGM, Bureau of Meteorology (BOM), Minister, Department of Premier and Cabinet (DPC), DERM, Office of the Water Supply Regulator (OWSR), Seqwater	Situation update.
10/01 – 3pm	WGM, Seqwater, QUU	For stand-alone supplies, status update. Jimna, Linville and Kilcoy areas of greatest impact. Carting to Jimna to commence. QUU to arrange bottled water. No advice from Energex as to when power might be restored to the Kilcoy WTP. Communications arrangements agreed.
10/01 – 4pm	WGM, Seqwater, QUU, Unitywater, LinkWater	General situation update regarding production, demand and storage. Advised that the Capalaba WTP was not operational, with supply being sourced from alternative sources. Mt Crosby West Bank WTP on stand-by. Kenilworth WTP offline. Tankering to be arranged by Unitywater. Two sites running short of lime. Seqwater directed to escalate power supply issue with Energex.
11/01 – 7:30am	WGM, QUU, Seqwater, DERM, Allconnex Water, Unitywater, LinkWater	General situation update. For stand-alone supplies, situation discussed. Working group expanded and prioritised.
11/01 – 2:15pm	WGM, LinkWater, Seqwater, QUU, Unitywater	Grid connected situation update. Advised that the Mt Crosby East Bank WTP was isolated, with two and half days supply of chemicals onsite.
12/01 -	WGM, LinkWater,	General situation update, with a focus on stand-alone



• •

.

1.5

Taken by:

.....

Daniel Thomas Spiller

Date and time	Participants	Subject
7:30am	Seqwater, QUU, Unitywater	supplies.
12/01 – 10pm	WGM, Qld Health, DERM, Seqwater, LinkWater, two external water quality advisors	Discussion and agreement of course of action regarding water quality public health impacts associated with high turbidity in the source water of the Mt Crosby WTPs.
13/01 – 7:30am	WGM, LinkWater, Seqwater, QUU	General situation update, with a focus on reservoir storage levels and stand-alone supplies. QUU to coordinate boil water messaging as supply restored to isolated towns.
13/01 – 12:30pm	WGM, LinkWater, Seqwater, QUU	General situation update.
13/01 – 4pm	WGM, LinkWater, Seqwater, QUU	General situation update.
13/01 – 9pm	WGM, LinkWater, Seqwater	Teleconference to discuss Mt Crosby WTP turbidity levels and impacts on production.
14/01 – 6:30am	WGM, LinkWater, Seqwater	Update on the operation of the Mt Crosby WTPs and the treated water storages. Supply meeting demand, with increase in demand for clean down purposes unknown. Water balance team leading contingency planning for potential interruptions to supply.
14/01 – 7:30am	WGM, LinkWater, Seqwater, QUU	General situation update, with a focus on reservoir storage levels and stand-alone supplies.
14/01 – 10am	WGM, LinkWater, Seqwater, QUU, Qld Health, OWSR	General situation update, with a focus on reservoir storage levels and stand-alone supplies. Supply continuing to meet demand. More detailed discussion of



Taken by:

Daniel Thomas Spiller

Date and time	Participants	Subject
		demand management options.
14/01 – 12pm	WGM, LinkWater, Seqwater, QUU	General situation update, with a focus on reservoir storage levels and stand-alone supplies. North Pine WTP raw water back up pump requested of Seqwater, enabling that plant to increase supply.
14/01 – 3pm	WGM, LinkWater, Seqwater, QUU	General situation update, with a focus on reservoir storage levels and stand-alone supplies.
15/01 – 7:30am	WGM, LinkWater, Seqwater, QUU, Unitywater	General situation update, with a focus on stand-alone supplies. Unitywater seeking EMT to arrange for permission to utilize purified recycled water for clean up purposes. QUU requesting EMT to liaise with Queensland Police Service (QPS) regarding access to pipes in Grantham.
15/01 – 12pm	WGM, LinkWater, Seqwater, QUU, Unitywater	General situation update, with a focus on stand-alone supplies.
16/01 – 7:30am	WGM, QUU, LinkWater, Allconnex Water, Seqwater, Unitywater, WaterSecure	General situation update, with a focus on stand-alone supplies. Focus on reticulated mains status within the distribution network.
17/01 – 7:30am	WGM, LinkWater, Seqwater, QUU, Unitywater	General situation update, with a focus on stand-alone supplies. QUU is working through Grantham pipeline with QPS escort.
19/01 – 6pm	WGM, LinkWater, Seqwater, QUU	General situation update, with a focus on the Lowood WTP.
19/01 – 7pm	WGM, LinkWater,	Lowood WTP update. Pump running but loss of electricity from lightning strike in storm. Requested

Signed:..

• •

۰.

Taken by:

.....

Daniel Thomas Spiller

Date and time	Participants	Subject
	Seqwater, QUU	priority restoration of power.
20/1 – 8am	WGM, QUU, Seqwater	General situation update, with a focus on the Lowood WTP. Re-iterated the need for a secondary pump to be sourced for the Lowood WTP by Sequater.
21/1 – 1pm	WGM, LinkWater, Seqwater, QUU	General situation update. Mt Crosby WTP dewatering issues continuing. Turbidity increasing may require shutdown of WTP.

Step 5: Manage the recovery

- 64. By the morning of 16 January 2011, supply had been restored to approximately 95 percent of Queensland Urban Utilities' customers. Key issues from 16 January 2011 until emergency closure were as follows:
 - a. until 24 January 2011, Boil Water Notices for Lockyer and Somerset Council regions and Marburg;
 - b. until 18 February 2011, repairs to the Lowood raw water pump;
 - c. ongoing intensive water quality sampling; and
 - d. consideration of dewatering options for the Mt Crosby and North Pine WTPs.
- 65. The EMT was operational until 27 January 2011, when the Water Grid Manager transitioned back to normal, on call, arrangements.
- 66. A number of other high level incidents occurred over the following months, including an interruption to power supply to the Mt Crosby WTPs (determined to be a Level 5 emergency). These incidents were managed in accordance with the ERP.



Taken by:

[Justice of the Peace/Solicitor]

Daniel Thomas Spiller

18

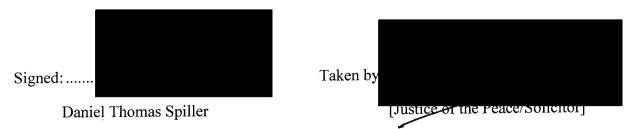
67. By the end of March 2011, the operation of the Water Grid has stabilised sufficiently for the desalination plant to the return to minimum production. In this mode, it produces about 50 megalitres per week (compared to its capacity of 135 megalitres per day).

Step 6: Improvement actions

68. These are discussed in my response to topic 10.

TOPIC 10: THE EXISTENCE OF, AND PERFORMANCE OF, ANY EMERGENCY ACTION PLAN HELD BY THE SOUTH EAST QUEENSLAND WATER GRID MANAGER DURING THE 6 TO 19 JANUARY 2011 FLOOD EVENT

- 69. The only emergency action plan held by the Water Grid Manager that I am aware of is the SEQ Water Grid Emergency Response Plan (**ERP**) prepared by the Water Grid Manager, a copy of which is attached to this statement as Annexure F1.
- 70. It is important to recollect that the ERP had been previously tested in an independent review of that plan by an emergency and disaster recovery consultancy called MC2 Pacific International (MC2 Pacific) in or around March 2010. That is discussed in more detail below.
- 71. Under the Market Rules, the Water Grid Manager, relevantly, is responsible for the preparation of an ERP. Market Rule 4.24 provides that:
 - (a) The Water Grid Manager must prepare, implement and maintain a Water Grid Emergency Response Plan which specifies:
 - (i) incidents which must be reported to the Water Grid Manager;
 - (ii) response levels for types of incidents reported to the Water Grid Manager;



- (iii) escalation and notifications paths for each response level;
- (iv) reporting and monitoring requirements for each response level;
- (v) responsibilities for preparing and issuing public statements (if required) for each response level;
- (vi) any changes to the process for the issue of Grid Instructions following a reported incident;
- (vii) the process for operation of the Water Grid following a Water Supply Emergency Declaration;
- (viii) the process for preparing, issuing and amending Operating Instructions following a Water Supply Emergency Declaration;
- (ix) arrangements (where applicable) for providing the Water Grid Manager with access to Grid Service Provider operated control rooms, real-time information, equipment and personnel following a Water Supply Emergency Declaration; and
- (x) any other matter the Water Grid Manager considers appropriate.'
- 72. The ERP is a detailed plan in the event of an emergency which affects the supply of water in SEQ. It applies to all Grid Participants and, in particular, to:
 - a. the Water Grid Manager;
 - b. the Queensland Bulk Water Supply Authority (trading as Seqwater);
 - c. the Queensland Manufactured Water Authority (trading as WaterSecure);

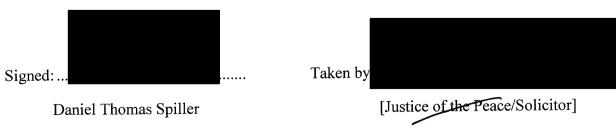


Taken by:

[Justice of the Peace/Solicitor]

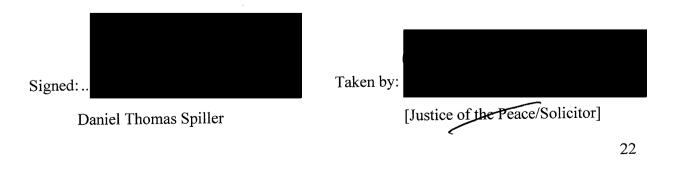
Daniel Thomas Spiller

- d. the Queensland Bulk Water Transport Authority (trading as LinkWater);
- e. Distribution Service Providers, including Queensland Urban Utilities.
- 73. On 2 December 2008, the original version of the ERP was approved by the then Deputy Premier and Minister for Infrastructure and Planning (version 1).
- 74. On 29 October 2009, an amended version of the ERP was submitted to the Minister for approval. The amendment followed an annual review of the approved Water Grid ERP, in accordance with Section 4.25 of the Market Rules.
- 75. As part of that annual review, the ERP and all changes made to it were circulated to all Grid Participants and other stakeholders for review and comment. Other stakeholders included Emergency Management Queensland, the Queensland Police Service, Queensland Health, DERM, the Office of the Water Supply Regulator and the QWC.
- 76. Submissions by entities in relation to the ERP were positive, and indicated that the Grid Participants believed they were effectively complying with the letter and intent of the Plan. For example, the LinkWater submission stated that the current ERP represented a marked improvement from the previous version. LinkWater had found that the notifications, forms, situational reports, action checklists and other templates were an important resource.
- 77. On 1 December 2009, the revised plan was adopted as the interim ERP, prior to a training and validation period (interim version).
- 78. In March 2010, an exercise, Exercise Matrix, was conducted in which external consultants were engaged to simulate various emergencies over a two day period to test the adequacy of the ERP. The Exercise Matrix scenario was set to stretch the capacity



of the Water Grid, with multiple Level 3 and 4 incidents. It involved the following organisations, either as higher control, observers or exercised parties:

- a. Water Grid Manager;
- b. LinkWater;
- c. Seqwater;
- d. WaterSecure;
- e. Queensland Urban Utilities;
- f. Gold Coast Water;
- g. Moreton Bay Regional Council;
- h. Queensland Police Service;
- i. Emergency Management Queensland;
- j. DERM; and
- k. Queensland Health.
- 79. Exercise Matrix was facilitated and assessed by MC2 Pacific. A number of recommendations for further improvement were made, all of which were discussed between the various agencies prior to being incorporated into version 2.
- 80. The MC2 Pacific report describing, and evaluating the results of, the testing is annexed at Annexure F97. This report was provided to the Minister, in accordance with Section 4.24(g) of the Market Rules.



- 81. On 13 August 2010, the Water Grid Manager submitted an amended version of the interim ERP to the Minister for final approval (version 2). The amendments reflected the outcomes of the testing and validation period, including the recommendations from MC2 Pacific.
- 82. On 23 September 2010, the Minister approved version 2 of the ERP.
- 83. On 23 November 2010, the Chief Executive Officer of the Water Grid Manager approved updated contact details in the ERP. This was the version which was in force as at the time of the 2010/2011 floods (version 2.1).

OCA

- 84. From December 2010, all incidents have been managed using the OCA Incident Manager system. Related communications are annexed at Annexure E.
- 85. OCA Incident Manager is a common emergency management system, which was implemented based on a recommendation following Exercise Matrix. It facilitates the effective implementation of the ERP, providing an all-in-one emergency management system that supports the management of contact information, incident logging, action tracking, communications, assets and mapping during an emergency.
- 86. OCA Incident Manager provides centralised control of all information to the EMT, resulting in:
 - a. improved communications between it, Grid Participants and key stakeholders;
 - b. reduced risk of miscommunication or misinformation;
 - c. the ability to communicate en masse with key stakeholders via SMS or email;



Taken by: .

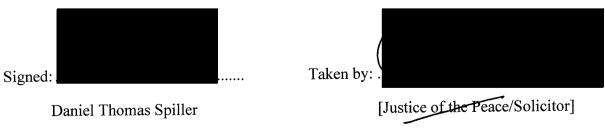
[Justice of the Peace/Solicitor]

Daniel Thomas Spiller

23

- d. faster response to changing situations; and
- e. secure software platform, enabling remote access by all users across the Grid (ASIO T4 approved data centres utilised).
- 87. Benefits for the Grid Participants include:
 - a. live situational awareness, allowing faster assessment of emergency situations;
 - b. visibility and transparency for all incidents across the Water Grid, regardless of involvement;
 - c. a central repository of all emergency communication and related materials;
 - d. clear roles and responsibilities when managing an emergency;
 - e. a reduction in the use of email for emergency communications; and
- 88. I understand the OCA software system is utilised within the State Disaster Coordination Centre and the Queensland Police Service for Counter Terrorism operations, as well within Emergency Management Queensland. Queensland Health also utilises OCA software system.
- 89. Implementation followed a three month trial involving all Grid Service Providers and Distribution Service Providers.
- 90. In December 2010, formal user training workshops were held for between 80 and 90 users from the Water Grid Manager and all Grid Service Providers and Distribution Service Providers.

Training



- 91. The Water Grid Manager has undertaken formal training for its staff and representatives from Grid Participants, in addition to Exercise Matrix. This training includes:
 - a. November 2008, ERP training workshop;
 - b. 2 December 2009, ERP workshop for senior executives;
 - c. 8, 15 and 16 December 2009, ERP workshops for relevant officers;
 - d. 28 January 2010, train the trainer workshop;
 - e. 4 February 2010, EMT workshop (including Grid Participants);
 - f. August 2010, participation in Exercise Mercury (Queensland Police Service) representing the Water Grid;
 - g. December 2010, OCA Incident Manager training for 80 to 90 users;
 - h. throughout 2010, training sessions for Water Grid Manager duty managers.

Application

- 92. In 2009-10, there were a total of 35 incidents that were rated as level 3 or higher under the interim ERP. From December 2009, incidents were managed in accordance with the interim ERP.
- 93. Since 1 July 2010, eighty incidents have been managed under the ERP, comprising:
 - a. 56 Alert level incidents;
 - b. 21 Level 3 emergencies;



Taken by:



Daniel Thomas Spiller

- c. two Level 4 emergencies; and
- d. one Level 5 emergency.

Performance

- 94. In my view, the ERP functioned very well during the course of the flood events in January 2011. It established structures and processes that were able to be adapted as circumstances changed, as outlined in response to Topic 9.
- 95. My view is confirmed by the preliminary outcomes of an after action review. This after action review is being undertaken as part of Step 6 (improvement actions) of the ERP.
- 96. The review is being carried out in two parts, being:
 - a. a first phase, which is focusing on 'technical' emergency management within the Water Grid (that is, a compliance audit against the ERP). It includes such factors as the use and useability of OCA Incident Manager, process and communication between the Incident Management Teams. The focus is on continual improvement for the short-term; and
 - b. a second phase, which will leverage the findings of the Commission of Inquiry and focus on the practical implementation of its recommendations. This phase may also focus on other broad strategic areas for the medium to long-term.
- 97. MC2 Pacific has been engaged to undertake the review, based on a variation to a contract that had already been awarded for the conduct of another annual exercise, Exercise Matrix II. The terms of reference and response by MC2 Pacific are annexed at Annexure F810.

Taken I



Daniel Thomas Spiller

- 98. MC2 Pacific has provided verbal advice on the first phase, following interviews with members of the EMT and representatives of all Grid Service Providers and Distribution Service Providers.
- 99. MC2 Pacific provided advice regarding each step of the emergency management process. The effect of this advice is as follows.
- 100. In relation to Steps 1 (identify and assess severity), 2 (declaration and notification) and 5 (recovery), MC2 Pacific considered that the process had been complied with and was effective. No improvements were recommended, though it noted that notification to some participants was not followed by a phone call in some instances.
- 101. In relation to Step 3 (establish command and control), MC2 Pacific considered that the process was effective and appropriate. It advised that there had been a strong understanding of the operational response and the role of the EMT, and that the technical groups and liaison role worked well. It recommended that the process could be improved by:
 - a. more clearly communicating the composition of the EMT where key positions are rotated, such as occurred from 14 January 2011;
 - b. further clarifying responsibilities for communications, especially in relation to wastewater issues which are not managed through the ERP;
 - c. formalising the liaison roles with disaster management groups, including the liaison role with State Disaster Management Group as provided by Mr Dennien; and
 - d. continuing to build relationships with disaster management agencies and groups, to ensure that they are aware of the role of the EMT.

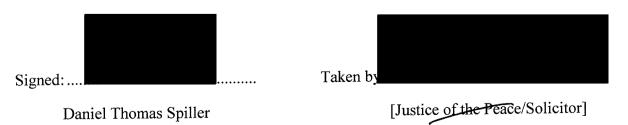


Taken by: .



Daniel Thomas Spiller

- 102. In relation to Step 4 (manage the emergency), MC2 Pacific considered that the process generally worked well. It recommended that the process could be improved by:
 - a. regular teleconferences with communications officers from all relevant entities, as a means of distributing information;
 - b. more regular updates to Grid Service Providers and Distribution Service Providers about strategic issues and responses, for officers not involved in the EMT teleconferences;
 - c. more regular information to Grid Service Providers and Distribution Service Providers about the status of requests for assistance; and
 - d. finalisation of the interim Boil Water Alert Protocol, which was developed with participants in late 2010 and distributed as a final draft on 23 December 2010 for use over the holiday period.
- 103. In relation to Step 6 (improvement actions), MC2 Pacific considered that the review process to be appropriate. Beyond the issues outlined above, it noted that the improvement actions should include:
 - a. finalisation of the Water Grid Manager Business Continuity Plan;
 - b. further training for Grid Participants on the OCA system; and
 - c. prior preparation of basic communications material.
- 104. Many of the recommendations are underway. For example, an updated version of the boiled water protocol was distributed to participants in April 2011 for review and comment, prior to final consideration by the Grid Water Quality Technical Committee.



105. A report will be provided once stage two of the review is completed.

Entity Emergency Response Plans

- 106. The Market Rules require that Grid Service Providers and Distribution Service Providers prepare their own emergency response plans (**EERP**) ERPs that are consistent with the ERP.
- 107. The Water Grid Manager holds copies of each of these EERPs, as submitted to it for approval. These documents are annexed as Annexure F. Related correspondence is also annexed, including communications regarding the Water Grid Manager's approval.
- 108. Section 4.26 of the Market Rules states that each Grid Service Provider and Distribution Service Provider must, no later than one month after the date on which the ERP is approved, prepare and submit to the Water Grid Manager for approval an EERP for its Infrastructure (Grid Service Provider Emergency Response Plan) that is consistent with the ERP.
- 109. Section 4.27(a) states that each Distribution Service Provider must no later than 30 September 2010 submit to the Water Grid Manager for approval an emergency response plan (Distribution Service Provider Emergency Response Plan) for:
 - (i) any portion of its infrastructure that connects with the Water Grid; or
 - (ii) infrastructure associated with Isolated Supply Schemes,

that is consistent with the ERP.

110. Sections 4.28 and 4.29 set out matters that must be included in these EERPs.



Taken by:

- 111. Section 4.30 sets out the process by which the Water Grid Manager comments on and approves Grid Service Provider and Distribution Service Provider Emergency Response Plans. It includes a provision for the Water Grid Manager to issue a Remedy Notice and a requirement. The Grid Service Provider or Distribution Service Provider must amend its Grid Service Provider Emergency Response Plan or Distribution Service Provider emergency response plan to address matters set out in a Remedy Notice and resubmit an amended emergency response plan to the Water Grid Manager for approval no later than ten business days after receipt of a Remedy Notice.
- 112. Section 4.31 states that each Grid Service Provider and Distribution Service Provider must review its approved Grid Service Provider Emergency Response Plan or Distribution Service Provider Emergency Response Plan within one month of the approval of any revision to the ERP in accordance with section 4.25 and submit the revised Grid Service Provider Emergency Response Plan or Distribution Service Provider Emergency Response Plan or Distribution Service Service Provider Emergency Response Plan or Distribution Service Provider Emergency Response Plan to the Water Grid Manager for approval under section 4.30.
- 113. On 30 September 2010, Mr Dennien wrote to the Chief Executive Officers of Grid Service Providers and Distribution Service Providers advising them that the Minister had approved the ERP and requesting that they submit updated versions of their EERPs, in accordance with the requirements of the Market Rules.
- 114. Updated plans were received from all participants within a month.
- 115. The Water Grid Manager undertook a review with the timeframes specified in the Market Rules. The results of this review were communicated to the providers by no later than 17 November 2010. For LinkWater, WaterSecure and Allconnex, the Water Grid Manager required minor issues to be remedied before its final approval.



Taken by:

[Justice of the Peace/Solicitor]

Daniel Thomas Spiller

- 116. Final approvals of Grid Service Provider and Distribution Service Provider Emergency Response Plans were as follows:
 - a. 21 October 2010, Unitywater plan approved;
 - b. 17 November 2010, Seqwater plan approved;
 - c. 17 November 2010, Queensland Urban Utilities plan approved;
 - d. 21 January 2011, LinkWater plan approved;
 - e. 21 January 2011, WaterSecure plan approved; and
 - f. 21 January 2011, Allconnex plan approved.
- 117. In my view, there was an effective response to water supply emergency by all Grid Participants. Water supply was maintained to about 95% percent of customers, despite impacts upon much of the Water Grid, as outlined in response to Topic 9.

All the facts and circumstances deposed to herein are within my own knowledge, save such as are deposed to from information only, and my means of knowledge and sources of knowledge appear in this my statement to the Commission.

Sworn by Daniel Thomas Spiller on 13 May 2011 at Brisbane in the presence of:



Daniel Thomas Spiller

Taken by

Statement of Daniel Thomas Spiller

Please note the annexures to this statement are too large to upload to the Queensland Floods Commission of Inquiry website.