- in accordance with Strategy S2 and Strategy W3 respectively; and, or alternatively,
- ii) at rates substantially in excess of the rate of inflow;

there would be insufficient flood storage capacity in Lake Somerset and Lake Wivenhoe to store incoming flows should further rainfall occur in accordance with, or in excess of, that forecast by the Bureau of Meteorology; and

- b) that, without such capacity, subsequent fleee" releases would be necessary in volumes that would cause urban flooding downstream of Wivenhoe Dam.
- 286 Further, and in the alternative to paragraph 285, in the circumstances pleaded in paragraphs 270-278 and 282-283, on 8 January 2011, there was a substantial risk:
 - a) that, unless fleed releases were commenced at Wivenhoe Dam at a rate substantially in excess of the rate of outflow from Somerset Dam, there would be insufficient flood storage capacity in Lake Wivenhoe to store incoming flows should further rainfall occur in accordance with, or in excess of, that forecast by the Bureau of Meteorology; and
 - b) that, without such capacity, subsequent flood releases would be necessary in volumes that would cause urban flooding downstream of Wivenhoe Dam.
- 287 [Not used]_Further,-in-tho-oiroumstancos-ploadod-in-paragraphs-270-278 and-285-286,-a-reasonably-prudent flood-onginoor-responsible-for-Flood Oporations-at-Somerset-Dam-and-Wivonhoo-Dam-on-8-January-2011:
 - a) would-have-had-regard-to-the-flood-mitigation-objectives-in-tho-Flood Mitigation-Manual,-and-the-priority-between-them;
 - b) would-havo-considered-tho-likely-offoot-of-continuing-inflows-in determining-the-rato-of-flood-release from-Somerset-Dam-and Wivenhoe-Dam;

- c) would-havo-considered-tho-likoly-effect-of-continuing-rainfall-indetermining-tho-rato-of-flood-roloase-from-Somercet-Dam-and Wivonhoo-Dam;-
- d) would-have-considered-forecast-rainfall-in-dotormining-tho-rato-of flood-release-from-Somerset-Dam-and-Wivenhoe-Dam;
- e) would-havo-oonsidorod-tho-risk that-further-rainfall-might-gonorate substantial-runoff given-previous rainfall-in-dotormining-tho-rato-of flood-release-from-Somerset-Dam-and-Wivenhoe-Dam;
- f) would-havo-oonsidorod-tho-risk-that-a-failure-to-make-substantial-flood releases-might-result-in-thoro-boing-insufficient-available-capacity-in tho-flood-storage-compartments-of-Somerset-Dam-and-Wivonhoo Dam-to-prevent-large-scale-releases-in-case-of-further-rain;
- g) would-havo-considered-tho-risk-that-future-rainfall-may-exceed-that predicted-by-the-Bureau-of-Meteorology;
- h) would-havo-oonsidorod-tho-current-water-lovols-of-Lako-Somorsot and-Lake-Wivenhoe;
- i) would-havo-oonsidorod-tho-likoly-impact-of-roloasos-from-Somorsot Dam-on-the-water-level-in-Lake-Wivenhoe;-and
- j) would-havo-considered-tho-magnitude-of-forecast-rainfall-and-tho -likely-impact-such-rainfall-would-havo-on-dam-water-lovols-should-it eventuate-
- 288 Further, by reason of the matters pleaded at paragraphs 270-278 and 285-286, a reasonably prudent flood engineer on 8 January 2011:
 - a) would have complied with the Flood Mitigation Manual:
 - b) would have implemented and maintained Strategy W3 at Wivenhoe Dam:
 - c) would have implemented and maintained Strategy S2 at Somerset Dam;

- d) would have caused Wivenhoe Dam to release water at rates exceeding the rate of inflow;
- e) <u>would not have substantially increased the rate of outflow from</u> <u>Somerset Dam without implementing a corresponding increase in the</u> <u>rate of outflow from Wivenhoe Dam;</u>
- f) would have kept the water level in Lake Somerset to no higher than:
 - i) <u>approximately EL 96.70 m AHD by the end of 8 January 2011;</u> <u>or. alternatively.</u>
 - ii) <u>approximately EL 100.14 m AHD by the end of 8 January 2011;</u> <u>or_alternatively.</u>
 - iii) <u>Temporary Full Supply Level by the end of 8 January 2011; or.</u> <u>alternatively.</u>
 - iv) Full Supply Level by the end of 8 January 2011; and
- g) would have kept the water level in Lake Wivenhoe to no higher than:
 - i) <u>approximately EL 62.80 m AHD at the end of 8 January 2011;</u> <u>or. alternatively.</u>
 - ii) <u>approximately EL 67.58 m AHD at the end of 8 January 2011;</u> <u>or. alternatively.</u>
 - iii) <u>Temporary Full Supply Level at the end of 8 January 2011; or,</u> <u>alternatively.</u>
 - iv) Full Supply Level at the end of 8 January 2011.

- A. <u>A reasonably prudent flood engineer would have complied with</u> the Flood Mitigation Manual by taking the actions pleaded in paragraph 288(b)-(g).
- B. <u>Flood Mitigation Manual, sections 1.1, 3.1, 8.4, 8.5, 9.3, 9.4.</u>
- C. Christensen Report. Chapter VIII. [907]-[926].

D. <u>Christensen Report. Chapter X. [1326]-[13401. [1476]-[1490],</u> [1603]-[1618], [1703]-[1725].

a) would have reasonably construed the Flood Mitigation Manual;

PARTICULARS

- A. A*reasonably-prudent flood-onginoor-would-havo-construed-the 'Flood-Mitigation-Manual-to-roquiro-tho-Flood-Enginoors-to-use tho-woathor-forecast-information-supplied-by-tho-Bureau-of 'Meteorology-in-dotormining-roloaso-strategies-for-Somorsot-Dam and*Wivonhoo+Dam.
- A-roasonably-prudont flood-onginoor would-havo-construed-tho
 Flood-Mitigation-Manual-to-require-tho-actions-ploadod-in
 paragraphs-288(b)-(c),-(j),-(l),-(n)-and-(o)-below.
- b) would-have-complied-with-the-Flood-Mitigation-Manual;

- A. A-roasonably-prudont-flood-onginoor-would-havo-complied-with tho-Flood-Mitigation-Manual-by-taking-tho-actions-ploadod-in paragraphs-288(c),-(j),-(l),-(n)-and-(o)-below.
- would-havo-made-roasonablo-prodictions,-and-formed-roasonablo oxpootations,-with-respect to-those-matters-in-relation-to-which-tho
 Flood-Mitigation-Manual-required-the-Flood-Enginoors-to-make
 predictions-and-form-oxpootations,-and-would-havo-acted-in
 aooordanco-with-thoso-prodictions-and-oxpootations.in.complying-with
 the-requirements.of the -Flood-Mitigation_Manual;
- would-havo-oonsidorod-that,-according-to-tho-terms-of-tho-Flood
 Mitigation-Manual,-a-Flood-Event-had-boon-ongoing-since-on-or around-2-December-2010,-or-alternatively,-since-on-or-around-2 January-2011-at the-latest;
- e) would-havo-oonsidorod-that-Flood-Operations-and-flood-roloasos woro-improperly-discontinued-on-2-January-2011;
- f) would-havo-oonsidorod-that-insufficient-roloases-had-been-mado-from
 Wivenhoe-Dam-in-tho-period-2-January-to-8-January-2011;

- g) would have expected the water lovel in Lake-Wivenhoo to exceed EL 68.5 m-AHD;
- h) would-havo-expected-that-tho-combined-poak-river-flows-at-Lowood ·havo-exceed-3500m³/s;
- i) would-havo-oonsidorod-that-tho-Flood-Mitigation-Manual-roquirod-the immediate-implementation-of-Strategy-W3-at-Wivenhoe-Dam;
- would immediately have implement. Strategy-W3-at
 Wivenhoe-Dam;
- k) would havo-oonsidorod that the Flood Mitigation Manual required the immodiate implementation of Strategy S2-at Somersot Dam but only in-conjunction with Strategy W3-at Wivenhoe Dam;
- would-immodiatoly-havo-movod-to-implement-Stratogy-S2-at
 Somorsot-Dam,-but-only-in-conjunction-with-Strategy-W3-at-Wivonhoe
 Dam;
- m) would-not-havo-implemented-Strategy-S2-at-Somorsot-Dam-without also-implementing-Stratogy-W3-at-Wivonhoo-Dam-or-othorwiso ensuring-that-tho-rato-of-outflow-from-Wivonhoe-Dam-substantially exceeded-tho-rato-of-outflow-from-Somerset-Dam;
- n) . would-havo-caused-Somerset-Dam-and-Wivonhoo-Dam-to-release water-at-rates-substantially-exceeding-the-rate-of-inflow;-and
- would-havo-oontinuod-Flood-Oporations-until-Lako-Somerset-and
 Lake-Wivonhoo-woro-no-longor-likoly-to-oxoood-thoir-respective-Full
 Supply-Lovols-
- By reason of the matters pleaded in paragraphs 279-288, on 8 January
 2011 the Flood Engineers (or one or more of them) <u>failed to do one or more</u> of the things in pleaded in paragraph 288. ÷
 - a) failed-to-havo-regard-to-or-to-accord-sufficient-weight-to-one-or-more of-the-matters-ploaded-in-paragraph-286;-and
 - b) failed-to-do-one-or-more-of-tho-things-in-ploadod-in-paragraph-288,

290 In the circumstances pleaded in the preceding paragraph, the Flood Engineers (or one or more of them) breached their duty of care to the plaintiff and other Group Members on 8 January 2011 (the **8 January Breaches).**

U Events of 9 January 2011

Weather Forecasts

- 291 On 9 January 2011:
 - a) the Bureau of Meteorology 4-day forecast for 10 9 January to 13 12 January 2011 predicted 150-300 75-300 mm of rainfall in the Brisbane River Basin, including in the Lake Somerset and Lake Wivenhoe catchment areas; and
 - b) the Bureau of Meteorology 8-day forecast for 40 <u>9</u> January to 17 <u>16</u> January 2011 predicted 150-300 <u>100-320</u> mm of rainfall in the Brisbane River Basin, including in the Lake Somerset and Lake Wivenhoe catchment areas.

PARTICULARS

- Bureau of Meteorology, Poor Man's Ensemble forecast issued-9 January-2011 for period 40 <u>9</u> January to 13 <u>12</u> January 2011.
- B. Bureau of Meteorology, Poor Man's Ensemble forecast issued-9
 January 2011 for period 40 <u>9</u> January to <u>17</u> <u>16</u> January 2011.
- 292 At or around 10:03 am on 9 January 2011, the Bureau of Meteorology issued a QPF predicting rainfall of 40-60 mm in the Lake Somerset and Lake Wivenhoe catchment areas over the following 24 hours.

PARTICULARS

 A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix C, p 174. 293 At or around 4:00 pm on 9 January 2011, the Bureau of Meteorology issued a QPF predicting the rainfall of 50-80 mm in the Lake Somerset and Lake Wivenhoe catchment areas over the following 24 hours.

PARTICULARS

A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix C, p 175.

Rainfall and Inflows

294 In the 24 hours to 9:00 am on 9 January 2011, there was widespread rainfall recorded throughout the catchment areas for Lake Somerset and Lake Wivenhoe, with up to 43 mm of rainfall in some areas.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Section 6.3, p 67.
- 295 Catchment inflows into Lake Wivenhoe and Lake Somerset continued in significant volumes throughout the course of 9 January 2011.

PARTICULARS

 A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Section 9.2, pp 156-157 and Section 9.3, pp 170-171.

Water Level

- 296 At or around 6:15 am on 9 January 2011:
 - a) the water level of Lake Somerset was at <u>approximately</u> EL 100.27 m AHD and falling slowly; and
 - b) the water level at Lake Wivenhoe was at <u>approximately_EL</u> 68.58 m AHD and falling slowly.

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix E, pp 17-18.
- B. Lake Somerset water level at 6.00am on 9 January 2011 EL 100.27 m AHD

Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, p 170.

C. Lake Wivenhoe water level at 6.00am on 9 January 2011 - EL 68.58 m AHD

Seqwater, Spreadsheet containing Lake Wivenhoe water levels between 1 December 2010 and 31 January 2011, Doc identification number: MAU.500.020.0027.

D. Lake Somerset water level at 7.32am on 9 January 2011 - EL 100.27 m AHD

Seqwater, Technical Situation Report 9, *January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2* March 2011, Appendix F, p 78.

E. Lake Wivenhoe water level at 7.32am on 9 January 2011 - EL
 68.58 m AHD

Seqwater, Technical Situation Report 9, *January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2* March 2011, Appendix F, p 79.

297 At or about 8:00 am on 9 January 2011, the water level in Lake Wivenhoe had exceeded approximately EL 68.50 m AHD for over 24 hours.

PARTICULARS

A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Section 9.2, pp155-156. 298 Over the course of 9 January 2011:

- a) the water level of Lake Somerset first decreased from approximately EL 100.32 m AHD (1.32 m above Full Supply Level) to approximately EL 100.27 m AHD, before increasing to approximately EL 102.22 m AHD (3.22 m above Full Supply Level) by day's end; and
- b) the water level of Lake Wivenhoe first decreased from approximately EL 68.64 m AHD (1.64 m above Full Supply Level) to <u>approximately</u> EL 68.53 m AHD, before increasing to approximately EL 69.60 m AHD (2.6<u>0</u> m above Full Supply Level) by day's end.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Section 9.2, pp 156-157 and Section 9.3, pp 170-171.
- B. Lake Wivenhoe water level at 12.00am on 9 January 2011 EL
 68.64 m AHD

Lake Wivenhoe water level at 10.00am on 9 January 2011 - EL 68.53 m AHD

Lake Wivenhoe water level at 11.00 pm on 9 January 2011 - EL 69.60 m AHD

Seqwater, Spreadsheet containing Lake Wivenhoe water levels between 1 December 2010 and 31 January 2011, Doc identification number: MAU.500.020.0027.

Flood Operations

299 The Flood Engineers on duty on 9 January 2011 were as follows:

Sal 8/1/2011 19:00	Sunday 9/1/2011 07:00	Nir Tibaldi

•		
Sunday 9/1/2011 07:00	Sunday 9/1/2011 19:00	<u>Mr Malone</u> Mr-Ruffini Mr-Ayro
Sunday 9/1/2011 19:00	Monday 10/1/2011 07:00	Mr Ruffini Mr Ay re Mr-Malone Mr-Tibaldi

299A In addition to the rostered shifts pleaded in the preceding paragraph:

- All four Flood Engineers attended a meeting at 3:30 pm on 9 January 2011 to discuss and agree the appropriate flood mitigation strategy given the prevailing and forecast conditions; and
- b) <u>Mr Malone remained at the Flood Operations Centre until</u> approximately 10:00 pm on 9 January and assisted Mr Ruffini and Mr <u>Ayre in conducting Flood Operations from 7:00 pm until</u> approximately 10:00 pm.

PARTICULARS

- A. <u>Segwater. January 2011 Flood Event: Report on the Operation of</u> <u>Somerset Dam and Wivenhoe Dam, 2 March 2011, pp 33-34.</u>
- 300 At or around 8:15 am on 9 January 2011, Mr <u>Malone</u> Tibaldi directed that releases from Somerset Dam be increased, while releases at Wivenhoe Dam were left substantially unchanged.

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix L, pp 7-8, 67.
- 301 The decision by Mr <u>Malone</u> Tibaldi to increase substantially the rate of outflow from Somerset Dam while not implementing a corresponding increase in the rate of outflow from Wivenhoe Dam increased the risk that there would be insufficient flood storage capacity in Lake Wivenhoe to store

incoming flows should further rainfall occur in accordance with, or in excess of, that forecast by the Bureau of Meteorology.

<u>301A Each of the other three Flood Engineers was notified that Mr Malone had</u> <u>increased the release rate from Somerset Dam, without a corresponding</u> <u>increase in the release rate from Wivenhoe Dam, at or around 8:15 am on</u> <u>9 January 2011.</u>

PARTICULARS

- A. <u>Seqwater, January 2011 Flood Event: Report on the Operation of</u> <u>Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix L.</u> <u>p 67</u>.
- 302 Until 3:30 pm on 9 January 2011 at the earliest, Mr Malone Tibaldi:
 - a) operated Wivenhoe Dam under Strategy W1 or W2, or maintained a release strategy at Wivenhoe Dam consistent with Strategy W1 or Strategy W2; and
 - b) did not implement Strategy W3 at Wivenhoe Dam.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix M, p 82.
- 303 The Flood Engineers did not implement Strategy W3 at Wivenhoe Dam, or a release strategy consistent with Strategy W3, until the afternoon of 9 January 2011 at.the earliest.

9 January 2011 Breaches

- 304 In the circumstances pleaded in paragraphs 291-298, on the morning of 9 January 2011, there was a substantial risk:
 - a) that, unless flood releases were immediately commenced at Somerset Dam and Wivenhoe Dam:

- in accordance with Strategy S2 and Strategy W3 respectively; and, or alternatively,
- ii) at rates substantially in excess of the rate of inflow;

there would be insufficient flood storage capacity in Lake Somerset and Lake Wivenhoe to store incoming flows should further rainfall occur in accordance with, or in excess of, that forecast by the Bureau of Meteorology; and

- b) that, without such capacity, subsequent flood releases would be necessary in volumes that would cause urban flooding downstream of Wivenhoe Dam.
- 305 Further, and in the alternative to paragraph 304, in the circumstances pleaded in paragraphs 291-298 and 300-<u>302</u>. on 9 January 2011, there was a substantial risk:
 - a) that, unless flood releases were commenced at Wivenhoe Dam at a rate substantially in excess of the rate of outflow from Somerset Dam, there would be insufficient flood storage capacity in Lake Wivenhoe to store incoming flows should further rainfall occur in accordance with, or in excess of, that forecast by the Bureau of Meteorology; and
 - b) that, without such capacity, subsequent flood releases would be necessary in volumes that would cause urban flooding downstream of Wivenhoe Dam.
- 306 [Not used] Further,-in-tho-circumstances-ploadod-in-paragraphs-291--298 and-304-305,-a-roasonably-prudont-flood-onginoor-rosponsiblo-for-Flood Operations-at-Somorsot-Dam-and-Wivonhoo-Dam-on-tho-morning-of-9 January -201.1:
 - a) would-havo-had-regard-to-the-flood-mitigation-objectives-in-tho-Flood Mitigation-Manual,-and-the-priority-between-them;
 - b) would-havo-considered-tho-likoly-effect-of-continuing-inflows-in determining-tho-rate-of-flood-roloaso-from-Somorsot-Dam-and Wivenhoe-Dam;

- would-havo-considered-tho-likoly-offoot-of-continuing-rainfall-in determining-tho-rate-of-flood-roloaso-from-Somorsot-Dam-and Wivenhoe-Dam;
- d) would-havo-considered-forecast-rainfall-in-dotormining-tho-rate-of flood-release-from-Somerset-Dam-and-Wivenhoe-Dam;
- e) would-havo-oonsidorod-tho-risk-that-further-rainfall-might-gonorato substantial-runoff-given-previous-rainfall-in-determining-tho-rato-of flood-release-from-Somerset-Dam-and-Wivenhoe-Dam;
- f) would-havo-oonsidorod-tho-risk-that-a-failure-to-make-substantial-flood
 releasos-might-rosult-in-thoro-boing-insufficient-availablo-capacity-inthe-flood-storago-compartments-of-Somorsot-Dam-and-Wivonhoe
 Dam-to-prevent-large-scale-releases-in-case-of-further-rain;
- g) would-havo-oonsidorod-tho-risk-that-future-rainfall-may-exceed-that ·predicted-by-the-Bureau-of-Meteorology;
- would-havo-oonsidorod-tho-current-water-lovols-of-Lako-Somorsot and-Lake-Wivenhoe;
- i) would-havo-considered-tho-likoly-impact-of-reloasos-from-Somorsot ·Dam-on-the-water-level-in-Lake-Wivenhoe;-and
- would havo considered tho magnitude of forooast rainfall and tho likely-impact-such rainfall would havo on dam water lovels should it eventuate.
- 307 Further, by reason of the matters pleaded at paragraphs 291 -298 and 304-305, a reasonably prudent flood engineer responsible for Flood Operations at Somerset Dam and Wivenhoe Dam on the morning of 9 January 2011:
 - a) would have complied with the Flood Mitigation Manual;
 - b) would have immediately implemented and maintained Strategy W3 at Wivenhoe Dam:
 - c) would have implemented and maintained Strategy S2 at Somerset Dam, but only in conjunction with Strategy W3 at Wivenhoe Dam;

- d) would not have implemented Strategy S2 at Somerset Dam, or substantially increased releases from Somerset Dam into Lake Wivenhoe. without also implementing Strategy W3 at Wivenhoe Dam or otherwise ensuring that the rate of outflow from Wivenhoe Dam substantially exceeded the rate of outflow from Somerset Dam;
- e) <u>would have commenced storing inflows in Lake Somerset by</u> <u>ensuring that releases from Lake Somerset were substantially less</u> <u>than the rate of inflow:</u>
- f) would have kept the water level in Lake Somerset to no higher than:
 - i) <u>approximately EL 100.18 m AHD by the end of 9 January 2011;</u> <u>or. alternatively.</u>
 - ii) approximately EL 102.98 m AHD by the end of 9 January 2011; and
- g) would have kept the water level in Lake Wivenhoe to no higher than:
 - i) <u>approximately EL 63.91 m AHD at the end of 9 January 2011;</u> <u>or. alternatively.</u>
 - ii) <u>Temporary Full Supply Level; or. alternatively.</u>
 - iii) Full Supply Level; or. alternatively,
 - iv) approximately EL 68.83 m AHD at the end of 9 January 2011.

- A. <u>A reasonably prudent flood engineer would have complied with</u> the Flood Mitigation Manual by taking the actions pleaded in paragraph 307(b)-(a).
- B. Flood Mitigation Manual, sections 1.1. 3.1, 8.4, 8.5. 9.3, 9.4.
- C. <u>Christensen Report. Chapter VIII. [927]-[952].</u>
- D. <u>Christensen Report. Chapter X. [1341]-[1356], [1491]-[1506],</u> [1619]-[1635], [1726]-[1741], [1806]-[1829].
- a) would-have-reasonably-construed-the-Flood-Mitigation-Manual;

- A. A-roasonably-prudont flood-engineer-would-have-construed-tho Flood-Mitigation-Manual-to-require-tho-Flood-Engineers-to-uso tho-woathor-forecast-information-supplied-by-the-Bureau-of Meteorology-in-determining-roloaso-strategies-for-Somorsot-Dam and-Wivonhoo-Dam,
- B. A-roasonably-prudont-flood-onginoor-would-havo-oonstruod-tho
 Flood-Mitigation-Manual-to-roquiro-tho-actions-ploadod-in
 paragraphs-307(b)-(o)-(k), (m)-and-(o)-(p)-below.
- b) would have complied with the Flood Mitigation Manual;

- A. A-reasonably-prudent-flood-onginoor-would-have-complied-with tho-Flood-Mitigation-Manual-by-taking-tho-actions-ploadod-in paragraphs-307(c), -(k), -(m)-and-(ο)-(p)-bolow.
- would-havo-mado-roasonablo-prodictions,-and-formed-roasonablo expectations,-with-respect-to-thoso-matters-in-relation-to-which-the
 Flood-Mitigation-Manual-required-the-Flood-Enginoors-to-make
 prodictions.and.form.expectations,-and.would-havo-acted.in
 accordance.with-thoso-prodictions.and-oxpootations.in.complying.with
 the_requirements_of the Flood_Mitigation_Manual;
- would-havo-ooncidored-that,-according-to-tho-to-to-flood
 Mitigation-Manual,-a-Flood-Evont-had-boon-ongoing-sinco-on-or around-2-December 2010,-or-alternatively,-since-on-or-around-2 January-2011-at the-latest;
- e) would-havo-considered-that-Flood-Operations-and-flood-roloasos woro-improperly-discontinued-on-2-January-2011;
- f) would-havo-considered-that-insufficient-roloasos-had-been-mado-from
 Wivenhoe-Dam-in-the-period-2-January-to-9-January-2011;
- g) would-havo-oxpoctod-tho-water-level-in-Lako-Wivonhoe-to-oxoood-EL 68.5-m-AHD;

- would-havo-oxpoctod-that-tho-combined-poak-rivor-flows-at-Lowood would-exceed-3500m³/s;
- i) would have considered that the Flood Mitigation Manual required the implementation of Strategy W3 at Wivenhee Dam;
- j) would have considered that the Flood Mitigation Manual required the immediate implementation of Strategy W3-at-Wivenhoe Dam;
- k) would-immediately-havo-movod-to-implement-Stratogy-W3-at Wivenhoe-Dam;
- would -havo -oonsidorod -that -tho -Flood -Mitigation -Manual-required -tho immodiato -implomontation -of-Stratogy-S2-at-Somorsot-Dam-but-only in-conjunction-with-Stratogy-W3-at-Wivenhoe-Dam;
- m) would-immodiatoly-havo-movod-to-implomont-Stratogy-S2-at Somorsot-Dam,-but-only-in-conjunction-with-Stratogy-W3-at-Wivonhoo Dam;
- would-not-havo-implemented-Strategy-S2-at-Somerset-Dam-without also-implementing-Stratogy-W3-at-Wivonhoo-Dam-or-othorwiso ensuring-that-tho-rate-of-outflow.from-Wivonhoe-Dam-substantially exceeded-the-rate-of-outflow.from-Somerset-Dam;
- would-havo-caused-Somorsot-Dam-and-Wivonhoo-Dam-to-release water-at-rates-substantially-exceeding-the-rate-of-inflow;-and
- p) would-havo-continued-Flood-Oporations-until-Lako-Somorsot-and -Lako-Wivonhoo-woro-no-longor-likoly-to-oxoood-thoir-respective-Full Supply-Lovols-
- 308 By reason of the matters pleaded in paragraphs 299-307, on tho-morning-of 9 January 2011 the Flood Engineers (or one or more of them) <u>failed to do</u> one or more of the things in pleaded in paragraph 307. ÷
 - a) failed-to-have-rogard-to--ror-to-accord-sufficient-weight-to--ene-or-more of-the-matters-ploaded-in-paragraph-306;-and
 - b) failod-to-do-ono-or-moro-of-tho-things-in-ploadod-in-paragraph-307.

309 In the circumstances pleaded in the preceding paragraph, the Flood Engineers (or one or more of them) breached their duty of care to the plaintiff and other Group Members on 9 January 2011 (the **9 January Breaches).**

V Events of 10 January to 11 January 2011

Weather Forecasts

- 310 On 10 January 2011:
 - a) the Bureau of Meteorology 4-day forecast for 44 <u>10</u> January to 44 <u>13</u> January 2011 predicted 50-150 <u>75-225</u> mm of rainfall in the Brisbane River Basin, including in the Lake Somerset and Lake Wivenhoe catchment areas; and
 - b) the Bureau of Meteorology 8-day forecast for 44 <u>10</u> January to 48<u>17</u> January 2011 predicted 50-150 <u>75-225</u> mm of rainfall in the Brisbane River Basin, including in the Lake Somerset and Lake Wivenhoe catchment areas.

- A. Bureau of Meteorology, Poor Man's Ensemble forecast issued-9 January-2011- for period 44 <u>10</u> January to 44 <u>13</u> January 2011.
- B. Bureau of Meteorology, Poor Man's Ensemble forecast issued-10 January-2011- for period 11 10 January to 4817 January 2-040 2011.
- 311 On 11 January 2011:
 - a) the Bureau of Meteorology 4-day forecast for 42 <u>11</u> January to 45 <u>14</u> January 2011 predicted <u>15-50 40-120</u> mm of rainfall in the Brisbane River Basin, including in the Lake Somerset and Lake Wivenhoe catchment areas; and
 - b) the Bureau of Meteorology 8-day forecast for 42 <u>11</u> January to 19 <u>18</u>
 January 2011 predicted 25-50 <u>40-120</u> mm of rainfall in the Brisbane

River Basin, including in the Lake Somerset and Lake Wivenhoe catchment areas.

PARTICULARS

- Bureau of Meteorology, Poor Man's Ensemble forecast issued-9 January-2011 for period 42 <u>11</u>January to 15 <u>14</u> January 2011.
- B. Bureau of Meteorology, Poor Man's Ensemble forecast issued-10 January-2011- for period 42 <u>11</u> January to 19 <u>18</u> January 2019 <u>2011</u>.
- 312 At or around 10:03 am on 10 January 2011, the Bureau of Meteorology issued a QPF predicting rainfall of 50-100 mm in the Lake Somerset and Lake Wivenhoe catchment areas over the following 24 hours.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix C, p 176.
- 313 At or around 4:00 pm on 10 January 2011, the Bureau of Meteorology issued a QPF predicting rainfall of 25-50 mm (with isolated falls of up to 100 mm) in the Lake Somerset and Lake Wivenhoe catchment areas over the following 24 hours.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix C, p 177.
- 314 At or around 10:14 am on 11 January 2011, the Bureau of Meteorology issued a QPF predicting rainfall in excess of 100 mm in the Lake Somerset and Lake Wivenhoe catchment areas over the following 24 hours.

PARTICULARS

A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix C, p 178.

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315 At or around 4:13 pm on 11 January 2011, the Bureau of Meteorology issued a QPF predicting rainfall of 50-100 mm in the Lake Somerset and Lake Wivenhoe catchment areas over the following 24 hours.

PARTICULARS

 A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix C, p 179.

Rainfall and Inflows

316 In the 24 hours to 9:00 am on 10 January 2011, there was widespread and high <u>heavy</u> rainfall recorded throughout the catchment areas for Lake Somerset and Lake Wivenhoe, with up to 284 mm of rainfall in some areas.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Section 6.3, p 68.
- 317 Catchment inflows into Lake Wivenhoe and Lake Somerset continued in significant volumes throughout the course of 10 January 2011.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Section 9.2, pp 157-158 and Section 9.3, p 171.
- 318 In the 24 hours to 9:00 am on 11 January 2011, there was widespread and frigb<u>heaw</u> rainfall recorded throughout the catchment areas for Lake Somerset and Lake Wivenhoe, with up to 131 mm of rainfall in some areas.

PARTICULARS

A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Section 6.3, p 69. 319 Catchment inflows into Lake Wivenhoe and Lake Somerset continued in significant volumes throughout the course of 11 January 2011.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Section 9.2, pp 158-159 and Section 9.3, pp 171-172.
- 320 The inflows into Lake Wivenhoe on 10 and 11 January 2011 included substantial inflows from Splityard Creek Dam caused by the release of water through that dam.
- 321 The release of water from Splityard Creek Dam into Lake Wivenhoe in the period 10 to 11 January 2011 increased the risk that there would be insufficient flood storage capacity in Lake Wivenhoe to store incoming flows should further rainfall occur in accordance with, or in excess of, that forecast by the Bureau of Meteorology.

Water Level

- 322 At or around 1:14 am on 10 January 2011:
 - a) the water level of Lake Somerset was at <u>approximately EL 102.22 m</u> AHD and rising quickly; and
 - b) the water level at Lake Wivenhoe was at <u>approximately</u> EL 69.60 m AHD and rising quickly.

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix E, pp 23-24.
- 323 At or around 6:30 am on 10 January 2011:
 - a) the water level of Lake Somerset was at <u>approximately</u> EL 102.84 m AHD and rising quickly; and

 b) the water level at Lake Wivenhoe was at <u>approximately</u> EL 70.77 m AHD and rising quickly.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix E, pp 25-26.
- 324 At or around 12:16 am on 10 January 2011:
 - a) the water level of Lake Somerset was at <u>approximately</u> <u>FL</u> 103.11 m
 AHD and rising quickly; and
 - b) the water level at Lake Wivenhoe was at <u>approximately</u>_EL 71.95 m AHD and rising quickly.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix E, pp 28-29.
- 325 At or around 6:43 pm on 10 January 2011:
 - a) the water level of Lake Somerset was at <u>approximately</u> EL 103.46 m AHD and rising; and
 - b) the water level at Lake Wivenhoe was at <u>approximately</u> EL 72.92 m AHD and rising quickly.

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix E, p 30.
- 326 At or around 11:56 pm on 10 January 2011:
 - a) the water level of Lake Somerset was at <u>approximately EL 103.40 m</u> AHD and falling slowly; and

 b) the water level at Lake Wivenhoe was at <u>approximately</u> EL 73.22 m AHD and rising quickly.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix E, p 32.
- 327 At or around 6:12 am on 11 January 2011:
 - a) the water level of Lake Somerset was at <u>approximately</u> EL 103.27 m AHD and falling slowly; and
 - b) the water level at Lake Wivenhoe was at <u>approximately</u> EL 73.51
 m AHD and rising quickly.

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix E, p 34. -
- 328 A substantial contributing cause of the rise in level of Lake Wivenhoe in the period 9 to 11 January 2011 was the actions of the Flood Engineers, or one or more of them, in releasing significant volumes of water from Somerset Dam into Lake Wivenhoe in circumstances where there were already large inflows into Wivenhoe Dam, and where such releases were unnecessary given the available capacity of the flood storage compartment of Lake Somerset.

Flood Operations

329 The Flood Engineers on duty on 10 and 11 January 2011 were as follows:

e na		
 Sunday 9/1/2011 19:00	Monday 10/1/2011 07:00	<u>Mr Ruffini</u> <u>Mr Avre</u> Mr-Malono- Mr-Tibaldi
Monday 10/1/2011 07:00	Monday 10/1/2011 19:00	<u>Mr Malone</u> <u>Mr Tiibaldi</u> Mr-Ruffini Mr- Ayre
Monday 10/1/2011 19:00	Tuesday 11/1/2011 07:00	<u>Mr Ruffini</u> <u>Mr Avre</u> Mr-Malono Mr-Tibaldi
Tuesday 11/1/2011 07:00	Tuesday 11/1/2011 19:00	<u>Mr Malone</u> <u>Mr Tiibaldi</u> Mr•Ruffini Mr-Ayro
Tuesday 11/1/2011 19:00	Wednesday 12/1/2011 7:00	<u>Mr Ruffini</u> <u>Mr Avre</u>

329A In addition to the rostered shifts pleaded in the preceding paragraph:

- a) <u>all four Flood Engineers met at or around the end of each shift on 10</u> <u>and 11 January to discuss and agree the appropriate flood mitigation</u> <u>strategy given the prevailing and forecast conditions;</u>
- b) <u>Mr Avre and Mr Ruffini assisted Mr Malone and Mr Tibaldi in</u> <u>conducting Flood Operations from approximately 1:00 pm on 11</u> <u>January 2011; and</u>
- c) <u>Mr Malone and Mr Tibaldi assisted Mr Avre and Mr Ruffini in</u> conducting Flood Operations until approximately 11:00 pm on 11 January 2011.

PARTICULARS

A. <u>Sequater. January 2011 Flood Event: Report on the Operation of</u> <u>Somerset Dam and Wivenhoe Dam, 2 March 2011, p 34.</u> 330 Throughout 10 and 11 January 2011, the Flood Engineers released water from Wivenhoe Dam at substantial rates of discharge (between approximately-3:594 m³/s and -11,561-m³/s 1,462 m³/s and 7.464 m³/s).

PARTICULARS

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Section 9.2, pp 158-159.
- 331 The water released from Wivenhoe Dam on 10 and 11 January 2011 was released in such volumes and at such rates that urban flooding downstream of Wivenhoe Dam was certain or, alternatively, very likely, to occur.
- 332 Notwithstanding the matters pleaded in paragraph 328, the Flood Engineers did not discontinue making substantial releases from Lake Somerset into Lake Wivenhoe until around 8:30 am on 11 January 2011.

- A. Seqwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam, 2 March 2011, Appendix L, p 70.
- 333 By making substantial and unnecessary releases from Somerset Dam into Lake Wivenhoe in the period 10-11 January, the Flood Engineers, or one or more of them, increased the risk that there would be insufficient flood storage capacity in Lake Wivenhoe to store incoming flows should further rainfall occur in accordance with, or in excess of, that forecast by the Bureau of Meteorology.
- 334 Further, the Flood Engineers did not take any steps on or before around6:00 pm on 11 January 2011:
 - a) to inform Tarong Energy that conditions were such that releases from Splityard Creek Dam into Wivenhoe Dam would increase the risk of flooding downstream of Wivenhoe Dam; or

- b) to request that Tarong Energy refrain from releasing water into Lake Wivenhoe.
- Had the Flood Engineers requested that Tarong Energy refrain from releasing water from Splityard Creek Dam on 10 and 11 January 2011, Tarong Energy would have complied with that request.

- A. That Tarong Energy would have complied with the request is to be inferred from the circumstance that Tarong Energy did comply with a request to that effect when it was ultimately made by the Flood Engineers at or around 6:30 pm on 11 January 2011.
- B. Statement of Andrew Krotewicz to the Queensland Flood Commission of Inquiry, 13 September 2011, ATK-6.
- 336 The failure of the Flood Engineers to take the steps pleaded in paragraph 334 <u>before 6:00 pm on 11 January 2</u>011 increased the risk that they would be required to release water from Wivenhoe Dam in the following hours or days in volumes that would cause flooding in urban areas downstream of Wivenhoe Dam.

PARTICULARS

 A. <u>The effect of the failure pleaded in Paragraph 334 of the SOC on</u> <u>the water level in Wivenhoe Dam is that described in Tarong</u> <u>Energy's report entitled January 2011 Exceptional Rainfall Event:</u> <u>Review of Events and Actions, February 2011, Appendix 7.</u>

10-11 January 2011 Breaches

- In the circumstances pleaded in paragraphs 310-328, on 10 and 11January 2011, there was a substantial risk:
 - a) that, unless releases into Lake Wivenhoe from Somerset Dam and Splityard Creek Dam were immediately stopped there would be insufficient flood storage capacity in Lake Wivenhoe to store incoming flows should further rainfall occur in accordance with, or in excess of, that forecast by the Bureau of Meteorology; and

- b) that, without such capacity, subsequent flood releases would be necessary in volumes that would cause urban flooding downstream of Wivenhoe Dam, or more such flooding than would otherwise be necessary if releases from Somerset Dam and Splityard Creek Dam were stopped on 10 and 11 January 2011.
- 338 [Not used] Further,-in-tho-oiroumstancos-ploadod-in-paragraphs-310-328 and-337, a roasonably-prudent-flood onginoor-responsible-for-Flood Operations-at-Somorsot Dam-and-Wivonhoo Dam on -10-and11–January 204k
 - a) would-havo-had-rogard-to-tho-flood-mitigation-objectives-in-tho-Flood •Mitigation-Manual- and the-priority-between-them;•
 - b) would-have-considered-tho-likoly-effect-of-continuing-inflows-in dotormining-the-rato-of-flood-release-from-Somorsot-Dam-and Wivenhoe-Dam;
 - would-havo-considered-tho-likoly-effect-of-continuing-rainfall-in dotormining-tho-rato-of-flood-roloaso-from-Somerset-Dam-and Wivenhoe-Dam;
 - d) would-havo-oonsidorod-forooast-rainfall-in-dotormining-tho-rato-of flood-release-from-Somerset-Dam-and-Wivenhoe-Dam;
 - e) would-have-oonsidorod-tho-risk-that-furthor-rainfall-might-generate substantial-runoff-givon-provious-rainfall-in-dotormining-tho-rato-of flood-release-from-Somerset-Dam-and-Wivenhoe-Dam;
 - f) would-havo-considorod-the-current-water-lovols-of-Lake-Somerset and-Lake-Wivenhoe;
 - g) would-havo-considorod-tho-risk-that-future-rainfall-may-exceed-that ·predicted-by-the-Bureau-of-Meteorology;
 - would-have-considorod-tho-magnitude-of-forooast-rainfall-and-tho
 likoly-impact-such-rainfall-would-havo-on-dam-water-lovols-should-it
 eventuate;-and

- i) would-havo-considered-tho-likoly-impact-of-roloasos-from-Somorsot
 Dam-and-from-Spiltyard-Crook-Dam-on-tho-wator-level-in-Lako
 Wivonhoo-
- Further, by reason of the matters pleaded at paragraphs 310-328 and <u>337</u> 337-338, a reasonably prudent flood engineer responsible for Flood
 Operations at Somerset Dam and Wivenhoe Dam on 10 and 11 January 2011:
 - a) would have complied with the Flood Mitigation Manual;
 - b) would have immediately ceased releases from Somerset Dam into Lake Wivenhoe:
 - c) <u>would have immediately informed Tarong Energy that the conditions</u> were such that releases from Splityard Creek Dam into Wivenhoe Dam would increase the risk of flooding downstream of Wivenhoe Dam:
 - d) <u>would have immediately requested that Tarong Energy discontinue</u> releasing water into Lake Wivenhoe;
 - e) <u>would have continued storing inflows in Lake Somerset by ensuring</u> that releases from Lake Somerset were substantially less than the rate of inflow;
 - f) would have allowed the water level in Lake Somerset to rise to:
 - i) <u>approximately EL 103.22 m AHD bv the end of 10 January</u> 2011; or, alternatively.
 - ii) approximately EL 104.50 m AHD by the end of 10 January 2011:
 - g) would have kept the water level in Lake Wivenhoe to no higher than:
 - i) <u>approximately EL 67.94 m AHD at the end of 10 January 2011;</u> <u>or. alternatively.</u>
 - ii) approximately EL 72.42 m AHD at the end of 10 January 2011:
 - h) would have allowed the water level in Lake Somerset to rise to:

- i) <u>approximately EL 106.10 m AHD by the end of 11 January</u> <u>2011; or. alternatively.</u>
- ii) <u>approximately EL 106.73 m AHD by the end of 10 January</u> 2011: and
- i) would have kept the water level in Lake Wivenhoe to no higher than:
 - i) <u>approximately EL 71.66 m AHD at the end of 10 January 2011;</u> <u>or. alternatively.</u>
 - ii) approximately EL 74.89 m AHD at the end of 10 January 2011.

- A. <u>A reasonably prudent flood engineer would have complied with</u> <u>the Flood Mitigation Manual by taking the actions pleaded in</u> <u>paragraphs 339(b)-(i).</u>
- B. <u>Flood Mitigation Manual, sections 1.1. 3.1, 8.4, 8.5, 9.3, 9.4.</u>
- C. Christensen Report. Chapter VIII. [953]-[998].
- D. <u>Christensen Report. Chapter X. [1357]-[13901. [1507]-[1540],</u> [1636]-[1669], [1742]-[1773], [1830]-[1862], [1896]-[1937].
- a) would-have-reasonably-construed-the-Flood-Mitigation-Manual;

- A. A-roasonably-prudent-flood-onginoor-would-havo-construed-tho Flood-Mitigation-Manual-to-roquiro-tho-Flood-Enginoors-to-use tho-weathor-forecast information-supplied-by tho Buroau-of Meteorology-in-determining-roloaso-strategies-for-Somerset-Dam and-Wivonhoo-Dam.
- A-roasonably-prudont-flood-onginoor-would-havo-construod-tho
 Flood-Mitigation-Manual-to-roquiro-tho-actions-ploadod-in
 paragraphs-339(b)-(c)-and-(g)-(i)-bolow,
- b) would-have-complied-with-the-Flood-Mitigation-Manual;-

- A. A-roasonably-prudont-flood-onginoor-would-havo-complied-with tho-Flood-Mitigation-Manual-by-taking-tho-actions-ploadod-in paragraphs-339(c)-and-(g)-(i)-bolow-
- c) would-havo-mado-roasonablo-predictions,-and-formed-roasonablo oxpootations,-with-respect-to-those-matters-in-relation-to-which-tho ·Flood-Mitigation-Manual-roquirod-tho-Flood-Enginoors-to-make predictions-and-form-oxpootations,-and-would-havo-aotod-in aooordanco-with-thoso-prodictions-and-oxpootations-in-complying-with the-requirements-of-the -Flood -Mitigation -Manual;
- would-havo-oonsidorod-that, according-to-tho-terms-of-tho-Flood Mitigation-Manual, a-Flood-Evont-had-boon-ongoing-sinco-on-or around-2-December 2010, or-alternatively, sinco-on-or-around-2 January 2011 – at-the-latest;
- e) would-havo-considered-that-Flood-Operations-and-flood-roloases woro-improperly-discontinued-on-2-January-2011;
- f) would-havo-considered-that-insufficient-roloasos-had-boon-made-from
 Wivonhoo-Dam-in-tho-period-2-January-to-9-January-2011;
- g) would-havo-immodiatoly-ceased-roloasos-from-Somorsot-Dam-into ·Lako-Wivonhoo;
- would-havo-immodiatoly-informed-Tarong-Energy-that-tho-conditions
 woro-such-that-roloasos-from-Splityard-Crook-Dam-into-Wivonhoo
 Dam-would-increase tho-risk-of-flooding-downstream-of-Wivonhoo
 Dam;-and
- i) would-havo-immediately-roquosted-that-Tarong-Energy-discontinue releasing-water-into-Lako-Wivonhoo-
- 340 By reason of the matters pleaded in paragraphs 310<u>-339-340</u>, on 10 and 11 January 2011 the Flood Engineers (or one or more of them) <u>failed to do one</u> or more of the things pleaded in paragraph 339.
 - a) failed-to-have-regard-to,-or-to-accord-sufficient-weight-to,-one-or-more of-tho-matters-ploaded-in-paragraph-338;-and

- b) failed to do-one-or-moro-of-the-things-in-ploadod-in-paragraph-339.
- 341 In the circumstances pleaded in the preceding paragraph, the Flood Engineers (or one or more of them) breached their duty of care to the plaintiff and other Group Members on 10 and 11 January 2011 (the 10-11 January Breaches).

W Causation and Loss

- 342 In the period 9 January to 11 January 2011, there was substantial rainfall in the catchment areas of Lake Somerset and Lake Wivenhoe, which generated significant runoff volumes into Lake Somerset and Lake Wivenhoe.
- 343 By reason of one or more of:
 - a) the 16 December Breaches;
 - b) the <u>17-</u>24 December Breaches;
 - c) <u>25 December 1 January Breaches</u>;
 - d) 2 January Breaches;
 - e) the 3-5 January Breaches;
 - f) the 6 January Breaches;
 - g) the 7 January Breaches;
 - h) the 8 January Breaches; and
 - i) the 9 January Breaches; and
 - j) the 10-11 January Breaches (collectively, the Flood Engineers' Breaches);

there was insufficient available capacity in Lake Somerset and Lake Wivenhoe in the period from the evening of 9 January to 11 January 2011 to store incoming inflows, or to mitigate effectively the effect of such inflows. 344 In circumstances where rainfall and inflows were ongoing in the period 9 January to 11 January 2011, the lack of available flood storage capacity at Lake Somerset and Lake Wivenhoe necessitated the release of large volumes of water from Wivenhoe Dam in order to protect the structural integrity of Wivenhoe Dam.

PARTICULARS

- A. <u>The volume of water released from Wivenhoe Dam in the period</u> <u>9 January 2011 to 19 January 2011 is that reported by Segwater</u> in its report entitled Segwater, January 2011 Flood Event: Report on the Operation of Somerset Dam and Wivenhoe Dam. 2 March 2011. Section 9.2.
- 345 In the period from the evening of 9 January to 19 January 2011, the Flood Engineers caused Wivenhoe Dam to release water in large volumes, causing flooding of urban land downstream of Wivenhoe Dam.

- A. <u>The volume of water released from Wivenhoe Dam in the period</u> <u>9 January 2011 to 19 January 2011 is that reported by Segwater</u> <u>in its report entitled Segwater. January 2011 Flood Event: Report</u> <u>on the Operation of Somerset Dam and Wivenhoe Dam. 2 March</u> <u>2011. Section 9.2.</u>
- 346 The large volume releases from Wivenhoe Dam in the period 9 January 2011 to 19 January 2011:
 - a) would not have been necessary, or would have been of smaller volume, had the Flood Engineers not committed one or more of the Flood Engineers' Breaches;
 - b) <u>caused:</u>
 - i) <u>flooding downstream of Wivenhoe Dam in circumstances where</u> <u>such flooding would not have otherwise occurred had the Flood</u> <u>Engineers not committed one or more of the Flood Engineers'</u> <u>Breaches: or</u>

 ii) greater flooding downstream of Wivenhoe Dam than would have occurred had the Flood Engineers not committed one or more of the Flood Engineers' Breaches;

(both are referred to in this pleading for convenience as "Greater Flooding"):

- A. <u>The Greater Flooding was more extensive than the flooding</u> <u>downstream of Wivenhoe Dam that would have occurred absent</u> <u>the Flood Engineers' Breaches, both in terms of the geographical</u> <u>extent of downstream flooding and the depths of the flood waters</u> <u>in the flooded areas.</u>
- B. <u>The approximate geographic extent of Greater Flooding is</u> <u>indicated in the map that is Schedule A to this Amended</u> <u>Statement of Claim. The area shaded red indicates the extent of</u> <u>inundation had Somerset Dam and Wivenhoe Dam not been</u> <u>negligently operated and the area shaded orange indicates the</u> <u>geographic extent of Greater Flooding.</u>
- C. <u>The extent of Greater Flooding in terms of depth can be inferred</u> from the geographical extent of such flooding. It is a function of the difference between the elevation levels of the areas that flooded in fact. and the elevation levels of those areas which would have flooded even absent the Flood Engineers' Breaches according to the map in Schedule A.
- D. <u>Further particulars of the precise extent of Greater Flooding (both</u> in terms of geographic extent and depth) will be provided upon service of the plaintiff's expert hydrology evidence.
- c) <u>caused loss or damage to the plaintiff in circumstances where the plaintiff:</u>
 - i. would not have suffered any loss or damage: or
 - ii. would have suffered lesser loss or damage:

had the Flood Engineers not committed one or more of the Flood Engineers' Breaches.

- caused-Greater-Flooding-downstream-of-Wivonhoo-Dam-in oiroumstancos-whoro-suoh-flooding-would-not-havo-boon-caused-had the-Flood-Engineers-not-committed-ono-or-moro-of-tho-Flood Engineers'-Breaches;-and
- e) caused-loss-or-damage-to-tho-plaintiff-in-oiroumstancos-where-tho plaintiff:
 - i) would not havo suffered any loos or damage; or
 - ii) would-have-sufforod-less-loss-or-damage;

347 By reason of the matters pleaded in paragraph 342-346, the Flood Engineers' Breaches, or one or more of them, caused loss or damage to the plaintiff;

- A. The premises from which the plaintiff conducted its business was inundated with water on or around 12 January 2011. The flood water did not recede from the premises until on or around 14 January 2011.
- B. The plaintiff's business had to be closed from 11 January 2011 (due to the likelihood of imminent inundation) until 26 May 2011 as a result of the inundation with water. The plaintiff was not able to continue operating its business for that period.
- C. The plaintiff suffered loss and damage as a result of the inundation.
- D. The plaintiff's loss and damage consists of:
 - a. damage caused to fixtures, fittings, stock and equipment as a result of the inundation;

- b. loss of sales and profits for the period in which the premises had to be closed;
- c. costs associated with repairs and restoration of the premises; and
- costs associated with hiring a storage facility in which to store stock and equipment that was not damaged by the flood.
- E. Further particulars of the plaintiff's claim for damage to property and economic loss will be provided prior to the trial of these proceedings.
- 348 The loss or damage pleaded in the preceding paragraph was the natural and foreseeable consequence of one or more of the Flood Engineers' Breaches.

X Direct Liability of Seqwater and SunWater in Negligence

Direct Liability of Seqwater in Negligence

- 349 In circumstances where the Flood Engineers (or one or more of them) committed one or more of the Flood Engineers' Breaches in the period 2 January-to-9 <u>16 December 2010 to 11</u> January 2011, Seqwater breached:
 - a) Seqwater's Duty as Owner and Occupier; and, or alternatively,
 - b) Seqwater's Duty as Licensee.
- 350 In circumstances where the Flood Engineers' Breaches, or one or more of them, caused loss or damage to the plaintiff as pleaded in paragraph 347, Seqwater's breach of:
 - a) Seqwater's Duty as Owner and Occupier; and, or alternatively,
 - b) Seqwater's Duty as Licensee;

caused the loss or damage to the plaintiff pleaded in paragraph 347.

A. The particulars to paragraph 347 are repeated.

Liability of SunWater in Negligence

- 351 At all material times in the period from 2-January to <u>19</u>-January <u>2011</u>, <u>16</u> <u>December 2010 to 11 January 2011</u>, SunWater:
 - had practical control of Flood Operations at Somerset Dam and Wivenhoe Dam; and
 - b) was able to supervise and control the Flood Engineers in the conduct of the Flood Operations at Somerset Dam and Wivenhoe Dam.
- 352 In circumstances where the Flood Engineers (or one or more of them) committed one or more of the Flood Engineers' Breaches in the period 2-January-to-9-January <u>16 December 2010 to 11 January 2</u>011, and SunWater had supervision and control over the conduct of the Flood Operations by the Flood Engineers in that period, SunWater breached its duty of care to the plaintiff and other Group Members.
- 353 In circumstances where the Flood Engineers' Breaches, or one or more of them, caused loss or damage to the plaintiff as pleaded in paragraph 347, SunWater's breach of its duty of care caused the loss or damage to the plaintiff pleaded in paragraph 347.

PARTICULARS

A. The particulars to paragraph 347 are repeated.

Y Private Nuisance and Trespass

354 Further, and in the alternative to the allegations in negligence above, the plaintiff brings these proceedings on its own behalf and on behalf of those Group Members who held an interest in land located downstream of Wivenhoe Dam (whether in the nature of freehold title, lease or otherwise), and whose use or enjoyment of that interest was interfered with by reason of the inundation by water in the period 9 January 2011 to 24 January 2011 of that land, or other land located downstream of Wivenhoe Dam (Subgroup Members).

- 355 Paragraphs 143, 147 and 149 are repeated.
- 356 At all material times in December 2010 and January 2011, it was the Risk of Interference with Use and Enjoyment was reasonably foreseeable by the Flood Engineers. that:
 - a-failure-properly-to-conduct-Flood-Operations-at-Somorsot-Dam-and
 Wivenhoo-Dam-may-cause-Groator-Flooding-downstroam-of
 Wivenhoe-Dam;-and
 - b) such-Greater-Flooding-may-unreasonably-interfore-with-the-use-or enjoyment-of-interests-in:
 - i) land-that-was-inundated-by-water-as-a-result-of-such-Groator Flooding;-and
 - ii) land-that-became-inaccessible-or-practically-unusable-because of-tho-inundation-by-water-of-other-land-located-downstroam-of Wivonhoo-Dam-as-a-result-of-suoh-Greater-Flooding-
- 357 In the period 9 January to 19 January 2011, the Flood Engineers (or one or more of them) released water from Wivenhoe Dam in volumes that caused:
 - a) Greater Flooding of land in which the plaintiff and other Subgroup Members held interests; and
 - b) land in which the plaintiff and other Subgroup Members held interests to become inaccessible or practically unusable because of Greater Flooding of other land located downstream of Wivenhoe Dam;

such that Subgroup Members suffered loss or damage.

358 The releases of water made by the Flood Engineers in the period 9 January to 19 January 2011 were practicably avoidable and would have been unnecessary, or of smaller volume, had the Flood Engineers made sufficient precautionary releases from Wivenhoe Dam in the period 2-January <u>16 December 2010</u> to 9 January 2011.

359 In the premises:

- a) the releases of water made from Wivenhoe Dam in the period
 9 January to 19 January 2011 substantially and unreasonably
 interfered with the use or enjoyment of interests in land held by the
 plaintiff and other Subgroup Members; and
- b) constituted a private nuisance.
- 360 Further:
 - a) the nuisance arose on land owned and controlled by Seqwater;
 - Seqwater was the sole entity with lawful authority to release water from Somerset Dam and Wivenhoe Dam under the Water Act;
 - Seqwater permitted SunWater and the Flood Engineers to conduct Flood Operations at Somerset Dam and Wivenhoe Dam;
 - d) the conduct of Flood Operations at Somerset Dam and Wivenhoe Dam carried with it the inherent risk of the nuisance;
 - e) Seqwater knew, or ought reasonably to have known, that the Flood Engineers (or one or more of them) had caused the nuisance by failing to make sufficient precautionary releases in the period 16 December 2010 to 9 January 2011; and
 - f) Seqwater failed to take reasonable steps to bring the nuisance to an end or to prevent the nuisance from interfering with the use or enjoyment of interests in land held by the plaintiff and other Subgroup Members.
- 361 By reason of the matters pleaded in paragraph 360, to the extent the pleaded nuisance was caused by the Flood Engineers (or one or more of them), Seqwater is directly liable for the nuisance.
- 362 Further, and in the alternative to paragraph 359, the releases of water from Wivenhoe Dam in the period 9 January to 19 January <u>2011</u>, constituted a trespass to land committed by the Flood Engineers (or one or more of

them) to the extent that the released water entered onto any land in which the plaintiff or any Subgroup Members held an interest.

Z Vicarious Liability

Vicarious Liability of Seqwater

363 To the extent that Mr Tibaldi committed one or more of:

- a) the 16 December Breaches;
- b) the 17-24 December Breaches;
- c) the 25 December 1 January Breaches:
- d) the 3-5 January Breaches:
- e) the 8 January Breaches:
- f) the 9 January Breaches; and
- g) the 10-11 January Breaches;

those breaches were in the course of Mr Tibaldi's employment.

To tho-extent that-Mr-Tibaldi-omitted to do ono-or-moro-of tho things ploadod-in-paragraphs-212,-229,-246,-268,-289-and-308,-thoso-omissions were-in-tho-course-of-Mr-Tibaldi's-employment.

364 To the extent that Mr Malone committed one or more of:

- a) the 16 December Breaches;
- b) the 17-24 December Breaches;
- c) the 25 December 1 January Breaches:
- d) the 2 January Breaches:
- e) the 3-5 January Breaches:
- f) the 6 January Breaches;
- g) the 7 January Breaches;

- h) the 8 January Breaches:
- i) the 9 January Breaches: and
- j) the 10-11 January Breaches;

those breaches were in the course of Mr Malone's employment.

To-the-extent-that-Mr-Malono-omitted to-do-ono-or-moro-of-the-things pleaded-in-paragraphs 212, 229, 246, 268, 289-and 308, those-omissions wore-in-tho-course-of-Mr-Malono's-omployment.

- 365 Seqwater was accordingly vicariously liable for each of the Flood Engineers' Breaches committed by:
 - a) Mr Tibaldi; or
 - b) Mr Malone.
- 366 To the extent Mr Tibaldi engaged in the conduct pleaded in paragraph 357, that conduct was in the course of Mr Tibaldi's employment.
- 367 To the extent Mr Malone engaged in the conduct pleaded in paragraph 357, that conduct was in the course of Mr Malone employment.
- 368 Seqwater was accordingly vicariously liable for the nuisance or trespass alleged in paragraphs 354-359 and 362 to the extent that that nuisance or trespass was caused by:
 - a) Mr Tibaldi; or
 - b) Mr Malone.

Vicarious Liability of SunWater

369 To the extent that Mr Avre committed one or more of:

- a) the 17-24 December Breaches;
- b) the 25 December 1 January Breaches;
- c) the 2 January Breaches;

- d) the 3-5 January Breaches;
- e) the 6 January Breaches;
- f) the 7 January Breaches:
- g) the 8 January Breaches;
- h) the 9 January Breaches; and
- i) the 10-11 January Breaches;

those breaches were in the course of Mr Ayre's employment.

To-tho-oxtont-that-Mr-Ayro-omitted-to-do-ono-or-moro-of-tho-things-pleaded in-paragraphs-212,-229,-246,-268,-289-and-308,-thoso-omissions-woro-in tho-course-of-Mr-Ayro's-employment.

- 370 SunWater was accordingly vicariously liable for each of the Flood Engineers' Breaches committed by Mr Ayre.
- 371 To the extent Mr Ayre engaged in the conduct pleaded in paragraph 357, that conduct was in the course of Mr Ayre's employment.
- 372 SunWater was accordingly vicariously liable for the nuisance or trespass alleged in paragraphs 354-359 and 362 to the extent that that nuisance or trespass was caused by Mr Ayre.

Vicarious Liability of the State of Queensland

- 373 To the extent that Mr Ruffini committed one or more of:
 - a) the 17-24 December Breaches;
 - b) the 25 December 1 January Breaches:
 - c) the 3-5 January Breaches;
 - d) the 7 January Breaches;
 - e) the 8 January Breaches;

- f) the 9 January Breaches: and
- g) the 10-11 January Breaches;

those breaches were in the course of Mr Ruffini's employment.

To-tho-oxtont-that-Mr-Ruffini-omitted-to-do-ono-or-moro-of-tho-things ploadod-in-paragraphs-212,-229,-246,-268,-289-and-308,-thoso-omissions woro-in-tho-course-of-Mr-Ruffini's-employment-

- 374 The State of Queensland was accordingly vicariously liable for each of the Flood Engineers' Breaches committed by Mr Ruffini.
- 375 To the extent Mr Ruffini engaged in the conduct pleaded in paragraph 357, that conduct was in the course of Mr Ruffini's employment.
- 376 The State of Queensland was accordingly vicariously liable for the nuisance or trespass alleged in paragraphs 354-359 and 362 to the extent that that nuisance or trespass was caused by Mr Ruffini.
- 377 Further, and in the alternative to paragraphs 374 and 376, to that extent that the State of Queensland is not vicariously liable for the Flood Engineers' Breaches committed by Mr Ruffini, or the alleged nuisance or trespass by Mr Ruffini, as a result of the arrangements pleaded in paragraph 93, SunWater is vicariously liable for:
 - a) each of the Flood Engineers' Breaches <u>alleged in paragraph_</u>373 committed by Mr Ruffini; and
 - b) the nuisance or trespass alleged in paragraphs 354-359 and 362 to the extent that that nuisance or trespass was caused by Mr Ruffini.

AA Section 374 of the Water Supply Act

378 On or around 22 December 2010, the Chief Executive of DERM approved the Flood Mitigation Manual for a period of 5 years under s 371 of the Water Supply Act.

- A. Queensland, Queensland Government Gazette, Vol 353 No 15, 22 January 2010, p 127.
- 379 By reason of the matters pleaded in paragraph 378, to the extent that Section 374 of the Water Supply Act would prevent civil liability attaching to one or more of:
 - a) Seqwater;
 - b) SunWater; and
 - c) the Flood Engineers;

that liability attaches to the State of Queensland by operation of Section 374(3) of the Water <u>Supply Act</u>.

BB Relief

- 380 The plaintiff, on its own behalf and on behalf of other Group Members, claims relief as follows:
 - a) from Seqwater:
 - i) damages;
 - ii) interest in accordance with s 100 of the *Civil Procedure Act* 2005 (Cth); and
 - iii) costs;
 - b) from SunWater:
 - i) damages;
 - ii) interes<u>t in accordance with s 100 of the *Civil Procedure Act* 2005 (Cth); and</u>
 - iii) costs;
 - c) from the State of Queensland:
 - i) damages;

ii) interes<u>t in accordance with s 100 of the *Civil Procedure Act* <u>2005 (Cth)</u>; and</u>

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iii) costs.

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SIGNATURE OF LEGAL REPRESENTATIVE

I certify under section 347 of the Legal Profession Act 2004 that there are reasonable grounds for believing on the basis of provable facts and a reasonably arguable view of the law that the claim for damages in these proceedings has reasonable prospects of success.

I have advised the plaintiffs that court fees may be payable during these proceedings. These fees may include a hearing allocation fee.

Signature

Capacity

Solicitor on the record

Date of signature

19 Felermon, 2015

NOTICE TO DEFENDANT

If you do not file a defence within 28 days of being served with this statement of claim:

- You will be in default in these proceedings.
- The court may enter judgment against you without any further notice to you.

The judgment may be for the relief claimed in the statement of claim and for the plaintiff's costs of bringing these proceedings. The court may provide third parties with details of any default judgment entered against you.

HOW TO RESPOND

Please read this statement of claim very carefully. If you have any trouble understanding it or require assistance on how to respond to the claim you should get legal advice as soon as possible.

You can get further information about what you need to do to respond to the claim from:

- A legal practitioner.
- LawAccess NSW on 1300 888 529 or at www.lawaccess.nsw.gov.au.
- The court registry for limited procedural information.

You can respond in one of the following ways:

- 1 If you intend to dispute the claim or part of the claim, by filing a defence and/or making a cross-claim.
- 1 If money is claimed, and you believe you owe the money claimed, by:
 - Paying the plaintiff all of the money and interest claimed. If you file a notice of payment under UCPR 6.17 further proceedings against you will be stayed unless the court otherwise orders.
 - Filing an acknowledgement of the claim.
 - Applying to the court for further time to pay the claim.
- If money is claimed, and you believe you owe part of the money claimed, by:
 - Paying the plaintiff that part of the money that is claimed.
 - Filing a defence in relation to the part that you do not believe is owed.

Court forms are available on the UCPR website at www.lawlink.nsw.gov.au/ucpr or at any NSW court registry.

REGISTRY ADDRESS

Street address	Supreme Court of NSW
	Law Courts Building
	184 Phillip Street
	SYDNEY NSW 2000
Postal address	GPO Box 3
	SYDNEY NSW 2001
Telephone	(02) 9230 8111

AFFIDAVIT VERIFYING

Name

Vicente Rodriguez

Address

C/- Pluta Accountants

858 Oxley Road

Corinda QLD 4075

Occupation

Director of Rodriguez & Sons Pty Ltd

19/02/15 Date

say on oath:

I am the sole director of Rodriguez & Sons Pty Ltd (ACN 108 770 681).

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I believe that the allegations of fact in the statement of claim are true.

SWORN at BRISBANE

Signature of deponent

Name of witness

Address of witness

Capacity of witness

Nadia Tucker

Level 8, 179 North Quay, Brisbane QLD 4000

And as a witness, I certify the following matters concerning the person who made this affidavit (the deponent):

Solicitor

I saw the face of the deponent. 1

I have confirmed the deponent's identity using the following identification document: 2

Oriver Identification document relied on (may be original or certified

Signature of witness

Note: The deponent and witness must signeach page of the fidarit, See UCPR 35.7

copy)

PARTY DETAILS

PARTIES TO THE PROCEEDINGS

Plaintiff

Rodriguez & Sons Pty Ltd (ACN 108 770 681)

Defendants

Queensland Bulk Water Supply Authority trading as Seqwater (First Defendant)

SunWater Limited (ACN 131 034 985) (Second Defendant)

State of Queensland (Third Defendant)

FURTHER DETAILS ABOUT PLAINTIFF

Plaintiff

Name	Rodriguez & Sons Pty Ltd (ACN 108 770 681)
Address	C/- Pluta Accountants
	85 Oxley Road
	Corinda QLD 4075

Legal representative for plaintiff

Name	Damian Scattini
Practising certificate number	3028
Firm	Maurice Blackburn Pty Ltd
Address	Level 8, 179 North Quay
	Brisbane QLD 4000
DX address	DX 1060 Northpoint

Telephone	(07) 3016 0300
Fax	(07) 3236 1966
Email	DScattini@mauriceblackburn.com.au
Electronic service address	DScattini@mauriceblackbum.com.au
DETAILS ABOUT DEFENDANTS	
First defendant	
Name	Queensland Bulk Water Supply Authority trading as Seqwater
Address	C/- King and Wood Mallesons
	Level 33, Waterfront Place
	1 Eagle Street
	Brisbane QLD 4000
Second defendant	
Name	SunWater Limited (ACN 131 034 985)
Address	C/- Norton Rose Fulbright
	Level 18, Grosvenor Place
	225 George Street
	Sydney NSW 2000
Third defendant	
Name	State of Queensland
Address	C/- Crown Law, Department of Attorney General and Justice
	State Law Building
	50 Ann Street
	Brisbane QLD 4000

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SCHEDULE A

Indicative Comparison Map: Actual Flood vs Non-Negligent Operation

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Indicative Comparison Map: Actual Flood vs Non-Negligent Operation 5 0 5 10 km