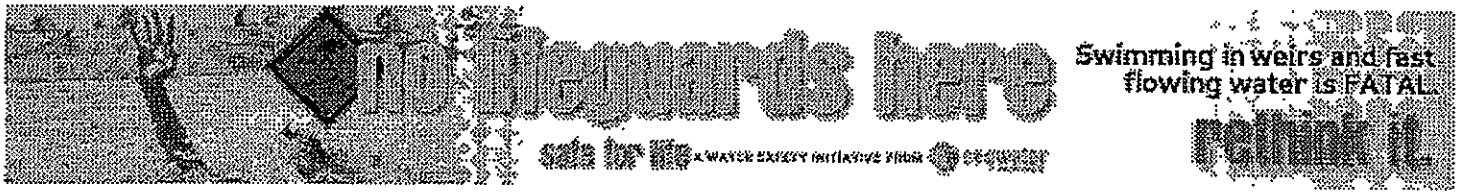

Swimming in weirs and fast
flowing water is FATAL.


seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | [redacted] | E rdrury[redacted]

Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306

Website | www.seqwater.com.au

From: Rob Drury
Sent: Monday, 10 January 2011 7:53 AM
To: Rob Drury; 'Daniel.Spiller[redacted]; 'Barry.Dennien[redacted]
'Michael.Lyons[redacted]; 'media[redacted]; 'debbie.best[redacted]
'Scott.Denner[redacted]; Paul Bird; Stan Stevenson; Peter Borrows;
'Peter.Allen[redacted]
Subject: RE: Technical Report W35

Attached report W35.

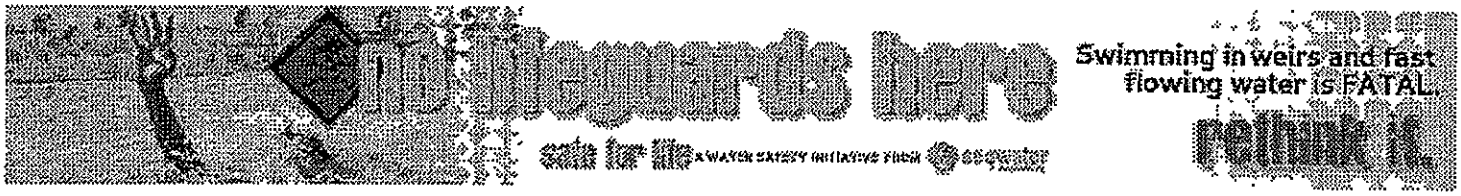
Rob

Robert Drury

Dam Operations Manager

Water Delivery

Queensland Bulk Water Supply Authority *trading as* Seqwater


Swimming in weirs and fast flowing water is FATAL.
rethink it.


seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | M [redacted] | E rdrury[redacted]

Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306

Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

TSR Number	W37	Date of TSR release	10.1.2011	Time of TSR release	3pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Continue increasing releases to discharge flood waters but keep impact downstream to minimum.	
Strategy	• All bridges are now inundated . • Ramp up to 2800cumecs which will give a flow in the lower Brisbane River of around 4,000cumecs	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

Significant rainfall has fallen in the Wivenhoe Dam catchment over the last 3 hours, with falls exceeding 100mm. This rainfall will significantly increase inflows into the dam. A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 10:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (75mm to 150mm); Wivenhoe/Somerset Dam Catchments (50mm – 100mm). Potentially significant rain moving towards the dam catchments is currently evident on the BOM radar.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.41m AHD and rising. Peak inflow to the dam is estimated to be about 4,200 m3/s. Five sluice gates are open releasing about 1,100m3/s (95,000ML/day) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5m AHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 72.41m AHD and rising quickly. The rainfall experienced over the last 2 to 3 hours will result in significant further inflows into the dam and releases from the dam will need to be increased in accordance with Flood Mitigation procedures and to ensure that a fuse plug is not initiated. The initiation of a fuse plug will result in a rapid uncontrolled outflow from the dam of 2,000m3/s being added to the gate release outflow. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

Five radial gates are currently open at the dam releasing about 2,000m3/s into the Brisbane River and

this will need to be increased steadily to an outflow of 2,800m3/s over the next 9 hours (commencing at 1500). At this stage, the dam will reach about 73.8m AHD during Tuesday morning.

The objective for dam operations is currently to minimise the impact of urban flooding in areas downstream of the dam and to keep river flows in the lower Brisbane River below 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s. If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate rapidly over the next 24 hours. The flood operation centre will continue to monitor the situation and provide every six hours until the situation stabilizes.

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time		or Event	Change in strategy

Gina O'Driscoll

From: Dan Spiller
Sent: Monday, 10 January 2011 4:09 PM
To: Barry Dennien
Subject: Technical Situation Report W37
Attachments: Technical Situation Report W37.docx

TECHNICAL SITUATION REPORT

TSR Number	W37	Date of TSR release	10.1.2011	Time of TSR release	3pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Continue increasing releases to discharge flood waters but keep impact downstream to minimum.	
Strategy	• All bridges are now inundated . • Ramp up to 2800cumecs which will give a flow in the lower Brisbane River of around 4,000cumecs	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

Significant rainfall has fallen in the Wivenhoe Dam catchment over the last 3 hours, with falls exceeding 100mm. This rainfall will significantly increase inflows into the dam. A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 10:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (75mm to 150mm); Wivenhoe/Somerset Dam Catchments (50mm – 100mm). Potentially significant rain moving towards the dam catchments is currently evident on the BOM radar.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.41m AHD and rising. Peak inflow to the dam is estimated to be about 4,200 m3/s. Five sluice gates are open releasing about 1,100m3/s (95,000ML/day) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5m AHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 72.41m AHD and rising quickly. The rainfall experienced over the last 2 to 3 hours will result in significant further inflows into the dam and releases from the dam will need to be increased in accordance with Flood Mitigation procedures and to ensure that a fuse plug is not initiated. The initiation of a fuse plug will result in a rapid uncontrolled outflow from the dam of 2,000m3/s being added to the gate release outflow. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

Five radial gates are currently open at the dam releasing about 2,000m3/s into the Brisbane River and

this will need to be increased steadily to an outflow of 2,800m3/s over the next 9 hours (commencing at 1500). At this stage, the dam will reach about 73.8m AHD during Tuesday morning.

The objective for dam operations is currently to minimise the impact of urban flooding in areas downstream of the dam and to keep river flows in the lower Brisbane River below 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s. If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate rapidly over the next 24 hours. The flood operation centre will continue to monitor the situation and provide every six hours until the situation stabilizes.

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	**Date**	11.1.2011	**Time**		**or Event**	Change in strategy

Dan Spiller

From: Dan Spiller
Sent: Monday, 10 January 2011 5:48 PM
To: Matthies.GregoryM[redacted] Saunderson.MichelleA[redacted]
Subject: RE: contact details for BCC re water effects
Attachments: Technical Situation Report W37.docx

Updated report as discussed.

Please call me or[redacted] if you have any queries or require any further information.

Regards,
Dan

'O::BOM615

IDQ20805

Australian Government Bureau of Meteorology Queensland

PRIORITY
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY Issued at 4:16 PM on Monday the 10th of January 2011 by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

.t the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:
Further rainfall during Monday has led to renewed rises in the Lockyer Creek catchment. Rainfall is forecast to continue this evening and a return to moderate to major flood levels is expected overnight and during Tuesday. Major flood levels are expected to continue at Lyons Bridge with rises above 15 metres likely during Tuesday.

BREMER RIVER:
Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK
Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley overnight.

MIDDLE AND LOWER BRISBANE:
SEQwater advises releases from Wivenhoe Dam will increase during Monday.
Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:
Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

oggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday.
Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:
The next warning will be issued at about 9pm Monday.

Latest River Heights:

Lockyer Ck at Gatton #	10.36m steady	03:04 PM MON 10/01/11
aidley Ck at Laidley	6m rising	02:45 PM MON 10/01/11
Laidley Ck at Showground Weir #	6.98m rising	03:07 PM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.43m falling	01:00 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	11.36m falling	03:05 PM MON 10/01/11
Lockyer Ck at Lyons Br #	14.79m rising	03:02 PM MON 10/01/11
Lockyer Ck at Rifle Range Rd *	13.4m rising	08:20 AM MON 10/01/11
Brisbane R at Lowood Pump Stn #	14.13m falling	03:07 PM MON 10/01/11
Brisbane R at Savages Crossing #	14.15m rising	03:09 PM MON 10/01/11
Brisbane R at Burtons Br #	10.88m rising	03:05 PM MON 10/01/11
Brisbane R at Kholo Br #	6.23m rising	03:06 PM MON 10/01/11
Brisbane R at Mt Crosby #	14.26m rising	03:07 PM MON 10/01/11
Brisbane R at Colleges Crossing #	11.96m rising	03:09 PM MON 10/01/11
Bremer R at Spressers Br #	5.07m rising	03:09 PM MON 10/01/11
Bremer R at Rosewood #	4.94m rising	03:02 PM MON 10/01/11
Bremer R at Five Mile Br Walloon #	5.12m falling	03:09 PM MON 10/01/11
Warrill Ck at Harrisville #	3.82m rising	03:05 PM MON 10/01/11
Warrill Ck at Amberley DNR *	5.34m rising	08:10 AM MON 10/01/11
Bremer R at Ipswich #	6.6m rising	02:40 PM MON 10/01/11
Brisbane R at Moggill #	5.52m rising	02:59 PM MON 10/01/11
Brisbane R at Jindalee Br #	3.7m rising	02:50 PM MON 10/01/11
Brisbane R at City Gauge #	1.36m falling	03:09 PM MON 10/01/11

*automatic station

Warnings and River Height Bulletins are available at http://www.bom.gov.au/qld/flood/ . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.
----------Safe Stamp----------

From: Matthies.GregoryM[redacted]:Matthies.GregoryM[redacted]
Sent: Monday, 10 January 2011 10:54 AM
To: Dan Spiller
Subject: contact details for BCC re water effects

Dan

As per our conversation my email is attached and any further info will be great

Regards Greg Matthies

Suzie Emery

From: Ken Smith [Ken.Smith[redacted]
Sent: Monday, 10 January 2011 6:12 PM
To: Barry Dennien
Subject: FW: BCC Innundation Map at 4000 cumecs
Attachments: img-110173945-0001.jpg

Barry

FYI

Regards

Ken Smith
Director-General
Department of the Premier and Cabinet

Phone:[redacted] Fax:[redacted]
Mobile:[redacted]
Email: Ken.Smith[redacted]

Tomorrow's Queensland: strong, green, smart, healthy and fair - www.towardQ2.qld.gov.au

Please consider the environment before printing this email (3 sheets of paper = 1 litre of water)

From: Colin Jensen [mailto:Colin.Jensen[redacted]
Sent: Monday, 10 January 2011 6:09 PM
To: Ken Smith
Subject: BCC Innundation Map at 4000 cumecs

Ken

As discussed, please find attached a map showing the innundation in Brisbane that is estimated to result from a river flow of 4,000 cubic meters per second. Note that this only shows the river flooding not innundation from localised rain flooding.

Regards

Colin Jensen
Chief Executive Officer
Brisbane City Council
GPO Box 1434 | Brisbane Qld 4001
Level 23, Brisbane Square | 266 George Street, Brisbane, Qld 4000
Phone:[redacted] | Fax:[redacted]
Email: colin.jensen[redacted]

4,000 m³/s Peak Discharge at Port Office Gauge Inundation Extents

Figure 103

Suzie Emery

From: Ken Smith [Ken.Smith[redacted]
Sent: Monday, 10 January 2011 6:24 PM
To: Barry Dennien
Subject: FW: List of suburbs impacted by innundation from a 4,000 cumec river flow

Barry

At last. I will call you to discuss assumptions underpinning number of properties impacted at 4,000 cubic meters assumption

Regards

Ken Smith
Director-General
Department of the Premier and Cabinet

Phone:[redacted] Fax:[redacted]
Mobile:[redacted]
Email: Ken.Smith[redacted]

Tomorrow's Queensland: strong, green, smart, healthy and fair - www.towardQ2.qld.gov.au

Please consider the environment before printing this email (3 sheets of paper = 1 litre of water)

From: Colin Jensen [mailto:Colin.Jensen[redacted]
Sent: Monday, 10 January 2011 6:21 PM
To: Ken Smith
Subject: List of suburbs impacted by innundation from a 4,000 cumec river flow

Ken

Please find following, as discussed, some information on the consequence of river innundation likely to result from a river flow of 4,000 cubic meters per second.

Number of properties affected:
- 455 properties (parcels of land) have been identified as experiencing flooding on next Wednesday (at least 221 of these are homes and businesses)
- 7, 731 properties may see some flooding either on the land or outside the property
- More than 400 streets will be affected by flooding in some way

Below is the list of suburbs where the 455 properties that will be affected are located. In brackets is the number of properties/parcels of land that will be affected in each suburb. This is based on the data and modelling we have done to date and we may see increases in these numbers once figures are revised.
- Rocklea (80)
- Albion (49)

- Milton (49)
- Auchenflower (40)
- Norman Park (26)
- Pinkenba (26)
0- Oxley (19)
- New Farm (17)
- Kangaroo Point (16)
- Bulimba & Sherwood (14 each)
- Yeronga (10)
- Graceville (9)
- Newstead (8)
- Yeerongpilly (7)
- Bowen Hills (6)
- Indooroopilly, Windsor (5 each)
- Wacol, Brisbane City, Moggill, East Brisbane, Fortitude Valley (4 each)
- Chelmer, Hemmant, Tennyson (3 each)
- Fairfield, Fig Tree Pocket, Coorparoo, South Brisbane, Lytton, Murrarie (2 each)

7 Rapid Response Group teams will be working from both a map and a database to doorknock/letterbox drop a flyer to the 221 homes and businesses that are predicted as being likely to experience innundation. They will visually check using the map that none of the remaining parcels of land from the total 455 properties identified as experiencing flooding are actually homes or businesses also.

The locations where the 221 homes and businesses are located is Albion, Auchenflower, Brisbane City, Bowen Hills, Bulimba, Fortitude Valley, Graceville, Hemmant, Indooroopilly, Kangaroo Point, Lytton, Milton, New Farm, Newstead, Norman Park, Oxley, Pinkenba, Rocklea, Sherwood, Tennyson, Wacol, Windsor, Yeronga.

Regards

Colin Jensen
Chief Executive Officer
Brisbane City Council
GPO Box 1434 | Brisbane Qld 4001
Level 23, Brisbane Square | 266 George Street, Brisbane, Qld 4000
Phone: [redacted]
Email: colin.jensen[redacted]

Litsupport Brisbane

From: Dan Spiller
Sent: Tuesday, 11 January 2011 6:29 AM
To: Debbie Best
Cc: Martin.PeterJ [redacted] Dunn.KerryG [redacted] Barry Dennien; Tim Watts
Subject: Fwd: Impact of Lockyer flows
Attachments: Seqwater_No-Lifeguards-Here_email_strap.png; ATT00001.htm; cidimage001.png@01CA24E1.BDB90020; ATT00002.htm

Debbie,

Preliminary advice below. Report being prepared and BoM remodeling.

Dan

Begin forwarded message:

From: Rob Drury <rdrury[redacted]
Date: 11 January 2011 6:17:48 AM GMT+10:00
To: Dan Spiller <Daniel.Spiller[redacted]
Cc: Barry Dennien <Barry.Dennien[redacted]>, Peter Borrows <pborrows[redacted], Paul Bird <pbird[redacted] Michael Lyons <Michael.Lyons[redacted]
Subject: RE: Impact of Lockyer flows

Dan,

I will send a report shortly but below are words I was going to send. I have also attached the BoM warning for the Lockyer that they sent this morning.

They are reissuing their warning this morning based on new information.

Basically the FOC was going to try to slow our releases last night to give a small window for the Lockyer flood to go through however we again received and are still receiving heavy rain in the catchments.

Currently the FOC has shut some sluices at Somerset to store more water to keep Wivenhoe below RL74 at which we need to start increasing releases. The first fuse plug goes at about RL 75.7m

The strategy is now to keep releases as is to not worsen the situation downstream as the Lockyer recorded levels higher than any on record. However we may still need to increase releases depending on what happens through the day.

The FOC have given our release strategy (not really different in releases at this stage) to the BoM and they will reissue their flood warnings based on that and other flows in the Lockyer and Bremer.

The FOC have spoken to BCC and ICC and we will send them an update. BCC are having a LDMG meeting this morning. Dan, not sure if anyone from the WGM is going but Chris Lavin is the contact.

Rob

From: Aifs Operational Manager[SMTP:AIFSQLD[redacted]

Sent: Tuesday, January 11, 2011 4:06:54 AM

To: weather

Subject: BOM: FLDWARN for Lower Brisbane and Bremer Rs [SEC=UNCLASSIFIED] Auto forwarded by a Rule

TO::BOM615

IDQ20805

Australian Government Bureau of Meteorology Queensland

PRIORITY

FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY Issued at 4:06 AM on Tuesday the 11th of January 2011 by the Bureau of Meteorology, Brisbane.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge, with strong stream rises expected during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane during Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Extremely heavy rainfall during Monday led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton Monday evening before the station failed. This level was well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently arriving at Lyons Bridge, with strong stream rises expected in the next few hours. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood.

Renewed stream rises have commenced in Lockyer Creek at Lyons Bridge with a peak between 16 and 16.5 metres expected Tuesday morning. This is likely to be similar in level to the 1996 flood.

BREMER RIVER:

The Bremer River at Walloon has exceeded the moderate flood level. The Bremer River at Rosewood peaked at 5.8 metres around midnight monday.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Warrill Creek at Amberley peaked at 5.98 metres around 9pm Monday.

MIDDLE AND LOWER BRISBANE:

Moderate flooding is developing at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres (minor) with the afternoon high tide on Tuesday. Reach about 3 metres (moderate) with the high tides on Wednesday.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 8am Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	3.49m falling	02:10 AM TUE 11/01/11
Sandy Creek at Sandy Creek Road #	2.15m falling	03:19 AM TUE 11/01/11
Ma Ma Ck at Harm's *	3.26m rising	02:30 AM TUE 11/01/11
Tenthill Ck at Tenthill *	5.57m rising	02:40 AM TUE 11/01/11
Lockyer Ck at Gatton #	18.92m rising	06:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	6.39m rising	02:20 AM TUE 11/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	7.84m rising	03:25 AM TUE 11/01/11
Laidley Ck at Warrego Hwy *	6.41m rising	02:00 AM TUE 11/01/11
Lockyer Ck at Glenore Grove #	13.8m falling	03:24 AM TUE 11/01/11
Lockyer Ck at Lyons Br #	15.55m rising	03:23 AM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	15.39m rising	02:40 AM TUE 11/01/11

Lockyer Ck at O'Reilly's Weir # 18m falling 03:28 AM TUE 11/01/11

Brisbane R at Lowood Pump Stn # 15.93m falling 03:31 AM TUE 11/01/11

Brisbane R at Savages Crossing # 15.89m rising 03:29 AM TUE 11/01/11

Brisbane R at Burtons Br # 12.22m rising 03:29 AM TUE 11/01/11

Brisbane R at Kholo Br # 7.99m rising 03:29 AM TUE 11/01/11

Brisbane R at Mt Crosby # 15.82m steady 03:30 AM TUE 11/01/11

Brisbane R at Mt Crosby # 14.08m falling 04:39 PM MON 10/01/11

Brisbane R at Colleges Crossing # 13.91m rising 03:32 AM TUE 11/01/11

Bremer R at Rosewood# 5.56m falling 03:11 AM TUE 11/01/11

Bremer R at Five Mile Br Walloon # 6.4m rising 03:15 AM TUE 11/01/11

Warrill Ck at Greens Rd Amberley # 5.84m falling 03:29 AM TUE 11/01/11

Bremer R at One Mile Br # 13.75m rising 03:31 AM TUE 11/01/11

Bremer R at Hancocks Br Brassall # 11.33m rising 03:22 AM TUE 11/01/11

Bremer R at Ipswich # 8.55m rising 03:31 AM TUE 11/01/11

Brisbane R at Moggill # 7.07m rising 03:29 AM TUE 11/01/11

Brisbane R at Jindalee Br # 4.5m rising 03:29 AM TUE 11/01/11

Brisbane R at City Gauge # 1.4m falling 03:15 AM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at http://www.bom.gov.au/qld/flood/ . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.

----------Safe Stamp----------

For more information regarding this service, please contact your service provider.

Robert Drury

Dam Operations Manager

Water Delivery

Queensland Bulk Water Supply Authority *trading as* Seqwater

D415

Cindy Hulsey

From: Barry Dennien
Sent: Tuesday, 11 January 2011 8:33 AM
To: Dan Spiller
Subject: Re: Levels

Categories: T8

Dan let quu know asap

Regards
Barry Dennien

On 11/01/2011, at 8:28 AM, "Dan Spiller" <Daniel.Spiller[redacted] wrote:

> Based on 3700 cumecs release?
>
> By when?

From: Barry Dennien
Sent: Tuesday, 11 January 2011 8:29 AM
To: Dan Spiller
Subject: Re: Levels

BOM forecast 6000 plus cumecs in river 4 plus meters at port office

74 flood 5.45m

Regards

Barry Dennien

On 11/01/2011, at 8:00 AM, "Dan Spiller" <Daniel.Spiller[redacted] wrote:

> Wivenhoe Dam: 173%
>
> Somerset Dam: 160%
>
> **Daniel Spiller**
>
> Director, Operations
>
> **SEQ Water Grid Manager**

Phone: [redacted] | Fax: [redacted] | Mobile: [redacted]

Email: daniel.spiller[redacted]

Visit: Level 15, 53 Albert Street Brisbane

Post: PO Box 16205, City East QLD 4002

ABN: 14783 317 630

Cindy Hulsey

From: John Adcock
Sent: Tuesday, 11 January 2011 8:39 AM
Subject: Water Grid Update - Dam Releases - 11 January 2011

Importance: High

Categories: T8

Water Grid update – 11 January 2011

Unprecedented Wivenhoe Dam releases

Significant rainfall received across catchments has caused waterways upstream of Somerset and Wivenhoe Dams to rise quickly overnight.

Wivenhoe Dam is currently at 173% and rising. Somerset Dam is at 160%.

Controlled releases through the five gates have been held at around 236,000 megalitres since early last night but will need to be increased further today. These releases will are being made in consultation with the Bureau of Meteorology and local councils and aim to limit downstream impacts where possible. Note these large releases are necessary for the safe management of the dam.

Release levels will be progressively reviewed depending on rainfall across the catchments today.

Local Councils have been advised that as a result of Lockyer Creek flows, local runoff and Wivenhoe releases, Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge Colleges Crossing, Fernvale Bridge, and Mt Crosby Weir Bridge may be inundated until at Sunday 16 January. Residents are urged to contact local councils for detailed information on road crossing closures and other impacts.

All recreations areas around Somerset and Wivenhoe are closed, and given the dam levels and the need for safety around spillways, **we will not be able to facilitate any land-based media access to our sites today.**

While substantial amounts of water is being released into Wivenhoe from Somerset Dam, water levels in Somerset are expected to continue to rising today and areas around Kilcoy are likely to be impacted by these rising dam levels.

Five gates are open at North Pine Dam, releasing around 15,000 megalitres a day and will continue until at least Wednesday 12 January. The local Council is being kept informed regarding Youngs Crossing.

Gate releases at Leslie Harrison Dam are underway due to rainfall and inflows.

A minor release of around 1200 megalitres a day is being made through the emergency gates at Hinze Dam. There is no access to the spillway.

For detailed information on road crossing closures and other potential impacts, always contact your local council.

UPPER SOMERSET TOWNSHIPS URGED TO CONSERVE WATER

Residents in the upper Somerset townships of Kilcoy, Jimna and Linville are being urged to conserve water due to the impacts of local flooding on water infrastructure.

Water Grid spokesperson Dan Spiller said vital water infrastructure in these regions has been damaged by flood waters, cutting off the raw water supply.

"We have a limited supply in local reservoirs that is expected to last one to three days. However, we will ensure that critical supplies are maintained. In the meantime we are asking people to conserve water while we repair equipment and organise alternate supplies," he said.

The power is currently down at the main water treatment plant in Kilcoy, with flood water restricting access to rectify the situation.

In Jimna and Linville rising waters have impacted infrastructure that supports the region's supply.

Approximately 1,000 residents on town water across these three areas are impacted.

"We are asking people to restrict non-essential water use, including limiting shower times and considering alternative water supplies where possible," said Mr Spiller.

The Water Grid Manager is working closely with Emergency Management Queensland to gain access to the plants and to rectify all situations. Current demand and supply levels are being closely monitored and alternate water supplies are being considered.

"We are looking at trucking in tankers to fill the reservoirs and are also considering the supply of bottled water if necessary. Obviously we cannot truck in water while roads are closed," said Mr Spiller.

ENDS

Note to the Editor: While releases are being made from the region's water storages, routine updates will be provided.

Community Assistance: Please direct the community to contact **telephone - 1800 613 122.** This number has been established for members of the public seeking information on which dams are spilling in South East Queensland.

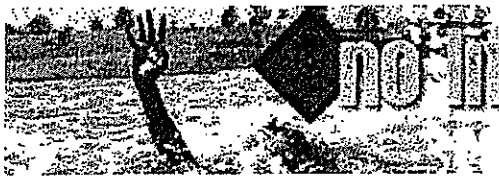
Members of the public seeking information on **potential impacts in their local areas** should **direct inquiries to their local councils.**

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

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

For further information on the Water Grid: www.watergrid.com.au

For further details contact the SEQ Water Grid Communications Unit on:
Ph: [redacted] **| Email:** media[redacted]



A WATER SAFETY INITIATIVE FROM SEQ Water Grid

Swimming in weirs and f
flowing water is FAT

rethink

Cindy Hulsey

From: Colin Jensen [Colin.Jensen[redacted]
Sent: Tuesday, 11 January 2011 9:27 AM
To: Barry Dennien; Dan Spiller; ken.smith[redacted]
Cc: Chris Lavin; John Cowie; Vicki Pethybridge
Subject: BCC Innundation Maps for 5000m3/s
Attachments: 5000 m3 Brisbane East.pdf; 5000 m3 Brisbane South.pdf; 5000 m3 Brisbane West.pdf; 5000 m3 Whole of Brisbane.pdf

Categories: T8

+=*
Place: LDCC
+=*
Gentlemen

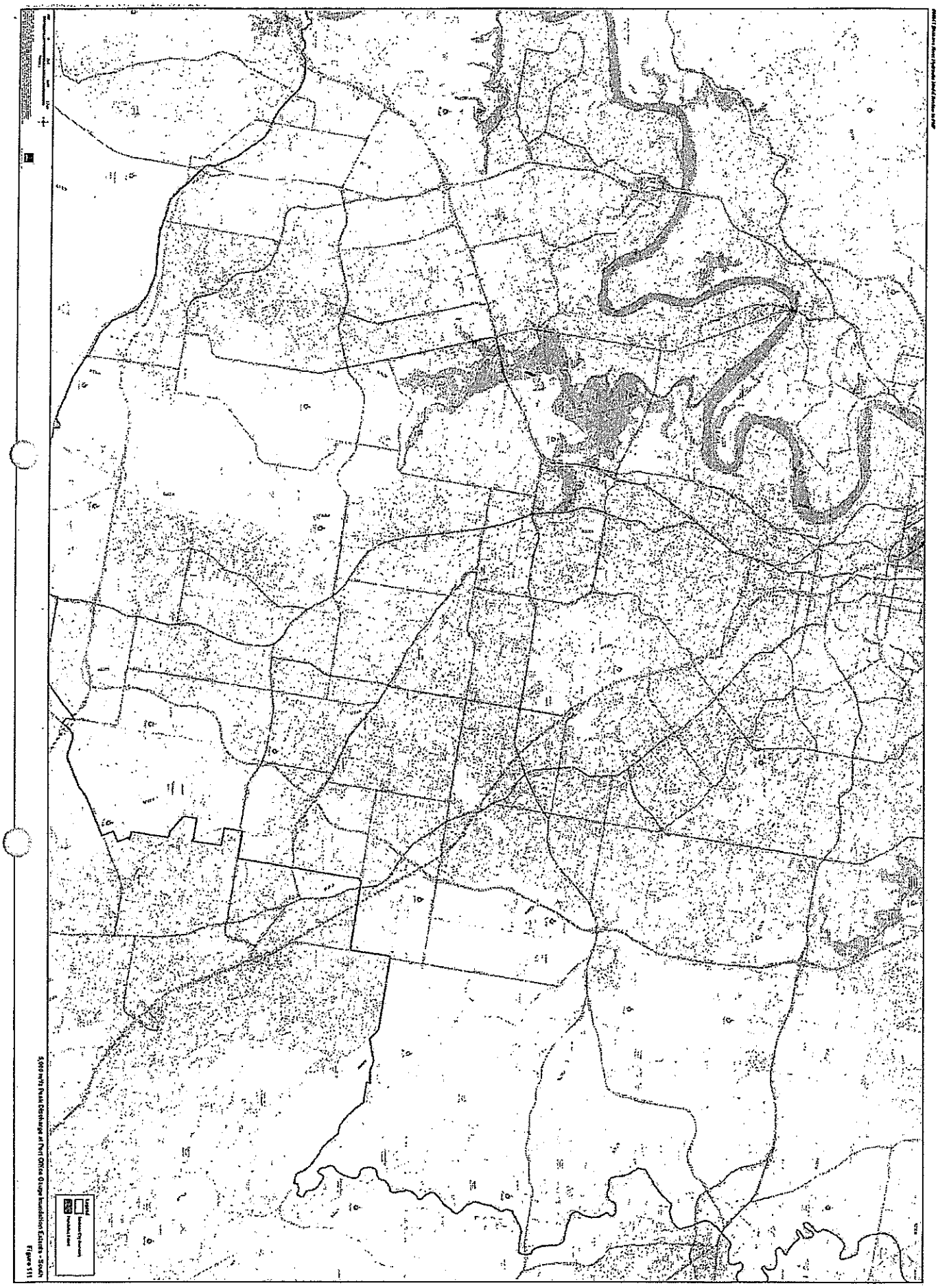
Please find attached our flood maps for river flows of 5,000 cumecs FYI. I will also provide a list of suburbs and streets when I have it to hand.

I note the preliminary advice from BOM is to start our consideration of a 6,000 cumec event for Thursday

Regards

Colin Jensen
Chief Executive Officer
Brisbane City Council
GPO Box 1434 | Brisbane Qld 4001
Level 23, Brisbane Square | 266 George Street, Brisbane, Qld 4000
Phone: [redacted] Fax: [redacted]
Email: colin.jensen[redacted]

D485



D486

D487

D488

Cindy Hulsey

From: Dan Spiller
Sent: Tuesday, 11 January 2011 1:18 PM
To: Madgwick.DarrenT[redacted] stephen.robertson[redacted]; Ken Smith (ken.smith[redacted]; Lance McCallum (lance.mccallum[redacted]); Tim Watts (tim.watts[redacted]); lauren.sims[redacted]; Martin.PeterJ[redacted] Dunn.KerryG[redacted]; Debbie Best (debbie.best[redacted]; terry.wal[redacted]; Geoff Stead (geoff.stead[redacted])
Cc: Barry Dennien; Peter Borrows; Rob Drury (rdrury[redacted]); Stan Stevenson; Madgwick.DarrenT[redacted]
Subject: Wivenhoe Dam release update
Attachments: image001.png; Technical Situation Report W39 (2).docx

Categories: T8

All,

Attached is the updated Technical Situation Report.

Releases from Wivenhoe Dam have needed to be increased to 3,970 cubic metres per second. BoM is modelling based on this strategy.

Based on these releases, Wivenhoe Dam will peak at between 74.5 and 74.8m with no further inflows.

Further inflows will require further releases. Seqwater is considering worst case scenarios to provide to BoM and BCC to model impacts.

Regards,
Daniel Spiller

TECHNICAL SITUATION REPORT

TSR Number	W39	Date of TSR release	11.1.2011	Time of TSR release	12.00pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible	
Strategy	• Maintain current release of 3970cumecs as long as possible but it may need to be increased • Close sluices at Somerset Dam to store more water however will affect upstream areas. • Current estimate of peak dam level is between EL74.5 and EL74.8 (assuming no further significant rainfall). However it is noted that rainfall is continuing across the catchment. • Further rainfall in the next 3 hours will require releases to be increased in accordance with Strategy W4, page 29 of the Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam (Flood Operations Manual)	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.30 AHD and rising. Peak inflow to the dam is estimated to be about 4,200 m3/s. Volume stored above FSL is 240,00ML at 163.3%

The dam level peaked at 103.52m AHD at 19:00 on Monday 10 January 2011, (unless further significant rainfall is experienced). Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 74.1m AHD and rising at about 25 mm/hour. Holding 930,000ML above FSL and 179.5%.Releases from the dam are currently 3,970cumec/s. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

At this stage it is considered that without further rainfall the dam can be kept at around 74.8m.

The aim is to prevent fuse plug initiation.

Currently the situation is being assessed every 3 hours.

If further rainfall occurs, dam releases may need to be increased further.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate over the next 24 hours. The flood operation centre will continue to monitor the situation and provide situation reports every six hours until the situation stabilizes.

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

BoM assessment

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

BoM has been advised.

BoM Technical Officer name	Peter Baddiley
BoM Technical Officer position title	
BoM Technical Officer contact details	[redacted]

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	Current

Litsupport Brisbane

From: Stan Stevenson [sstevenson[redacted]
Sent: Tuesday, 11 January 2011 3:58 PM
To: SEQWGM Emergency
Cc: Dan Spiller; Peter Borrows; Paul Bird; Rob Drury; Jim Pruss
Subject: Technical Situation Report W40.docx
Attachments: Technical Situation Report W40.docx

Latest update on releases from Wivenhoe

Regards

Stan Stevenson
Acting EGM Water Delivery
QLD Bulk Water Supply Authority *trading as* Seqwater

seqwater
WATER FOR LIFE

Ph[redacted] | Fax[redacted] Mobile[redacted] | E sstevenson[redacted]
Level 3, 240 Margaret St, Brisbane City QLD 4000 Australia
PO Box 16146, City East QLD 4002
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

TSR Number	W40	Date of TSR release	11.1.2011	Time of TSR release	4.00pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible	
Strategy	• Inflows into Wivenhoe in excess of 12000 cumecs. • Maintain current release 5700 cumecs as long as possible but due to the high level in the dam may change frequently due to inflows, this is being reviewed every 30 minutes and releases adjusted accordingly. • Close sluices at Somerset Dam to store more water however will affect upstream areas.	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset/Wivenhoe Dam

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time. Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy.

Wivenhoe Dam is rising very quickly and rapid gate openings are required to manage this increase. Based on the current rate of rise, inflow rate is in excess of 12,000m3/s. The situation is being revised constantly and releases will be increased hourly until the water level starts to stabilize. It is possible that the releases will be as high as 10,000m3/s in the next few hours. Heavy rainfall continues in the catchment especially around the dam.

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s.

Travel time to Lower Brisbane River is 24 hours.

North Pine

Inflows and outflows are at record levels and increasing within inflows nearing 3,000m3/s, and is approaching an extreme event (possibly as high as 1 in 10,000 AEP)

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event

From: Dan Spiller <Daniel.Spiller[redacted]
Sent: Tuesday, January 11, 2011 4:00 PM
To: Barry Dennien <Barry.Dennien[redacted]
Subject: Fwd: Technical Situation Report W40.docx
Attach: image.png; ATT00001.htm; Technical Situation Report W40.docx; ATT00002.htm

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Begin forwarded message:

From: Stan Stevenson <sstevenson[redacted]
Date: 11 January 2011 3:58:25 PM GMT+10:00
To: SEQWGM Emergency <SEQWGM.Emergency[redacted]
Cc: Dan Spiller <Daniel.Spiller[redacted], Peter Borrows <pborrows[redacted], Paul Bird <pbird[redacted], Rob Drury <rdrury[redacted], Jim Pruss <jpruss[redacted]
Subject: Technical Situation Report W40.docx

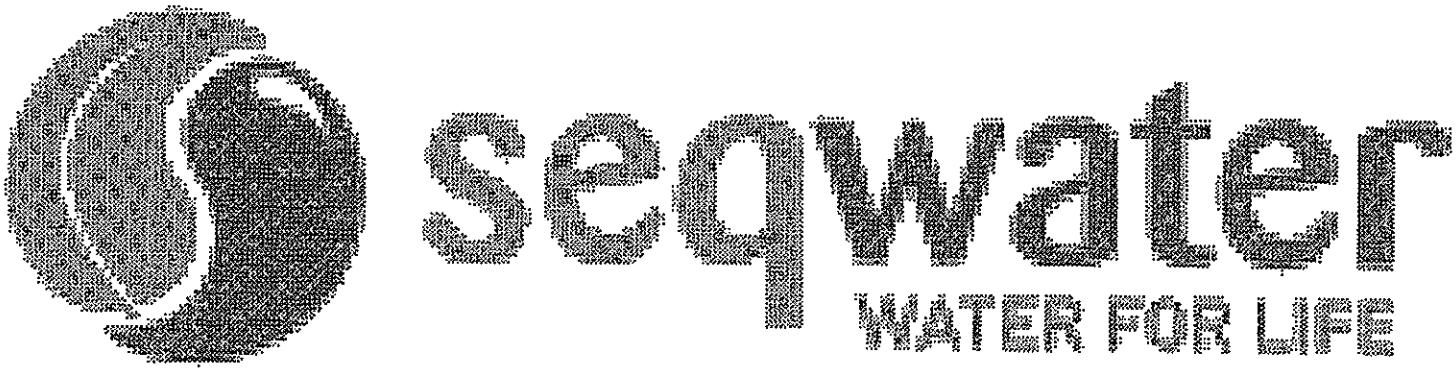
Latest update on releases from Wivenhoe

Regards

Stan Stevenson

Acting EGM Water Delivery

QLD Bulk Water Supply Authority *trading as* Seqwater


seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] Mobile [redacted] | E [redacted]

Level 3, 240 Margaret St, Brisbane City QLD 4000 Australia
PO Box 16146, City East QLD 4002

Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

TSR Number	W40	Date of TSR release	11.1.2011	Time of TSR release	4.00pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible	
Strategy	• Inflows into Wivenhoe in excess of 12000 cumecs. • Maintain current release 5700 cumecs as long as possible but due to the high level in the dam may change frequently due to inflows, this is being reviewed every 30 minutes and releases adjusted accordingly. • Close sluices at Somerset Dam to store more water however will affect upstream areas.	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset/Wivenhoe Dam

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time. Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy.

Wivenhoe Dam is rising very quickly and rapid gate openings are required to manage this increase. Based on the current rate of rise, inflow rate is in excess of 12,000m3/s. The situation is being revised constantly and releases will be increased hourly until the water level starts to stabilize. It is possible that the releases will be as high as 10,000m3/s in the next few hours. Heavy rainfall continues in the catchment especially around the dam.

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s.

Travel time to Lower Brisbane River is 24 hours.

North Pine

Inflows and outflows are at record levels and increasing within inflows nearing 3,000m3/s, and is approaching an extreme event (possibly as high as 1 in 10,000 AEP)

Seqwater Technical Officer name	Robert Drury
Seqwater Technical Officer position title	Dam Operations Manager
0410378740	[redacted]

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event

Suzie Emery

From: Reilly Bob [Bob.Reilly[redacted]
Sent: Tuesday, 11 January 2011 4:19 PM
To: Dan Spiller; Barry Dennien
Cc: Allen Peter
Subject: Wivenhoe Releases

Hi Dan, Barry

Peter Allen has asked Seqwater to provide a concise summary of the flood release strategy. I can confirm though that they are taking into account estimated inflows over the next 24 hours and have a release strategy that addresses that scenario.

Regards

Bob

Bob Reilly

General Manager, Office of the Water Supply Regulator

Telephone[redacted] **Mobile**[redacted] **Facsimile:**[redacted]

Email: bob.reilly[redacted]

www.derm.qld.gov.au

Department of Environment and Resource Management

Lvl 3 41 George Street, Brisbane Q 4000

GPO Box 2454, Brisbane Q 4001

TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible
Strategy	• Peak inflows into Wivenhoe in excess of 12000 cumecs. • Increase releases to maintain fuse plug and dam integrity. • Close sluices at Somerset Dam to store more water however will affect upstream areas.
Key considerations	Storage levels: Above FSL
	Inflows: Inflows expected well over 1,500,000ML.
	Rainfall: Continuing
	Lockyer/Bremer: Monitoring their inflows
	Brisbane River: Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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

At 1730 Wivenhoe Dam was 74.92m AHD holding 2,200,000ML and 190% and rising slowly and releasing about 6,700m3/s.

The current expectation is that the dam will reach a steady state (outflow equals inflow) within the next 3 hours without further significant rainfall. At this time, release from the dam will be about 8,000 m3/s.

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

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

North Pine Dam:
Five gates are open, and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

Wyralong Dam

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

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

Gina O'Driscoll

From: Paul Bird [pbird[redacted]
Sent: Tuesday, 11 January 2011 6:19 PM
To: SEQWGM Media; aroebuck[redacted] greg.swain[redacted]
GSTUBBS[redacted] Kathy Petrik; lisa.m.martin[redacted]
Paula Weston; tjacobs[redacted] Arminda Roberts; Bec Middlemiss; Michael Fiechtner; Mike Foster; Tara King; Barry Dennien; Dan Spiller; Scott Denner
Cc: Michael Lyons; ELT
Subject: Release Update

As at 6.00 pm on Tuesday 11 January, the following applies:

SOMERSET DAM:
Releases have stopped, however levels in Somerset are expected to continue rising and areas around Kilcoy are likely to be impacted.

WIVENHOE DAM:
Wivenhoe Dam is rising slowly and releasing about 576,000 megalitres per day.

The current expectation is that the dam will reach a steady state (outflow equals inflow) within the next 3 hours without further significant rainfall.

At this time, release from the dam will be about, 688,000 megalitres.

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

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes.

The Centre is also maintaining close contact with warning agencies and local councils.

NORTH PINE DAM:
Five gates are open, and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

LIE HARRISON DAM:
Gate releases are underway due to rainfall and inflows.

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

For detailed information on river levels, road and crossing closures and other potential impacts, always contact your local council.

This information will be updated during the evening of Tuesday 11 January.

Litsupport Brisbane

From: Rob Drury [redacted]
Sent: Tuesday, 11 January 2011 6:28 PM
To: Rob Drury; Dan Spiller; Paul Bird; Stan Stevenson; Peter Borrows; Peter.Allen[redacted]
Cc: David Roberts
Subject: RE: Technical Report
Attachments: Technical Situation Report W41.docx

Attached is the latest Technical Report.

Rob

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

seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | M [redacted] | E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible	
Strategy	• Peak inflows into Wivenhoe in excess of 12000 cumecs. • Increase releases to maintain fuse plug and dam integrity. • Close sluices at Somerset Dam to store more water however will affect upstream areas.	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected well over 1,500,000ML.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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

At 1730 Wivenhoe Dam was 74.92m AHD holding 2,200,000ML and 190% and rising slowly and releasing about 6,700m3/s.

The current expectation is that the dam will reach a steady state (outflow equals inflow) within the next 3 hours without further significant rainfall. At this time, release from the dam will be about 8,000 m3/s.

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

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

North Pine Dam:
Five gates are open, and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

Wyralong Dam

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event		

Litsupport Brisbane

From: Rob Drury [rdrury[redacted]
Sent: Tuesday, 11 January 2011 6:28 PM
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Subject: RE: Technical Report
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Robert Drury
Dam Operations Manager
Water Delivery
Queensland Bulk Water Supply Authority *trading as* Seqwater

seqwater
WATER FOR LIFE

Ph[redacted] | Fax [redacted] | M[redacted] | E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible	
Strategy	• Peak inflows into Wivenhoe in excess of 12000 cumecs. • Increase releases to maintain fuse plug and dam integrity. • Close sluices at Somerset Dam to store more water however will affect upstream areas.	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected well over 1,500,000ML.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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At 1730 Wivenhoe Dam was 74.92m AHD holding 2,200,000ML and 190% and rising slowly and releasing about 6,700m3/s.

The current expectation is that the dam will reach a steady state (outflow equals inflow) within the next 3 hours without further significant rainfall. At this time, release from the dam will be about 8,000 m3/s.

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

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

North Pine Dam:
Five gates are open, and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

Wyralong Dam

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event		

Suzie Emery

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

All,

Updated report attached.

Regards,
Dan

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

TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible	
Strategy	• Peak inflows into Wivenhoe in excess of 12000 cumecs. • Increase releases to maintain fuse plug and dam integrity. • Close sluices at Somerset Dam to store more water however will affect upstream areas.	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected well over 1,500,000ML.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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

At 1730 Wivenhoe Dam was 74.92m AHD holding 2,200,000ML and 190% and rising slowly and releasing about 6,700m3/s.

The current expectation is that the dam will reach a steady state (outflow equals inflow) within the next 3 hours without further significant rainfall. At this time, release from the dam will be about 8,000 m3/s.

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

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

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

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

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North Pine Dam:
Five gates are open, and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

Wyralong Dam

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

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

TECHNICAL SITUATION REPORT

TSR Number	W42	Date of TSR release	11.1.2011	Time of TSR release	7pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible
Strategy	• Peak inflows into Wivenhoe in excess of 12000 cumecs. • Increase releases to maintain fuse plug and dam integrity. • Close sluices at Somerset Dam to store more water however will affect upstream areas.
Key considerations	Storage levels: Above FSL
	Inflows: Inflows expected well over 1,500,000ML.
	Rainfall: Continuing
	Lockyer/Bremer: Monitoring their inflows
	Brisbane River: Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy. Somerset is at 104.6m holding 684,000ML and 180.0%.

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

At 1900 Wivenhoe Dam was 74.97m AHD holding 2,227,000ML and 191.1% and rising slowly and releasing about 7,500m3/s.

Since the last update, there has only been an increase in release to 7,500cumecs. At this stage there is no planned increase in releases unless there are further inflows.

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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Wyralong Dam

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

Ipswich City Council (ICC) assessment (if required)

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

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

Somerset Regional Council (SRC) assessment (if required)

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

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event	

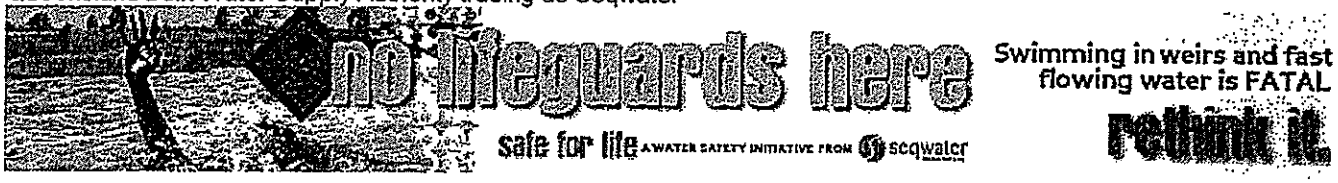
Litsupport Brisbane

From: Rob Drury [rdrury[redacted]
Sent: Tuesday, 11 January 2011 7:29 PM
To: Rob Drury; Dan Spiller; Paul Bird; Stan Stevenson; Peter Borrows; Peter.Aller[redacted]
Cc: David Roberts
Subject: RE: Technical Report
Attachments: Technical Situation Report W42.docx

Attached is the latest Technical Report.

Rob

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



seqwater
WATER FOR LIFE

Ph[redacted] | Fax[redacted] | M[redacted] | E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

TSR Number	W42	Date of TSR release	11.1.2011	Time of TSR release	7pm

Seqwater status of inflows and dam operations

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

BoM assessment

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

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

BCC Technical Officer name	Chris Lavin

BCC Technical Officer position title	Disaster Operations Manager
BCC Technical Officer contact details	[redacted]

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current strategy.

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

Somerset Regional Council (SRC) assessment (if required)

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event		

TECHNICAL SITUATION REPORT

TSR Number	W43	Date of TSR release	11.1.2011	Time of TSR release	8pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below fuse plug initiation and releases need to be made to ensure the dam security and minimise flood impacts downstream if possible
Strategy	• Peak inflows into Wivenhoe in excess of 12000 cumecs. • Increase releases to maintain fuse plug and dam integrity. • Close sluices at Somerset Dam to store more water however will affect upstream areas.
Key considerations	Storage levels: Above FSL
	Inflows: Inflows expected well over 1,500,000ML.
	Rainfall: Continuing
	Lockyer/Bremer: Monitoring their inflows
	Brisbane River: Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy. Somerset is at 104.7m holding 691,500ML and 180.2%.

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

At 2000 Wivenhoe Dam was 74.97m AHD holding 2,227,000ML and 191.1% and steady and releasing about 7,500m3/s.

The levels have stayed the same for an hour so there are no planned increases in releases.

As soon as the levels show they are dropping, releases will be reduced.

The dam is now expected to peak around 74.97m AHD which is around 600mm below the first fuse plug initiation level.

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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

The local Council is being kept informed regarding Youngs Crossing.

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

Wyralong Dam

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current strategy.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current strategy.

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

Collated and distributed by (Agency)

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

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

TECHNICAL SITUATION REPORT

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

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Current status but could change based on inflows or rainfall.

Current objectives	• Initiate the gradual reduction of releases.	
Strategy	• Peak inflows into Wivenhoe were in excess of 12000 cumecs. • Maintain controlled releases. • Keep sluices closed at Somerset Dam to store more water however will affect upstream areas.	
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Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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

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

The levels have now stabilized and commenced to fall slowly.

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

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

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

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event	

Litsupport Brisbane

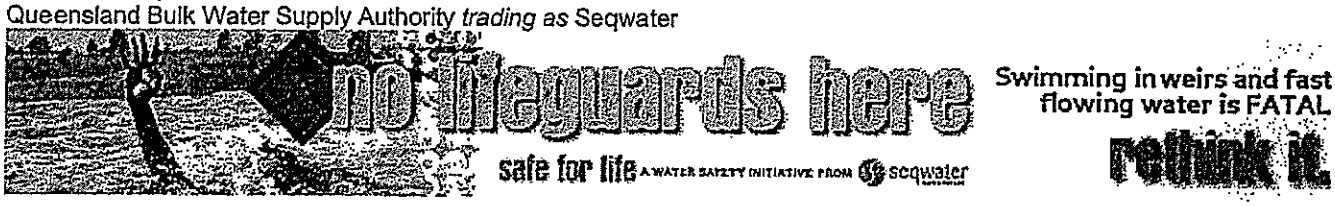
From: Rob Drury [rdrury[redacted]
Sent: Tuesday, 11 January 2011 8:20 PM
To: Rob Drury; Dan Spiller; Paul Bird; Stan Stevenson; Peter Borrows; Peter.Allen[redacted]
Cc: David Roberts
Subject: RE: Technical Report
Attachments: Technical Situation Report W43.docx

Attached report W43.

Levels at Wivenhoe now seem to be steady.

Rob

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



seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] M [redacted] | E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

TSR Number	W43	Date of TSR release	11.1.2011	Time of TSR release	8pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

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	Inflows:	Inflows expected well over 1,500,000ML.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy. Somerset is at 104.7m holding 691,500ML and 180.2%.

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

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The levels have stayed the same for an hour so there are no planned increases in releases.

As soon as the levels show they are dropping, releases will be reduced.

The dam is now expected to peak around 74.97m AHD which is around 600mm below the first fuse plug initiation level.

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It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

BCC Technical Officer contact details	[redacted]

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current strategy.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current strategy.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event		

From:	Dan Spiller <Daniel.Spiller[redacted]
Sent:	Tuesday, January 11, 2011 8:25 PM
To:	Barry Dennien <Barry.Dennier[redacted]
Subject:	Fwd: Technical Report
Attach:	Seqwater_No-Lifeguards-Here_email_strap.png; ATT00001.htm; cidimage001.png@01CA24E1.BDB90020; ATT00002.htm; Technical Situation Report W43.docx; ATT00003.htm

Begin forwarded message:

From: Rob Drury <[redacted]
Date: 11 January 2011 8:19:49 PM GMT+10:00
To: Rob Drury <rdrury[redacted], Dan Spiller <Daniel.Spiller[redacted], Paul Bird <pbird[redacted], Stan Stevenson <sstevenson[redacted], Peter Borrows <pborrows[redacted], "Peter.Allen[redacted] <Peter.Allen[redacted]
Cc: David Roberts <droberts[redacted]
Subject: RE: Technical Report

Attached report W43.

Levels at Wivenhoe now seem to be steady.

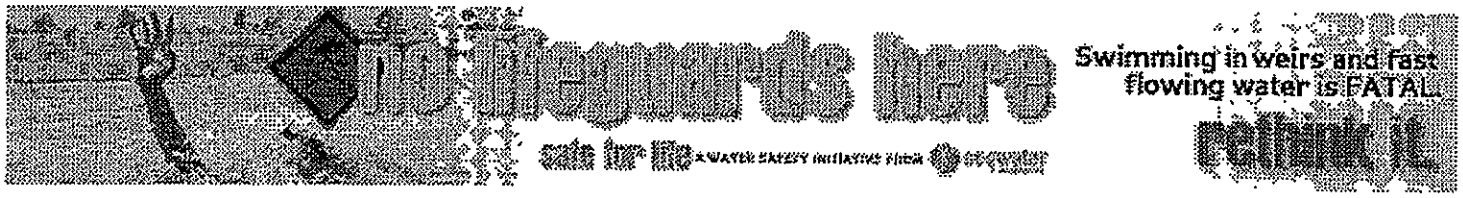
Rob

Robert Drury

Dam Operations Manager

Water Delivery

Queensland Bulk Water Supply Authority *trading as* Seqwater


Swimming in weirs and fast flowing water is FATAL
rethink it


seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | E rdrury[redacted]

Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306

Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

TSR Number	W43	Date of TSR release	11.1.2011	Time of TSR release	8pm

Seqwater status of inflows and dam operations

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The dam is now expected to peak around 74.97m AHD which is around 600mm below the first fuse plug initiation level.

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

BCC Technical Officer contact details	[redacted]

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current strategy.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current strategy.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event		

From:	Barry Dennien </O=SOUTH EAST QUEENSLAND WATER GRID MANAGER/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=BARRY.DENNIEN>
Sent:	Tuesday, January 11, 2011 8:31 PM
To:	Dan Spiller <Daniel.Spiller[redacted]
Subject:	RE: Technical Report

Do not send as yet

From: Dan Spiller
Sent: Tuesday, 11 January 2011 8:25 PM
To: Barry Dennien
Subject: Fwd: Technical Report

Begin forwarded message:

From: Rob Drury <rdrury[redacted]
Date: 11 January 2011 8:19:49 PM GMT+10:00
To: Rob Drury <rdrury[redacted] Dan Spiller <Daniel.Spiller[redacted] Paul Bird <pbird[redacted], Stan Stevenson <sstevenson[redacted]>, Peter Borrows <pborrows[redacted], "Peter.Allen[redacted] <Peter.Allen[redacted]
Cc: David Roberts <droberts[redacted]
Subject: RE: Technical Report

Attached report W43.

Levels at Wivenhoe now seem to be steady.

Rob

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

Gina O'Driscoll

From: Paul Bird [pbird[redacted]
Sent: Tuesday, 11 January 2011 8:33 PM
To: SEQWGM Media; aroebuck[redacted] greg.swain[redacted]
GSTUBBS[redacted] Kathy Petrik; lisa.m.martin[redacted]
Paula Weston; tjacobs[redacted] Arminda Roberts; Bec Middlemiss; Michael Fiechtner; Mike Foster; Tara King; Barry Dennien; Dan Spiller; Scott Denner
Cc: Michael Lyons; ELT
Subject: Release Update

As at 8.30 pm on Tuesday 11 January, the following applies:

SOMERSET DAM:
Releases have stopped, however levels in Somerset are expected to continue rising and areas around Kilcoy are likely to be impacted.

WIVENHOE DAM:
Wivenhoe Dam is currently releasing about 654,000 megalitres per day.

e levels have stayed the same for an hour so at this stage there are no planned increases in releases.

As soon as the levels show they are consistently dropping, releases will be reduced.

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes.

The Centre is also maintaining close contact with warning agencies and local councils.

NORTH PINE DAM:
Five gates are open, and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

LESLIE HARRISON DAM:
Gate releases are underway due to rainfall and inflows.

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

For detailed information on river levels, road and crossing closures and other potential impacts, always contact your local council.

This information will be updated in the event of a significant change.

Litsupport Brisbane

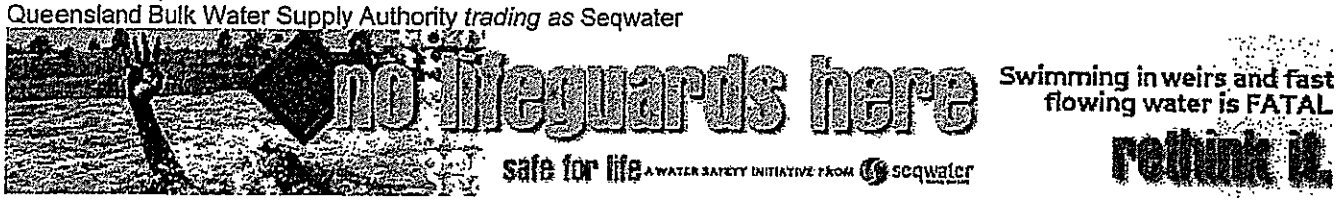
From: Rob Drury [rdrury[redacted]
Sent: Tuesday, 11 January 2011 9:16 PM
To: Rob Drury; Dan Spiller; Paul Bird; Stan Stevenson; Peter Borrows; Peter.Aller[redacted]
Cc: David Roberts
Subject: RE: Technical Report
Attachments: Technical Situation Report W44.docx

Attached report.

Dam has peaked (assuming no more rain) and release reduction has been initiated.

Rob

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



seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | M [redacted] | E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

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

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

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

The levels have now stabilized and commenced to fall slowly.

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

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

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

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

BoM assessment

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

BoM has been advised.

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

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

Council has been advised of the current strategy

BCC Technical Officer name	Chris Lavin
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ICC Technical Officer name	Tony Trace
ICC Technical Officer position title	Local Disaster Response Coordinator
ICC Technical Officer contact details	[redacted]

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event	

Cindy Hulsey

From: Rob Drury [rdrury[redacted]
Sent: Tuesday, 11 January 2011 9:51 PM
To: Dan Spiller
Subject: RE: Technical Report
Attachments: Technical Situation Report W44.docx

Categories: T8

Dan,
Updated report.

Rob

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

seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | M [redacted] | E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

From: Dan Spiller [mailto:Daniel.Spiller[redacted]
Sent: Tuesday, 11 January 2011 9:33 PM
To: Rob Drury
Subject: Re: Technical Report

Sorry, I meant release rates. You note the closure sequence, but not from what.

On 11/01/2011, at 9:31 PM, "Rob Drury" <rdrury[redacted]> wrote:

> Sure,
>
> I had the volumes of the dams in there, which volumes did you mean?
>
> Rob

Robert Drury

Dam Operations Manager

Water Delivery

Queensland Bulk Water Supply Authority *trading as* Seqwater

<image001.jpg>

<image002.png>

Ph [redacted] | Fax [redacted] M [redacted] | E rdrury [redacted]

Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306

Website | www.seqwater.com.au

From: Dan Spiller [mailto:Daniel.Spiller [redacted]
Sent: Tuesday, 11 January 2011 9:28 PM
To: Rob Drury
Subject: Re: Technical Report

Rob,

We will distribute this version widely. Can you pls update to state volumes?

Dan

On 11/01/2011, at 9:15 PM, "Rob Drury" <rdrury [redacted]> wrote:

> Attached report.
>
> Dam has peaked (assuming no more rain) and release reduction has been initiated.

Rob

Robert Drury

Dam Operations Manager

Water Delivery

Queensland Bulk Water Supply Authority *trading as* Seqwater

<image001.jpg>

<image002.png>

Ph [redacted] | Fax [redacted] | M [redacted] E rdrury[redacted]

Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306

Website | www.seqwater.com.au

<Technical Situation Report W44.docx>

Important information: This email and any attached information is intended only for the addressee and may contain confidential and/or privileged information. If you are not the

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

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

TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Initiate the gradual reduction of releases.	
Strategy	• Peak inflows into Wivenhoe were in excess of 12000 cumecs. • Maintain controlled releases. • Keep sluices closed at Somerset Dam to store more water however will affect upstream areas.	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected well over 1,500,000ML.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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

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

The levels have now stabilized and commenced to fall slowly.

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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

The local Council is being kept informed regarding Youngs Crossing.

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current strategy.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current strategy.

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

Collated and distributed by (Agency)

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

Next TSR due	Date:	11.1.2011	Time:	PM	Or Event:

TECHNICAL SITUATION REPORT

TSR Number	W45	Date of TSR release	11.1.2011	Time of TSR release	10pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Gradual reduction of releases.	
Strategy	• Peak inflows into Wivenhoe were in excess of 12000 cumecs. • Maintain controlled releases. • Keep sluices closed at Somerset Dam to store more water however will affect upstream areas.	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected well over 1,500,000ML.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset/Wivenhoe

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Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy. Somerset is at 104.85m holding 702,260ML and 185%.

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

At 2200 Wivenhoe Dam was 74.95m AHD holding 2,223,000ML and 190.8%.

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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

The local Council is being kept informed regarding Youngs Crossing.

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

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

Council has been advised of the current strategy.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current strategy.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event	

Litsupport Brisbane

From: Rob Drury [rdrury[redacted]
Sent: Tuesday, 11 January 2011 10:07 PM
To: Rob Drury; Dan Spiller; Paul Bird; Stan Stevenson; Peter Borrows; Peter.Allen[redacted]
Cc: David Roberts
Subject: RE: Technical Report
Attachments: Technical Situation Report W45.docx

Attached report W45.

Rob

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

Swimming in weirs and fast flowing water is FATAL

rethink it.

seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | M [redacted] | E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

TSR Number	W45	Date of TSR release	11.1.2011	Time of TSR release	10pm

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	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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

The local Council is being kept informed regarding Youngs Crossing.

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current strategy.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current strategy.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event	

Cindy Hulsey

From: Dan Spiller
Sent: Tuesday, 11 January 2011 10:19 PM
To: stephen.robertson[redacted] Lance McCallum (lance.mccallum[redacted] Tim Watts (tim.watts[redacted] Geoff Stead (geoff.stead[redacted] lauren.sims[redacted] John Bradley (john.bradley[redacted]; Debbie Best (debbie.best[redacted] Martin.PeterJ[redacted] Dunn.KerryG[redacted] Ken Smith (ken.smith[redacted]
Cc: Rob Drury (rdrury[redacted] Barry Dennien; Peter Borrows; SEQWGM Media; SEQWGM Emergency; Madgwick.DarrenT[redacted]
Subject: Wivenhow Dam update
Attachments: Technical Situation Report W44.docx

Categories: T8

All,

Attached is the most recent technical situation report.

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

Regards,
Daniel Spiller

TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Initiate the gradual reduction of releases.	
Strategy	• Peak inflows into Wivenhoe were in excess of 12000 cumecs. • Maintain controlled releases. • Keep sluices closed at Somerset Dam to store more water however will affect upstream areas.	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected well over 1,500,000ML.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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

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

The levels have now stabilized and commenced to fall slowly.

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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

The local Council is being kept informed regarding Youngs Crossing.

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current strategy.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current strategy.

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

Collated and distributed by (Agency)

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

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

Gina O'Driscoll

From: Paul Bird [pbird[redacted]
Sent: Tuesday, 11 January 2011 10:21 PM
To: SEQWGM Media; aroebuck[redacted] greg.swain[redacted]
GSTUBBS[redacted] Kathy Petrik; lisa.m.martin[redacted]
Paula Weston; tjacobs[redacted] Arminda Roberts; Bec Middlemiss; Michael Fiechtner; Mike Foster; Tara King; Barry Dennien; Dan Spiller; Scott Denner
Cc: Michael Lyons; ELT
Subject: Release Update

For detailed information on river levels, road and crossing closures and other potential impacts, always contact your local council.

As at 10.30 pm on Tuesday 11 January, the following applies:

SOMERSET DAM:
Releases have stopped, however levels in Somerset are expected to continue rising and areas around Kilcoy are likely to be impacted.

VENHOE DAM:
The Flood Operations Centre has begun an appropriate closure sequence to reduce releases.

Releases will be reduced slowly throughout the night to track dropping levels. First reduction has been to around 610,000 megalitres per day.

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes.

The Centre is also maintaining close contact with warning agencies and local councils.

NORTH PINE DAM:
Five gates are open, and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

ESLIE HARRISON DAM:
e releases are underway due to rainfall and inflows.

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

For detailed information on river levels, road and crossing closures and other potential impacts, always contact your local council.

This information will be updated in the event of a significant change.

Litsupport Brisbane

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

It warrants a discussion. On phone when suits you.

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

Thanks Dan

As an aside, I think we need to try to maintain the protocol on these through these most serious of events - I notice sitreps lately have had no comment from bom/councils or just "has been advised".

Wouldn't bear much scrutiny in an ex post review, noting recipients (Min, DsG, etc)

Happy to take your and barry's advice as to how this can be achieved.

John B

From: Dan Spiller [mailto:Daniel.Spiller[redacted]
Sent: Tuesday, January 11, 2011 10:18 PM
To: stephen.robertson[redacted]<stephen.robertson[redacted]>; Lance McCallum (lance.mccallum[redacted]) <lance.mccallum[redacted], Tim Watts (tim.watts[redacted]) <tim.watts[redacted]; Geoff Stead (geoff.stead[redacted] <geoff.stead[redacted] lauren.sims[redacted]<lauren.sims[redacted]; Bradley John; Best Debbie; Martin.PeterJ[redacted]<Martin.PeterJ[redacted]; Dunn.KerryG[redacted] <Dunn.KerryG[redacted]; Ken Smith (ken.smith[redacted] <ken.smith[redacted]
Cc: Rob Drury (rdrury[redacted]) <rdrury[redacted]; Dennien Barry @ SEQWGM; Peter Borrows <pborrows[redacted]>; Media @ SEQWGM; SEQWGM Emergency <SEQWGM.Emergency[redacted] Madgwick.DarrenT[redacted] <Madgwick.DarrenT[redacted]
Subject: Wivenhow Dam update

All,

Attached is the most recent technical situation report.

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

Regards,
Daniel Spiller

```
+-------------------------------------------------------------+
Think B4U Print
1 ream of paper = 6% of a tree and 5.4kg CO2 in the atmosphere
3 sheets of A4 paper = 1 litre of water
+-------------------------------------------------------------+
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TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Gradual reduction of releases.
Strategy	• Peak inflows into Wivenhoe were in excess of 12000 cumecs. • Maintain controlled releases. • Keep sluices closed at Somerset Dam to store more water however will affect upstream areas.
Key considerations	Storage levels: Above FSL
	Inflows: Inflows expected well over 1,500,000ML.
	Rainfall: Continuing
	Lockyer/Bremer: Monitoring their inflows
	Brisbane River: Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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

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

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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

The local Council is being kept informed regarding Youngs Crossing.

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

Ipswich City Council (ICC) assessment (if required)

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

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

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

Collated and distributed by (Agency)

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

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

Litsupport Brisbane

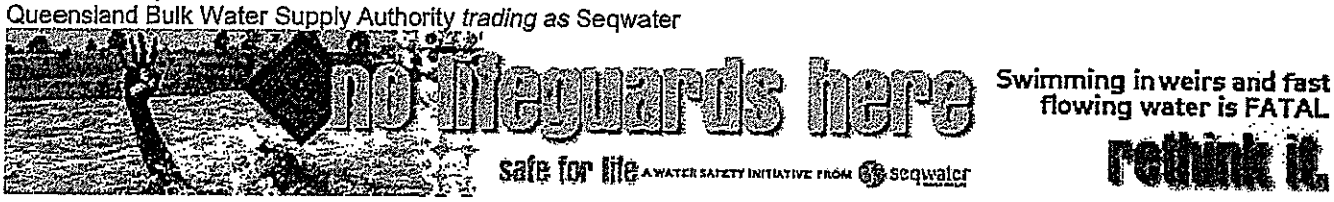
From: Rob Drury [rdrury[redacted]
Sent: Tuesday, 11 January 2011 11:21 PM
To: Rob Drury; Dan Spiller; Paul Bird; Stan Stevenson; Peter Borrows; Peter.Allen[redacted]
Cc: David Roberts; Duty Seq
Subject: RE: Technical Report
Attachments: Technical Situation Report W46.docx

Attached report W46.

Next report will be 5am Wednesday 12.1.2011.

Rob

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



seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] M [redacted] E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

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

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Current status but could change based on inflows or rainfall.

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	Brisbane River:	Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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

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Gate releases are underway due to rainfall and inflows.

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

Ipswich City Council (ICC) assessment (if required)

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

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current strategy.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	12.1.2011	Time	AM	or Event		

Litsupport Brisbane

From: Dan Spiller
Sent: Tuesday, 11 January 2011 11:43 PM
To: 'stephen.robertson[redacted]; 'Ken Smith (ken.smith[redacted]); 'john.bradley[redacted]; 'Lance McCallum (lance.mccallum[redacted] 'Tim Watts (tim.watts[redacted]; 'Geoff Stead (geoff.stead[redacted]; 'lauren.sims[redacted] 'Martin.PeterJ[redacted]; 'Dunn.KerryG[redacted]
Cc: Barry Dennien; 'pborrows[redacted]; 'Rob Drury'; SEQWGM Media; SEQWGM Emergency; 'bob.reilly[redacted]; 'Damien Brown (damien.brown[redacted]; 'Madgwick.DarrenT[redacted]
Subject: Updated Wivenhoe Dam releases
Attachments: image001.jpg; image002.png; Technical Situation Report W46.docx

All,

Updated report attached.

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

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

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

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

Regards,
Dan

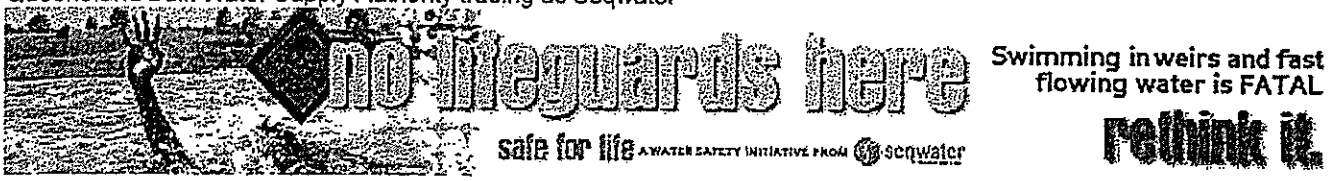
From: Rob Drury [mailto:rdrury[redacted]
Sent: Tuesday, January 11, 2011 11:21 PM
To: Rob Drury; Dan Spiller; Paul Bird; Stan Stevenson; Peter Borrows; Peter.Allen[redacted]
Cc: David Roberts; Duty Seq
Subject: RE: Technical Report

Attached report W46.

Next report will be 5am Wednesday 12.1.2011.

Rob

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



seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | M [redacted] | E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Gradual reduction of releases.	
Strategy	• Peak inflows into Wivenhoe were in excess of 12000 cumecs. • Develop and implement closing plan for next 7 or so days	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected well over 2,000,000ML.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

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

Somerset/Wivenhoe

Somerset Dam has peaked at 105.11 m AHD at 08:00 on 12 January 2011 and the dam is discharging 1,230 m3/s over the spillway. Sluice gates will be utilised to assist the draining of the flood storage compartment commencing later Wednesday. At 8am Somerset was 105.11m and 720,400ML at 189.7%.

Wivenhoe Dam peaked at 74.97 m AHD at 19:00 on 11 January 2011 with a corresponding discharge of 7,450 m3/s. Wivenhoe Dam was 74.75 m AHD at 2,192,000ML and 188.1% at 07:30 and generally falling slowly.

The releases from Wivenhoe Dam have been temporarily reduced to 2,500 m3/s at 07:30 to allow the peak of Lockyer Creek to enter the Brisbane River. After the downstream peak in the lower Brisbane River has passed, releases will be increased to maximum of 3,500 m3/s. This release will then be maintained to drain the flood storage component within the required 7 days.

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

North Pine

At 07:00 North Pine Dam was 39.78 mAHD falling and releasing about 105 m3/s. North Pine has

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

Strategy

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

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current strategy.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current strategy.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	12.1.2011	Time	11am	or Event	

From:	Dan Spiller <Daniel.Spiller[redacted]
Sent:	Tuesday, January 11, 2011 11:49 PM
To:	'ceo[redacted]
Cc:	Barry Dennien <Barry.Dennien[redacted] 'john.bradley[redacted]
Subject:	Dam release update

Colin,

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

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

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

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

Please call on mobile if you have any queries.

Regards,
Dan

Cindy ..ulsey

From:	Barry Dennien
Sent:	Monday, 10 January 2011 4:11 PM
To:	Peter Baddiley (p.baddiley[redacted]
Cc:	Dan Spiller
Subject:	Tech report
Attachments:	Technical Situation Report W37.docx
Categories:	T8

Barry Dennien
Chief Executive Officer
SEQ Water Grid Manager
Phone: [redacted] | **Fax:** [redacted] | **Mobile:** [redacted]
Email: barry.dennien[redacted]
Visit: Level 15, 53 Albert Street, Brisbane
ost: PO Box 16205, City East Qld 4002
ABN: 14783 317 630

TECHNICAL SITUATION REPORT

TSR Number	W37	Date of TSR release	10.1.2011	Time of TSR release	3pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Continue increasing releases to discharge flood waters but keep impact downstream to minimum.	
Strategy	• All bridges are now inundated . • Ramp up to 2800cumecs which will give a flow in the lower Brisbane River of around 4,000cumecs	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

Significant rainfall has fallen in the Wivenhoe Dam catchment over the last 3 hours, with falls exceeding 100mm. This rainfall will significantly increase inflows into the dam. A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 10:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (75mm to 150mm); Wivenhoe/Somerset Dam Catchments (50mm – 100mm). Potentially significant rain moving towards the dam catchments is currently evident on the BOM radar.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.41m AHD and rising. Peak inflow to the dam is estimated to be about 4,200 m3/s. Five sluice gates are open releasing about 1,100m3/s (95,000ML/day) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5m AHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 72.41m AHD and rising quickly. The rainfall experienced over the last 2 to 3 hours will result in significant further inflows into the dam and releases from the dam will need to be increased in accordance with Flood Mitigation procedures and to ensure that a fuse plug is not initiated. The initiation of a fuse plug will result in a rapid uncontrolled outflow from the dam of 2,000m3/s being added to the gate release outflow. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

Five radial gates are currently open at the dam releasing about 2,000m3/s into the Brisbane River and

this will need to be increased steadily to an outflow of 2,800m3/s over the next 9 hours (commencing at 1500). At this stage, the dam will reach about 73.8m AHD during Tuesday morning.

The objective for dam operations is currently to minimise the impact of urban flooding in areas downstream of the dam and to keep river flows in the lower Brisbane River below 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s. If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate rapidly over the next 24 hours. The flood operation centre will continue to monitor the situation and provide every six hours until the situation stabilizes.

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

Litsupport Brisbane

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

It warrants a discussion. On phone when suits you.

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

Thanks Dan

As an aside, I think we need to try to maintain the protocol on these through these most serious of events - I notice sitreps lately have had no comment from bom/councils or just "has been advised".

Wouldn't bear much scrutiny in an ex post review, noting recipients (Min, DsG, etc)

Happy to take your and barry's advice as to how this can be achieved.

John B

From: Dan Spiller [mailto:Daniel.Spiller[redacted]
Sent: Tuesday, January 11, 2011 10:18 PM
To: stephen.robertson[redacted]<stephen.robertson[redacted]; Lance McCallum (lance.mccallum[redacted]<lance.mccallum[redacted]; Tim Watts (tim.watts[redacted]<tim.watts[redacted]; Geoff Stead (geoff.stead[redacted]<geoff.stead[redacted]; lauren.sims[redacted]<lauren.sims[redacted]; Bradley John; Best Debbie; Martin.PeterJ[redacted]<Martin.PeterJ[redacted]; Dunn.KerryG[redacted]<Dunn.KerryG[redacted]; Ken Smith (ken.smith[redacted]) <ken.smith[redacted]
Cc: Rob Drury (rdrury[redacted]) <rdrury[redacted]; Dennien Barry[redacted]; Peter Borrows <pborrows[redacted]>; Media[redacted]; SEQWGM Emergency <SEQWGM.Emergency[redacted]; Madgwick.DarrenT[redacted]<Madgwick.DarrenT[redacted]
Subject: Wivenhow Dam update

All,

Attached is the most recent technical situation report.

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

Regards,
Daniel Spiller

TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Gradual reduction of releases.
Strategy	• Peak inflows into Wivenhoe were in excess of 12000 cumecs. • Maintain controlled releases. • Keep sluices closed at Somerset Dam to store more water however will affect upstream areas.
Key considerations	Storage levels: Above FSL
	Inflows: Inflows expected well over 1,500,000ML.
	Rainfall: Continuing
	Lockyer/Bremer: Monitoring their inflows
	Brisbane River: Impact as below.

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time.

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

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

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

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

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

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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BCC Technical Officer contact details	[redacted]

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ICC Technical Officer contact details	[redacted]

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SRC Technical Officer position title	Local Disaster Response Coordinator
SRC Technical Officer contact details	[redacted]

Collated and distributed by (Agency)

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

Next TSR due	Date	12.1.2011	Time	AM	or Event	

Litsupport Brisbane

From: Rob Drury [rdrury[redacted]
Sent: Tuesday, 11 January 2011 11:21 PM
To: Rob Drury; Dan Spiller; Paul Bird; Stan Stevenson; Peter Borrows; Peter.Allen[redacted]
Cc: David Roberts; Duty Seq
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Attachments: Technical Situation Report W46.docx

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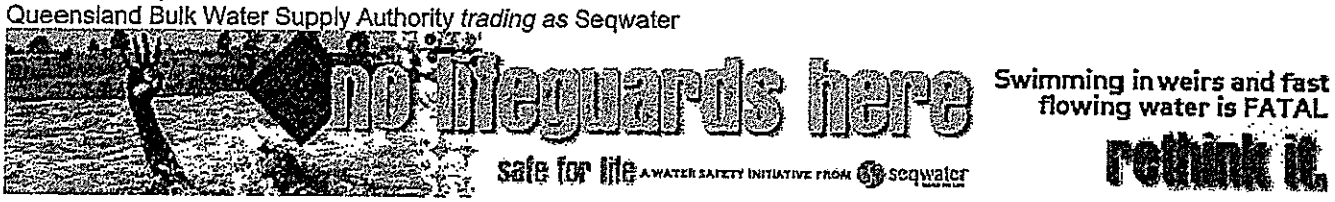
Water Delivery
Queensland Bulk Water Supply Authority *trading as* Seqwater



seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | M [redacted] | E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

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Seqwater Technical Officer position title	Dam Operations Manager
[redacted]	[redacted]

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BCC Technical Officer contact details	[redacted]

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ICC Technical Officer position title	Local Disaster Response Coordinator
ICC Technical Officer contact details	[redacted]

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

Collated and distributed by (Agency)

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

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Sent: Tuesday, 11 January 2011 11:43 PM
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Cc: Barry Dennien; 'pborrows[redacted] 'Rob Drury'; SEQWGM Media; SEQWGM Emergency; 'bob.reilly[redacted] 'Damien Brown (damien.brown[redacted]; 'Madgwick.DarrenT[redacted]
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Attachments: image001.jpg; image002.png; Technical Situation Report W46.docx

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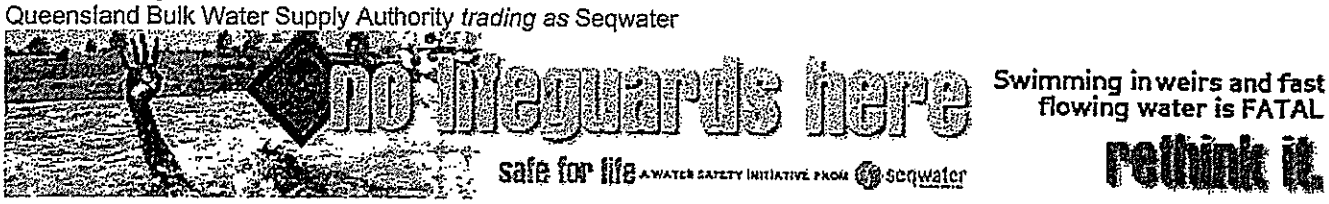
Rob

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



seqwater
WATER FOR LIFE

Ph [redacted] E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
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TECHNICAL SITUATION REPORT

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

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

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Strategy	• Peak inflows into Wivenhoe were in excess of 12000 cumecs. • Develop and implement closing plan for next 7 or so days	
Key considerations	Storage levels:	Above FSL
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	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

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

Somerset/Wivenhoe

Somerset Dam has peaked at 105.11 m AHD at 08:00 on 12 January 2011 and the dam is discharging 1,230 m3/s over the spillway. Sluice gates will be utilised to assist the draining of the flood storage compartment commencing later Wednesday. At 8am Somerset was 105.11m and 720,400ML at 189.7%.

Wivenhoe Dam peaked at 74.97 m AHD at 19:00 on 11 January 2011 with a corresponding discharge of 7,450 m3/s. Wivenhoe Dam was 74.75 m AHD at 2,192,000ML and 188.1% at 07:30 and generally falling slowly.

The releases from Wivenhoe Dam have been temporarily reduced to 2,500 m3/s at 07:30 to allow the peak of Lockyer Creek to enter the Brisbane River. After the downstream peak in the lower Brisbane River has passed, releases will be increased to maximum of 3,500 m3/s. This release will then be maintained to drain the flood storage component within the required 7 days.

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

North Pine

At 07:00 North Pine Dam was 39.78 mAHD falling and releasing about 105 m3/s. North Pine has

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

Strategy

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

Leslie Harrison Dam:
Gate releases are underway due to rainfall and inflows.

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

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current strategy

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current strategy.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current strategy.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	12.1.2011	Time	11am	or Event	

From:	Dan Spiller <Daniel.Spiller[redacted]
Sent:	Tuesday, January 11, 2011 11:49 PM
To:	'ceo[redacted]
Cc:	Barry Dennien <Barry.Dennien[redacted] 'john.bradley[redacted]
Subject:	Dam release update

Colin,

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

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

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

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

Please call on mobile if you have any queries.

Regards,
Dan

Cindy ..dlsey

From: Barry Dennien
Sent: Monday, 10 January 2011 4:11 PM
To: Peter Baddiley (p.baddiley[redacted]
Cc: Dan Spiller
Subject: Tech report
Attachments: Technical Situation Report W37.docx

Categories: T8

Barry Dennien
Chief Executive Officer
SEQ Water Grid Manager
Phone:[redacted] | **Fax:**[redacted] | **Mobile:**[redacted]
Email: barry.dennien[redacted]
Visit: Level 15, 53 Albert Street, Brisbane
ost: PO Box 16205, City East Qld 4002
ABN: 14783 317 630

TECHNICAL SITUATION REPORT

TSR Number	W37	Date of TSR release	10.1.2011	Time of TSR release	3pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Continue increasing releases to discharge flood waters but keep impact downstream to minimum.	
Strategy	• All bridges are now inundated . • Ramp up to 2800cumecs which will give a flow in the lower Brisbane River of around 4,000cumecs	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

Significant rainfall has fallen in the Wivenhoe Dam catchment over the last 3 hours, with falls exceeding 100mm. This rainfall will significantly increase inflows into the dam. A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 10:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (75mm to 150mm); Wivenhoe/Somerset Dam Catchments (50mm – 100mm). Potentially significant rain moving towards the dam catchments is currently evident on the BOM radar.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.41m AHD and rising. Peak inflow to the dam is estimated to be about 4,200 m3/s. Five sluice gates are open releasing about 1,100m3/s (95,000ML/day) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5m AHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 72.41m AHD and rising quickly. The rainfall experienced over the last 2 to 3 hours will result in significant further inflows into the dam and releases from the dam will need to be increased in accordance with Flood Mitigation procedures and to ensure that a fuse plug is not initiated. The initiation of a fuse plug will result in a rapid uncontrolled outflow from the dam of 2,000m3/s being added to the gate release outflow. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

Five radial gates are currently open at the dam releasing about 2,000m3/s into the Brisbane River and

this will need to be increased steadily to an outflow of 2,800m3/s over the next 9 hours (commencing at 1500). At this stage, the dam will reach about 73.8m AHD during Tuesday morning.

The objective for dam operations is currently to minimise the impact of urban flooding in areas downstream of the dam and to keep river flows in the lower Brisbane River below 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s. If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate rapidly over the next 24 hours. The flood operation centre will continue to monitor the situation and provide every six hours until the situation stabilizes.

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	11.1.2011	[redacted]		[redacted]	Change in strategy

Gina O'Driscoll

From: Rob Drury [rdrury[redacted]
Sent: Monday, 10 January 2011 4:24 PM
To: Barry Dennien; Dan Spiller
Cc: Peter Borrows
Subject: FW: FLDWARN for Lower Brisbane and Bremer Rs [SEC=UNCLASSIFIED]

Attached is the BoM warning re levels that they develop in discussion with our FOC re releases and models and then they discuss with BCC.

This is what they then provide to everyone.

Rob

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

Ph[redacted] | Fax[redacted] | M[redacted] | E rdrury[redacted] Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia PO Box 37, Fernvale QLD 4306 Website | www.seqwater.com.au

-----Original Message-----
From: weather
Sent: Monday, 10 January 2011 4:17 PM
To: DG-Ops Dam Levels; Murray Dunstan; Craig Duncan; Jayam Tennakoon; David Roberts; Jeff Lyddon; Glenn Patterson
Subject: FW: FLDWARN for Lower Brisbane and Bremer Rs [SEC=UNCLASSIFIED]

From: Aifs Operational Manager[SMTP:AIFSQLD[redacted]
Sent: Monday, January 10, 2011 4:16:39 PM
To: weather
Subject: BOM: FLDWARN for Lower Brisbane and Bremer Rs [SEC=UNCLASSIFIED]
Auto forwarded by a Rule

TO::BOM615

IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY
Issued at 4:16 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:
Further rainfall during Monday has led to renewed rises in the Lockyer Creek catchment. Rainfall is forecast to continue this evening and a return to moderate to major flood levels is expected overnight and during Tuesday. Major flood levels are expected to continue at Lyons Bridge with rises above 15 metres likely during Tuesday.

BREMER RIVER:
Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK
Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley overnight.

MIDDLE AND LOWER BRISBANE:
SEQwater advises releases from Wivenhoe Dam will increase during Monday. Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:
Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday. Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:
The next warning will be issued at about 9pm Monday.

Latest River Heights:

Lockyer Ck at Gatton #	10.36m steady	03:04 PM MON 10/01/11
Laidley Ck at Laidley	6m rising	02:45 PM MON 10/01/11
Laidley Ck at Showground Weir #	6.98m rising	03:07 PM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.43m falling	01:00 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	11.36m falling	03:05 PM MON 10/01/11
Lockyer Ck at Lyons Br #	14.79m rising	03:02 PM MON 10/01/11
Lockyer Ck at Rifle Range Rd *	13.4m rising	08:20 AM MON 10/01/11
Brisbane R at Lowood Pump Stn #	14.13m falling	03:07 PM MON 10/01/11
Brisbane R at Savages Crossing #	14.15m rising	03:09 PM MON 10/01/11
Brisbane R at Burtons Br #	10.88m rising	03:05 PM MON 10/01/11
Brisbane R at Kholo Br #	6.23m rising	03:06 PM MON 10/01/11
Brisbane R at Mt Crosby #	14.26m rising	03:07 PM MON 10/01/11
Brisbane R at Colleges Crossing #	11.96m rising	03:09 PM MON 10/01/11
Bremer R at Spressers Br #	5.07m rising	03:09 PM MON 10/01/11
Bremer R at Rosewood #	4.94m rising	03:02 PM MON 10/01/11
Bremer R at Five Mile Br Walloon #	5.12m falling	03:09 PM MON 10/01/11
Warrill Ck at Harrisville #	3.82m rising	03:05 PM MON 10/01/11
Warrill Ck at Amberley DNR *	5.34m rising	08:10 AM MON 10/01/11
Bremer R at Ipswich #	6.6m rising	02:40 PM MON 10/01/11
Brisbane R at Moggill #	5.52m rising	02:59 PM MON 10/01/11
Brisbane R at Jindalee Br #	3.7m rising	02:50 PM MON 10/01/11
Brisbane R at City Gauge #	1.36m falling	03:09 PM MON 10/01/11

*automatic station

Warnings and River Height Bulletins are available at http://www.bom.gov.au/qld/flood/ . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.

Cindy Hulsey

From: Peter Baddiley [P.Baddiley[redacted]
Sent: Monday, 10 January 2011 4:33 PM
To: Barry Dennien
Cc: Dan Spiller; 'flood.qld[redacted]
Subject: RE: Tech report [SEC=UNCLASSIFIED]
Attachments: Technical Situation Report W37_BOM.docx

Categories: T8

BOM additions as at 4:30pm Monday.

Peter Baddiley
Regional Hydrology Manager
Climate & Water Division
Bureau of Meteorology
Level 21, 69 Ann Street
GPO Box 413, BRISBANE, QLD, AUSTRALIA 4001
Phone:[redacted] Fax :[redacted]
EMAIL: p.baddiley[redacted]
EMAIL for flood matters: flood.qld[redacted]
WWW : www.bom.gov.au

From: Barry Dennien [mailto:Barry.Dennien[redacted]
Sent: Monday, 10 January 2011 4:11 PM
To: Peter Baddiley
Cc: Dan Spiller
Subject: Tech report

Barry Dennien
Chief Executive Officer
SEQ Water Grid Manager
Phone:[redacted]
Email: barry.dennien[redacted]
Visit: Level 15, 53 Albert Street, Brisbane
Post: PO Box 16205, City East Qld 4002
ABN: 14783 317 630

TECHNICAL SITUATION REPORT

TSR Number	W37	Date of TSR release	10.1.2011	Time of TSR release	3pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Continue increasing releases to discharge flood waters but keep impact downstream to minimum.	
Strategy	• All bridges are now inundated . • Ramp up to 2800cumecs which will give a flow in the lower Brisbane River of around 4,000cumecs	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

Significant rainfall has fallen in the Wivenhoe Dam catchment over the last 3 hours, with falls exceeding 100mm. This rainfall will significantly increase inflows into the dam. A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 10:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (75mm to 150mm); Wivenhoe/Somerset Dam Catchments (50mm – 100mm). Potentially significant rain moving towards the dam catchments is currently evident on the BOM radar.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.41m AHD and rising. Peak inflow to the dam is estimated to be about 4,200 m3/s. Five sluice gates are open releasing about 1,100m3/s (95,000ML/day) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5m AHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 72.41m AHD and rising quickly. The rainfall experienced over the last 2 to 3 hours will result in significant further inflows into the dam and releases from the dam will need to be increased in accordance with Flood Mitigation procedures and to ensure that a fuse plug is not initiated. The initiation of a fuse plug will result in a rapid uncontrolled outflow from the dam of 2,000m3/s being added to the gate release outflow. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

Five radial gates are currently open at the dam releasing about 2,000m3/s into the Brisbane River and

this will need to be increased steadily to an outflow of 2,800m3/s over the next 9 hours (commencing at 1500). At this stage, the dam will reach about 73.8m AHD during Tuesday morning.

The objective for dam operations is currently to minimise the impact of urban flooding in areas downstream of the dam and to keep river flows in the lower Brisbane River below 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s. If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate rapidly over the next 24 hours. The flood operation centre will continue to monitor the situation and provide every six hours until the situation stabilizes.

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

BoM assessment

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

Refer to details in latest Brisbane River flood warning issued at 4:16pm Monday 10 Jan. Warning is to be updated at 9pm tonight.

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday.

Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

BoM Technical Officer name	Peter Baddiley
BoM Technical Officer position title	Supervising Hydrologist, Flood Warning Centre
BoM Technical Officer contact details	flood.qld[redacted] / [redacted]

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time		Trigger Event	Change in strategy

D354

From:	Barry Dennien </O=SOUTH EAST QUEENSLAND WATER GRID MANAGER/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=BARRY.DENNIEN>
Sent:	Monday, January 10, 2011 4:37 PM
To:	stephen.robertson[redacted]; ken.smith[redacted] Lance McCallum (lance.mccallum[redacted]; tim.watts[redacted] geoff.stead[redacted] lauren.sims[redacted]; Martin.PeterJ[redacted] Dunn.KerryG[redacted]; debbie.best[redacted]
Cc:	pbird[redacted] SEQWGM Media <media[redacted] damien.brown[redacted] Bob.Reilly[redacted] Madgwick.DarrenT[redacted] sstevenson[redacted] Dan Spiller <Daniel.Spiller[redacted]>; Scott Denner <Scott.Denner[redacted]
Subject:	FW: FLDWARN for Lower Brisbane and Bremer Rs [SEC=UNCLASSIFIED]

Folks

For information

Barry Dennien

TO::BOM615

IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY
Issued at 4:16 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

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LOCKYER CREEK:
Further rainfall during Monday has led to renewed rises in the Lockyer Creek catchment. Rainfall is forecast to continue this evening and a return to moderate to major flood levels is expected overnight and during Tuesday. Major flood levels are expected to continue at Lyons Bridge with rises above 15 metres likely during Tuesday.

BREMER RIVER:
Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK
Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley overnight.

MIDDLE AND LOWER BRISBANE:
SEQwater advises releases from Wivenhoe Dam will increase during Monday. Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

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(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:
Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday. Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:
The next warning will be issued at about 9pm Monday.

Latest River Heights:

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Laidley Ck at Showground Weir #	6.98m	rising	03:07 PM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.43m	falling	01:00 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	11.36m	falling	03:05 PM MON 10/01/11
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Brisbane R at Lowood Pump Stn #	14.13m	falling	03:07 PM MON 10/01/11
Brisbane R at Savages Crossing #	14.15m	rising	03:09 PM MON 10/01/11
Brisbane R at Burtons Br #	10.88m	rising	03:05 PM MON 10/01/11
Brisbane R at Kholo Br #	6.23m	rising	03:06 PM MON 10/01/11
Brisbane R at Mt Crosby #	14.26m	rising	03:07 PM MON 10/01/11
Brisbane R at Colleges Crossing #	11.96m	rising	03:09 PM MON 10/01/11
Bremer R at Spressers Br #	5.07m	rising	03:09 PM MON 10/01/11
Bremer R at Rosewood #	4.94m	rising	03:02 PM MON 10/01/11
Bremer R at Five Mile Br Walloon #	5.12m	falling	03:09 PM MON 10/01/11
Warrill Ck at Harrisville #	3.82m	rising	03:05 PM MON 10/01/11
Warrill Ck at Amberley DNR *	5.34m	rising	08:10 AM MON 10/01/11
Bremer R at Ipswich #	6.6m	rising	02:40 PM MON 10/01/11
Brisbane R at Moggill #	5.52m	rising	02:59 PM MON 10/01/11
Brisbane R at Jindalee Br #	3.7m	rising	02:50 PM MON 10/01/11
Brisbane R at City Gauge #	1.36m	falling	03:09 PM MON 10/01/11

*automatic station

Warnings and River Height Bulletins are available at http://www.bom.gov.au/qld/flood/ . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.

Cindy Hulsey

From: Barry Dennien
Sent: Monday, 10 January 2011 6:45 PM
To: Madgwick.DarrenT[redacted] Dunn.KerryG[redacted]
Martin.Peter[redacted]
Cc: Dan Spiller; debbie.best[redacted]
Attachments: img-110173945-0001.jpg; Technical Situation Report W37.docx

Categories: T8

Folks

Please find latest Technical report on Wivenhoe releases, BOM forecast of river heights accounting for the releases and downstream flows, and BCC flood maps accounting for the releases and downstream flows. Brisbane forecasts of properties impacted.

Further updates will be issued tomorrow morning.

Australian Government Bureau of Meteorology Queensland

PRIORITY
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY Issued at 4:16 PM on Monday the 10th of January 2011 by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:
Further rainfall during Monday has led to renewed rises in the Lockyer Creek catchment. Rainfall is forecast to continue this evening and a return to moderate to major flood levels is expected overnight and during Tuesday. Major flood levels are expected to continue at Lyons Bridge with rises above 15 metres likely during Tuesday.

BREMER RIVER:
Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK
Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley overnight.

MIDDLE AND LOWER BRISBANE:
SEQwater advises releases from Wivenhoe Dam will increase during Monday.
Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:
Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday.
Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:
The next warning will be issued at about 9pm Monday.

Brisbane Properties affected

Number of properties affected:
- 455 properties (parcels of land) have been identified as experiencing flooding on next Wednesday (at least 221 of these are homes and businesses)
- 7, 731 properties may see some flooding either on the land or outside the property
- More than 400 streets will be affected by flooding in some way

Below is the list of suburbs where the 455 properties that will be affected are located. In brackets is the number of properties/parcels of land that will be affected in each suburb. This is based on the data and modelling we have done to date and we may see increases in these numbers once figures are revised.
- Rocklea (80)
- Albion (49)
- Milton (49)
- Auchenflower (40)
- Norman Park (26)
- Pinkenba (26)
0- Oxley (19)
- New Farm (17)
- Kangaroo Point (16)
- Bulimba & Sherwood (14 each)
- Yeronga (10)

- Graceville (9)
- Newstead (8)
- Yeerongpilly (7)
- Bowen Hills (6)
- Indooroopilly, Windsor (5 each)
- Wacol, Brisbane City, Moggill, East Brisbane, Fortitude Valley (4 each)
- Chelmer, Hemmant, Tennyson (3 each)
- Fairfield, Fig Tree Pocket, Coorparoo, South Brisbane, Lytton, Murrarie (2 each)

7 Rapid Response Group teams will be working from both a map and a database to doorknock/letterbox drop a flyer to the 221 homes and businesses that are predicted as being likely to experience innundation. They will visually check using the map that none of the remaining parcels of land from the total 455 properties identified as experiencing flooding are actually homes or businesses also.

The locations where the 221 homes and businesses are located is Albion, Auchenflower, Brisbane City, Bowen Hills, Bulimba, Fortitude Valley, Graceville, Hemmant, Indooroopilly, Kangaroo Point, Lytton, Milton, New Farm, Newstead, Norman Park, Oxley, Pinkenba, Rocklea, Sherwood, Tennyson, Wacol, Windsor, Yeronga.

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Regards

Barry Dennien
Chief Executive Officer
SEQ Water Grid Manager
Phone: [redacted] | **Fax:** [redacted] **Mobile:** [redacted]

Email: barry.dennien[redacted]
Visit: Level 15, 53 Albert Street, Brisbane
Post: PO Box 16205, City East Qld 4002
ABN: 14783 317 630

TECHNICAL SITUATION REPORT

TSR Number	W37	Date of TSR release	10.1.2011	Time of TSR release	3pm

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Continue increasing releases to discharge flood waters but keep impact downstream to minimum.	
Strategy	• All bridges are now inundated . • Ramp up to 2800cumecs which will give a flow in the lower Brisbane River of around 4,000cumecs	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

Significant rainfall has fallen in the Wivenhoe Dam catchment over the last 3 hours, with falls exceeding 100mm. This rainfall will significantly increase inflows into the dam. A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 10:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (75mm to 150mm); Wivenhoe/Somerset Dam Catchments (50mm – 100mm). Potentially significant rain moving towards the dam catchments is currently evident on the BOM radar.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.41m AHD and rising. Peak inflow to the dam is estimated to be about 4,200 m3/s. Five sluice gates are open releasing about 1,100m3/s (95,000ML/day) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5m AHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 72.41m AHD and rising quickly. The rainfall experienced over the last 2 to 3 hours will result in significant further inflows into the dam and releases from the dam will need to be increased in accordance with Flood Mitigation procedures and to ensure that a fuse plug is not initiated. The initiation of a fuse plug will result in a rapid uncontrolled outflow from the dam of 2,000m3/s being added to the gate release outflow. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

Five radial gates are currently open at the dam releasing about 2,000m3/s into the Brisbane River and

this will need to be increased steadily to an outflow of 2,800m3/s over the next 9 hours (commencing at 1500). At this stage, the dam will reach about 73.8m AHD during Tuesday morning.

The objective for dam operations is currently to minimise the impact of urban flooding in areas downstream of the dam and to keep river flows in the lower Brisbane River below 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s. If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate rapidly over the next 24 hours. The flood operation centre will continue to monitor the situation and provide every six hours until the situation stabilizes.

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	[redacted]	11.1.2011	[redacted]	[redacted]	Change in strategy

D390

Gina O'Driscoll

From: Paul Bird [pbird[redacted]
Sent: Monday, 10 January 2011 7:31 PM
To: SEQWGM Media; aroebuck[redacted] greg.swain[redacted] GSTUBBS[redacted] Kathy Petrik; lisa.m.martin[redacted] Paula Weston; tjacobs[redacted] Arminda Roberts; Bec Middlemiss; Michael Fiechtner; Mike Foster; Tara King; Barry Dennien; Dan Spiller; Scott Denner
Cc: ELT; Michael Lyons; Geoff.Stead[redacted]
Subject: Release update
Attachments: image001.jpg; image004.jpg

As at 7.00 pm on Monday 10 January, the following applies:

SOMERSET DAM:
As a result of rainfall and inflows, water is being released into Wivenhoe through five sluice gates at about 146,000 megalitres per day, reducing to 103,000 megalitres per day by late Tuesday 11 January, and is likely to continue until Thursday 13 January. Areas around Kilcoy are likely to be impacted as a result of the rising dam levels.

WIVENHOE DAM:
Stream levels are rising quickly as a result of significant heavy rainfall. The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam.

Gate Releases are being increased to 240,000 megalitres a day are underway and are to continue until at least Sunday 16 January.

Local Councils have been advised that as a result of Lockyer Creek flows, local runoff and Wivenhoe releases, Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge Colleges Crossing, Fernvale Bridge, and Mt Crosby Weir Bridge may be inundated until at least the weekend.

NORTH PINE DAM:
Five gates are open, releasing around 31,000 megalitres a day and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

LESLIE HARRISON DAM:
Gate releases are underway due to rainfall and inflows.

HINZE DAM:
A minor release of around 1200 megalitres a day is being made through the emergency gates. There is no public access to the spillway.

For detailed information on road crossing closures and other potential impacts, always contact your local council.

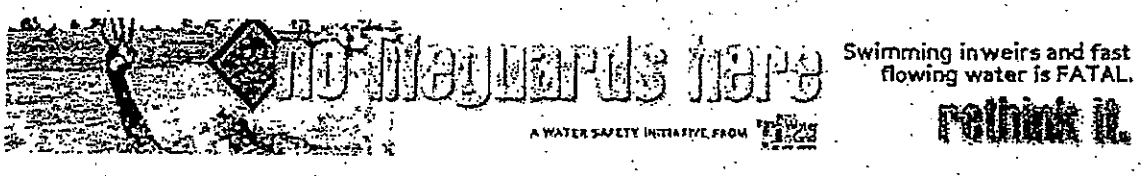
This information will be updated on the morning of Tuesday 11 January.

Paul Bird
Senior Communications Advisor
Queensland Bulk Water Supply Authority *trading as* Seqwater

seqwater
WATER FOR LIFE

P [redacted] M [redacted] E pbird[redacted]

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



Gina O'Driscoll

From: Rob Drury [rdrury[redacted]
Sent: Tuesday, 11 January 2011 6:18 AM
To: Dan Spiller
Cc: Barry Dennien; Peter Borrows; Paul Bird; Michael Lyons
Subject: RE: Impact of Lockyer flows
Attachments: image001.jpg; image002.png

Dan,
I will send a report shortly but below are words I was going to send. I have also attached the BoM warning for the Lockyer that they sent this morning.
They are reissuing their warning this morning based on new information.

Basically the FOC was going to try to slow our releases last night to give a small window for the Lockyer flood to go through however we again received and are still receiving heavy rain in the catchments.

Currently the FOC has shut some sluices at Somerset to store more water to keep Wivenhoe below RL74 at which we need to start increasing releases. The first fuse plug goes at about RL 75.7m

The strategy is now to keep releases as is to not worsen the situation downstream as the Lockyer recorded levels higher than any on record. However we may still need to increase releases depending on what happens through the day.

The FOC have given our release strategy (not really different in releases at this stage) to the BoM and they will reissue their flood warnings based on that and other flows in the Lockyer and Bremer.

The FOC have spoken to BCC and ICC and we will send them an update. BCC are having a LDMG meeting this morning. Dan, not sure if anyone from the WGM is going but Chris Lavin is the contact.

Rob

From: Aifs Operational Manager[SMTP:AIFSQLD[redacted]
Sent: Tuesday, January 11, 2011 4:06:54 AM
To: weather
Subject: BOM: FLDWARN for Lower Brisbane and Bremer Rs [SEC=UNCLASSIFIED] Auto forwarded by a Rule

TO::BOM615

IDQ20805

Australian Government Bureau of Meteorology Queensland

PRIORITY
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY Issued at 4:06 AM on Tuesday the 11th of January 2011 by the Bureau of Meteorology, Brisbane.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge, with strong stream rises expected during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane during Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:
Extremely heavy rainfall during Monday led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton Monday evening before the station failed. This level was well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently arriving at Lyons Bridge, with strong stream rises expected in the next few hours. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood.

Renewed stream rises have commenced in Lockyer Creek at Lyons Bridge with a peak between 16 and 16.5 metres expected Tuesday morning. This is likely to be similar in level to the 1996 flood.

BREMER RIVER:
The Bremer River at Walloon has exceeded the moderate flood level. The Bremer River at Rosewood peaked at 5.8 metres around midnight monday.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK
Warrill Creek at Amberley peaked at 5.98 metres around 9pm Monday.

MIDDLE AND LOWER BRISBANE:
Moderate flooding is developing at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:
Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres (minor) with the afternoon high tide on Tuesday. Reach about 3 metres (moderate) with the high tides on Wednesday.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:
The next warning will be issued at about 8am Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	3.49m falling	02:10 AM TUE 11/01/11
Sandy Creek at Sandy Creek Road #	2.15m falling	03:19 AM TUE 11/01/11
Ma Ma Ck at Harm's *	3.26m rising	02:30 AM TUE 11/01/11
Tenthill Ck at Tenthill *	5.57m rising	02:40 AM TUE 11/01/11
Lockyer Ck at Gatton #	18.92m rising	06:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	6.39m rising	02:20 AM TUE 11/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	7.84m rising	03:25 AM TUE 11/01/11
Laidley Ck at Warrego Hwy *	6.41m rising	02:00 AM TUE 11/01/11
Lockyer Ck at Glenore Grove #	13.8m falling	03:24 AM TUE 11/01/11
Lockyer Ck at Lyons Br #	15.55m rising	03:23 AM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	15.39m rising	02:40 AM TUE 11/01/11
Lockyer Ck at O'Reilly's Weir #	18m falling	03:28 AM TUE 11/01/11
Brisbane R at Lowood Pump Stn #	15.93m falling	03:31 AM TUE 11/01/11
Brisbane R at Savages Crossing #	15.89m rising	03:29 AM TUE 11/01/11
Brisbane R at Burtons Br #	12.22m rising	03:29 AM TUE 11/01/11
Brisbane R at Kholo Br #	7.99m rising	03:29 AM TUE 11/01/11
Brisbane R at Mt Crosby #	15.82m steady	03:30 AM TUE 11/01/11
Brisbane R at Mt Crosby #	14.08m falling	04:39 PM MON 10/01/11
Brisbane R at Colleges Crossing #	13.91m rising	03:32 AM TUE 11/01/11
Bremer R at Rosewood#	5.56m falling	03:11 AM TUE 11/01/11
Bremer R at Five Mile Br Walloon #	6.4m rising	03:15 AM TUE 11/01/11
Warrill Ck at Greens Rd Amberley #	5.84m falling	03:29 AM TUE 11/01/11
Bremer R at One Mile Br #	13.75m rising	03:31 AM TUE 11/01/11
Bremer R at Hancocks Br Brassall #	11.33m rising	03:22 AM TUE 11/01/11
Bremer R at Ipswich #	8.55m rising	03:31 AM TUE 11/01/11
Brisbane R at Moggill #	7.07m rising	03:29 AM TUE 11/01/11
Brisbane R at Jindalee Br #	4.5m rising	03:29 AM TUE 11/01/11
Brisbane R at City Gauge #	1.4m falling	03:15 AM TUE 11/01/11

*automatic station

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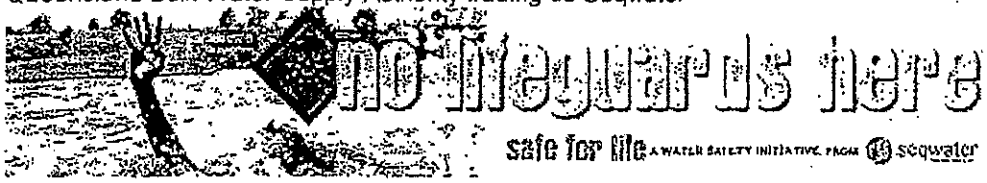
Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.

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



seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] M [redacted] E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

From: Dan Spiller [mailto:Daniel.Spiller[redacted]
Sent: Tuesday, 11 January 2011 6:13 AM
To: Rob Drury
Cc: Barry Dennien; Peter Borrows; Paul Bird; Michael Lyons
Subject: Impact of Lockyer flows

Rob,

I am fielding calls from Gov seeking advice about the impact of the Lockyer Valley flows on Brisbane River levels and on overnight rainfall (I am told that there was 50mm in two hours in Lockyer).

Early advice would be good. There are many nervous people.

Thanks,
Dan

Litsupport Brisbane

From:	Dan Spiller
Sent:	Tuesday, 11 January 2011 6:29 AM
To:	Debbie Best
Cc:	Martin.Peter[redacted] Dunn.KerryG[redacted] Barry Dennien; Tim Watts
Subject:	Fwd: Impact of Lockyer flows
Attachments:	Seqwater_No-Lifeguards-Here_email_strap.png; ATT00001.htm; cidimage001.png@01CA24E1.BDB90020; ATT00002.htm

Debbie,

Preliminary advice below. Report being prepared and BoM remodeling.

Dan

Begin forwarded message:

From: Rob Drury <rdrury[redacted]
Date: 11 January 2011 6:17:48 AM GMT+10:00
To: Dan Spiller <Daniel.Spiller[redacted]
Cc: Barry Dennien <Barry.Dennien[redacted]>, Peter Borrows <pborrows[redacted], Paul Bird <pbird[redacted]>, Michael Lyons <Michael.Lyons[redacted]>
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The strategy is now to keep releases as is to not worsen the situation downstream as the Lockyer recorded levels higher than any on record. However we may still need to increase releases depending on what happens through the day.

The FOC have given our release strategy (not really different in releases at this stage) to the BoM and they will reissue their flood warnings based on that and other flows in the Lockyer and Bremer.

The FOC have spoken to BCC and ICC and we will send them an update. BCC are having a LDMG meeting this morning. Dan, not sure if anyone from the WGM is going but Chris Lavin is the contact.

Rob

From: Aifs Operational Manager[SMTP:AIFSQLD[redacted]

Sent: Tuesday, January 11, 2011 4:06:54 AM

To: weather

Subject: BOM: FLDWARN for Lower Brisbane and Bremer Rs [SEC=UNCLASSIFIED] Auto forwarded by a Rule

TO::BOM615

IDQ20805

Australian Government Bureau of Meteorology Queensland

PRIORITY

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Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane during Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Extremely heavy rainfall during Monday led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton Monday evening before the station failed. This level was well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently arriving at Lyons Bridge, with strong stream rises expected in the next few hours. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood.

Renewed stream rises have commenced in Lockyer Creek at Lyons Bridge with a peak between 16 and 16.5 metres expected Tuesday morning. This is likely to be similar in level to the 1996 flood.

BREMER RIVER:

The Bremer River at Walloon has exceeded the moderate flood level. The Bremer River at Rosewood peaked at 5.8 metres around midnight monday.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Warrill Creek at Amberley peaked at 5.98 metres around 9pm Monday.

MIDDLE AND LOWER BRISBANE:

Moderate flooding is developing at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres (minor) with the afternoon high tide on Tuesday. Reach about 3 metres (moderate) with the high tides on Wednesday.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 8am Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	3.49m falling	02:10 AM TUE 11/01/11
Sandy Creek at Sandy Creek Road #	2.15m falling	03:19 AM TUE 11/01/11
Ma Ma Ck at Harm's *	3.26m rising	02:30 AM TUE 11/01/11
Tenthill Ck at Tenthill *	5.57m rising	02:40 AM TUE 11/01/11
Lockyer Ck at Gatton #	18.92m rising	06:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	6.39m rising	02:20 AM TUE 11/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	7.84m rising	03:25 AM TUE 11/01/11
Laidley Ck at Warrego Hwy *	6.41m rising	02:00 AM TUE 11/01/11
Lockyer Ck at Glenore Grove #	13.8m falling	03:24 AM TUE 11/01/11
Lockyer Ck at Lyons Br #	15.55m rising	03:23 AM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	15.39m rising	02:40 AM TUE 11/01/11

Lockyer Ck at O'Reilly's Weir # 18m falling 03:28 AM TUE 11/01/11

Brisbane R at Lowood Pump Stn # 15.93m falling 03:31 AM TUE 11/01/11

Brisbane R at Savages Crossing # 15.89m rising 03:29 AM TUE 11/01/11

Brisbane R at Burtons Br # 12.22m rising 03:29 AM TUE 11/01/11

Brisbane R at Kholo Br # 7.99m rising 03:29 AM TUE 11/01/11

Brisbane R at Mt Crosby # 15.82m steady 03:30 AM TUE 11/01/11

Brisbane R at Mt Crosby # 14.08m falling 04:39 PM MON 10/01/11

Brisbane R at Colleges Crossing # 13.91m rising 03:32 AM TUE 11/01/11

Bremer R at Rosewood# 5.56m falling 03:11 AM TUE 11/01/11

Bremer R at Five Mile Br Walloon # 6.4m rising 03:15 AM TUE 11/01/11

Warrill Ck at Greens Rd Amberley # 5.84m falling 03:29 AM TUE 11/01/11

Bremer R at One Mile Br # 13.75m rising 03:31 AM TUE 11/01/11

Bremer R at Hancocks Br Brassall # 11.33m rising 03:22 AM TUE 11/01/11

Bremer R at Ipswich # 8.55m rising 03:31 AM TUE 11/01/11

Brisbane R at Moggill # 7.07m rising 03:29 AM TUE 11/01/11

Brisbane R at Jindalee Br # 4.5m rising 03:29 AM TUE 11/01/11

Brisbane R at City Gauge # 1.4m falling 03:15 AM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at http://www.bom.gov.au/qld/flood/ . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.

----------Safe Stamp----------

For more information regarding this service, please contact your service provider.

Robert Drury

Dam Operations Manager

Water Delivery

Queensland Bulk Water Supply Authority *trading as* Seqwater

D415

TECHNICAL SITUATION REPORT

TSR Number	W38	Date of TSR release	11.1.2011	Time of TSR release	6.30am

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below RL74 at which significant releases need to be made to ensure the dam security and minimise flood impacts downstream if possible	
Strategy	• Maintain current release of 2750cumecs as long as possible but it may need to be increased • Close sluices at Somerset Dam to store more water however will affect upstream areas. •	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

Rainfall continues in the North Pine Dam, Somerset Dam and Wivenhoe Dam catchments. Isolated falls in the Upper Brisbane River of up to 125 mm have been recorded with widespread falls of 40 to 70 mm in the Somerset Dam catchment. This rainfall will increase inflows into the dam.

There has also been 20 to 60 mm in the Lockyer Creek catchment in the last 12 hours with falls of up to 30 mm in the Bremer River.

A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 16:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (25mm to 50mm, with isolated falls to 100mm); Wivenhoe/Somerset Dam Catchments (25mm to 50mm, with isolated falls to 100mm).

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level is 39.80m AHD and has commenced rising again (storing 4,400ML above FSL). Five gates are open releasing 177 m3/s. The inflow into the dam since the commencement of the event is 77,000 ML. Estimated event volume is 88,000 ML assuming no further rainfall. Releases from the dam will continue until at least Wednesday 12 January 2011.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.27m AHD and falling slowly. Peak inflow to the dam is estimated to be about

4,200 m3/s. Total discharge into Wivenhoe Dam is currently 1400 m3/s and this discharge will be decreased in the next few hours to be around 500 m3/s later on Tuesday. This is to ensure that the combined flood mitigation capacity in Somerset and Wivenhoe Dam is maximized.

The dam level peaked at 103.52m AHD at 19:00 on Monday 10 January 2011, (unless further significant rainfall is experienced). Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 73.51m AHD and rising at about 25 mm/hour. Releases from the dam have been held at a rate of 2,750 m3/s since 19:30 hours on Monday 10 January 2011. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

The BoM has provided further advice about the flash flooding experienced in the upper areas of Lockyer Creek. The rainfall responsible for this event was not observed at any rainfall stations but it is considered to be extreme. Flood levels in the Lockyer Creek catchment will exceed maximum recorded levels in some stations in the upper catchment. This flow will result in increases in Brisbane River levels below the junction of Lockyer Creek.

Five radial gates are currently open at the dam releasing about 2,750m3/s into the Brisbane River. At this stage, the dam will reach just over 74.0m AHD during Tuesday evening.

Above EL 74.0m AHD the objective for dam operations is to maintain the security of the dam and minimise downstream flood flows if possible.

If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.

The BoM will provide further information regarding the magnitude of the flash flood event occurring in Lockyer Creek early Tuesday morning. Consideration was given to modifying the releases from Wivenhoe Dam to try to moderate the peak flows emanating from Lockyer Creek but the rainfall in the past 12 hours in the catchment above the dam makes this option not possible. Therefore instead of decreasing releases to accommodate the Lockyer Creek flows, the strategy will endeavour to maintain the current releases until Lockyer Creek peaks.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate over the next 24 hours. The flood operation centre will continue to monitor the situation and provide situation reports every six hours until the situation stabilizes.

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event	

Litsupport Brisbane

From: Rob Drury [rdrury[redacted]
Sent: Tuesday, 11 January 2011 6:36 AM
To: Rob Drury; Dan Spiller; Paul Bird; Stan Stevenson; Peter Borrows; Peter.Allen[redacted]
Cc: David Roberts
Subject: RE: Technical Report
Attachments: Technical Situation Report W38.docx

Attached is the latest report. Also below is the BoM warning with info on the Lockyer flood. The Somerset Council chambers had water through it and the library and they are working off site at the moment so communications with the Council may be impacted.

Basically the FOC was going to try to slow our releases last night to give a small window for the Lockyer flood to go through however we again received and are still receiving heavy rain in the catchments. Hence the best we can do at this stage is not increase releases.

Currently the FOC has shut some sluices at Somerset to store more water to keep Wivenhoe below RL74 at which we need to start increasing releases to ensure dam security and minimise downstream flood impacts if possible.

The strategy is now to keep releases at current levels so as to not worsen the situation downstream as the Lockyer recorded levels higher than any on record at some spots. However we may still need to increase releases depending on what happens through the day.

The FOC have given our release strategy (not really different in releases at this stage) to the BoM and they will reissue their flood warnings based on that and other flows in the Lockyer and Bremer and downstream.

The FOC have spoken to BCC and ICC and we will send them an update. BCC are having a LDMG meeting this morning.

Rob

From: Aifs Operational Manager[SMTP:AIFSQLD[redacted]]
Sent: Tuesday, January 11, 2011 4:06:54 AM
To: weather
Subject: BOM: FLDWARN for Lower Brisbane and Bremer Rs [SEC=UNCLASSIFIED] Auto forwarded by a Rule

TO::BOM615

IDQ20805

Australian Government Bureau of Meteorology Queensland

PRIORITY
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY Issued at 4:06 AM on Tuesday the 11th of January 2011 by the Bureau of Meteorology, Brisbane.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge, with strong stream rises expected during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane during Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:
Extremely heavy rainfall during Monday led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton Monday evening before the station failed. This level was well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently arriving at Lyons Bridge, with strong stream rises expected in the next few hours. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood.

Renewed stream rises have commenced in Lockyer Creek at Lyons Bridge with a peak between 16 and 16.5 metres expected Tuesday morning. This is likely to be similar in level to the 1996 flood.

BREMER RIVER:
The Bremer River at Walloon has exceeded the moderate flood level. The Bremer River at Rosewood peaked at 5.8 metres around midnight monday.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK
Warrill Creek at Amberley peaked at 5.98 metres around 9pm Monday.

MIDDLE AND LOWER BRISBANE:
Moderate flooding is developing at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:
Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres (minor) with the afternoon high tide on Tuesday. Reach about 3 metres (moderate) with the high tides on Wednesday.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:
The next warning will be issued at about 8am Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
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*automatic station

Warnings and River Height Bulletins are available at http://www.bom.gov.au/qld/flood/ . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.

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

seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | M [redacted] | E [redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

TSR Number	W38	Date of TSR release	11.1.2011	Time of TSR release	6.30am

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below RL74 at which significant releases need to be made to ensure the dam security and minimise flood impacts downstream if possible	
Strategy	• Maintain current release of 2750cumecs as long as possible but it may need to be increased • Close sluices at Somerset Dam to store more water however will affect upstream areas. •	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

Rainfall continues in the North Pine Dam, Somerset Dam and Wivenhoe Dam catchments. Isolated falls in the Upper Brisbane River of up to 125 mm have been recorded with widespread falls of 40 to 70 mm in the Somerset Dam catchment. This rainfall will increase inflows into the dam.

There has also been 20 to 60 mm in the Lockyer Creek catchment in the last 12 hours with falls of up to 30 mm in the Bremer River.

A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 16:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (25mm to 50mm, with isolated falls to 100mm); Wivenhoe/Somerset Dam Catchments (25mm to 50mm, with isolated falls to 100mm).

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level is 39.80m AHD and has commenced rising again (storing 4,400ML above FSL). Five gates are open releasing 177 m3/s. The inflow into the dam since the commencement of the event is 77,000 ML. Estimated event volume is 88,000 ML assuming no further rainfall. Releases from the dam will continue until at least Wednesday 12 January 2011.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.27m AHD and falling slowly. Peak inflow to the dam is estimated to be about

4,200 m3/s. Total discharge into Wivenhoe Dam is currently 1400 m3/s and this discharge will be decreased in the next few hours to be around 500 m3/s later on Tuesday. This is to ensure that the combined flood mitigation capacity in Somerset and Wivenhoe Dam is maximized.

The dam level peaked at 103.52m AHD at 19:00 on Monday 10 January 2011, (unless further significant rainfall is experienced). Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 73.51m AHD and rising at about 25 mm/hour. Releases from the dam have been held at a rate of 2,750 m3/s since 19:30 hours on Monday 10 January 2011. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

The BoM has provided further advice about the flash flooding experienced in the upper areas of Lockyer Creek. The rainfall responsible for this event was not observed at any rainfall stations but it is considered to be extreme. Flood levels in the Lockyer Creek catchment will exceed maximum recorded levels in some stations in the upper catchment. This flow will result in increases in Brisbane River levels below the junction of Lockyer Creek.

Five radial gates are currently open at the dam releasing about 2,750m3/s into the Brisbane River. At this stage, the dam will reach just over 74.0m AHD during Tuesday evening.

Above EL 74.0m AHD the objective for dam operations is to maintain the security of the dam and minimise downstream flood flows if possible.

If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.

The BoM will provide further information regarding the magnitude of the flash flood event occurring in Lockyer Creek early Tuesday morning. Consideration was given to modifying the releases from Wivenhoe Dam to try to moderate the peak flows emanating from Lockyer Creek but the rainfall in the past 12 hours in the catchment above the dam makes this option not possible. Therefore instead of decreasing releases to accommodate the Lockyer Creek flows, the strategy will endeavour to maintain the current releases until Lockyer Creek peaks.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate over the next 24 hours. The flood operation centre will continue to monitor the situation and provide situation reports every six hours until the situation stabilizes.

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event

D423

Gina O'Driscoll

From: Paul Bird [pbird[redacted]
Sent: Tuesday, 11 January 2011 6:47 AM
To: SEQWGM Media; Reception; aroebuck[redacted]
greg.swain[redacted] GSTUBBS[redacted]; Kathy Petrik;
lisa.m.martin[redacted] Paula Weston; tjacobs[redacted]
Arminda Roberts; Bec Middlemiss; Michael Fiechtner; Mike Foster; Tara King; Barry Dennien; Dan Spiller; Scott Denner
Cc: Michael Lyons; Mike Foster; Geoff Stead
Subject: Release Update
Attachments: image001.jpg; image004.jpg

As at 7.00 am on Tuesday 11 January, the following applies:

SOMERSET DAM:
Water is being released into Wivenhoe; however the amount discharged can change as conditions change. Levels in Somerset are expected to continue rising.

Areas around Kilcoy are likely to be impacted as a result of the rising dam levels.

WIVENHOE DAM:
Upstream levels are rising quickly as a result of significant heavy rainfall. The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam.

Releases through five gates have been held at around 236,000 megalitres a day since early Monday night 10 January as a result of outflows into the Brisbane River from the Lockyer Creek and Bremer River.

If further rainfall occurs, dam releases may need to be increased further.

Local Councils have been advised that as a result of Lockyer Creek flows, local runoff and Wivenhoe releases, Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge Colleges Crossing, Fernvale Bridge, and Mt Crosby Weir Bridge may be inundated until at Sunday 16 January.

NORTH PINE DAM:
Five gates are open, releasing around 15,000 megalitres a day and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

LESLIE HARRISON DAM:
Gate releases are underway due to rainfall and inflows.

HINZE DAM:
A minor release of around 1200 megalitres a day is being made through the emergency gates. There is no public access to the spillway.

For detailed information on road crossing closures and other potential impacts, always contact your local council.

This information will be updated during Tuesday 11 January.

Paul Bird
Senior Communications Advisor
Queensland Bulk Water Supply Authority *trading as* Seqwater

seqwater
WATER FOR LIFE

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

Gina O'Driscoll

From: Barry Dennien
Sent: Tuesday, 11 January 2011 6:57 AM
To: Madgwick.DarrenT[redacted] Dunn.KerryG[redacted]
Martin.PeterJ[redacted]
Subject: Wivenhoe releases - Monday PM
Attachments: img-110173945-0001.jpg; Technical Situation Report W37.docx

Folks

Please find latest Technical report on Wivenhoe releases, BOM forecast of river heights accounting for the releases and downstream flows, and BCC flood maps accounting for the releases and downstream flows. Brisbane forecasts of properties impacted.

Further updates will be issued tomorrow morning.

Australian Government Bureau of Meteorology Queensland

PRIORITY
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY Issued at 4:16 PM on Monday the 10th of January 2011 by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:
Further rainfall during Monday has led to renewed rises in the Lockyer Creek catchment. Rainfall is forecast to continue this evening and a return to moderate to major flood levels is expected overnight and during Tuesday. Major flood levels are expected to continue at Lyons Bridge with rises above 15 metres likely during Tuesday.

BREMER RIVER:
Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley overnight.

MIDDLE AND LOWER BRISBANE:
SEQwater advises releases from Wivenhoe Dam will increase during Monday.
Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:
Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Cindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday.
Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:
The next warning will be issued at about 9pm Monday.

Brisbane Properties affected

Number of properties affected:
- 455 properties (parcels of land) have been identified as experiencing flooding on next Wednesday (at least 221 of these are homes and businesses)
- 7, 731 properties may see some flooding either on the land or outside the property
- More than 400 streets will be affected by flooding in some way

Below is the list of suburbs where the 455 properties that will be affected are located. In brackets is the number of properties/parcels of land that will be affected in each suburb. This is based on the data and modelling we have done to date and we may see increases in these numbers once figures are revised.
- Rocklea (80)
- Albion (49)
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- Indooroopilly, Windsor (5 each)
- Wacol, Brisbane City, Moggill, East Brisbane, Fortitude Valley (4 each)
- Chelmer, Hemmant, Tennyson (3 each)
- Fairfield, Fig Tree Pocket, Coorparoo, South Brisbane, Lytton, Murrarie (2 each)

7 Rapid Response Group teams will be working from both a map and a database to doorknock/letterbox drop a flyer to the 221 homes and businesses that are predicted as being likely to experience inundation. They will visually check using the map that none of the remaining parcels of land from the total 455 properties identified as experiencing flooding are actually homes or businesses also.

The locations where the 221 homes and businesses are located is Albion, Auchenflower, Brisbane City, Bowen Hills, Bulimba, Fortitude Valley, Graceville, Hemmant, Indooroopilly, Kangaroo Point, Lytton, Milton, New Farm, Newstead, Norman Park, Oxley, Pinkenba, Rocklea, Sherwood, Tennyson, Wacol, Windsor, Yeronga.

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- 455 properties (parcels of land) have been identified as experiencing flooding on next Wednesday (at least 221 of these are homes and businesses)
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Regards

Barry Dennien
Chief Executive Officer
SEQ Water Grid Manager
Phone: [redacted] | Fax: [redacted] | Mobile: [redacted]
Email: barry.dennien[redacted]
Visit: Level 15, 53 Albert Street, Brisbane

Post: PO Box 16205, City East Qld 4002
ABN: 14783 317 630

Litsupport Brisbane

From: Dan Spiller
Sent: Tuesday, 11 January 2011 7:17 AM
To: 'stephen.robertson[redacted]; 'Ken Smith (ken.smith[redacted]; 'Lance McCallum (lance.mccallum[redacted]; 'Tim Watts (tim.watts[redacted]; 'Geoff Stead (geoff.stead[redacted]; 'lauren.sims[redacted]; 'Martin.PeterJ[redacted] 'Dunn.KerryG[redacted]
Cc: Barry Dennien; 'pborrows[redacted]; 'Rob Drury'; 'pbird[redacted] 'Damien Brown (damien.brown[redacted]; 'bob.reilly[redacted] 'terry.wall[redacted]; 'Madgwick.DarrenT[redacted]
Subject: Water Grid dam release strategy
Attachments: Technical Situation Report W38.docx

All,

Attached is the latest report, with the BoM warning on the Lockyer flood below.

Key points are:

- Current releases are 2,750 cubic metres per second (about 240,000 ML/day). Due to heavy rainfall in the catchment, it was not possible to reduce releases to allow the Lockyer Valley flows to pass.
- Further rainfall may result in the need to increase releases.
- Wivenhoe Dam is at 73.51m AHD and rising at about 25mm/hour. Above 74m, the primary objective becomes maintaining the security of the dam. Releases would be increased at this level with less scope for consideration of downstream impacts.

The BoM is remodeling based on this release strategy. There is some uncertainty about the level of flows coming from the Lockyer.

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

Debbie and Tim: I recommend that a briefing for the Minister would be appropriate, perhaps around 10am.

Regards,
Daniel Spiller

Australian Government Bureau of Meteorology Queensland

PRIORITY
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY Issued at 4:06 AM on Tuesday the 11th of January 2011 by the Bureau of Meteorology, Brisbane.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge, with strong stream rises expected during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane during Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:
Extremely heavy rainfall during Monday led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton Monday evening before the station failed. This level was well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently arriving at Lyons Bridge, with strong stream rises expected in the next few hours. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood.

Renewed stream rises have commenced in Lockyer Creek at Lyons Bridge with a peak between 16 and 16.5 metres expected Tuesday morning. This is likely to be similar in level to the 1996 flood.

BREMER RIVER:
The Bremer River at Walloon has exceeded the moderate flood level. The Bremer River at Rosewood peaked at 5.8 metres around midnight monday.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK
Warrill Creek at Amberley peaked at 5.98 metres around 9pm Monday.

MIDDLE AND LOWER BRISBANE:
Moderate flooding is developing at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:
Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres (minor) with the afternoon high tide on Tuesday. Reach about 3 metres (moderate) with the high tides on Wednesday.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 8am Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	3.49m falling	02:10 AM TUE 11/01/11
Sandy Creek at Sandy Creek Road #	2.15m falling	03:19 AM TUE 11/01/11
Ma Ma Ck at Harm's *	3.26m rising	02:30 AM TUE 11/01/11
Tenthill Ck at Tenthill *	5.57m rising	02:40 AM TUE 11/01/11
Lockyer Ck at Gatton #	18.92m rising	06:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	6.39m rising	02:20 AM TUE 11/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	7.84m rising	03:25 AM TUE 11/01/11
Laidley Ck at Warrego Hwy *	6.41m rising	02:00 AM TUE 11/01/11
Lockyer Ck at Glenore Grove #	13.8m falling	03:24 AM TUE 11/01/11
Lockyer Ck at Lyons Br #	15.55m rising	03:23 AM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	15.39m rising	02:40 AM TUE 11/01/11
Lockyer Ck at O'Reilly's Weir #	18m falling	03:28 AM TUE 11/01/11
Brisbane R at Lowood Pump Stn #	15.93m falling	03:31 AM TUE 11/01/11
Brisbane R at Savages Crossing #	15.89m rising	03:29 AM TUE 11/01/11
Brisbane R at Burtons Br #	12.22m rising	03:29 AM TUE 11/01/11
Brisbane R at Kholo Br #	7.99m rising	03:29 AM TUE 11/01/11
Brisbane R at Mt Crosby #	15.82m steady	03:30 AM TUE 11/01/11
Brisbane R at Mt Crosby #	14.08m falling	04:39 PM MON 10/01/11
Brisbane R at Colleges Crossing #	13.91m rising	03:32 AM TUE 11/01/11
Bremer R at Rosewood#	5.56m falling	03:11 AM TUE 11/01/11
Bremer R at Five Mile Br Walloon #	6.4m rising	03:15 AM TUE 11/01/11
Warrill Ck at Greens Rd Amberley #	5.84m falling	03:29 AM TUE 11/01/11
Bremer R at One Mile Br #	13.75m rising	03:31 AM TUE 11/01/11
Bremer R at Hancocks Br Brassall #	11.33m rising	03:22 AM TUE 11/01/11
Bremer R at Ipswich #	8.55m rising	03:31 AM TUE 11/01/11
Brisbane R at Moggill #	7.07m rising	03:29 AM TUE 11/01/11
Brisbane R at Jindalee Br #	4.5m rising	03:29 AM TUE 11/01/11
Brisbane R at City Gauge #	1.4m falling	03:15 AM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at http://www.bom.gov.au/qld/flood/ . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.

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

seqwater
WATER FOR LIFE

Ph [redacted] E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

TSR Number	W38	Date of TSR release	11.1.2011	Time of TSR release	6.30am

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below RL74 at which significant releases need to be made to ensure the dam security and minimise flood impacts downstream if possible	
Strategy	• Maintain current release of 2750cumecs as long as possible but it may need to be increased • Close sluices at Somerset Dam to store more water however will affect upstream areas. •	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

Rainfall continues in the North Pine Dam, Somerset Dam and Wivenhoe Dam catchments. Isolated falls in the Upper Brisbane River of up to 125 mm have been recorded with widespread falls of 40 to 70 mm in the Somerset Dam catchment. This rainfall will increase inflows into the dam.

There has also been 20 to 60 mm in the Lockyer Creek catchment in the last 12 hours with falls of up to 30 mm in the Bremer River.

A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 16:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (25mm to 50mm, with isolated falls to 100mm); Wivenhoe/Somerset Dam Catchments (25mm to 50mm, with isolated falls to 100mm).

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level is 39.80m AHD and has commenced rising again (storing 4,400ML above FSL). Five gates are open releasing 177 m3/s. The inflow into the dam since the commencement of the event is 77,000 ML. Estimated event volume is 88,000 ML assuming no further rainfall. Releases from the dam will continue until at least Wednesday 12 January 2011.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.27m AHD and falling slowly. Peak inflow to the dam is estimated to be about

4,200 m3/s. Total discharge into Wivenhoe Dam is currently 1400 m3/s and this discharge will be decreased in the next few hours to be around 500 m3/s later on Tuesday. This is to ensure that the combined flood mitigation capacity in Somerset and Wivenhoe Dam is maximized.

The dam level peaked at 103.52m AHD at 19:00 on Monday 10 January 2011, (unless further significant rainfall is experienced). Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 73.51m AHD and rising at about 25 mm/hour. Releases from the dam have been held at a rate of 2,750 m3/s since 19:30 hours on Monday 10 January 2011. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

The BoM has provided further advice about the flash flooding experienced in the upper areas of Lockyer Creek. The rainfall responsible for this event was not observed at any rainfall stations but it is considered to be extreme. Flood levels in the Lockyer Creek catchment will exceed maximum recorded levels in some stations in the upper catchment. This flow will result in increases in Brisbane River levels below the junction of Lockyer Creek.

Five radial gates are currently open at the dam releasing about 2,750m3/s into the Brisbane River. At this stage, the dam will reach just over 74.0m AHD during Tuesday evening.

Above EL 74.0m AHD the objective for dam operations is to maintain the security of the dam and minimise downstream flood flows if possible.

If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.

The BoM will provide further information regarding the magnitude of the flash flood event occurring in Lockyer Creek early Tuesday morning. Consideration was given to modifying the releases from Wivenhoe Dam to try to moderate the peak flows emanating from Lockyer Creek but the rainfall in the past 12 hours in the catchment above the dam makes this option not possible. Therefore instead of decreasing releases to accommodate the Lockyer Creek flows, the strategy will endeavour to maintain the current releases until Lockyer Creek peaks.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate over the next 24 hours. The flood operation centre will continue to monitor the situation and provide situation reports every six hours until the situation stabilizes.

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event	

D435

Gina O'Driscoll

From: Paul Bird [pbird[redacted]
Sent: Tuesday, 11 January 2011 6:47 AM
To: SEQWGM Media; Reception; aroebuck[redacted]; greg.swain[redacted]; GSTUBBS[redacted]; Kathy Petrik; lisa.m.martin[redacted]; Paula Weston; tjacobs[redacted]; Arminda Roberts; Bec Middlemiss; Michael Fiechtner; Mike Foster; Tara King; Barry Dennien; Dan Spiller; Scott Denner
Cc: Michael Lyons; Mike Foster; Geoff Stead
Subject: Release Update
Attachments: image001.jpg; image004.jpg

As at 7.00 am on Tuesday 11 January, the following applies:

SOMERSET DAM:
Water is being released into Wivenhoe; however the amount discharged can change as conditions change. Levels in Somerset are expected to continue rising.

Areas around Kilcoy are likely to be impacted as a result of the rising dam levels.

WIVENHOE DAM:
Upstream levels are rising quickly as a result of significant heavy rainfall. The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam.

Releases through five gates have been held at around 236,000 megalitres a day since early Monday night 10 January as a result of outflows into the Brisbane River from the Lockyer Creek and Bremer River.

If further rainfall occurs, dam releases may need to be increased further.

Local Councils have been advised that as a result of Lockyer Creek flows, local runoff and Wivenhoe releases, Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge Colleges Crossing, Fernvale Bridge, and Mt Crosby Weir Bridge may be inundated until at Sunday 16 January.

NORTH PINE DAM:
Five gates are open, releasing around 15,000 megalitres a day and will continue until at least Wednesday 12 January.

The local Council is being kept informed regarding Youngs Crossing.

LESLIE HARRISON DAM:
Gate releases are underway due to rainfall and inflows.

HINZE DAM:
A minor release of around 1200 megalitres a day is being made through the emergency gates. There is no public access to the spillway.

For detailed information on road crossing closures and other potential impacts, always contact your local council.

This information will be updated during Tuesday 11 January.

Paul Bird
Senior Communications Advisor
Queensland Bulk Water Supply Authority *trading as* Seqwater

seqwater
WATER FOR LIFE

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

Gina O'Driscoll

From: Barry Dennien
Sent: Tuesday, 11 January 2011 6:57 AM
To: Madgwick.DarrenT [redacted]; Dunn.KerryG [redacted]
Martin.PeterJ [redacted]
Subject: Wivenhoe releases - Monday PM
Attachments: img-110173945-0001.jpg; Technical Situation Report W37.docx

Folks

Please find latest Technical report on Wivenhoe releases, BOM forecast of river heights accounting for the releases and downstream flows, and BCC flood maps accounting for the releases and downstream flows. Brisbane forecasts of properties impacted.

Further updates will be issued tomorrow morning.

Australian Government Bureau of Meteorology Queensland

PRIORITY
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY Issued at 4:16 PM on Monday the 10th of January 2011 by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:
Further rainfall during Monday has led to renewed rises in the Lockyer Creek catchment. Rainfall is forecast to continue this evening and a return to moderate to major flood levels is expected overnight and during Tuesday. Major flood levels are expected to continue at Lyons Bridge with rises above 15 metres likely during Tuesday.

BREMER RIVER:
Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley overnight.

MIDDLE AND LOWER BRISBANE:
SEQwater advises releases from Wivenhoe Dam will increase during Monday.
Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:
Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Cindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday. Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:
The next warning will be issued at about 9pm Monday.

Brisbane Properties affected

Number of properties affected:
- 455 properties (parcels of land) have been identified as experiencing flooding on next Wednesday (at least 221 of these are homes and businesses)
- 7, 731 properties may see some flooding either on the land or outside the property
- More than 400 streets will be affected by flooding in some way

Below is the list of suburbs where the 455 properties that will be affected are located. In brackets is the number of properties/parcels of land that will be affected in each suburb. This is based on the data and modelling we have done to date and we may see increases in these numbers once figures are revised.
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The locations where the 221 homes and businesses are located is Albion, Auchenflower, Brisbane City, Bowen Hills, Bulimba, Fortitude Valley, Graceville, Hemmant, Indooroopilly, Kangaroo Point, Lytton, Milton, New Farm, Newstead, Norman Park, Oxley, Pinkenba, Rocklea, Sherwood, Tennyson, Wacol, Windsor, Yeronga.

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- Fairfield, Fig Tree Pocket, Coorparoo, South Brisbane, Lytton, Murrarie (2 each)

7 Rapid Response Group teams will be working from both a map and a database to doorknock/letterbox drop a flyer to the 221 homes and businesses that are predicted as being likely to experience inundation. They will visually check using the map that none of the remaining parcels of land from the total 455 properties identified as experiencing flooding are actually homes or businesses also.

The locations where the 221 homes and businesses are located is Albion, Auchenflower, Brisbane City, Bowen Hills, Bulimba, Fortitude Valley, Graceville, Hemmant, Indooroopilly, Kangaroo Point, Lytton, Milton, New Farm, Newstead, Norman Park, Oxley, Pinkenba, Rocklea, Sherwood, Tennyson, Wacol, Windsor, Yeronga.

Regards

Barry Dennien
Chief Executive Officer
SEQ Water Grid Manager
Phone: [redacted] | Fax: [redacted] Mobile: [redacted]
Email: barry.dennien[redacted]
Visit: Level 15, 53 Albert Street, Brisbane

Post: PO Box 16205, City East Qld 4002
ABN: 14783 317 630

Litsupport Brisbane

From: Dan Spiller
Sent: Tuesday, 11 January 2011 7:17 AM
To: 'stephen.robertson[redacted]; 'Ken Smith (ken.smith[redacted]'; 'Lance McCallum (lance.mccallum[redacted]'; 'Tim Watts (tim.watts[redacted]; 'Geoff Stead (geoff.stead[redacted]'; 'lauren.sims[redacted]; 'Martin.PeterJ[redacted]; 'Dunn.KerryG[redacted]
Cc: Barry Dennien; 'pborrows[redacted]; 'Rob Drury'; 'pbird[redacted]; 'Damien Brown (damien.brown[redacted]'; 'bob.reilly[redacted]; 'terry.wall[redacted]; 'Madgwick.DarrenT[redacted]
Subject: Water Grid dam release strategy
Attachments: Technical Situation Report W38.docx

All,

Attached is the latest report, with the BoM warning on the Lockyer flood below.

Key points are:

- Current releases are 2,750 cubic metres per second (about 240,000 ML/day). Due to heavy rainfall in the catchment, it was not possible to reduce releases to allow the Lockyer Valley flows to pass.
- Further rainfall may result in the need to increase releases.
- Wivenhoe Dam is at 73.51m AHD and rising at about 25mm/hour. Above 74m, the primary objective becomes maintaining the security of the dam. Releases would be increased at this level with less scope for consideration of downstream impacts.

The BoM is remodeling based on this release strategy. There is some uncertainty about the level of flows coming from the Lockyer.

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

Debbie and Tim: I recommend that a briefing for the Minister would be appropriate, perhaps around 10am.

Regards,
Daniel Spiller

Australian Government Bureau of Meteorology Queensland

PRIORITY
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY Issued at 4:06 AM on Tuesday the 11th of January 2011 by the Bureau of Meteorology, Brisbane.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge, with strong stream rises expected during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane during Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:
Extremely heavy rainfall during Monday led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton Monday evening before the station failed. This level was well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently arriving at Lyons Bridge, with strong stream rises expected in the next few hours. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood.

Renewed stream rises have commenced in Lockyer Creek at Lyons Bridge with a peak between 16 and 16.5 metres expected Tuesday morning. This is likely to be similar in level to the 1996 flood.

BREMER RIVER:
The Bremer River at Walloon has exceeded the moderate flood level. The Bremer River at Rosewood peaked at 5.8 metres around midnight monday.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK
Warrill Creek at Amberley peaked at 5.98 metres around 9pm Monday.

MIDDLE AND LOWER BRISBANE:
Moderate flooding is developing at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:
Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres (minor) with the afternoon high tide on Tuesday. Reach about 3 metres (moderate) with the high tides on Wednesday.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 8am Tuesday.

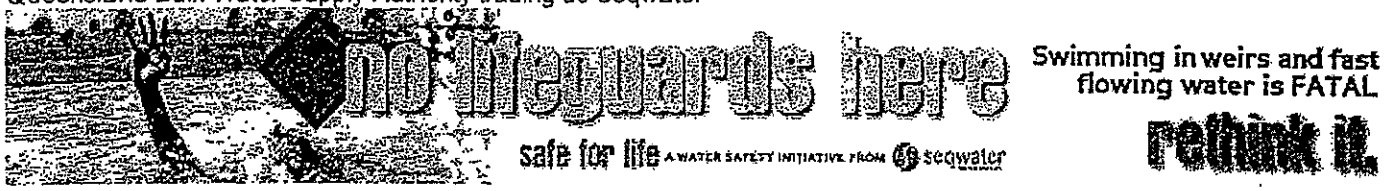
Latest River Heights:

Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	3.49m falling	02:10 AM TUE 11/01/11
Sandy Creek at Sandy Creek Road #	2.15m falling	03:19 AM TUE 11/01/11
Ma Ma Ck at Harm's *	3.26m rising	02:30 AM TUE 11/01/11
Tenthill Ck at Tenthill *	5.57m rising	02:40 AM TUE 11/01/11
Lockyer Ck at Gatton #	18.92m rising	06:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	6.39m rising	02:20 AM TUE 11/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	7.84m rising	03:25 AM TUE 11/01/11
Laidley Ck at Warrego Hwy *	6.41m rising	02:00 AM TUE 11/01/11
Lockyer Ck at Glenore Grove #	13.8m falling	03:24 AM TUE 11/01/11
Lockyer Ck at Lyons Br #	15.55m rising	03:23 AM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	15.39m rising	02:40 AM TUE 11/01/11
Lockyer Ck at O'Reilly's Weir #	18m falling	03:28 AM TUE 11/01/11
Brisbane R at Lowood Pump Stn #	15.93m falling	03:31 AM TUE 11/01/11
Brisbane R at Savages Crossing #	15.89m rising	03:29 AM TUE 11/01/11
Brisbane R at Burtons Br #	12.22m rising	03:29 AM TUE 11/01/11
Brisbane R at Kholo Br #	7.99m rising	03:29 AM TUE 11/01/11
Brisbane R at Mt Crosby #	15.82m steady	03:30 AM TUE 11/01/11
Brisbane R at Mt Crosby #	14.08m falling	04:39 PM MON 10/01/11
Brisbane R at Colleges Crossing #	13.91m rising	03:32 AM TUE 11/01/11
Bremer R at Rosewood#	5.56m falling	03:11 AM TUE 11/01/11
Bremer R at Five Mile Br Walloon #	6.4m rising	03:15 AM TUE 11/01/11
Warrill Ck at Greens Rd Amberley #	5.84m falling	03:29 AM TUE 11/01/11
Bremer R at One Mile Br #	13.75m rising	03:31 AM TUE 11/01/11
Bremer R at Hancocks Br Brassall #	11.33m rising	03:22 AM TUE 11/01/11
Bremer R at Ipswich #	8.55m rising	03:31 AM TUE 11/01/11
Brisbane R at Moggill #	7.07m rising	03:29 AM TUE 11/01/11
Brisbane R at Jindalee Br #	4.5m rising	03:29 AM TUE 11/01/11
Brisbane R at City Gauge #	1.4m falling	03:15 AM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at http://www.bom.gov.au/qld/flood/ . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.

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



seqwater
WATER FOR LIFE

Ph [redacted] | Fax [redacted] | M [redacted] | E rdrury[redacted]
Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia
PO Box 37, Fernvale QLD 4306
Website | www.seqwater.com.au

TECHNICAL SITUATION REPORT

TSR Number	W38	Date of TSR release	11.1.2011	Time of TSR release	6.30am

Seqwater status of inflows and dam operations

Current status but could change based on inflows or rainfall.

Current objectives	• Maintain releases to keep Wivenhoe below RL74 at which significant releases need to be made to ensure the dam security and minimise flood impacts downstream if possible	
Strategy	• Maintain current release of 2750cumecs as long as possible but it may need to be increased • Close sluices at Somerset Dam to store more water however will affect upstream areas. •	
Key considerations	Storage levels:	Above FSL
	Inflows:	Inflows expected around 1,500,000ML which is close to 1974 event.
	Rainfall:	Continuing
	Lockyer/Bremer:	Monitoring their inflows
	Brisbane River:	Impact as below.

Rainfall

Rainfall continues in the North Pine Dam, Somerset Dam and Wivenhoe Dam catchments. Isolated falls in the Upper Brisbane River of up to 125 mm have been recorded with widespread falls of 40 to 70 mm in the Somerset Dam catchment. This rainfall will increase inflows into the dam.

There has also been 20 to 60 mm in the Lockyer Creek catchment in the last 12 hours with falls of up to 30 mm in the Bremer River.

A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 16:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (25mm to 50mm, with isolated falls to 100mm); Wivenhoe/Somerset Dam Catchments (25mm to 50mm, with isolated falls to 100mm).

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level is 39.80m AHD and has commenced rising again (storing 4,400ML above FSL). Five gates are open releasing 177 m3/s. The inflow into the dam since the commencement of the event is 77,000 ML. Estimated event volume is 88,000 ML assuming no further rainfall. Releases from the dam will continue until at least Wednesday 12 January 2011.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.27m AHD and falling slowly. Peak inflow to the dam is estimated to be about

4,200 m3/s. Total discharge into Wivenhoe Dam is currently 1400 m3/s and this discharge will be decreased in the next few hours to be around 500 m3/s later on Tuesday. This is to ensure that the combined flood mitigation capacity in Somerset and Wivenhoe Dam is maximized.

The dam level peaked at 103.52m AHD at 19:00 on Monday 10 January 2011, (unless further significant rainfall is experienced). Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 73.51m AHD and rising at about 25 mm/hour. Releases from the dam have been held at a rate of 2,750 m3/s since 19:30 hours on Monday 10 January 2011. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

The BoM has provided further advice about the flash flooding experienced in the upper areas of Lockyer Creek. The rainfall responsible for this event was not observed at any rainfall stations but it is considered to be extreme. Flood levels in the Lockyer Creek catchment will exceed maximum recorded levels in some stations in the upper catchment. This flow will result in increases in Brisbane River levels below the junction of Lockyer Creek.

Five radial gates are currently open at the dam releasing about 2,750m3/s into the Brisbane River. At this stage, the dam will reach just over 74.0m AHD during Tuesday evening.

Above EL 74.0m AHD the objective for dam operations is to maintain the security of the dam and minimise downstream flood flows if possible.

If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.

The BoM will provide further information regarding the magnitude of the flash flood event occurring in Lockyer Creek early Tuesday morning. Consideration was given to modifying the releases from Wivenhoe Dam to try to moderate the peak flows emanating from Lockyer Creek but the rainfall in the past 12 hours in the catchment above the dam makes this option not possible. Therefore instead of decreasing releases to accommodate the Lockyer Creek flows, the strategy will endeavour to maintain the current releases until Lockyer Creek peaks.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate over the next 24 hours. The flood operation centre will continue to monitor the situation and provide situation reports every six hours until the situation stabilizes.

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

BoM assessment

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

BoM has been advised.

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

Brisbane City Council (BCC) assessment

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

Council has been advised of the current status.

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

Ipswich City Council (ICC) assessment (if required)

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

Council has been advised of the current status.

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

Somerset Regional Council (SRC) assessment (if required)

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

Council has been advised of the current status.

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

Collated and distributed by (Agency)

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

Next TSR due	Date	11.1.2011	Time	PM	or Event	

D435

Suzie Emery

From: Elaina Smouha [elainamir[redacted]
Sent: Thursday, 13 January 2011 4:45 PM
To: tim.watts[redacted]
Cc: john.bradley[redacted] ken.smith[redacted] Barry Dennien
Subject: Flood Mitigation Manual review
Attachments: Scan 1.pdf; Brian Cooper - final report.docx; Brian Cooper - final report attachment.xlsx; Wivenhoe Dam Background_Briefing_Jan_2011[1].docx

Tim,

Attached is the independent review of Somerset and Wivenhoe Dam operations against the Flood Mitigation Manual and a briefing note from Seqwater on the development of the Manual.

Kind regards

Elaina

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

SEQ Water Grid manager

Secure and efficient water through partnership and innovation

13 January 2011

The Honourable Stephen Robertson MP
Minister for Natural Resources, Mines and Energy
and Minister for Trade
PO Box 15216
Brisbane QLD 4002

Dear Minister

Independent review of Somerset and Wivenhoe Dam operations against the *Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam*

Attached is a final report from Mr Brian Cooper, Brian Cooper Consulting, on an independent review of the operation of Somerset and Wivenhoe Dams for compliance against Seqwater's *Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam* (Flood Mitigation Manual) during the current flood event.

Mr Cooper concludes that:

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

Given the circumstances, we endeavoured to provide him with as much information as possible to enable a sufficient compliance review against the Flood Mitigation Manual. Mr Cooper identifies some Flood Mitigation Manual requirements where further information of compliance is required. In relation to these matters, Mr Cooper states:

"There are a number of requirements where there was insufficient time given the urgency of this review, to source the necessary information for me to demonstrate compliance. However, satisfaction or otherwise of these requirements would have had little impact on the operation of the two dams during this particular Flood Event. It is intended that they be audited when time permits, after the Flood Event."

PO Box 16205, City East Q 4002 Tel: +61 [redacted] www.seqwgm.qld.gov.au
ABN: 14 783 317 630

Also, attached is a summary from Mr Barton Maher, Seqwater, on the development history of the Flood Mitigation Manual, and in particular, the extensive peer review to which both the Flood Mitigation Manual and studies that fed the development of it were subject. For example:

- the Brisbane and Pine Rivers Flood Study underwent an internal review by the Water Resources Group and then went to an independent review panel comprising of Professor Colin Apelt, Head of Department, Department of Civil Engineering, University of Queensland; and Mr Eric Lesleighter, Principal Hydraulic Engineer and Chief Engineer Water Resources, Snowy Mountains Engineering Corporation
- the 2005/2006 Brisbane Valley Flood Damage Minimisation Study involved a Project Technical Review Group involving SEQWater Corporation, the Bureau of Meteorology, SunWater, Department of Natural Resources, Mining and Water Dam Safety Regulator and WRM Consultants
- the most recent 2009 review of the Flood Mitigation Manual was subject to an expert review panel comprising of The Bureau of Meteorology; SunWater (as operator of the Flood Control Centre); the Department of Environment and Resource Management Dam Safety Regulator and Brisbane City Council. The minor changes to the Flood Mitigation Manual were extensively tested to ensure that the flood mitigation outcomes were not compromised.

I hope this proves to be of assistance.

If you have any questions, please contact me on [redacted] or via email at barry.dennien[redacted]

Yours sincerely

[redacted]

Barry Dennien
Chief Executive Officer

Cc: Mr John Bradley
Director-General
Department of Environment and Resource Management

Date	Time	TSR	Wivenhoe Dam Release (m^3/s)				Gate No.	Opening (m)	Storage Level	Rainfall (mm)
			Regulators	Hydro	Gates	Total				
12/12/2010	1400	W1								
13/12/2010	1300	W2		10	290	300				
15/12/2010	1800	W3								
16/12/2010	1600	W4			0					
17/12/2010	1200	W5								Large storms yesterday pm and night; 20-50 forecast tonight
17/12/2010	1800	W6	Closed		Opening Op. Initiated					20-50 forecast o/n
	1830			13	50	63	3	0.5		
18/12/2010	0700	W7								40-50 since 16/12/2010
19/12/2010	0700	W8			350	350	3	3.5		20-30 upper Brisbane R.
19/12/2010	1800	W9			300	300	3	3		
20/12/2010	0700	W10								
20/12/2010	0900	W11							68 expected this afternoon	
20/12/2010	0900	W12								
21/12/2010	0730	W13				peak 1,280 (0500)			peak 68.24 (0400); currently 68.22 (112% cap.) falling slowly	
22/12/2010	0830	W14							currently @ 67.61 (107% cap.) falling slowly	none since 300 on 20/12/2010
22/12/2010	1600	W15			Closing sequence				to finish just>FSL	
23/12/2010	0800	W16			All gates expected to be closed by 1500				When gates closed, will be 67.2 (0.2m > FSL) & 50mm <gate opening trigger level	
23/12/2010	1430	W17			350		3	3.5	67.23	10-30 in CA over last 24 hrs.; further heavy rain expected to start on 29/12/2010
24/12/2010	0630	W18			All gates expected to be closed by 1300				67.07 expected when all gates closed	little or no rainfall
24/12/2010	1330	W19	4,200Ml/day from reg. & Hydro		Radial gate ops ceased @ 1300		3 zero			
25/12/2010	0930	W20								10-20 over last 24 hrs

26/12/2010	0800 W21					Rel. minor over last 24 hrs.
27/12/2010	0800 W22					40-50 over dam CA last 24 hrs.
28/12/2010	0700 W23	347 (initially) then back to 46				20-40 over dam CA's ;ast 24 hrs
29/12/2010	0700 W24				69.26 (@ 0600) - aim is to return to FSL by 2/1/2011	No/very little in last 24 hrs.
30/12/2010	0700 W25	Wivenhoe+Lockyer = 1,600m^3/s			69.33 peak yesterday @ 1200 (2.3m > FSL) 69.07 this am	No/very little in last 24 hrs.
31/12/2010	0700 W26 W27	Wivenhoe+Lockyer = 1,600m^3/s			68.4 @ 0500	No/very little in last 24 hrs.
06/01/2011	1200 W28	Commence opening RG @ 1800 & ramp up to 300m^3/s by 2200			67.31 @ 0700	20-30 widespread with up to 50 on dam CA's
07/01/2011	0700 W29				67.64 @ 0600	30-50 with isolated falls up to 75; signif. Rain on Lock. Ck.
07/01/2011	1500 W30	Release started 1500 to be incr. slowly to ~1,200m^3/s by 1400 tomorrow				
08/01/2011	0700 W31	~890		All (5) RG's open	68.45 @ 0600 rising steadily	Widespread rain 20-40 over dam CA's since 0900 yesterday; further high rainfall predicted for next 4 days
09/01/2011	0700 W32 W33		1,343		Currently 68.58 (falling slowly)	For last 12 hrs. av. of 40 for Somerset CA & <10 for Wivenhoe CA
09/01/2011	2100 W34		1,400		Currently @ 69.1;	Very heavy rainfall -totals for 24 hrs 100 - 300; Severe weather warning for heavy rainfall

	W35					
	W36					
	W37					
11/01/2011	0630 W38		2,750 since 1930 on 10/1/2011	All (5) gates	73.51 rising @ 25mm/hr.	20-60 last 12 hrs in Lockyer CA; 30 in Bremer R.; Isol. Falls of 125 in upper Brisbane R. & widespread falls of 40 - 70 in Somerset CA
11/01/2011	1200 W39		3,970		74.1 (179.5% cap.) rising @ 25mm/hr.	

Comments	Crossing Closures
45,000Ml from Somerset; WL|Somerset to peak at 99.7 on 13/12/2010; 150m^3/s expected through Brisbane; 30,000Ml expected into Wivenhoe from upper Brisbane R.; peak WL in Wivenhoe expected to be 67.6; Releases expected from Wivenhoe on afternoon of 13/12/2010 ramping up to 300m^3/s; Reg. will be closed & Gate 3 opened to 3m to get WL back to 67.25; Incr. release will impact on 3 crossings; Dam Regulator informed	
138m^3/s from Somerset;	Gate release will impact on 3 crossings
Releases from Wivenhoe will cease on 16/12/2010; Hydro will continue during fish recovery ops.	
Gate closed 1000	
Decision to commence a release tonight was made this am by Duty Flood Engineers to provide as much notice to impacted Councils as possible; 60,000Ml needs to be released from Wivenhoe & Somerset to maintain FSL	
Need to release >60,000Ml from Wivenhoe & Somerset to achieve FSL	
Releases could increase to 300m^3/s;	Would impact Twin Bridges, Savages Crossing, Colleges Crossing
100,000Ml to be drained in next 4 days; Q|Brisbane R. to be maintained at 300-350m^3/s;Transfer from Somerset via 2 reg.; Wivenhoe Q incr. to 150m^3/s o/n; Will incr. further to 300m^3/s as Q|Lock.Ck. Subside over next 24 hrs.; Q|Lock.Ck. Currently 130m^3/s	Twin Bridges & Savages Crossing currently closed; Colleges Crossing to be impacted in afternoon
12,000Ml/day from Somerset; Release expected until 22/12/2010;	Twin Bridges, Savages Crossing, Colleges Crossing currently closed
Somerset rel. steady (Q|reg.≈140m^3/s); Q}Wivenhoe to be maintained at 300m^3/s (Lock.Ck. Permitting) to allow Burtons Bridge to remain open; WL|Wivenhoe expected to incr. to 67.4 over next 2 days;	Twin Bridges, Savages Crossing and Colleges Crossing are closed; closing of Burtons Bridge and Kholo Bridge will be considered if more rain or inflows
Somerset risen to 100.2 - sluice gate releases to be made until am of 22/12/2010 when FSL expected; WL|Wivenhoe at 68 expected this pm; Q|Wivenhoe expected to be >1,200m^3/s - discuss with impacted Cncls.- strategy decision by 10000; Wivenhoe inflows excl.	
Q|Somerset peak tomorrow at 1800m^3/s	Both Burtons and Kholo bridges likely to be inundated
Inflow to Somerset to peak today at 700m^3/s; Somerset & Wivenhoe currently storing 140,000Ml above FSL; further inflows occurring; releases to be incr. o/n to ~1,200m^3/s; various Cncls. Given heads up; BOM advised	Wivenhoe releases reduced slightly to keep Burtons Bridge open - then incr. releases after Somerset RegnlCncl inform residents affected by Burtons Bridge
Same as W11	
410m^3/s from Somerset sluice gates; Somerset peaked @100.43 (1300 on 20/12/2010), currently @ 100.23 (114% of cap.); 110,700Ml Inflow to Somerset,67,500Ml discharged into Wivenhoe; Wivenhoe inflow (excl. Somerset releases) = 157,900Ml, 103,000Ml released; Total Inflow to both dams ~310,000Ml; Continued gate operations may be necessary if forecast rainfall results in subsequent river rises	Kholo Bridge is also expected to be inundated by mid-morning ; In accordance with the adopted operational strategy these bridges should be back in service by late Thursday and all bridges (with the possible exception of Twin Bridges) should be trafficable for Christmas providing no further rainfall occurs.
410m^3/s from Somerset sluice gates; Somerset currently @ 99.68 (108% cap.); 121,500Ml inflow to Somerset, 103,000Ml released to Wivenhoe; Gate Ops. @ Wivenhoe; High tides expected to coincide with peak levels in Brisbane R.	Burtons Bridge & Kholo Bridge expected to be back in service by 23-24/12/2010; All bridges expected to be trafficable by Xmas provided no further rain
BOM aware of all releases	Gate closing sequence to allow bridges to be accessible
	Projected crossing openings: Burtons Bridge – 18:00 Thursday 23 December 2010.
	Savages Crossing – 19:00 Thursday 23 December 2010
1 sluice open @ Somerset to be closed @ 0900 - WL will be 0.1m> FSL; Est. Inflow to Somerset 135,000ML, majority discharged into Wivenhoe; Gate closure ops @ Wivenhoe in progress; Wivenhoe inflow (excl. Somerset inflow) = 204,000Ml; A total of 324,000Ml has been released; Contd. gate ops may be necessary if forecast rain results in river rises; Gate closure ops sequence to be reviewed	Kholo Bridge – 21:00 Thursday 23 December 2010 Colleges Crossing – 08:00 Friday 23 December 2010
Somerset gate ops ceased @ 0900, WL @ 99.1; Gate closure sequence extended to pm of 24/12/2010; Contd. Gate ops may be necessary if forecast rainfall gives incr. river levels	Projected crossing openings: Burtons Bridge – 18:00 Thursday 23 December 2010, Kholo Bridge - 21:00 Thursday 23 December 2010; Other bridges expected to remain closed until Xmas Day
Gate ops @ Somerset ceased yesterday, reg. to be opened to bring lake to FSL; Gate ops continuing @ Wivenhoe -1 gate incr. every 5-6 hrs to ensure Brisbane R. Q not incr. due to incr. Lock. Ck. Outflows & maintain Burtons Bridge open;	Twin Bridges, Savages Crossing and Colleges Crossing are currently closed and should remain so for some time due in part to current outflows into the Brisbane River from Lockyer Creek that will peak in excess of 200 cumecs late today.
Flood Centre to monitor o/n & consider options tomorrow am based on inflows & rainfall; further gate ops may be necessary in coming days	Twin Bridges, Savages Crossing and Colleges Crossing may still be affected by flows from the Lockyer.
Somerset WL incr. from 99.18 yesterday @ 0600 to 99.33 @ 0730 today; 99.5 tomorrow if no gate ops.; Wivenhoe currently 4,200Ml through hydro & reg.; 15,00Ml expected just from upper Brisbane R. in next few days; WL cont. to fall in Lock. Ck; Small rises expected in Bremer & Warrill systems; WL in Wivenhoe incr. to 67.28 @ 600	Twin Bridges, Savages and Colleges Crossing remain impacted by Wivenhoe releases and Lockyer and local runoff. Burtons and Kholo Bridges would be currently unaffected. Kholo will no doubt still be closed by Council regarding repairs.

BOM issued severe weather warning @ 0 445; Somerset WL incr. to 99.46 (0.46m> FSL) - 2 regs. To be opened today (140m^3/s); Wivenhoe WL incr. to 67.37 (0.37m > FSL); RG to be opened later today following discussions with local authorities; further gate ops may be necessary if rainfall incr. river levels	Crossings downstream of the dam are currently impacted primarily by non-controlled river flows only (no RG releases from Wivenhoe). Lockyer Creek outflows into the Brisbane River are currently in the order of 60m^3/s. Twin Bridges, Savages and Colleges Crossings will be inundated but the plan is to release around 300-350m^3/s depending on flows downstream so as to not impact Burtons Bridge.
BOM continues with severe weather warning & widespread rainfall over dam CA's; 2 regs. @ Somerset giving 139m^3/s release, lake contd. To rise to 99.6 (0.6m> FSL); RG ops @ Wivenhoe commenced yesterday @ 0900, WL contd. To rise to 67.57 (0.57m > FSL);Q|Wivenhoe reduced o/n because of incr. Q|Lockyer to ensure Burtons Bridge remains open; RG @ Wivenhoe wound back as Q|Lockyer incr. > 250m^3/s; Q|Lockyer expected to peak>500m^3/s later today/tomorrow - will innundate Burtons Bridge;When this happens, Q|Wivenhoe will be incr. to get WL back to FSL; further gate ops may be necessary in coming days	Twin Bridges, Savages Crossing and Colleges Crossing currently closed; Burtons Bridge is currently open, but will be closed later today/tomorrow; Kholo Bridge remains unserviceable due to flood damage; No current expectation that either Mt Crosby Weir Bridge or Fernvale Bridge will be impacted by the current event; An updated estimate of the time of closure of Burtons Bridge this afternoon will be provided to Council RG discharge dropped back to 46m3/s to ensure Burtons Bridge can remain open; Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed; No current expectation that either Mt Crosby Weir Bridge or Fernvale Bridge will be impacted by the current event; Lockyer Creek outflows being closely monitored and may come close to impacting upon the Mt Crosby Weir Bridge; England Creek access is not impacted yet
Sever weather warning no longer current; Somerset release through regs' ~ 208m^3/s;WL|Somerset incr. to 99.96 (0.96m>FSL) - inflows decreasing; RG opening dependent on Q|Lockyer; Wivenhoe WL currently @ 68.55 (1.55m > FSL); Inflows to Wivenhoe decr.	
Further 2 sluices opened @ Somerset; WL @ Somerset 99.83 & falling slowly, 2 sluices to be closed @ 1200; Intended to incr. Wivenhoe releases so Q|Wivenhoe+Q|Lockyer maintained @ 1,600m^3/s (similar Q to mid Oct &mid Dec 2010)	Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed; no current expectation that Mt Crosby Weir Bridge or Fernvale Bridge will be impacted by current event. At this stage, estimated that the flow at Burtons Bridge will fall below the bridge deck on Sunday morning.
2 sluices @ Somerset remain open (405m^3/s) - FSL expected by 6/1/2011; RG closing sequence expected to start mid tomorrow- RG expected to be closed on 2/1/2011	
WL @ Somerset 99.01 (falling from peak of 100.0 - 1200 28/12/2010) - currently 2 regs;	Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed due to inundation Not included
Somerset @ 99.34 (0.34m > FSL) & rising slowly; Wivenhoe 67.31 (0.31m > FSL) & rising slowly; Gates will be opened in next 24 hrs; Lockyer Ck peak of about 100m3/s Friday afternoon	Lockyer Ck peak of about 100m3/s Friday afternoon. This will take out Twin Bridges and nearly inundate Savages Crossing. Colleges Crossing could be taken out by a combined Lockyer and local runoff. Current strategy is to keep Burton Bridge free. Gate release would limit mid-Brisbane Q to 400m^3/s ((Burtons capacity 450m^3/s).
100-200mm rain forecast for SE Qld next 5 days; Somerset WL @ 99.58 (0.59m > FSL) rising slowly - currently releasing 35m^3/s; Wivenhoe WL @ 67.64 (0.64m > FSL & > gate trigger level) rising slowly; u/s of dam river levels peaked @ Linville and Gregors Ck gauges; A peak of about 470 cumecs is expected from Lockyer Creek by mid-afternoon; Wivenhoe gate releases will occur after the impact of Lockyer flows on Burtons Bridge has been ascertained and flood levels in the lower Lockyer subside Q|Wivenhoe may be as high as 1,200m^3/s	Q|Lockyer may be of sufficient magnitude to inundate Burtons Bridge; Somerset Regional Council, Ipswich City Council and Brisbane City Council have been advised of the potential for gate operations during the next 24 hours; The relatively high Lockyer flows will adversely impact upon Twin Bridges, Savages Crossing, and Colleges Crossing for several days, may also later impact upon Burtons Bridge & Kholo Bridge; not expected to be any adverse impacts upon Fernvale Bridge or Mt Crosby Weir Bridge; Councils have been advised of this strategy and are contacting residents
Somerset releasing 35m^3/s; 50,000Ml into Somerset; Gate release @ Wivenhoe - strategy to be reviewed tomorrow (dependent on further rainfall)	All of the crossings downstream of Wivenhoe with the exception of Fernvale and Mt Crosby Weir Bridge will be adversely impacted; Councils have been advised of this strategy and are contacting residents
Somerset WL @100.42 & rising (0500) - 1 open sluice gate; Water temp. held in Wivenhoe - strategy may need to be reviewed (depend. On confidence in estimates of Wivenhoe inflows); Intended to ramp Wivenhoe up to 1,200m^3/s by 1200 - likely to be incr. next week; since 2/1/2011, ~200,000Ml has flowed into Wivenhoe (incl. Somerset releases), further 180,000Ml expected based on recorded rainfall; ~ 50,000Ml released via reg. & hydro (@50m^3/s)	The projected Wivenhoe release of 1,200m3/s combined with Lockyer flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Colleges Crossing) will be adversely impacted for several days. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected but they could potentially be affected if the predicted rainfall totals eventuate.
Somerset currently @ 100.27 - 60mm rain in last 2 hrs will cause significant inflow later today; 405m^3/s being released into Wivenhoe; maintain combined Q of 1,600m^3/s in mid-Brisbane R. Not included	The current Wivenhoe Dam release combined with Lockyer flows and local runoff will mean that all low level crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Colleges Crossing) will be adversely impacted until at least Wednesday 12 January. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected, but this may be revised if the predicted rainfall totals eventuate and higher releases from Wivenhoe Dam are considered necessary. Cncls advised of Wivenhoe op. strategy
Somerset @ 101.68 rising quickly; 5 sluice gates open releasing ~1,100m^3/s; WL expected to reach 103.5 by am 11/1/2011; River levels u/s Wivenhoe rising fast; Q|Brisbane R. @ Gregors Ck @ 6,700m^3/s; Wivenhoe expected to reach 73.0 by 11/1/2011 - need to incr. Q|Wivenhoe am of 10/1/2011 - crank up to 2,600m^3/s by am 11/1/2011; Attempt to keep combined Q < 3,500m^3/s - < limit of urban damages in the City	The projected Wivenhoe Dam releases combined with Lockyer flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Saturday 15 January in varying degrees; Water levels in the lower Brisbane R will be impacted by the combined flows of Lockyer Ck, Bremer River, local runoff and releases from Wivenhoe Dam

Not included
Not included
Not included

Somerset WL @ 103.27 & falling slowly ; currently 1,400m^3/s released to Wivenhoe- to be reduced to 500m^3/s later in the day - to ensure flood mitigation of Somerset & Wivenhoe are maximized; BOM provided advice on flash flooding in Lockyer Ck.; WL in Wivenhoe will reach 74 by evening; May need to increase Q further - may result inQ|lower Brisbane R. >5,000m^3/s

Somerset @ 103.3 & rising; Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing; If no further rain, can hold @ 74.8 - aim is to prevent fuse plug triggering, situation assessed every 3 hrs.; Heavy rainfall continues throughout South East Queensland and the situation could deteriorate over the next 24 hours. The flood operation centre will continue to monitor the situation and provide situation reports every six hours until the situation stabilizes.

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted; Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.