

TECHNICAL SITUATION REPORT

TSR Number	W11	Date of TSR release	20.12.2010	Time of TSR release	9am
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Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

Somerset Dam has risen steadily overnight to currently be at around 100.2m AHD. A sluice gate will be opened at 0700 this morning, with a further sluice gate opened later today. Sluice gate releases are projected to continue until around Wednesday morning, when the dam level will approach FSL. Dam inflow should peak today at around 700 cumecs.

Wivenhoe Dam has risen steadily overnight, with the level projected to reach 68.0m AHD by this afternoon. The proposed strategy is to ramp up releases to have the dam drained to FSL by Saturday. This will require both Burtons and Kholo bridges to be inundated, with dam discharges in excess of 1200 cumecs. This strategy has been discussed with the impacted Councils this morning. Dam inflow excluding Somerset Dam outflows should peak tomorrow at around 1800 cumecs.

Currently Somerset and Wivenhoe are storing around 140,000ML above FSL with further inflows occurring.

Releases from Wivenhoe are being reduced slightly this morning to prevent Burtons Bridge being affected by flows down Lockyer Creek. Releases are then expected to increase from Wivenhoe Dam late this afternoon once Somerset Regional Council have had time to advise residents affected by Burtons Bridge being inundated.

Releases will then be increased overnight to around 1200m³/sec or higher (possibly 1500m³/s) depending on ongoing inflows to the dams and flows downstream of the dam.

A heads up was provided to Somerset Regional Council on Sunday and they were advised again at 8am of the strategy. They did not have a concern as long as there was a lead time and releases were not ramped up until Monday afternoon and media releases were made.

Ipswich City Council and Brisbane City Council were both advised at 8am today and had no concerns with the strategy.

Emails have been sent to all Councils requesting an assessment if they want to forward one in.

The BoM has been advised and they

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 will be advised of the releases.

BoM Technical Officer name	
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)

BCC is being contacted again to discuss situation and get their comment.

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)

ICC is being contacted again to discuss situation and get their comment.

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)

Somerset Council is being contacted again to discuss situation and get their comment. They were advised yesterday of the possibility.

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	20.12.2010	Time	Morning	or Event	After strategy is finalised with Councils
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TECHNICAL SITUATION REPORT

TSR Number	W12	Date of TSR release	20.12.2010	Time of TSR release	9am
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Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

Somerset Dam has risen steadily overnight to currently be at around 100.2m AHD. A sluice gate will be opened at 0700 this morning, with a further sluice gate opened later today. Sluice gate releases are projected to continue until around Wednesday morning, when the dam level will approach FSL. Dam inflow should peak today at around 700 cumecs.

Wivenhoe Dam has risen steadily overnight, with the level projected to reach 68.0m AHD by this afternoon. The proposed strategy is to ramp up releases to have the dam drained to FSL by Saturday. This will require both Burtons and Kholo bridges to be inundated, with dam discharges in excess of 1200 cumecs. This strategy has been discussed with the impacted Councils this morning. Dam inflow excluding Somerset Dam outflows should peak tomorrow at around 1800 cumecs.

Currently Somerset and Wivenhoe are storing around 140,000ML above FSL with further inflows occurring.

Releases from Wivenhoe are being reduced slightly this morning to prevent Burtons Bridge being affected by flows down Lockyer Creek. Releases are then expected to increase from Wivenhoe Dam late this afternoon once Somerset Regional Council have had time to advise residents affected by Burtons Bridge being inundated.

Releases will then be increased overnight to around 1200m³/sec or higher (possibly 1500m³/s) depending on ongoing inflows to the dams and flows downstream of the dam.

A heads up was provided to Somerset Regional Council on Sunday and they were advised again at 8am of the strategy. They did not have a concern as long as there was a lead time and releases were not ramped up until Monday afternoon and media releases were made.

Ipswich City Council and Brisbane City Council were both advised at 8am today and had no concerns with the strategy.

Emails have been sent to all Councils requesting an assessment if they want to forward one in.

The BoM has been advised.

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)

The Flood Centre has spoken to the Duty Flood Engineer (Jimmy Stewart) at the BoM FWC at 8.15am today and discussed the proposed release strategy for Wivenhoe Dam. They will incorporate the new advice into their warning system. Proposed releases will be provided to BoM and Councils when model scenarios are complete.

BoM Technical Officer name	Jimmy Stewart
BoM Technical Officer position title	Duty Flood Engineer
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)

BCC has been contacted to advise and discuss.
Email sent to request any assessment.

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)

ICC has been contacted to advise and discuss.
Email sent to request any assessment.

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)

SRC has been contacted to advise and discuss.
Email sent to request any assessment.

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	20.12.2010	Time	Late afternoon	or Event	
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TECHNICAL SITUATION REPORT

TSR Number	W14	Date of TSR release	22.12.2010	Time of TSR release	8.30am
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Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

Rainfall

No rainfall has occurred over the catchment of the dams since 03:00 on Monday 20 December 2010. All major streams have now peaked and inflows are receding.

Wednesday 22 December Rain developing

Thursday 23 December Rain easing to showers

Friday 24 December Showers tending to rain at times

Saturday 25 December Showers tending to rain at times

Sunday 26 December Rain increasing

Monday 27 December Rain at times

Tuesday 28 December Rain at times

Somerset Dam

Gate operations are occurring at Somerset Dam and are expected to continue until at least Wednesday 22 December 2010 assuming no further rainfall. Two sluice gates are currently releasing about 410 m³/s from the dam into Lake Wivenhoe.

Somerset Dam peaked at EL 100.43 m AHD at around 13:00 on Monday 20 December 2010 and the lake level is slowly falling. Somerset Dam is currently at EL 99.68 m AHD, (108 % of capacity).

The estimated inflow into Somerset Dam to date is 121,500ML, of which 103,000 ML has been discharged into Wivenhoe Dam.

Continued gate operations may be necessary if forecast rainfall from Wednesday to Monday results in subsequent river rises.

Wivenhoe Dam

Gate operations are occurring at Wivenhoe Dam and are expected to continue until Thursday 23 December 2010 assuming no further rainfall. Releases from the dam were increased slightly late yesterday as other river flows dropped and have been steady at a maximum release rate of about 1,440 m³/s since 18:00 Tuesday 21/12/2010. This flow rate will be maintained until early Thursday 23 December 2010, when releases will be reduced as the flood storage compartment is emptied.

Wivenhoe Dam peaked at a level of EL 68.24 m AHD at approximately 04:00 on Tuesday 21/12/2010. The current level is EL 67.71 m AHD (107% of capacity) and falling slowly.

The estimated inflow into Wivenhoe Dam to date (excluding releases from Somerset Dam) is 181,000 ML, of which 221,500 ML has been released. The total estimated inflow into both dams for this event, based upon rainfall to date is 310,000 ML.

Continued gate operations may be necessary if forecast rainfall from Wednesday to Monday results in subsequent river rises.

Impacts of Releases

The increased release from Wivenhoe Dam has resulted in elevated levels in the Brisbane River from Wivenhoe to Colleges Crossing. Twin Bridges, Savages Crossing and Colleges Crossing were inundated earlier in the event. As a consequence of the increased release from Wivenhoe Dam, Burtons Bridge was inundated at around 00:40 on Tuesday 21 December 2010. Kholo Bridge was inundated around midday Tuesday 21 December 2010. In accordance with the adopted operational strategy these bridges should be back in service by late Thursday or Friday and all bridges (with the exception of Twin Bridges) should be trafficable for Christmas providing no further rainfall occurs. No future rainfall is currently included in these forecasts.

Advice from the BoM regarding predicted tides in the Brisbane River at the City Gauge, suggest that peak levels (1.7 to 1.8 m AHD) may reach or slightly exceed the minor flood level of 1.7 m AHD. The effect of the Wivenhoe release on these high tide values is estimated to be about 0.1m. Peak levels will coincide with high tides which are expected at about 11:00 am on Wednesday 22 December and around noon on Thursday 23 December. Tide levels will be monitored over the next few days and these estimates may be adjusted by BoM in light of changed observations. It is anticipated that this advice will be updated sometime today but no significant change to this advice is expected.

Emails have been sent to BCC, ICC and SRC this morning with similar information and requesting any assessments or concerns. If any are received they will be forwarded.

The BoM is aware of all releases.

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)

As above.

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)

BCC has been contacted by Flood Centre on ongoing basis.
 Email sent to request any assessment.

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)

ICC has been contacted by Flood Centre on ongoing basis.
 Email sent to request any assessment.

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)

SRC has been contacted by Flood Centre on ongoing basis.
 Email sent to request any assessment.

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		Time		or Event	Closing strategy
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TECHNICAL SITUATION REPORT

TSR Number	W15	Date of TSR release	22.12.2010	Time of TSR release	4.00pm
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Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

Closing Sequence

In order to close by 1400 Thursday and allow bridges to be accessible prior to the weekend and achieve an acceptable recession, closing of Wivenhoe gates commenced at 1600 Wednesday.

This will result in Wivenhoe finishing at a level slightly above FSL.

The BoM is aware of all releases.

Seqwater Technical Officer name	Robert Drury
Seqwater Technical Officer position title	Dam Operations Manager

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 and is in line with previous strategy.

BCC Technical Officer name	Chris Lavin
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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 and is in line with previous 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 and is in line with previous 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	23.12.2010	Time		or Event	Closure
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TECHNICAL SITUATION REPORT

TSR Number	W16	Date of TSR release	23.12.2010	Time of TSR release	8.00am
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Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

Somerset Dam

Sluice Gate operations are continuing with once sluice gate currently open. This gate will be closed at around 9:00am this morning. At this time the lake level will be around 99.10m or 100mm above the dam full supply level. A regulator may then be used to maintain the lake level near full supply level. The estimated inflow into Somerset Dam to date is 135,000ML, the majority of which has been discharged into Wivenhoe Dam.

Further gate operations may be necessary in coming days if forecast rainfall results in subsequent river rises.

Wivenhoe Dam

Radial Gate operations are occurring at Wivenhoe Dam with the gate closure sequence currently underway. The gate closure sequence has been developed to minimise adverse river bank impacts downstream of the dam, while also aiming to allow downstream river crossings to be open for Christmas day. All gates are currently scheduled to be closed by 1500 on Thursday 23 December 2010 (today) to allow for fish recovery in daylight hours. This assumes that no further significant rainfall occurs during the day. When the gates are closed, the lake level will be around 67.20m or 200mm above the dam full supply level and 50mm below the radial gate opening trigger level of 67.25m. A regulator will then be used to maintain the lake level near to or below this level. The estimated inflow into Wivenhoe Dam to date (excluding releases from Somerset Dam) is 204,000 ML. A total of 324000 ML has been released. The total estimated inflow into both dams for this event, based upon rainfall to date is 340,000 ML.

There is also the possibility of using a gate to make a low level ongoing release that may affect low levels bridges but keep the dam levels under control. Again this is rain dependent and will be decided later today.

Continued gate operations may be necessary if forecast rainfall results in subsequent river rises. The gate closure sequence will be reviewed throughout today and discussions with impacted Local Authorities will be ongoing.

Impacts of Wivenhoe Dam Releases

The releases from Wivenhoe Dam have resulted in elevated levels in the Brisbane River downstream to Colleges Crossing. Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently all closed due to inundation resulting from these releases. In accordance with the

current operational strategy all bridges (with the exception of Twin Bridges) should be trafficable by Friday. Projected “early side” times for bridges becoming clear of water based on the current gate closure sequence and no Lockyer Creek outflows are as follows. (Note that rainfalls of up to 33mm have been observed in the Lockyer Creek Catchment over the last 24 hours, but no significant stream rises have been observed as yet). These are estimates only.

- Burtons Bridge – 18:00 Thursday 23 December 2010.
- Savages Crossing – 19:00 Thursday 23 December 2010
- Kholo Bridge – 21:00 Thursday 23 December 2010
- Colleges Crossing – 08:00 Friday 23 December 2010

Tide levels continue to be monitored closely with peak tide estimates being adjusted by BOM to account for Wivenhoe Dam outflows.

The BoM is aware of all releases.

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 and is in line with previous 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 and is in line with previous 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 and is in line with previous 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	Time	or Event	Closure
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