'SR-B'

# TECHNICAL SITUATION REPORT

| TSR Number | W2 | Date of TSR release | 13.12.2010 | Time of TSR release | 1pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

**Somerset/Wivenhoe Dams**

As highlighted in the previous Report, releases commenced from Wivenhoe Dam today.

Wivenhoe Dam Lake Level was 67.30 m AHD and rising slowly at 0630 Monday 13/12/2010. Two regulators are open at Somerset Dam releasing about 138m3/s into Wivenhoe.

One gate is being opened at Wivenhoe Dam commencing at 1.00pm and being fully opened by 3:30pm and releasing approximately 290m3/s, adding to the small ongoing release from the hydro plant gives a total of 300m3/s.

At this stage, it is expected that this gate setting will be maintained until at least Thursday afternoon 16/12/2010.

It should be noted that a release of 300m3/s will impact upon Twin Bridges, Savages Crossing and Colleges Crossing.

Councils were contacted this morning to provide a heads up and contacted again when the gate was opened.

A follow up email has been sent however their phone advice is considered sufficient considering the minor actions required of councils. They were advised they can offer their own assessments if they wish and can ring the Flood Centre for further information.

| | |
|---|---|
| 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 was advised of planned releases via their flood information email. No formal advice is required of them as the release is a minor drawdown however there is ongoing advice provided by them on predicted rainfall and flows. They were also provided advice of the releases that are occurring.

Action taken was to mobilise the flood centre and advise Councils as requested regarding releases and keep BoM up to date.

| | |
|---|---|
| BoM Technical Officer name | |
| 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)*

BCC will advise internally for information purposes mainly re bridge closures in other council areas that may affect Brisbane residents.

Action taken was to mobilise the flood centre and advise Councils as requested regarding releases and keep BoM up to date.

| | |
|---|---|
| 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)*

Ipswich will coordinate closure of Colleges Crossing as necessary and any other actions.

Action taken was to mobilise the flood centre and advise Councils as requested regarding releases and keep BoM up to date.

| | |
|---|---|
| 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 will coordinate closure of Twin Bridges and Savages Crossing as necessary and any other actions.

Action taken was to mobilise the flood centre and advise Councils as requested regarding releases and keep BoM up to date.

| | |
|---|---|
| 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 | Update on closure strategy |
|---|---|---|---|---|---|---|

# TECHNICAL SITUATION REPORT

| TSR Number | W3 | Date of TSR release | 15.12.2010 | Time of TSR release | 6pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

**Somerset/Wivenhoe Dams**

As highlighted in the previous Reports, releases continued from Wivenhoe Dam and will cease around 10am on 16th December 2010.

At this stage it is planned that the radial gate will be closed by 10am Thursday morning with the closing sequence starting around 8am.

Once the radial gate is closed, releases from the hydro will continue during fish recovery operations. Once they are completed, the cone valve will also be opened to continue to release at a combined rate of around 4200ML per day until the water level in both dams falls to near full supply levels. At this time normal operational releases to the Mt. Crosby WTP will re-commence.

The release from Wivenhoe dam continues to impact upon Twin Bridges, Savages Crossing and Colleges Crossing and these crossings will clear as the river level drops. It is likely that Colleges Crossing will be opened sometime Friday morning, although this will depend on flows in the river and any rainfall.

Councils were contacted this morning to provide advice on closing sequences and will be contacted again when the gate is finally closed.

A follow up email will not be sent as no assessment is required.

| | |
|---|---|
| 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 was advised of planned releases via their flood information email. No formal advice is required of them as the release is a minor drawdown however there is ongoing advice provided by them on predicted rainfall and flows. They were also provided advice of the releases that are occurring and closing.

Action taken was to mobilise the flood centre and advise Councils as requested regarding releases and keep BoM up to date.

| | |
|---|---|
| BoM Technical Officer name | |
| 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)*

BCC will advise internally for information purposes mainly re bridge closures in other council areas that may affect Brisbane residents.

Action taken was to mobilise the flood centre and advise Councils as requested regarding releases and keep BoM up to date.

| | |
|---|---|
| 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)*

Ipswich will coordinate closure of Colleges Crossing as necessary and any other actions.

Action taken was to mobilise the flood centre and advise Councils as requested regarding releases and keep BoM up to date.

| | |
|---|---|
| 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 will coordinate closure of Twin Bridges and Savages Crossing as necessary and any other actions.

Action taken was to mobilise the flood centre and advise Councils as requested regarding releases and keep BoM up to date.

| | |
|---|---|
| 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** | 16.12.2010 | **Time** | | **or Event** | Closing of event |

# TECHNICAL SITUATION REPORT

| TSR Number | W4 | Date of TSR release | 16.12.2010 | Time of TSR release | 4pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

**Somerset/Wivenhoe Dams**

Releases ceased from Wivenhoe Dam at 10am on 16th December 2010.

Releases from the hydro continued during fish recovery operations.
Once they were completed, the cone valve was also opened to release at a combined rate of around 4200ML per day until the water level in both dams falls to near full supply levels. At this time normal operational releases to the Mt. Crosby WTP will re-commence.

Twin Bridges, Savages Crossing and Colleges Crossing will clear as the river level drops. It is likely that Colleges Crossing will be opened sometime Friday morning, although this will depend on flows in the river and any rainfall.

Releases from Somerset to Wivenhoe will be wound back during today and tomorrow.

Councils were contacted when the gate was closed this morning.

A follow up email will not be sent as no assessment is required.

| | |
|---|---|
| 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 was advised of the closure.

Action taken was to demobilise the flood centre.

| | |
|---|---|
| BoM Technical Officer name | |
| 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 was advised of the closure.

Action taken was to demobilise the flood centre.

| | |
|---|---|
| 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 was advised of the closure.

Action taken was to demobilise the flood centre.

| | |
|---|---|
| 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 was advised of the closure.

Action taken was to demobilise the flood centre.

| | |
|---|---|
| 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 | Nil | Time | | or Event | |
|---|---|---|---|---|---|---|

# TECHNICAL SITUATION REPORT

| TSR Number | W5 | Date of TSR release | 17.12.2010 | Time of TSR release | 12pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

**Somerset/Wivenhoe Dams**

The previous release plan was to get Wivenhoe dam as close to FSL as possible without inundating Burtons bridge and balance this off against opening Colleges Crossing as soon as possible. The BOM forecasts on Wednesday when the decision was made to proceed with closure on Thursday morning indicated a low chance of significant rainfall until Sunday and unfortunately these forecasts did not prove correct and were revised upwards on Thursday.

A decision to commence a release tonight was made this morning by Duty Flood Engineers to provide as much notice to impacted Councils as possible. Due to the large storms experienced yesterday afternoon and night, the current rain on the ground will result in over 60,000ML needing to be released from Wivenhoe and Somerset Dams to achieve FSL. Additionally BOM are forecasting an additional 20 to 50 millimetres of rain tonight, with further rain forecast through the weekend. If this rain eventuates, substantial flood releases will occur impacting a number of bridges along the river.

The extent of the release commencing tonight will depend on the rain that falls in the catchment over the next 72 hours. This could vary between 10 and 100+ millimetres and the release strategy will be developed in accordance with the Manual of Flood Mitigation as the situation develops. The objectives of the release will be to protect the safety of the dam while minimising flooding impacts on the crossings downstream of the dam in the Brisbane River.

Councils were contacted this morning to advise of the strategy and they had no concerns with the strategy and agreed with the strategy.

Twin Bridges, Savages Crossing and Colleges Crossing may be impacted by releases but it depends to some extent on the rainfall tonight and weekend. Significant rainfall could result in other bridges being impacted by releases.

A follow up email will be sent in case Councils want to provide an assessment.

| | |
|---|---|
| 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 of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| BoM Technical Officer name | |
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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** | 17.12.2010 | **Time** | | **or Event** | Gate opening |

# TECHNICAL SITUATION REPORT

| TSR Number | W6 | Date of TSR release | 17.12.2010 | Time of TSR release | 6pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

At 18:00 tonight the regulator was closed and Gate 3 opening initiated.

By 18:30, Gate 3 will be open 0.5 metres and releasing approximately 50m3/s.

It is noted that the hydro will continuing releasing 13 m3/s, making a total release from Wivenhoe Dam just over 63m3/s.

Based on levels in the creeks and ongoing rain, releases will most likely increase during the night depending on the flow in Lockyer Creek and inflows. It is planned at this stage that releases could increase to 300m3/s depending on downstream flows. This is similar to last week and will impact Twin Bridges, Savages Crossing and Colleges Crossing.

Councils were contacted tonight prior to release to advise them of the strategy and they had no concerns with the proposed release strategy.

A follow up email will be sent in case Councils want to provide an assessment.

| | |
|---|---|
| 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 of the releases.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| BoM Technical Officer name | |
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 | 18.12.2010 | Time | 9am | or Event | Change in strategy |

# TECHNICAL SITUATION REPORT

| TSR Number | W7 | Date of TSR release | 18.12.2010 | Time of TSR release | 7am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

Since Thursday falls of 40-50 mm have fallen over the catchment with isolated falls of up to 80 mm. It is estimated that this inflow will result in approximately 100,000 Ml of flood water flood storage that will need to be drained over the next four days. The total flow in the Brisbane River will be maintained at between 300-350 m3/s, depending on further rain. Somerset Dam is currently transferring water to Wivenhoe Dam through two regulators. Overnight Wivenhoe Dam releases where increased to 150m3/s and will increase to 300 m3/s as the flows from Lockyer Creek subside over the next twenty-four hours. Lockyer Creek is currently peaking at approximately 130 m3/s.

Currently twin Bridges and Savages crossing are closed by the flood releases. Colleges crossing will be impacted from late afternoon.

This is in accordance with the strategy advised to Councils previously however a follow up advice will be sent.

A follow up email will be sent in case Councils want to provide an assessment.

| | |
|---|---|
| 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 of the releases.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| BoM Technical Officer name | |
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 | Any significant change in strategy |
|---|---|---|---|---|---|---|

# TECHNICAL SITUATION REPORT

| TSR Number | W8 | Date of TSR release | 19.12.2010 | Time of TSR release | 7am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

This is just an update and does not include further discussions with Councils unless the strategy changes.

There is no change in the current strategy however storms on Saturday afternoon dumped 20 to 30mm in the Monsildale area in the upper Brisbane River but elsewhere in the Upper Brisbane and Stanley Rivers falls were much lower.

At 0600 Sunday, two regulators remain open at Somerset Dam, giving a release of around 12,000 ML/day into Wivenhoe. These releases are expected to continue for several days, especially as further rain is forecast in the next 24 hours.

The storms on Saturday afternoon caused renewed river rises in the Upper Brisbane. Significant inflows to Wivenhoe will continue for several days.

There is currently has one gate open at Wivenhoe Dam at 3.5 metres providing a release of about 350 m3/s. This release is expected to continue until at least Wednesday and perhaps longer depending on forecast rain in the next 36 hours.

Twin Bridges, Savages Crossing and Colleges Crossing are closed. Savages Crossing and Colleges Crossing are expected to remain closed until at least Wednesday with Twin Bridges closed for a much longer period.

The current strategy is to drain Somerset and Wivenhoe back to full supply level by mid week and keep Kholo and Burtons Bridge remaining open, but this may change depending on the rainfall experienced in the catchments in the next 24 hours.

This is in accordance with the strategy advised to Councils and they will be advised of any change.

| | |
|---|---|
| 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 of the releases.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| BoM Technical Officer name | |
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 was advised of the strategy.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 | Any significant change in strategy |

# TECHNICAL SITUATION REPORT

| TSR Number | W9 | Date of TSR release | 19.12.2010 | Time of TSR release | 6pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

This is a further update.

Somerset Dam remains relatively steady with two regulator valves discharging around 140 cumecs. Inflows have risen slightly during the afternoon and so Somerset Dam lake level should remain steady until late tonight.

The only change with Wivenhoe Dam was to reduce the gate opening from 3.5m to 3.0m due to the Lockyer flows. Wivenhoe Dam also remains steady with Gate 3 open 3.0 m discharging approximately 300 cumecs. Rises in the Upper Brisbane are expected to result in the Lake level increasing to around 67.4 m AHD over the next two days.

Under the current operational strategy the release from Wivenhoe Dam will be maintained at 300 cumecs (Lockyer Creek flows permitting) to enable Burtons Bridge to remain open. This may mean releases from Wivenhoe Dam will be throttled back to ensure the bridge is not inundated prematurely. It is anticipated that if no further rainfall occurs, Wivenhoe and Somerset Dam will continue to operate until early Friday 24 December.

If more rainfall occurs this evening or further inflows occur, the current strategy will need to be revised and the closing of Burtons Bridge and Kholo Bridge will be considered. A decision on this will be made by 10:00 on Monday 20 December 2010. Councils have been advised of this possibility and further discussions with Councils will take place in the morning.

Twin Bridges, Savages Crossing and Colleges Crossing are closed. Savages Crossing and Colleges Crossing are expected to remain closed until at Friday.

| | |
|---|---|
| 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 of the releases.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| BoM Technical Officer name | |
| 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)*

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 situation with further advice before the current strategy is changed.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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 situation with further advice before the current strategy is changed.

Action taken was to mobilise the flood centre.

| | |
|---|---|
| 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** | Any significant change in strategy |

# TECHNICAL SITUATION REPORT

| TSR Number | W10 | Date of TSR release | 20.12.2010 | Time of TSR release | 7am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

This is a further update.

**Somerset and Wivenhoe Dam**

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 will be discussed with the impacted Councils this morning with a decision on the strategy to be made by 1000. Dam inflow excluding Somerset Dam outflows should peak tomorrow at around 1800 cumecs.

| | |
|---|---|
| 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 | [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. Their 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 |

# TECHNICAL SITUATION REPORT

| TSR Number | W11 | Date of TSR release | 20.12.2010 | Time of TSR release | 9am |
|---|---|---|---|---|---|

## 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 wee 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 | [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. Their 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 |

# TECHNICAL SITUATION REPORT

| TSR Number | W12 | Date of TSR release | 20.12.2010 | Time of TSR release | 9am |
|---|---|---|---|---|---|

## 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 wee 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 | [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** | |

# TECHNICAL SITUATION REPORT

| TSR Number | W13 | Date of TSR release | 21.12.2010 | Time of TSR release | 7.30am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

Somerset/Wivenhoe Dams

**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 100.23 m AHD, (114 % of capacity).

The estimated inflow into Somerset Dam to date is 110,700 ML, of which 67,500 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 have been steadily increased overnight with a maximum release rate of about 1,280 m3/s being established at 05:00 today. 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 this morning. The current level is EL 68.22 m AHD (112% of capacity) and falling slowly.

The estimated inflow into Wivenhoe Dam to date (excluding releases from Somerset Dam) is 157,900 ML, of which 103,000 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 Lower Brisbane River. 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 is also expected to be inundated by mid-morning today as the increased releases reach the lower Brisbane River. 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.

Advice from the BoM regarding predicted tides in the Brisbane River at the City Gauge, suggest that peak levels (1.6 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 only 0.1 m. 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 in light of changed observations.

BCC had similar advice from BoM yesterday that releases plus other fresh water flows would only have 100mm impact on tides. The Flood Centre discussed with BCC yesterday and requested if they had any concerns to advise or any need to change release strategy and none received to date.

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 | [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** | 21.12.2010 | **Time** | Late afternoon | **or Event** | |

# TECHNICAL SITUATION REPORT

| TSR Number | W14 | Date of TSR release | 22.12.2010 | Time of TSR release | 8.30am |
|---|---|---|---|---|---|

## 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 | [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 |
|---|---|---|---|---|---|---|

# TECHNICAL SITUATION REPORT

| TSR Number | W15 | Date of TSR release | 22.12.2010 | Time of TSR release | 4.00pm |
|---|---|---|---|---|---|

## 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 |
| [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 | [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 | 23.12.2010 | Time | | or Event | Closure |

# TECHNICAL SITUATION REPORT

| TSR Number | W16 | Date of TSR release | 23.12.2010 | Time of TSR release | 8.00am |
|---|---|---|---|---|---|

## 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 | [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 |

# TECHNICAL SITUATION REPORT

| TSR Number | W17 | Date of TSR release | 23.12.2010 | Time of TSR release | 2.30pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

**Somerset/Wivenhoe Dams**

**Somerset Dam**

Sluice gate operations ceased at 09:00 today with the lake level at 99.10 m AHD. Base flows will result in the lake level rising over the next few days.

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

**Wivenhoe Dam**

Wivenhoe Dam is currently discharging around 350 $m^3/s$ with Gate 3 open 3.5 m. The scheduled cessation of gate operations at Wivenhoe Dam has been extended until tomorrow afternoon (Friday 24 December 2010) with a target of 1.00pm as base flows and the overnight rain has meant the lake level has not dropped as quickly as anticipated. The current lake level is 67.23 m AHD.

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.

**Impact 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 Kholo Bridge and Burtons Bridge should be trafficable by this evening.

Projected "early side" times for bridges becoming clear of water based on the current gate closure sequence and concurrent Lockyer Creek flows are as follows:-

Burtons Bridge – 18:00 Thursday 23 December 2010.
Kholo Bridge – 21:00 Thursday 23 December 2010.

The remaining bridges will most likely remain closed until Christmas Day.

**Rainfall**

There have been falls of between 10 and 30 mm in the catchments over the last 24 hours. This has led to small rises in the Stanley, Pine, Lockyer and Bremer Rivers. The Lockyer Creek flow is likely to impact the middle-Brisbane River tomorrow and this may prevent the opening of Savages Crossing and Colleges Crossing.

Rainfall across the region is expected to increase up to 06:00 on 25 December 2010 before easing and further heavy rainfall may commence late on 29 December 2010.

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

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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 |

# TECHNICAL SITUATION REPORT

| TSR Number | W18 | Date of TSR release | 24.12.2010 | 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 | • Reduce level of Wivenhoe as close as possible and still close.off today and allow further bridge openings (dependent on other inflows). | |
| Strategy | • Wivenhoe releasing around 300 to 350m3/s through one gate but reducing during the day based on Lockyer flows to prevent Burtons Crossing going under.<br>• Continued releases through valves and hydro after gate is closed at 1pm but level based on Lockyer flows.<br>• Monitor inflows and need for further gate releases. | |
| Key considerations | Storage levels: | See below |
| | Inflows: | Ongoing base flows |
| | Rainfall: | See below |
| | Lockyer/Bremer: | Flows increasing. With further rainfall, may inundate local bridges with further rainfall. |
| | Brisbane River: | Any minor impact on tides will start decreasing. |

### Rainfall

Little to no rainfall has been experienced in the dam catchments since yesterday morning. However BOM commenced issuing severe weather warnings last night for scattered showers, thunderstorms and general rain areas over eastern Queensland for the coming week.
Some locally heavy falls are expected to commence developing about the southeast coast during this evening. The current BOM forecast is:

**Friday 24 December** Rain increasing
**Saturday 25 December** Rain at times
**Sunday 26 December** Rain at times
**Monday 27 December** Rain at times
**Tuesday 28 December** Rain easing
**Wednesday 29 December** Showers
**Thursday 30 December** Showers

With the current wet catchments, there is a high probability that the forecast rain will result in further flood releases from the dams over the coming week.

### Somerset Dam

Sluice Gate operations ceased at 0900 yesterday and since that time the lake has risen around 100 millimeters. A regulator will be opened this morning to drain the lake to near full supply level. Further

gate operations may be necessary in coming days if forecast rainfall results in subsequent river rises. The estimated total inflow into the dam for the event is in excess of 135,000ML, the majority of which has been released into Wivenhoe.

**Wivenhoe Dam**

Radial Gate operations are currently continuing at Wivenhoe Dam with the release being reduced by one gate increment every 5 to 6 hours to ensure that Brisbane River flows are not increased by the increasing Lockyer Creek outflows and to maintain Burtons Bridge open (water ceased to flow over Burtons Bridge at approximately 2030 yesterday). All gates are currently scheduled to be closed by 1300 today. When the gates are closed, the lake level will be around 67.07m or 70mm above the dam full supply level and 180mm 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 for the event (excluding releases from Somerset Dam) is now 250,000 ML. A total of over 360,000 ML will have been released downstream from Wivenhoe Dam into the Brisbane River by this afternoon. The total estimated inflow into both dams for this event is now approaching 390,000 ML.

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

**Impacts of Wivenhoe Dam Releases**

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. All other crossings downstream of the dam are currently open. Tide levels continue to be monitored closely with peak tide estimates being adjusted by BOM to account for Wivenhoe Dam outflows but will decrease continuously.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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 |

# TECHNICAL SITUATION REPORT

| TSR Number | W19 | Date of TSR release | 24.12.2010 | Time of TSR release | 1.30pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| Current objectives | • Monitor the rain overnight and ongoing inflows. | |
| Strategy | • Close gates at Wivenhoe at 1.00pm<br>• Wivenhoe continues to release 4,200ML per day through hydro and valves. | |
| Key considerations | Storage levels: | Just above FSL |
| | Inflows: | Ongoing base flows |
| | Rainfall: | |
| | Lockyer/Bremer: | Flows increasing. With further rainfall, may inundate local bridges with further rainfall. |
| | Brisbane River: | Any minor impact on tides still decreasing. |

### Somerset Dam

Sluice Gate and valve operations have ceased for the time being.

### Wivenhoe Dam

Radial Gate operations ceased at 1.00pm.
A regulator and hydro will be opened to release around 4,200ML per day.

The Flood Centre will monitor overnight and consider options tomorrow morning based on inflows and rainfall.

Further gate operations may be necessary in coming days.

### Impacts of Wivenhoe Dam Releases

Twin Bridges, Savages Crossing and Colleges Crossing may still be affected by flows from the Lockyer.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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 | Gate opening |

# TECHNICAL SITUATION REPORT

| TSR Number | W20 | Date of TSR release | 25.12.2010 | Time of TSR release | 9.30am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | |
|---|---|
| Current objectives | • Begin discharging tomorrow now Lockyer is dropping |
| Strategy | • Monitor today and begin releases Sunday morning to maximise release but not affecting anything more than low level bridges.<br>• Planned release is 300-400m3/s<br>• Currently still releasing 4200ML per day from valve and hydro |
| Key considerations | Storage levels: Above FSL |
| | Inflows: Ongoing inflows plus last nights rain |
| | Rainfall: |
| | Lockyer/Bremer: Flows decreasing.. |
| | Brisbane River: |

**Somerset Dam**

All regulators and sluices are currently closed at Somerset Dam.

In the 24 hours to 0600 25/12/2010 rainfall totals have varied from 10 to 20mm with an average of about 20mm. Some small rises have being recorded at Peachester, Woodford and Mt Kilcoy.
Lake level has risen from 99.18m at 0600 24/12/2010 to 99.33 at 0730 25/12/2010. The runoff from the overnight rain plus baseflow will result in approximately 13,000 ML over the next few days. Without gate ops, water level could reach 99.5m later on Sunday 26/12/2010.

**Wivenhoe Dam**

Wivenhoe Dam is currently releasing 4,200ML through the hydro and regulator.

In the 24 hours to 0600 25/12/2010 rainfall totals have varied from 10 to 20mm with an average of about 20mm. Recessions are expected to be prolonged. An additional 15,000ML is expected to flow into Wivenhoe just from the upper Brisbane in the next few days. Downstream of Wivenhoe, water levels are continuing to fall in Lockyer Ck and the overnight rain is not expected to cause renewed rises. Some small rises are expected in the Bremer and Warrill systems during today.
Lake level has risen from 67.12m when gates were closed at 1400 24/12/2010 to 67.28m at 0600 26/12/2010.

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.

Strategy is to begin operation Sunday morning of Wivenhoe gates and probably Somerset valves. Councils have been notified and are fine with strategy.

Burtons and Kholo (apart from repairs) will not be affected by this release strategy at this stage however it depends on rainfall over next few days.

**Rainfall Forecast for SEQId**
Sat 25/12/2010 10-15mm
Sun 26/12/2010 25-50mm
Mon 27/12/2010 50-100mm
Tue 28/12/2010 50-100mm
Wed 29/12/2010 15-25mm
BOM confirm that heaviest rain is likely to be Sunday/Monday.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new strategy.

| | |
|---|---|
| ICC Technical Officer name | Tony Trace |
| ICC Technical Officer position title | Local Disaster Response Coordinator |

| | |
|---|---|
| TCC 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 do not have a problem with the new 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 | Gate opening |

# TECHNICAL SITUATION REPORT

| TSR Number | W21 | Date of TSR release | 26.12.2010 | Time of TSR release | 8.00am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | |
|---|---|
| Current objectives | • Begin releases to drain stored flood waters only impacting on low level bridges and monitoring predicted rainfall |
| Strategy | • Begin releases of around 300m3/sec<br>• Monitor rainfall |
| Key considerations | Storage levels: Above FSL |
| | Inflows: Ongoing inflows plus last nights rain |
| | Rainfall: |
| | Lockyer/Bremer: Flows decreasing. |
| | Brisbane River: |

### Rainfall

Only relatively minor rainfall has been experienced in the dam catchments in the last 24 hours, with a catchment average of around 10mm experienced at all three dams. However the QPF issues at 1600 yesterday was for 40 to 60mm and BOM radar indicates that rain is approaching the catchments from the north. Additionally at 0445, BOM issued a severe weather warning that takes in the dam catchment areas that is associated with a rain depression moving down from Mackay towards the NSW border. The current BOM forecast is:

**Sunday 26 December** Rain
**Monday 27 December** Rain periods
**Tuesday 28 December** Rain at times
**Wednesday 29 December** Rain at times
**Thursday 30 December** Rain easing to showers
**Friday 31 December** Mostly fine
**Saturday 31 December** Mostly fine

With the current wet catchments, there is a high probability that the forecast rain will result in further flood releases from the dams over the coming week.

### Somerset Dam

Sluice Gate operations ceased on 23 December 2010 and since that time the lake has risen steadily to currently be around 99.46m or 460mm above the full supply level. At least two regulators will be opened later today to drain the lake to near full supply level, plan is for 9.00am at a discharge of about 140m3/s. Draining will take at least until Tuesday. Further gate operations may be necessary in coming days if forecast rainfall results in subsequent river rises.

**Wivenhoe Dam**

Radial Gate operations ceased on 24 December 2010 and since that time the lake has risen steadily to currently be around 67.37m or 370mm above the full supply level. A radial gate will be opened later today following discussions with the Impacted Local Authorities to drain the lake to near full supply level. Draining will take at least until Tuesday. Further gate operations may be necessary in coming days if forecast rainfall results in subsequent river rises.

**Impacts of Wivenhoe Dam Releases**

With no radial gate releases from Wivenhoe dam since 24 December 2010, the crossings downstream of the dam are currently impacted primarily by non-controlled river flows only. Lockyer Creek outflows into the Brisbane River are currently in the order of 60 cumecs.

Twin Bridges, Savages and Colleges Crossings will be inundated but the plan is to release around 300-350cumecs depending on flows downstream so as to not impact Burtons Bridge.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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 | Significant Change |

# TECHNICAL SITUATION REPORT

| TSR Number | W22 | Date of TSR release | 27.12.2010 | Time of TSR release | 8.00am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| Current objectives | • Continue reducing releases until Lockyer increases to flow sufficient to inundate Burtons and/or Kholo and then begin releasing stored water during week.<br>• Continue to store floodwaters to minimise impacts downstream and then release in a controlled manner | |
| Strategy | • Begin increasing release later today or early tomorrow as Lockyer rises to give overall river flow of around 1500cumecs | |
| Key considerations | Storage levels: | Above FSL |
| | Inflows: | Ongoing inflows plus last nights rain |
| | Rainfall: | |
| | Lockyer/Bremer: | Flows increasing significantly due to rain last 24 hours |
| | Brisbane River: | |

### Rainfall

Reasonably significant rainfalls in the order of 40 to 50 mm have been experienced in the dam catchments in the last 24 hours, but the rainfall has only been in the order of 5 to 10mm in the last 6 hours. The QPF issued at 1600 yesterday was for 50 to 100mm and the severe weather warning associated with possible widespread rainfall in the dam catchments remains current and was re-issued by BOM at 0445 today. The current BOM forecast is:

**Monday 27 December** Rain periods
**Tuesday 28 December** Rain at times
**Wednesday 29 December** Rain at times
**Thursday 30 December** Shower or two
**Friday 31 December** Fine
**Saturday 31 December** Fine
**Sunday 1 January** Fine

With the current wet catchments, there is a high probability that the forecast rain will result in further flood releases from the dams over the coming week.

### Somerset Dam

Two regulators were opened yesterday morning, to provide a release of 12000ML/day. Since that time the lake has continued to rise steadily to currently be around 99.60m or 600mm above the full supply level. Further gate operations may be necessary today if forecast rainfall results in subsequent river rises. Draining will take at least until Wednesday. The next update will be provided at around 1200

today.

Currently at 107.7% with 30,000ML over FSL.

**Wivenhoe Dam**

Radial Gate operations recommenced yesterday at 0900 and since that time the lake has risen steadily to currently be around 67.57m or 570mm above the full supply level. Because of outflows from Lockyer Creek, outflows from Wivenhoe Dam have been steadily reduced during the night to ensure Burtons Bridge remained open. Radial gates at Wivenhoe Dam have been progressively wound back this morning as the Lockyer Creek outflows into the Brisbane River increase above 250 cumecs. This will keep Burtons Bridge open until late this afternoon. However it is anticipated that Lockyer Creek outflows will peak above 500 cumecs later today/tomorrow and these flows will inundate Burtons Bridge. As this occurs, outflows from Wivenhoe Dam will be increased to drain the lake to near full supply level. Draining will take at least until Thursday. Further gate operations may be necessary in coming days if forecast rainfall results in subsequent river rises.

Wivenhoe is around 105.6% and 65,000ML over FSL.

**Impacts of Wivenhoe Dam Releases**

Twin Bridges, Savages Crossing and Colleges Crossing are currently closed and will remain so until at least Thursday. Burtons Bridge is currently open, but will be closed later today/tomorrow and is likely to remain closed until at least Wednesday. However, the length of time that Burtons Bridge will be closed is dependant upon the rainfall experienced over the next several days. Kholo Bridge remains unserviceable due to flood damage. There is 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, but at this stage it is not expected to be before 1600 today. This may change as rainfall is experienced during the day.

Tide levels in Brisbane are decreasing generally so Wivenhoe releases should have minimal impact.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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 | Change in strategy |
|---|---|---|---|---|---|---|

# TECHNICAL SITUATION REPORT

| TSR Number | W24 | Date of TSR release | 29.12.2010 | Time of TSR release | 7.00am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| **Current objectives** | • Drain flood compartment as quickly as possible (by about Sunday) without impacting Mt Crosby or Fernvale bridges. | |
| **Strategy** | • Continue increasing releases from current release as Lockyer drops up to maximum of 1500cumecs.<br>• Twin Bridges, Savages, Burtons, Kholo and Colleges will be inundated until Sunday. | |
| **Key considerations** | Storage levels: | Above FSL |
| | Inflows: | Ongoing inflows plus yesterdays rain |
| | Rainfall: | |
| | Lockyer/Bremer: | Flows beginning to decrease |
| | Brisbane River: | Releases increasing from yesterday, other inflows downstream dropping away rapidly so releases will not impact on Brisbane River downstream. As per BoM advice, impact on tides minimal. |

**Rainfall**

No rainfall has fallen in the past 12 hours to 0600 Wednesday with the exception of 2-4 mm in the upper Somerset Dam catchment.
The rainfall forecast issued by BOM at 1600 Tuesday indicated only 3-5 mm in the Somerset and Wivenhoe catchments and 5-10mm in the North Pine catchment for the next 24 hours. The current BOM forecast for SE Qld over the next few days is mostly fine with a few showers

However, catchments remain saturated and are primed for additional runoff in the event of rain.

**Somerset Dam**

A flood release through the regulator cone valves at the dam commenced at 0900 on Sunday 26 December 2010. Early Tuesday the regulators were closed and sluices progressively opened throughout the day. At 1800 Tuesday 2 sluices were open, releasing about 35,000 ML/day into Wivenhoe. A further two sluice gates where opened overnight in an attempt to bring the lake level down to 99.75 to enable recreational use of Somerset water activities to resume on Wednesday. At 1800, the lake level was 99.83m AHD and falling slowly. Two sluice gates will be closed by 12:00 29/12/2010 and two sluice gates are expected to remain open until Thursday and will be closed when the lake returns to the full supply level of 99m AHD. The total volume of water released since the event commenced on 26 December 2010 is 66,000ML, with the current projected total release volume for this event approaching 110,000ML (includes inflows still coming ing).

Currently Somerset is at around 110% with 36,000ML above FSL.

**Wivenhoe Dam**

Radial gate operations for the current event commenced at 0900 on Sunday 26 December 2010. After scaling up to an initial release rate of 30,000ML/day, the release was scaled back Monday to the minimum radial gate release rate of 4,000ML/day to ensure that Burtons Bridge remained open and to reduce flooding impacts in the Brisbane River caused by flows from Lockyer Creek. Lockyer Ck outflow peaked at midday Tuesday and Wivenhoe gates were commenced to be re-opened at 1500 Tuesday, releasing on the back of the Lockyer recession. It is intended to gradually increase the Wivenhoe releases during Tuesday and Wednesday so that the combined release and Lockyer flow is maintained at about 1600m3/s (140,000 ML/day) in the mid Brisbane R. Note this is similar to the flows in the mid Brisbane in mid October and mid December 2010. This will be maintained until at least Saturday when it is expected that shut down procedure will commence. Gate closure sequencing will be such that the releases will mimic the natural pre-dam flows.

At 0600, the Wivenhoe water level was 69.26m AHD and rising slowly with the current release rate at 60,000ML/day. Inflows into the dam are subsiding and the lake will fall slowly once the release rate is scaled up 130,000 ML/day during Wednesday. It is aimed to return the dam to full supply level by Sunday. The total volume of water released since the event commenced on 26 December 2010 is 66,000ML, with the current projected total release volume for this event being in the order of 385,000ML (includes inflows from Somerset Dam).

Currently Wivenhoe is at 122.3% about 260,000ML above FSL.

**Impacts of Wivenhoe Dam Releases**

Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed and will remain so until at least Sunday. There is no current expectation that either Mt Crosby Weir Bridge or Fernvale Bridge will be impacted by the current event. At this stage, it is estimated that the flow at Burtons Bridge will fall below the bridge deck on Sunday morning.

Wivenhoe releases should have minimal impact on tides based on planned releases. BoM advice confirmed this. Impacts from Bremer and other inflows should have mostly passed by the time any release from Wivenhoe gets to downstream river reaches.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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 | 30.12.2010 | Time | | or Event | |

# TECHNICAL SITUATION REPORT

| TSR Number | W25 | Date of TSR release | 30.12.2010 | Time of TSR release | 7.00am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| **Current objectives** | • Drain flood compartment as quickly as possible (by about Sunday) without impacting Mt Crosby or Fernvale bridges. | |
| **Strategy** | • Continue current releases of around 1500cumecs.<br>• Twin Bridges, Savages, Burtons, Kholo and Colleges will be inundated until Sunday. | |
| **Key considerations** | Storage levels: | Above FSL |
| | Inflows: | Ongoing inflows |
| | Rainfall: | |
| | Lockyer/Bremer: | Flows continue to decrease |
| | Brisbane River: | Releases increased from yesterday, other inflows downstream dropping away rapidly so releases will not impact on Brisbane River downstream. As per BoM advice, impact on tides minimal. |

### Rainfall

There has been no significant rainfall in the North Pine, Somerset and Wivenhoe catchments since 09:00 on Wednesday 29 December 2010. The current BOM forecast for SE Qld over the next few days is mostly fine with a few light showers, although there is a chance of storms on Tuesday and Wednesday next week.

The catchments remain saturated and are primed for additional runoff in the event of rain.

### Somerset Dam

At 06:00 Thursday 30 December 2010, two sluices remain open, releasing about 35,000 ML/d into Lake Wivenhoe and are expected to remain open until Thursday afternoon when the lake returns to the full supply level of 99.00m AHD. The total volume of water released since the event commenced on 26 December 2010 is 104,000ML, with the current projected total release volume for this event approaching 123,000ML.

### Wivenhoe Dam

Releases were gradually increased during Wednesday and Thursday morning until the combined release and Lockyer flow reached about 1,600m3/s (140,000 ML/d) in the middle Brisbane River. (Note this is similar to the flows in the releases made in mid-October and earlier in December 2010). This release will be maintained until mid-day Friday 31 December 2010, when the shut down procedure will commence and gates are expected to be fully closed by Sunday morning 2 January 2010. The proposed gate closure sequence will be such that the releases will mimic the natural pre-dam

recessional flows.

Gauge board readings indicate that the Wivenhoe dam water level peaked at 69.33m at noon Wednesday 29 December 2010, about 2.3m above the full supply level. At this level, the dam was temporarily storing over 270,000ML of flood water. At 06:00 on Thursday 30 December 2010, the level had fallen slightly to 69.07m AHD and was releasing about 1,530m3/s (132,000ML/d). The total volume of water released from Wivenhoe dam since the event commenced on 26 December 2010 is 160,000ML, with the current projected total release volume for this event being in the order of 425,000ML (includes inflows from Somerset Dam).

**Impacts of Wivenhoe Dam Releases**

Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed due to inundation and will remain so until at least Sunday 2 January 2011. There is no current expectation that either Mt Crosby Weir Bridge or Fernvale Bridge will be impacted by this event. At this stage, it is estimated that the flow at Burtons Bridge will fall below the bridge deck on Sunday morning.

Wivenhoe releases should have minimal impact on tides based on planned releases. BoM advice confirmed this earlier in the week. Impacts from Bremer and other inflows should have mostly passed by the time any release from Wivenhoe gets to downstream river reaches.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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** | Closing sequence or change in strategy |

# TECHNICAL SITUATION REPORT

| TSR Number | W26 | Date of TSR release | 31.12.2010 | Time of TSR release | 7.00am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| **Current objectives** | • Drain flood compartment as quickly as possible (by about Sunday) without impacting Mt Crosby or Fernvale bridges. | |
| **Strategy** | • Continue current releases of around 1500cumecs.<br>• Twin Bridges, Savages, Burtons, Kholo and Colleges will be inundated until Sunday. | |
| **Key considerations** | Storage levels: | Above FSL |
| | Inflows: | Ongoing inflows |
| | Rainfall: | |
| | Lockyer/Bremer: | Flows continue to decrease |
| | Brisbane River: | Releases not changing greatly, other inflows downstream dropping away rapidly so releases will not impact on Brisbane River downstream. As per BoM advice, impact on tides minimal. |

### Rainfall

There has been no significant rainfall in the North Pine, Somerset and Wivenhoe catchments since 0900 on Wednesday 29 December 2010. The current BOM forecast for SE Qld over the next few days is mostly fine with a few light showers, although there is a chance of storms on Tuesday and Wednesday next week.

The catchments remain wet and are likely to generate additional runoff in the event of rain.

### Somerset Dam

At 0500 on Friday 31 December 2010, the lake level was 99.01m AHD falling from a peak of 100.0m AHD reached around noon Tuesday 28 December 2010. Two regulators are currently operating and will remain open until the lake returns to the full supply level of 99.00m AHD. The total volume of water released since the event commenced on 26 December 2010 is 126,000 ML, with the current projected total release volume for this event approaching 130,000ML.

### Wivenhoe Dam

Releases were gradually increased during Wednesday and Thursday morning until the combined release and Lockyer flow reached about 1,600m3/s (140,000 ML/d) in the middle Brisbane River. (Note this is similar to the flows in the releases made in mid-October and earlier in December 2010). Flow measurement carried out by the Department of Environment and Heritage during Thursday has confirmed this flow. This release will be maintained until late Friday 31 December 2010, when the shut down procedure will commence and gates are expected to be fully closed by Sunday 2 January 2010.

The proposed gate closure sequence will be such that the releases will mimic the natural pre-dam recessional flows.

At 0500 on Friday 31 December 2010, the level had fallen slightly to 68.40m AHD and was releasing about 1,550m3/s (132,000ML/d). The total volume of water released from Wivenhoe dam since the event commenced on 26 December 2010 is 293,000ML, with the current projected total release volume for this event being in the order of 450,000ML (includes inflows from Somerset Dam).

**Impacts of Wivenhoe Dam Releases**

Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed due to inundation and will remain so until at least Sunday 2 January 2011. There is no current expectation that either Mt Crosby Weir Bridge or Fernvale Bridge will be impacted by this event. At this stage, it is estimated that the flow at Burtons Bridge will fall below the bridge deck on Sunday morning.

Wivenhoe releases should have minimal impact on tides based on planned releases. BoM advice confirmed this earlier in the week. Impacts from Bremer and other inflows should have mostly passed by the time any release from Wivenhoe gets to downstream river reaches.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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** | Final closing of gates |

# TECHNICAL SITUATION REPORT

| TSR Number | W27 | Date of TSR release | 2.1.2011 | Time of TSR release | 9.00am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| **Current objectives** | • . | |
| **Strategy** | • Closed gates at 9am<br>• Maintain levels through low level releases<br>• All bridges should be out of water during Sunday, Colleges may be late Sunday. | |
| **Key considerations** | Storage levels: | Slightly above FSL |
| | Inflows: | Ongoing minor inflows |
| | Rainfall: | |
| | Lockyer/Bremer: | |
| | Brisbane River: | Initial reduction of releases will have started being observed in Brisbane River downstream by late Saturday night. By Sunday afternoon impact would be equivalent to around 50% of maximum release. By later Monday there should be no impact of releases as flows will have all passed. |

### Rainfall

There has been light falls of up to 30mm in the North Pine and Somerset Dam catchments in the 24 hours to 06:00 Sunday 2 January 2011 which has resulted in some runoff in the Stanley and Pine Rivers. The current BOM forecast for SE Qld over the next week is for light showers, although there is a chance of storms on Wednesday and Thursday next week.

The catchments remain wet and are likely to generate additional runoff in the event of rain.

### Somerset Dam

The rain in the Stanley River catchment has produced minor inflows and one regulator is partially open, managing the small inflows.

At 07:30 on Sunday 2 January 2010, the lake level was EL 99.10m AHD and rising slowly. The peak of the event occurred around noon on Tuesday 28 December 2010 with a level of EL 100.0 m. The total volume of water released since the event commenced on 26 December 2010 is 135,000 ML.

### Wivenhoe Dam

At 09:00 on Sunday 2 January 2011, Wivenhoe Dam level was EL 67.10 m and gates are fully closed

and fish recovery has commenced. Upon completion of this operation, a regulator will be fully opened to manage continuing low inflows to the dam.

The total volume of water released from Wivenhoe dam since the event commenced on 26 December 2010 is 480,000ML (Includes inflows from Somerset Dam).

**Impacts of Wivenhoe Dam Releases**

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the closure.

It is expected that the flow in the mid Brisbane R will fall below Burtons Bridge on Sunday morning and below Colleges Crossing by Monday morning. Twin Bridges will continue to be impact by the continuing low releases for several days.

Wivenhoe releases should have minimal impact on tides based on planned releases. BoM advice confirmed this earlier in the week. Impacts from Bremer and other inflows have mostly passed by this time. By later Monday virtually all releases will have passed through the system.

| | |
|---|---|
| **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** | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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 | |

# TECHNICAL SITUATION REPORT

| TSR Number | W28 | Date of TSR release | 6.1.2011 | 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 | • Monitor inflows and begin releases later today depending on Lockyer flows | |
| Strategy | • Monitor and develop release strategy | |
| Key considerations | Storage levels: | Above FSL |
| | Inflows: | Ongoing inflows |
| | Rainfall: | |
| | Lockyer/Bremer: | Monitoring their inflows |
| | Brisbane River: | No impact as yet |

### Rainfall

Since 9am Wednesday, there have been widespread falls of 30mm with isolated heavy falls up to 50mm in the Somerset and Wivenhoe catchments. Totals in the North Pine catchment have generally been below 10mm. Falls up to 60mm were recorded in the Leslie Harrion catchment.

The forecast for the next 24 to 48 hours is for totals up to 150mm in SE Qld.

The catchments remain wet and are likely to generate additional runoff in the event of rain.

### Somerset Dam

At 0700 Thursday, Somerset Dam was 99.34m, 0.34m above FSL, and rising slowly. The rain in the Stanley River catchment has produced a small amount of runoff in the upper Stanley but there have been significant rises in Kilcoy Ck. Further regulator operations will be required later Thursday.

### Wivenhoe Dam

At 0700 Thursday, Wivenhoe Dam was 67.31m and rising slowly. This is 0.31m above FSL and above the gate trigger level of 67.25m. There have been rises recorded at rivers and stream upstream of Wivenhoe Dam. Gates will be opened in the next 24 hours to manage the inflows from the upper Brisbane River and the outflow from Somerset.

### Impacts of Wivenhoe Dam Releases

Based upon rain to date, expecting about 70,000ML from upper Brisbane. 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. On this basis, we will commence opening Wivenhoe at 1800 Thursday and ramp up to about 300m3/s by 2200. This would limit mid Brisbane flows to just

under 400m3/s (Burtons capacity 450m3/s).

If rainfall increases and Lockyer and local runoff also increase, we can close/reduce Wivenhoe accordingly to ensure that that 450m3/s is not exceeded unless necessary.

Councils have been advised of this strategy and are contacting residents.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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 | Gate opening |

# TECHNICAL SITUATION REPORT

| TSR Number | W29 | Date of TSR release | 7.1.2011 | Time of TSR release | 7.00am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| Current objectives | • Monitor inflows and begin releases later today depending on Lockyer flows | |
| Strategy | • Monitor and develop release strategy, possible Wivenhoe releases later today or early Saturday<br>• Due to high inflows, may need to impact Burtons which could be impacted purely by Lockyer flows later today anyway. | |
| Key considerations | Storage levels: | Above FSL |
| | Inflows: | Ongoing inflows |
| | Rainfall: | |
| | Lockyer/Bremer: | Monitoring their inflows |
| | Brisbane River: | No impact as yet |

### Rainfall

There have been general totals around 30 to 50 mm with isolated heavy falls up to 75mm in the Somerset and Wivenhoe catchments since the event commenced on Wednesday 5 January 2011. There have been significant rainfalls in the Lockyer Ck catchment in the last 72 hours with widespread falls of 50mm and isolated falls up to 100mm.

Totals in the North Pine catchment have generally been about 35mm.

Falls between 20 and 30mm were recorded in the Leslie Harrison catchment.

The forecast for the next five days is for totals between 100 and 200mm in SE Qld. Given the saturated condition of the catchments further runoff will most likely be generated from this rainfall.

### North Pine Dam

At 0600 Friday, North Pine Dam was at 39.48m, 0.12m below FSL. Gate operations commenced at 1915 on Thursday 6 January and are expected to continue until at least mid-day Friday 7 January when North Pine Dam is expected to be at 39.40m. These releases have impacted upon Youngs Crossing. Moreton Bay Regional Council was advised and they closed Youngs Crossing prior to gate operations commencing. Based upon the forecast rainfall, gate operations may continue into Saturday, but at this stage it is anticipated that gate operations will cease at around mid-day on Friday 7 January 2011.

### Somerset Dam

At 0600 Friday, Somerset Dam was at 99.59m, 0.59m above FSL, and rising slowly. The rain in the Stanley River catchment has produced a small amount of runoff in the Upper Stanley but there have been significant rises in Kilcoy Creek, contributing to the Somerset inflows. Somerset Dam is currently releasing at a rate of 35 cumecs and further regulator/sluice operations will be required in the next 24 to 72 hours.

The estimated event inflow volume into Somerset Dam is around 50,000ML.

**Wivenhoe Dam**

At 0600 Friday, Wivenhoe Dam was at 67.64m and rising slowly. This is 0.64m above FSL and above the gate trigger level of 67.25m. Upstream of the dam river levels have peaked at the Linville and Gregors Ck gauges. The estimated event inflow volume into Wivenhoe Dam is 230,000ML including Somerset Dam outflow.

A peak of about 470 cumecs is expected from Lockyer Creek by mid-afternoon on Friday 7 January. At this stage there is some uncertainty associated with this estimate but it may be of sufficient magnitude to inundate Burtons Bridge.

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. It is proposed that Wivenhoe releases will commence late Friday/early Saturday and may be as high as 1,200 cumecs, (similar but slightly smaller to recent events), and the releases are expected to continue over the weekend though to Monday or Tuesday.

**Impacts of Downstream of Wivenhoe**

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 and may impact upon Burtons Bridge from Friday mid-day and Kholo Bridge later on Friday evening. At this stage, there are 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.

**Leslie Harrison Dam**

Following the heavy rainfall Wednesday night, gate operations commenced at Leslie Harrison Dam late Wednesday night and are continuing. It is possible operations may cease later today with no further rainfall however, given the forecast rainfall, gate operations are expected to continue for some time.


| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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** | Gate opening decision |

# TECHNICAL SITUATION REPORT

| TSR Number | W30 | Date of TSR release | 7.1.2011 | Time of TSR release | 3.00pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| Current objectives | • Begin discharging stored floodwaters | |
| Strategy | • Start releasing at 3pm today and increase up to 1200cumecs. | |
| Key considerations | Storage levels: | Above FSL |
| | Inflows: | Ongoing inflows |
| | Rainfall: | |
| | Lockyer/Bremer: | Monitoring their inflows |
| | Brisbane River: | No impact as yet |

### North Pine Dam

Ongoing operations.

### Somerset Dam

Somerset Dam is currently releasing at a rate of 35 cumecs and further regulator/sluice operations will be required in the next 24 to 72 hours.

The estimated event inflow volume into Somerset Dam is around 50,000ML.

### Wivenhoe Dam

Wivenhoe releases commenced at 1500 Friday and will be slowly increased to about 1,200 m3/s by 1400 Saturday. It will initially be held around this level until Sunday morning at which time the release strategy will be reviewed and be dependent upon further rainfall.

### Impacts of Downstream of Wivenhoe

This will mean that 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.

Conversations have just taken place between BCC, Seqwater and BoM re impact of flows in the lower Brisbane R

Seqwater and BoM concur that a flow of a 1,500m3/s in the lower Brisbane R will only add about 50mm to the expected water levels in the City Reach on the recorded high tides. This has been demonstrated

by a comparison of the recorded water levels at Whyte Is and Brisbane City gauges during periods of no flow and periods of higher flows in the last few months.

However, it should be noted that this impact varies during the tidal cycle and is more pronounced on the low tide level that the high tide level.

It is recognized that current recorded high tide levels are 0.4 to 0.5 metres higher than predicted tides due to atmospheric conditions.

**Leslie Harrison Dam**

Following the heavy rainfall Wednesday night, gate operations commenced at Leslie Harrison Dam late Wednesday night and are continuing.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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 | 8.1.2011 | Time | | or Event | |

# TECHNICAL SITUATION REPORT

| TSR Number | W31 | Date of TSR release | 8.1.2011 | Time of TSR release | 7.00am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| **Current objectives** | • Continue increasing releases to discharge floodwater as quickly as possible | |
| **Strategy** | • Continue to increase releases from 890cumecs this morning to 1200cumecs by lunchtime<br>• This should keep Fernvale and Mt Crosby bridges clear however further predicted rainfall may impact. | |
| **Key considerations** | Storage levels: | Above FSL |
| | Inflows: | Ongoing inflows |
| | Rainfall: | |
| | Lockyer/Bremer: | Monitoring their inflows |
| | Brisbane River: | Minimal impact as per previous discussions and releases. |

**Rainfall**

Since 0900 Friday, there has been widespread 20 to 40mm throughout North Pine, Somerset and Wivenhoe catchments with isolated higher totals of 70mm in the upper reaches of the Brisbane R. No significant rain has fallen in the past 12 hours.

Advice from BoM indicates that SE Qld can expect further high rainfall totals over the next 4 days.

Saturday: Rain light at times 5-50mm with higher falls along the coast
Sunday: Widespread rain with totals between 50-100mm
Monday: Widespread rain again with totals between 50-100mm
Tuesday: Rain easing with totals between 25-50mm

Given the saturated conditions of the catchments, significant inflows to Seqwater dams will be generated, especially following the forecast rainfall on Sunday/Monday

**North Pine (Full Supply Level 39.60 m AHD)**

At 0600 Saturday, North Pine Lake Level was 39. 46 m AHD and slowly rising. Currently 3 gates are open to release runoff from rain on Wed/Thursday/Friday. Given the very high likelihood of significant runoff during the next 4 days, gates will be keep open to match inflows over the next few days, rather than opening and closing at various times with short notice. Youngs Crossing will remain adversely impacted for the duration of the gates being open. Moreton Bay Regional Council has been advised and concurs with this strategy.

**Somerset (Full Supply Level 99.00 m AHD)**

At 0500 Saturday, Somerset Dam level was 100.42m AHD and rising. The Dam is releasing into Wivenhoe through one open sluice gate. Water will be temporarily held in Somerset to allow the inflow from the upper Brisbane is passed through the system. However, this strategy may need to be reviewed if significant runoff occurs in the Stanley and Upper Brisbane. Under circumstances of high inflows to Somerset and Wivenhoe, it is the usual practice to hold flood water in Somerset until there is a high level of confidence in the estimated inflows to Wivenhoe.

Since the commencement of the event on 02/01/2011, approximately 85,000ML has flowed into Somerset Dam with a further 20,000ML expected based on the recorded rainfall to date. Approximately 25,000ML has been released into Wivenhoe.

**Wivenhoe (Full Supply Level 67.00 m AHD)**

At 0600 Saturday, Wivenhoe Dam was 68.45 m AHD and rising steadily with all five gates open and releasing about 890 m3/s. River levels upstream of Wivenhoe Dam were rising again, generating further inflow to the dam It is intended to ramp up the release from Wivenhoe to 1,200m3/s by midday Saturday 08/01/2011. Further assessments will be undertaken to determine increases above this level. However, given the high likelihood of significant inflows in the next week, this may be increased.

Since the commencement of the event on 02/01/2011, approximately 200,000ML has flowed into Wivenhoe Dam (including Somerset releases) with a further 180,000ML expected based on the recorded rainfall to date. Approximately 50,000ML has been released from Wivenhoe via the hydro and regulator at about 50m3/s.

**Impacts downstream of Wivenhoe**

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.

The current available assessments indicate that the combined flow in the lower Brisbane R would only add 50mm to an upper limit of 100mm to the recorded water levels in the City Reach of the Brisbane Rive. However, it is noted that tides in the lower Brisbane R will be 0.4 to 0.5 metres higher than predicted tides

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.

**Leslie Harrison Dam**

Following the heavy rainfall Wednesday night, gate operations commenced at Leslie Harrison Dam late Wednesday night and are continuing.


| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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** | Change in strategy |

# TECHNICAL SITUATION REPORT

| TSR Number | W32 | Date of TSR release | 9.1.2011 | Time of TSR release | 7.00am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| **Current objectives** | • Continue current releases to discharge floodwater as quickly as possible | |
| **Strategy** | • Continue the current releases of around 1350cumecs or 116,000ML per day, however this may change slightly depending on other flows to maintain around 1600cumecs in the mid Brisbane River<br>• This should keep Fernvale and Mt Crosby bridges clear however if further predicted rainfall occurs there may be impacts on these bridges too | |
| **Key considerations** | Storage levels: | Above FSL |
| | Inflows: | Ongoing inflows |
| | Rainfall: | |
| | Lockyer/Bremer: | Monitoring their inflows |
| | Brisbane River: | Minimal impact as per previous discussions and releases. |

**Rainfall**

Catchment average rainfall for the past 12 hours is; North Pine Dam (less than 10 mm); Somerset Dam (40 mm); Wivenhoe Dam (less than 10 mm). The bulk of the rain that has fallen in the Somerset Dam catchment has occurred in the last two hours, with recorded falls exceeding 60mm in some areas. The BOM forecast for the next seven days issued at 0450 this morning is:-

| | |
|---|---|
| Sunday: | Rain periods. |
| Monday: | Rain periods. |
| Tuesday: | Rain periods. |
| Wednesday | A few showers. |
| Thursday | A shower or two. |
| Friday | A shower or two. |
| Saturday | Mostly fine. |

A severe whether warning remains current for heavy rainfall in the dam catchment areas. The dam catchments are relatively saturated and significant inflows will be generated if the forecast rainfall eventuates.

**North Pine Dam (Full Supply Level 39.60 m AHD)**

The dam level is currently 39.47 m AHD and steady. Two radial gates remain open to release runoff generated from recent rainfall. Based on rainfall forecasts, the radial gates have been kept open in anticipation of further inflows over the next few days. However unless significant rain falls today,

consideration will be given to closing the gates late this afternoon or early tomorrow morning and discussions to finalise a decision on the timing of radial gate closure will be held with the Moreton Bay Regional Council later today. Youngs crossing will remain closed while releases are in progress.

**Somerset Dam (Full Supply Level 99.00 m AHD)**

The dam level is currently falling slowly, with the current level being 100.27m AHD. However the rain that has fallen in the dam catchment over the last two hours (recorded falls exceed 60mm in some areas) will result in significant inflows later today. The current release rate into Wivenhoe Dam is 35,000ML/day. Since the commencement of the event on 02/01/2011approximately 56,000ML has been released from the dam, with a total of at least 150,000ML to be released based on the currently recorded rainfall. The total release for the event is likely to increase significantly over the next few days based on the current rainfall forecasts. At this stage, releases will continue until at least Tuesday.

**Wivenhoe Dam (Full Supply Level 67.00 m AHD)**

The dam level is currently falling slowly, with the current level being 68.58m AHD. River levels upstream of the dam are receding, however further inflows will result from any additional rainfall. The current gate operation strategy will maintain flows of around 1,600$m^3/s$ in the mid-Brisbane River. The current release rate from Wivenhoe Dam is 116,000ML/day. Since the commencement of the event on 02/01/2011approximately 150,000ML has been released from the dam, with a total of at least 450,000ML to be released based on the currently recorded rainfall. The total release for the event is likely to increase over the next few days based on the current rainfall forecasts. At this stage, releases will continue until at least Wednesday.

**Impacts downstream of Wivenhoe Dam**

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.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.

**Leslie Harrison Dam**

Following the heavy rainfall Wednesday night, gate operations commenced at Leslie Harrison Dam late Wednesday night and closed late last night. However further releases are likely.

**Hinze Dam**

The gate opening of 300mm continues today and may for several days depending on inflows.

| | |
|---|---|
| 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 | [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 do not have a problem with the new 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 do not have a problem with the new 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 do not have a problem with the new 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 | Change in strategy |

# TECHNICAL SITUATION REPORT

| TSR Number | W33 | Date of TSR release | 9.1.2011 | Time of TSR release | 6.00pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| **Current objectives** | • Continue current releases however event is increasing in magnitude and may require increased releases. | |
| **Strategy** | • Continue the current releases however there may be a need to increase releases above current levels and impact Mt Crosby and Fernvale Bridges. | |
| **Key considerations** | Storage levels: | Above FSL |
| | Inflows: | Inflows may approach 1,000,000ML which is close to outflow in 1999 and two thirds of 1974 event. |
| | Rainfall: | Continuing |
| | Lockyer/Bremer: | Monitoring their inflows |
| | Brisbane River: | Minimal impact as per previous discussions and releases. |

**Rainfall**

Catchment average rainfall for the past 12 hours is; North Pine Dam (60 mm); Somerset Dam (150 mm); Wivenhoe Dam (80 mm). The bulk of the rain that has fallen in the upper reaches of the Stanley and Brisbane Rivers.

The BOM rainfall forecast for the next few days is:-

| | |
|---|---|
| Monday: | Very heavy rain periods with totals up to 300mm centred around North Pine. |
| Tuesday: | Rain periods with totals up to 150mm centred around North Pine. |
| Wednesday | A few showers less than 10mm |
| Thursday | A shower or two. |
| Friday | A shower or two. |
| Saturday | Mostly fine. |

A severe whether warning remains current for heavy rainfall in the dam catchment areas. The dam catchments are relatively saturated and significant inflows will be generated if the forecast rainfall eventuates.

**North Pine Dam (Full Supply Level 39.60 m AHD)**

The dam level is currently 39.65 m AHD and rising at 1600. Following the rain in the 9 hours, the number of open gates has been increased from 2 to 5.which are expected to remain open for the next 12 hours. Youngs Crossing will remain closed while releases are in progress.

**Somerset Dam (Full Supply Level 99.00 m AHD)**

The dam level is 100.75 m AHD and rising quickly. Estimated peak inflow to the dam is about 3,000m3/s. Five sluice gates are open releasing about 1,100m3/s (95,000Ml/d) into Wivenhoe Dam. At this stage the dam will reach at least 101.5 during early Tuesday morning.

Since the commencement of the event on 02/01/2011approximately 80,000ML has been released from the dam, with an event total of at least 320,000ML based on the recorded rainfall to date. The event total is expected to increase significantly due to the forecast rain in the next 24 to 48 hours. At this stage, releases will continue until at least Wednesday.

**Wivenhoe Dam (Full Supply Level 67.00 m AHD)**

The dam level is currently rising again, with the current level being 68.70m AHD. Estimated peak inflow to the dam just from the Upper Brisbane R is about 5,000m3/s and, at this stage, the dam will reach at least 72.5 m AHD during Wednesday morning. River levels upstream of the dam are rising quickly with significant inflow being generated from the intense heavy rainfall. The current gate operation strategy will maintain flows of around 1,600$m^3$/s in the mid-Brisbane River for the next 24 hours. This may mean temporarily reducing releases from Wivenhoe Dam as Lockyer flows increase. However, releases may have to be increased significantly during Monday depending on the rain in the next 12 to 24 hours. The current release rate from Wivenhoe Dam is 1,400m3/s (120,000ML/day).

Since the commencement of the event on 02/01/2011 approximately 210,000ML has been released from the dam, with an event total approaching 1,000,000ML (including Somerset outflow) based on the recorded rainfall to date. The total release for the event is likely to increase over the next few days based on the current rainfall forecasts. At this stage, releases will continue until at least Saturday 15th January 2011.

**Impacts downstream of Wivenhoe Dam**

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 Saturday 15 January.

**At this stage Fernvale and Mt Crosby Weir Bridge will not be affected for the next 24 hours but there is a strong possibility that, if the predicted rainfall totals eventuate in the next 12 to 24 hours, higher releases from Wivenhoe Dam will be necessary. This may adversely impact upon Fernvale and Mt Crosby Weir Bridges as early as Tuesday morning.**

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.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.

| | |
|---|---|
| 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 | 9.1.2011 | Time | | or Event | Change in strategy |
|---|---|---|---|---|---|---|

# TECHNICAL SITUATION REPORT

| TSR Number | W34 | Date of TSR release | 9.1.2011 | Time of TSR release | 9.00pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| Current objectives | • Continue current releases however event is increasing in magnitude and will require increased releases. | |
| Strategy | • Continue the current releases until tomorrow noon when re4leases will be increased to impact Mt Crosby and Fernvale Bridges. | |
| Key considerations | Storage levels: | Above FSL |
| | Inflows: | Inflows may approach 1,500,000ML which is close to 1974 event. |
| | Rainfall: | Continuing |
| | Lockyer/Bremer: | Monitoring their inflows |
| | Brisbane River: | Impact as below. |

**Rainfall**

Very heavy rainfall has been recorded in the upper reaches of the Brisbane and Stanley In the last 6 hours with totals up 100 to 140mm. Totals for the last 24 hours range from 100 to 300mm.

Rainfall of similar magnitudes is expected in the 12 to 24 hours, especially around the Bremer/Warrill catchments as the system tracks south.

A severe weather warning remains current for heavy rainfall in the dam catchment areas.

**Somerset Dam (Full Supply Level 99.00 m AHD)**

The dam level is 101.68 m AHD (about 500,000ML currently in storage) and rising quickly. Peak inflow to the dam is estimated to be about 4,000 m3/s based on observed rainfall and could be as high as 5,000m3/s with additional forecast rainfall. Five sluice gates are open releasing about 1,100m3/s (95,000Ml/d) into Wivenhoe Dam. At this stage the dam will reach at least 103.5 early Tuesday morning which will adversely impact areas around Kilcoy.

Since the commencement of the event on 02/01/2011approximately 100,000ML has been released from the dam into Wivenhoe, with an event total of the order of 520,000ML expected. This may increase due to the forecast rain in the next 24 to 48 hours. At this stage, releases will continue until at least Thursday.

**Wivenhoe Dam (Full Supply Level 67.00 m AHD)**

River levels upstream of the dam are rising quickly with significant inflow being generated from the intense heavy rainfall. Flows in the Brisbane River at Gregor's Ck have already reached 6,700m3/s and the river is still rising.

The dam level is rising again, with the current level being 69.10m AHD (1,410,000ML with about 300,00 of flood storage). Estimated peak inflow to the dam just from the Upper Brisbane R alone may reach as high as 7,500m3/s and, at this stage, the dam will reach at least 73.0 m AHD during Tuesday morning. Given the rapid increase in inflow volumes, it will be necessary to increase the release from Wivenhoe Monday morning.

The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam and, at this stage, releases will be kept below 3,500m3/s and the combined flows is the lower Brisbane will be limited to 4,000m3/s. This is below the limit of urban damages in the City reaches.

The current release rate from Wivenhoe Dam is 1,400m3/s (120,000ML/day). Gate opening will start to be increased from noon Monday and the release is expected increase to at least 2,600m3/s during Tuesday morning.

Since the commencement of the event on 02/01/2011 approximately 220,000ML has been released from the dam, with an event total approaching 1,000,000ML without further rain and as much as 1,500,000ML with forecast rainfall of (both including Somerset outflow). At this stage, releases will continue until at least Sunday 16th January 2011.

**Impacts downstream of Wivenhoe Dam**

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.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the updated Wivenhoe operating strategy.

| | |
|---|---|
| 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 | [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 | 10.1.2011 | Time | | or Event | Change in strategy |
|---|---|---|---|---|---|---|

# TECHNICAL SITUATION REPORT

| TSR Number | W35 | Date of TSR release | 10.1.2011 | Time of TSR release | 7am |
|---|---|---|---|---|---|

## 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 .<br>• Aiming to release 3,500cumecs to keep flow in lower Brisbane River 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**

Moderate to heavy rainfall has been recorded in the Upper Brisbane and Stanley Rivers in the last 12 hours with totals up to 90 mm. Totals for the last 24 hours range from 100 to 325mm.

Mt Glorious recorded 100 mm in the last 12 hours.

Rainfall of similar magnitudes is expected in the 12 to 24 hours around the downstream catchments as the system tracks south.

A severe weather warning remains current for heavy rainfall in the dam catchment areas.

**North Pine Dam (Full Supply Level 39.60 m AHD)**

The dam level was 39.97 m and steady. Five gates are open releasing 475 m3/s. The inflow into the dam since the commencement of the event is 62,000 ML. Estimated event volume is 72,000 ML assuming no further rainfall. Gate operations will continue until at least Tuesday 11 January 2011.

**Somerset Dam (Full Supply Level 99.00 m AHD)**

The dam level at 05:00 was 102.84 m AHD and rising (storing 193,000 ML above FSL). Peak inflow to the dam is estimated to be about 4,200 m3/s based on observed rainfall and could be as high as 5,000m3/s with additional forecast rainfall. Five sluice gates are open releasing about 1,100m3/s (95,000Ml/d) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5 mAHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Since the commencement of the event on 02/01/2011approximately 142,000ML has been released from the dam into Wivenhoe, with an event total of the order of 520,000ML expected. This is expected to increase due to the forecast rain in the next 24 to 48 hours. At this stage, releases will continue until at least Thursday.

**Wivenhoe Dam (Full Supply Level 67.00 m AHD)**

River levels upstream of the dam have peaked and are falling slowly with significant inflow being generated from the intense heavy rainfall. Flows in the Brisbane River at Gregor's Ck have peaked at 7,350m3/s at 23:00 on Sunday 9 January. This peak is bigger than January 1974 and February 1999 at this location.

The dam level is rising quickly, with the current level being 70.77m AHD (storing 450,000 ML). Estimated peak inflow to the dam just from the Upper Brisbane R is around 8,800m3/s and, at this stage, the dam will reach at least 73.3 m AHD during Tuesday morning. Given the rapid increase in inflow volumes, it was necessary to start to increase the release from Wivenhoe during Monday morning.

The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam and, at this stage, releases will be kept below 3,500m3/s and the combined flows in the lower Brisbane will be limited to 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000 m3/s.

Fernvale Bridge approaches and Mt Crosby Weir Bridge have been inundated and both bridges are now closed.

The current release rate from Wivenhoe Dam is 1,753m3/s (150,000ML/day). Gate opening will continue to be increased during Monday and the release is expected to increase to at least 2,600m3/s in the next 12 to 24 hours.

Since the commencement of the event on 02/01/2011 approximately 275,000ML has been released from the dam, with an event total approaching 1,600,000ML without further rain and as much as 2,100,000ML with forecast rainfall of (both including Somerset outflow). At this stage, releases will continue until at least Sunday 16th January 2011.

**Impacts downstream of Wivenhoe Dam**

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. If the predicted rainfall eventuates in the downstream tributary catchments the resultant combined flows in the lower Brisbane may exceed the threshold of damaging discharge in the urban areas within the next 24 to 48 hours. Currently the estimate peak flow in the lower Brisbane River will be the highest since Wivenhoe Dam was completed in 1984 but still well below flows the 1974 levels.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the updated Wivenhoe operating strategy.

**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 | [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 |

# TECHNICAL SITUATION REPORT

| TSR Number | W36 | Date of TSR release | 10.1.2011 | Time of TSR release | 8am |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| Current objectives | • Continue increasing releases to discharge flood waters but keep impact downstream to minimum. | |
| Strategy | • All bridges are now inundated . | |
| 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**

Moderate to heavy rainfall has been recorded in the Upper Brisbane and Stanley Rivers in the last 12 hours with totals up to 90 mm. Totals for the last 24 hours range from 100 to 325mm.

Mt Glorious recorded 100 mm in the last 12 hours.

Rainfall of similar magnitudes is expected in the 12 to 24 hours around the downstream catchments as the system tracks south.

A severe weather warning remains current for heavy rainfall in the dam catchment areas.

**North Pine Dam (Full Supply Level 39.60 m AHD)**

The dam level was 39.97 m and steady. Five gates are open releasing 475 m3/s. The inflow into the dam since the commencement of the event is 52,000 ML. Estimated event volume is 72,000 ML assuming no further rainfall. Gate operations will continue until at least Tuesday 11 January 2011.

**Somerset Dam (Full Supply Level 99.00 m AHD)**

The dam level at 05:00 was 102.84 m AHD and rising (storing 193,000 ML above FSL). Peak inflow to the dam is estimated to be about 4,200 m3/s based on observed rainfall and could be as high as 5,000m3/s with additional forecast rainfall. Five sluice gates are open releasing about 1,100m3/s (95,000Ml/d) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5 mAHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Since the commencement of the event on 02/01/2011approximately 142,000ML has been released from the dam into Wivenhoe, with an event total of the order of 520,000ML expected. This is expected to increase due to the forecast rain in the next 24 to 48 hours. At this stage, releases will continue until at least Thursday.

**Wivenhoe Dam (Full Supply Level 67.00 m AHD)**

River levels upstream of the dam have peaked and are falling slowly with significant inflow being generated from the intense heavy rainfall. Flows in the Brisbane River at Gregor's Ck have peaked at 7,350m3/s at 23:00 on Sunday 9 January. This peak is bigger than January 1974 and February 1999 at this location.

The dam level is rising quickly, with the current level being 70.77m AHD (storing 450,000 ML). Estimated peak inflow to the dam just from the Upper Brisbane R is around 8,800m3/s and, at this stage, the dam will reach at least 73.3 m AHD during Tuesday morning. Given the rapid increase in inflow volumes, it was necessary to start to increase the release from Wivenhoe during Monday morning.

The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam and, at this stage, the aim is to keep combined flows in the lower Brisbane to 3,500m3/sec if possible. Consistent with the approved Operating Procedures, these target combined flows may need to be increased to 4,000m3/s, and potentially higher. In either case, this is significantly less than the current estimated combined pre-dam peak inflow of 12,000 m3/s.

Fernvale Bridge approaches and Mt Crosby Weir Bridge have been inundated and both bridges are now closed.

The current release rate from Wivenhoe Dam is around 2,000m3/s (172,000ML/day). Gate opening will continue to be increased during Monday and the release is expected to increase to at least 2,600m3/s in the next 12 to 24 hours and further depending on downstream flows..

Since the commencement of the event on 02/01/2011 approximately 275,000ML has been released from the dam, with an event total approaching 1,600,000ML without further rain and as much as 2,100,000ML with forecast rainfall of (both including Somerset outflow). At this stage, releases will continue until at least Sunday 16th January 2011.

**Impacts downstream of Wivenhoe Dam**

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. If the predicted rainfall eventuates in the downstream tributary catchments the resultant combined flows in the lower Brisbane may exceed the threshold of damaging discharge in the urban areas within the next 24 to 48 hours. Currently the estimate peak flow in the lower Brisbane River will be the highest since Wivenhoe Dam was completed in 1984 but still well below flows the 1974 levels.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the updated Wivenhoe operating strategy.

**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 | [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 |
|---|---|---|---|---|---|---|

# 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 .<br>• 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 | [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 |

# 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<br>• Close sluices at Somerset Dam to store more water however will affect upstream areas.<br>• | |
| 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 | [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 | 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<br>• Close sluices at Somerset Dam to store more water however will affect upstream areas.<br>• 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.<br>• 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] | [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 | or Event | |

# 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.<br>• 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.<br>• 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 | [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 | 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.<br>• Increase releases to maintain fuse plug and dam integrity.<br>• 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 | [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 | 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.<br>• Maintain controlled releases.<br>• 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 | [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 | 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.<br>• Maintain controlled releases.<br>• 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] | [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 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 | AM | or Event | |

# TECHNICAL SITUATION REPORT

| TSR Number | W47 | Date of TSR release | 12.1.2011 | Time of TSR release | 5am |
|---|---|---|---|---|---|

## 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.<br>• Maintain controlled releases.<br>• 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 revolved ensuring dam security and was 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.

Only minimal falls occurred overnight in the order of mm.

Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy. Somerset is at 105.1m holding 719730ML and 189.5%. Some flows are going over the Somerset spillway.

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

At 0500 Wivenhoe Dam was 74.77m AHD holding 2,195,287ML and 188%.

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

Current release rate is 4,300cumecs.
Further reductions will occur throughout the week..

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 event magnitude is estimated to be a 1:10,000 year excedance probability.

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 | [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 | PM | or Event | |

# 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.<br>• 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 | [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 | |

# TECHNICAL SITUATION REPORT

| TSR Number | W50 | Date of TSR release | 12.1.2011 | Time of TSR release | 3pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| Current objectives | • Gradual release of stored floodwaters with minimal impact. | |
| Strategy | • Peak inflows into Wivenhoe were in excess of 12000 cumecs.<br>• Continue release of water from Somerset into Wivenhoe to reduce impacts upstream in Kilcoy area<br>• Maintain reduced release from Wivenhoe until Lockyer flows are reduced and then increase to discharge flood waters over 7 days | |
| Key considerations | Storage levels: | Above FSL |
| | Inflows: | Inflows expected well over 2,300,000ML. |
| | Rainfall: | Continuing |
| | Lockyer/Bremer: | Monitoring their inflows |
| | Brisbane River: | Impact as below. |

**Rainfall**

Rainfall in the last 12 hours is generally below 5mm with a couple of 10mm falls in the Stanley and North Pine catchments. There is no significant rain expected fin the next 4 days.

**Somerset/Wivenhoe**

Somerset Dam has peaked at 105.11 m AHD at 08:00 on 12 January 2011 and the dam has been discharging over the spillway. One sluice was opened at 1030 12 January 2011 and the dam is discharging 1,440 m3/s. Sluice gates will be utilised to drain of the flood storage compartment during the next 5 days.

At 3pm Somerset was 104.94m and 708,505ML at 186.5%.

Wivenhoe Dam peaked at 74.97 m AHD at 19:00 on 11 January 2011 with a corresponding discharge of 7,450 m3/s

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.

At 3pm Wivenhoe Dam was 74.81 m AHD at 2,201,636ML and 188.9% and fluctuating slightly due to the releases coming from Somerset but relatively steady.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be approximately 2.6 million megalitres.

**North Pine**

North Pine 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.

At 3.00pm North Pine Dam was 39.74 mAHD and 217,370 ML and 101.4% and slowly falling. It is expected that gates will be closed Thursday or Friday.

**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 | [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 | 8pm | or Event | |

# TECHNICAL SITUATION REPORT

| TSR Number | W51 | Date of TSR release | 12.1.2011 | Time of TSR release | 6pm |
|---|---|---|---|---|---|

## Seqwater status of inflows and dam operations

*Current status but could change based on inflows or rainfall.*

| | | |
|---|---|---|
| **Current objectives** | • Gradual release of stored floodwaters with minimal impact. | |
| **Strategy** | • Peak inflows into Wivenhoe were in excess of 12000 cumecs.<br>• Continue release of water from Somerset into Wivenhoe to reduce impacts upstream in Kilcoy area<br>• Maintain reduced release from Wivenhoe until Lockyer flows are reduced and then increase to discharge flood waters over 7 days | |
| **Key considerations** | Storage levels: | Above FSL |
| | Inflows: | Inflows expected well over 2,300,000ML. |
| | Rainfall: | Continuing |
| | Lockyer/Bremer: | Monitoring their inflows |
| | Brisbane River: | Impact as below. |

**Rainfall**

Rainfall in the last 12 hours is generally below 5mm with a couple of 10mm falls in the Stanley and North Pine catchments. There is no significant rain expected fin the next 4 days.

**Somerset/Wivenhoe**

Somerset Dam has peaked at 105.11 mAHD at 06:00 on 12 January 2011. One sluice was opened at 1030 12 January 2011 and discharging 1,410 m3/s. Sluice gates will be utilised to drain of the flood storage compartment during the next 6 days.

At 5pm Somerset was 104.86m and 702,953ML at 185.1%.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on 11 January 2011 with a corresponding discharge of 7,450 m3/s.

The release from Wivenhoe Dam was reduced to 2,500 m3/s at 07:30 12 January 2011 to allow the peak of Lockyer Creek to enter the Brisbane River and this release has been maintained since. After the downstream peak in the lower Brisbane River has passed, releases will be increased to maximum of 3,500 m3/s. The release is expected to commence Thursday and then be maintained at this level to drain the flood storage component within the required 7 days. The releases will not result in any renewed rises at downstream locations.

At 5pm Wivenhoe Dam was 74.82 m AHD at 2,203,223ML and 189.1% and fluctuating slightly due to the releases coming from Somerset but relatively steady.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be approximately 2.6 million megalitres.

**North Pine**

At 17:00 North Pine Dam had all gates open 1 increment, releasing about 80 m3/s. North Pine peaked at 41.11 mAHD at 14:00 on 11 January 2011 with peak release of 2,800 m3/s. The event has a volume of around 200,000 ML

At 5.00pm North Pine Dam was 39.74 mAHD and 217,370 ML and 101.4% and slowly falling. It is expected that gates will be closed Thursday or Friday.

**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 finished late this afternoon.

**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 | [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 | 13.1.2011 | Time | 8am | or Event | |

**Central SEQ water balance**

- On 12 January 2011, bulk water storage in central South East Queensland (Brisbane, Ipswich and Logan) reduced by a third from 338 to 215 ML.
- Most of the reduction was due to both of the Mt Crosby water treatment plants being taken offline.
    - The East Bank water treatment plant was partially inundated, forcing it to be shutdown for at least two days. Recovery is underway.
    - Raw water quality reduced during the day, causing treated water from the West Bank water treatment plant to exceed standard operational limits. Raw water quality increased from 1100 to 1700 NTU during the day.
- Without supply from Mt Crosby, key reservoirs around Ipswich would have been depleted on 13 January 2011.
- **Table 1** lists expected production on 13 January. These are maximum production values, excluding any allowance for mechanical or other failures. By comparison, total production on 12 January was less than 200 ML due to Mt Crosby WTP being offline for much of the day and the Northern Pipeline Interconnector supplying north rather than south.
- The table also includes an indication of additional supplies that could potentially become available on 14 January, as the clean up commences. These additional supplies are subject to operational considerations, such as rectification of flood damage. Only some of these supplies are likely to become available.

**Table 1: Supply to central SEQ (Brisbane, Ipswich and Logan)**

| Source | Planned production 13 January (ML) | Potential additional production from 14 January (ML) |
|---|---|---|
| Northern Pipeline Interconnector | 25 | |
| North Pine WTP | 100 | 50 |
| Petrie WTP | 0 | |
| Mt Crosby West Bank WTP | 150 | 50 |
| Mt Crosby East Bank WTP | 0 | 100 |
| Eastern Pipeline Interconnector | 7 | |
| Logan interconnector | 20 | |
| Southern Regional Water Pipeline[1] | 100 | 110 |
| Enoggera WTP and Brisbane Aquifer Project | 0 | TBD |
| **Total** | **402** | |

[1] Includes supply from desalination facility.

- These supplies exceed estimated demand scenarios for the clean up period in central SEQ, as illustrated in **Table 2**. Forecasts are based on:
    - the proportion of residences in the area that are likely to be inundated
    - for impacted areas, demand being about double typical consumption

- for other areas, demand being around current levels.

- The forecasts highlight the importance of water conservation outside of the impacted areas, as a contingency against further operational issues (including an inability to bring on the potential additional supplies listed above).

**Table 2: Estimated demand scenarios for clean up period in central SEQ (Brisbane, Ipswich and Logan)**

| Area | Typical | Low | Likely | High |
|---|---|---|---|---|
| Ipswich | 42 | 55 | 61 | 67 |
| Brisbane | 270 | 265 | 294 | 324 |
| Logan | 48 | 43 | 48 | 53 |
| **Total** | **360** | **363** | **403** | **443** |

**Mt Crosby operating arrangements**

- As noted above, Mt Crosby West Bank WTP ceased production on 12 January 2011 due to treated water exceeding critical limits for normal operations.
- Alternative operating arrangements are now being applied, taking into account current catchment risks. These risks are considered to be considerably lessened, for a range of impacts including dilution.
- For the duration of the current flood event, the operating rules for the Mt Crosby water treatment plants are:
  - Minimum production of 150 ML/day
  - Achieve and maintain stable operation
  - Shutdown for operational reasons only, not treated water quality
  - Target of below 1 NTU in treated water
  - Periods of up to 2 NTU in treated water tolerable
  - Disinfection residual maintained at standard operating procedure
  - Note some discolouration may occur
- Queensland Health advised that:
  - Based on these operating rules, water supplied from the Mt Crosby water treatment plants is considered to have taken all necessary precautions to minimise the public health risk.
  - Further advice should be sought from Queensland Health should there be a prolonged trend to above 1.5 NTU in treated water. Production should not cease while this advice is sought. An evaluation will be made at that time to determine if water of above 2 NTU may still be safe to supply.

**Mt Crosby critical logistics**

- Continued operation of the Mt Crosby West Bank WTP is required to maintain water supplies in central SEQ.

- Chemical supplies are required in order to maintain continued operation. A dirt track is now accessible on the site, however supply routes from Brisbane are still flooded.
- Critical supplies are:
    - hypochlorite (2 days)
    - caustic soda (3 days)
    - alum (5 days).
- **Should supply routes not become open tomorrow, assistance will be required to transport chemicals to the site. Volumes required are relatively large.**
- Recommissioning of Mt Crosby East Bank WTP is a priority, to provide additional production and as a contingency in the event that chemicals are unable to be replenished at the site on the other side of the river.
- The East Bank WTP is both partially inundated and surrounded by flood waters, with access currently only able to be made by helicopter. A helicopter has been hired to transport additional staff to the WTP on the morning of 14 January. **It is critical that this helicopter not be reprioritised by EMQ.**

**Western SEQ towns supplies**

- Gatton is expected to run out of water overnight, following the loss of stored treated water.
- Supply is from the Lowood water treatment plant, which is offline due to loss of electricity and some operational issues. Energex has given electricity supply to the site a high priority.
- A number of smaller towns have already run out of supply or are expected to do so soon. QUU has started to supply bottled water to these towns via commercial helicopter.
- Tanker trucks will commence supply to towns as soon as they become accessible. **QUU is seeking advice about potential routes as they become available.**
- A boiled water notice is required when supply recommences after having run dry. A notice is required because of the risk of ingress into the pipelines. A number of these notices will be issued on 13 January 2011 for western towns.