Rainfall

Some rain has fallen over the dam catchments in the past 12 hours. Catchment average rainfall for this period for North Pine Dam is 6 mm; Stanley River has received 12 mm; and the Upper Brisbane River 4 mm. This has resulted in minor increases in runoff into Somerset dam.

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

The forecast for the Somerset-Wivenhoe catchment for the next 24 hours is 30 to 50 mm, whilst North Pine is expected to receive 40 to 80 mm in the next 24 hours.

The outlook for the following days are:-

Sunday: Widespread rain with totals between 50-100mm
Monday: Widespread rain again with totals between 50-150mm
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 39.40 m AHD)

At 1700 Saturday, North Pine Lake Level was 39.47 m AHD and steady. Currently two gates are open to release runoff generated from rainfall over the last three days. Given the very high likelihood of significant runoff during the next 4 days, gates will be kept open to match inflows over the next few days, rather than opening and closing at various times with short notice. Lake Kurwongbah spillway flows are also contributing to the adverse impacts experienced at Youngs Crossing.

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)**

Somerset Dam level peaked at 100.47m AHD at 10:00 today and is now slowly falling. At 1700 it is now 100.41m. Somerset Dam is releasing into Wivenhoe through two open sluice gates and over the fixed crest at a rate of about 415 m³/s.

Since the commencement of the event on 02/01/2011, approximately 95,000ML has flowed into Somerset Dam with a further 20,000ML expected based on the recorded rainfall to date. Approximately 38,000ML has been released into Wivenhoe.

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

At 1800 Saturday, Wivenhoe Dam was 68.65 m AHD and rising slowly with all five gates open and releasing about 1,250 m³/s. River levels upstream of Wivenhoe Dam have peaked and are now receding. However, the further inflows may result from any additional rainfall. The current gate operation strategy will maintain flows of up to 1,600 m³/s in the mid-Brisbane River throughout the evening.

Since the commencement of the event on 02/01/2011, approximately 227,000ML has flowed into Wivenhoe Dam (including Somerset releases) with a further 200,000ML expected based on the recorded rainfall to date. Approximately 93,000ML has been released from Wivenhoe via the radial gates, hydro and regulator.

**Impacts downstream of Wivenhoe**

The current Wivenhoe release of 1,250m³/s combined with Lockyer flows and local runoff will mean that all low level crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Khole Bridge and Colleges Crossing) will be adversely impacted for several days (until Wednesday 12 January). 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 and higher releases from Wivenhoe Dam are considered necessary.

The current available assessments indicate that the combined flow in the lower Brisbane River would only add 50mm to an upper limit of 100mm to the recorded water levels in the City Reach of the Brisbane River. However, it is noted that tides in the lower Brisbane R will be 0.4 to 0.5 metres higher than predicted tides. The tide level at the Port Office Gauge at 1700 Saturday was 0.06 m and falling.

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

**Forecast Scenario – Based upon mid-range rainfall forecasts.**

Assessments have been undertaken to determine possible increases to releases given the high likelihood of significant inflows in the next few days. The interaction with runoff from the Bremer River and Warrill Creek catchment is an important consideration as the event magnitude will require the application of Wivenhoe Dam flood operation strategy V02 (Transition strategy between minimizing downstream impacts and maximizing protection to urban areas).

Projections based on the forecast rainfalls suggest flows of up to 1,200 m³/s will emanate from the Bremer River catchment. If similar rainfall magnitudes occur in the Upper Brisbane and Stanley Rivers then increased releases may be required from both Somerset Dam and Wivenhoe Dam. Preliminary projections suggest that such a forecast will extend the release duration until next Saturday 15 January, but mid-Brisbane River flows will be kept to a maximum of 1,800 m³/s. However, if falls are greater than those forecast releases from Wivenhoe Dam may need to adversely impact Mt Crosby Weir Bridge (1,900 m³/s) and possibly Fernvale Bridge (2,100 m³/s) but will be maintained below 3,500 m³/s.

The assessments will be updated as the event progresses.

Regards

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