

Water Report-January

Queensland Murray Darling Valleys

South-West Region

17th January, 2011

Overview

The south-west region received widespread rainfall during the past week. Of note is the significant rainfall in the eastern parts of the region during this period particularly in the Upper Condamine and Gowrie/Oakey Creek systems. Rainfall totals of between 150–350mm were recorded throughout both systems which resulted in major flooding in most areas of the upper Condamine catchment. This flow has continued downstream and has been bolstered by additional inflow from Charleys Creek and other Condamine tributaries. This renewed flood flow will prolong the current flooding throughout the Balonne and lower Balonne systems. High rainfall in the Border rivers catchment is also resulted in major flood flows in the Dumaresq and Macintyre/ Weir Rivers.

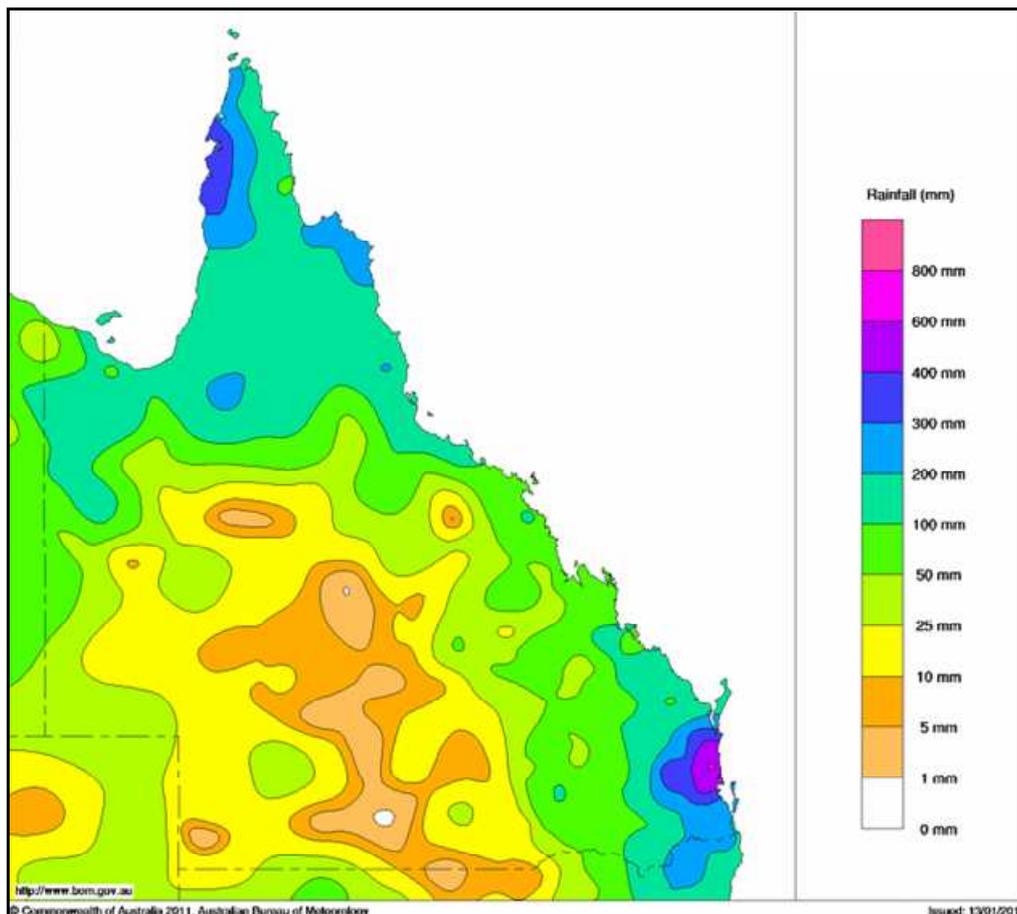
The majority of Queensland's Murray Darling river systems have been flowing at various rates since late September/early October 2010 with the majority of the moderate to major flooding occurring in the Condamine/Balonne river systems in the last few weeks. The major flow activity at this point in time relates to the eastern part of the QMDB with high flows present in the Border, Moonie and Condamine/Balonne catchments. Currently the Bureau of Meteorology has announced flood warnings for the Condamine, Moonie and Macintyre/Weir Rivers.

Water harvesting announcements continue for the Border & Weir Rivers in the south, Lower Balonne, Upper Condamine Water Management Area, North Branch of the Condamine River and the Warrego River.

The report is an update of streamflow conditions in the South West and was prepared on the 17th January, 2011. Please note that some flow data is not yet available for use in this report due to gauging station infrastructure damage in some areas as a result of the significant flood events seen in the Southwest region in the past month.



Submerged gauging station at Cotswold taken on 27th December 2010.



Queensland Rainfall Total for the period 1st to 13th January 2011

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LEGEND	
	Catchment Boundary
	Catchment Name
	State Border
	SunWater Storages
	Border Rivers Commission Storages
	Other Storages
	Major Streams
	Towns
	Gauging Stations



Produced by Water Services, Department of Environment and Resource Management, 200 Sir Street, Toowoomba, 4350 Phone: 4689 1229 25 March 2010

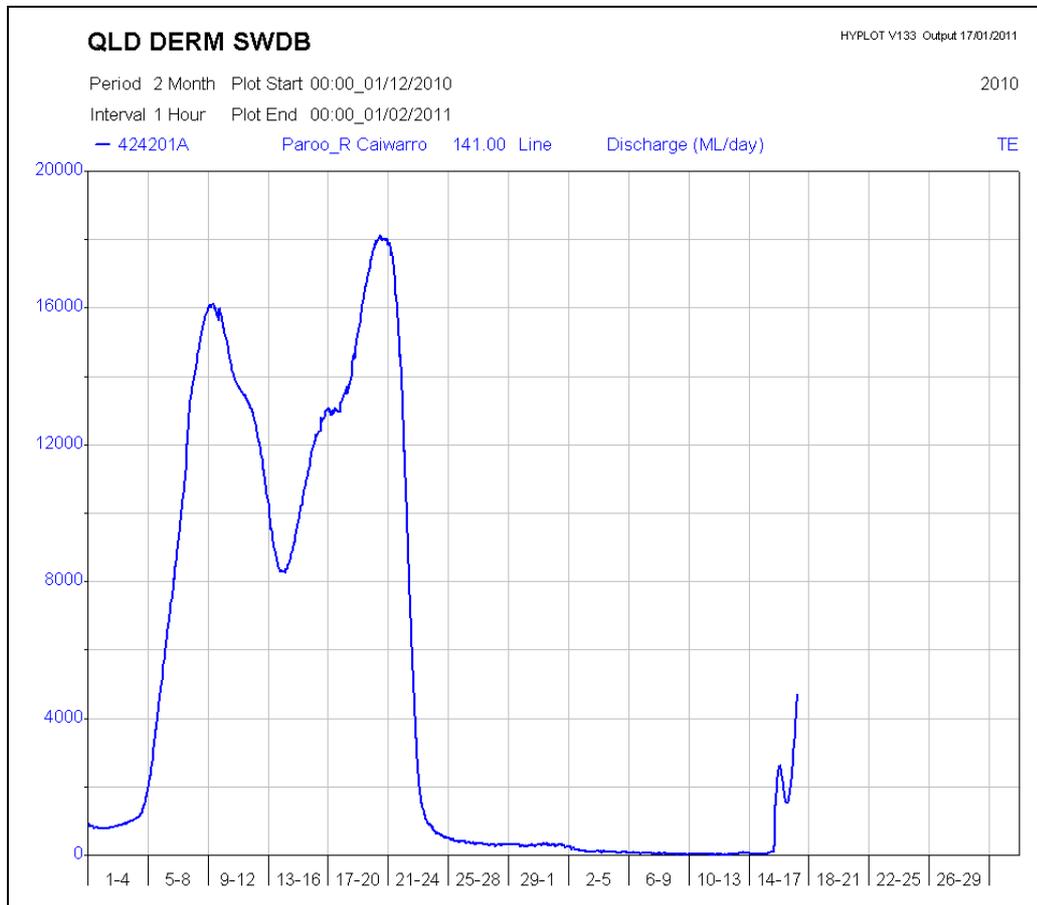
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Queensland Murray Darling Basin
Public Water Infrastructure
and Gauging Stations

Paroo River

An unregulated, ephemeral system, terminating in wetlands and floodplains north of Wilcannia, N.S.W.

Hydrograph from DERM's gauging station on the Paroo River at Caiwarro (424201A) showing stream discharge (ML/day) for since December, 2010

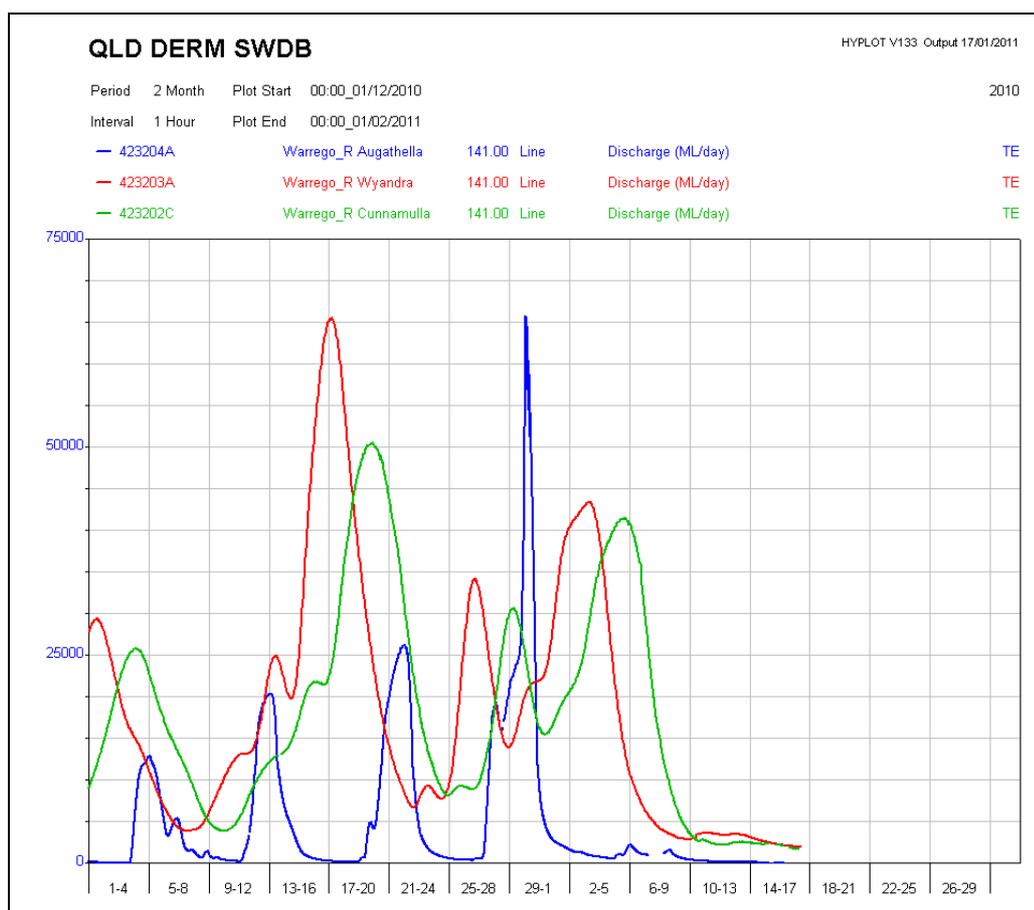


- After reaching a peak at the Caiwarro stream gauging station on the 20th December, 2010 of **17,965 ML/day**, flow quickly diminished and by the 14th January, 2011 was discharging approximately **38 ML/day**. A renewed rise began on the 15th January and the river is currently discharging about **4,700 ML/day**.
- Total volume to pass the Caiwarro gauging station from the 1st December, 2010 to 7th January, 2010 is approximately **228,000 ML**.

Warrego River

A largely unregulated, ephemeral system, which passes through Cunnamulla and joins the Darling River about 80kms SW of Bourke, N.S.W.

Hydrograph from DERM's gauging station on the upper Warrego River at Augathella (423204A), Warrego River at Wyandra (423203A) and Warrego River at Cunnamulla Weir (423202C) showing stream discharge (ML/day) since December, 2010

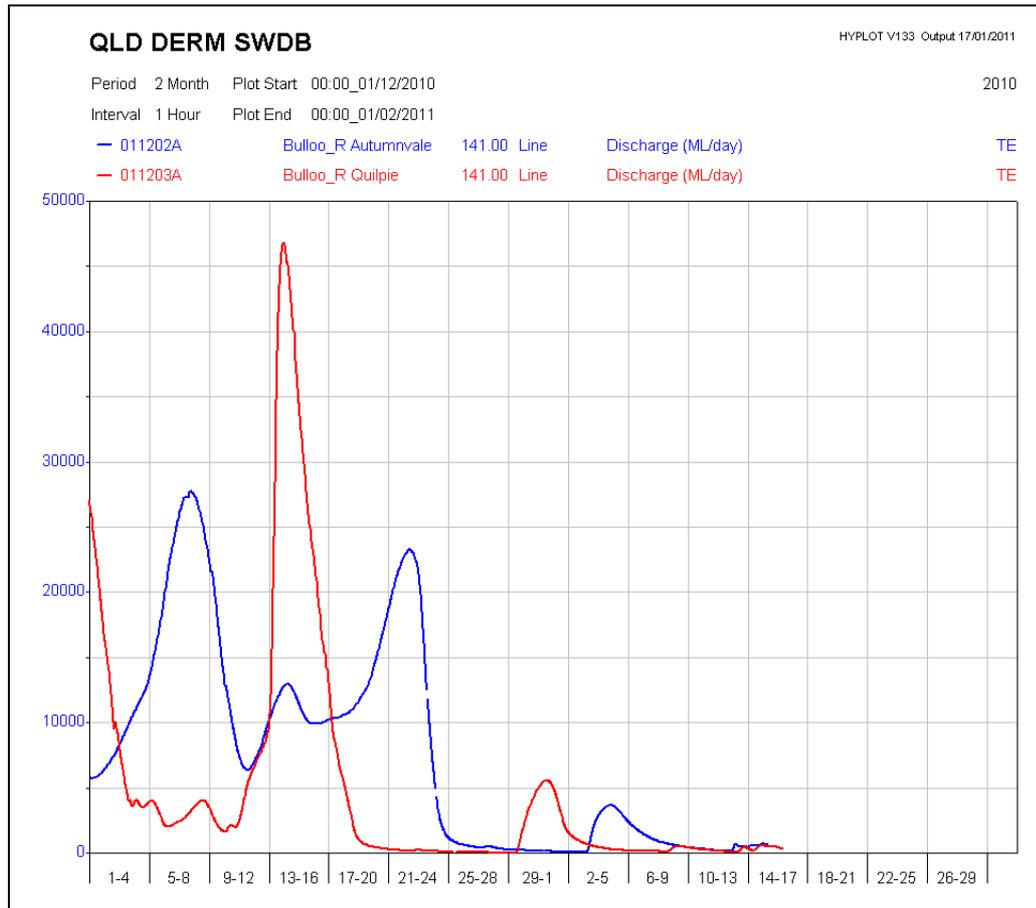


- Four flow events have been recorded in the Warrego River system since the 1st December, 2010. The largest of these peaked at Wyandra on the 17th December, 2010 and Augathella on the 29th December 2010, both exceeding **60,000 ML/day**.
- Flows have diminished in this part of the system. Current flow at Wyandra gauging station is **1,895 ML/day**, Cunnamulla Weir is recording **1,648 ML/day** and Augathella is discharging **45 ML/day**.
- Total volume to pass the Wyandra gauging station since the 1st December is in excess of **835,000 ML**.

Bulloo River

The Bulloo River is an isolated drainage system in western Queensland. It is the only river in this region not part of either the Murray-Darling Basin or the Lake Eyre Basin; instead it flows into a number of ephemeral lakes blocked by low hills from reaching either Lake Frome or the Paroo River.

Hydrograph from DERM's gauging stations on the Bulloo River at Autumnvale (011202A) and Quilpie (011203A) showing stream discharge (ML/day) since December, 2010

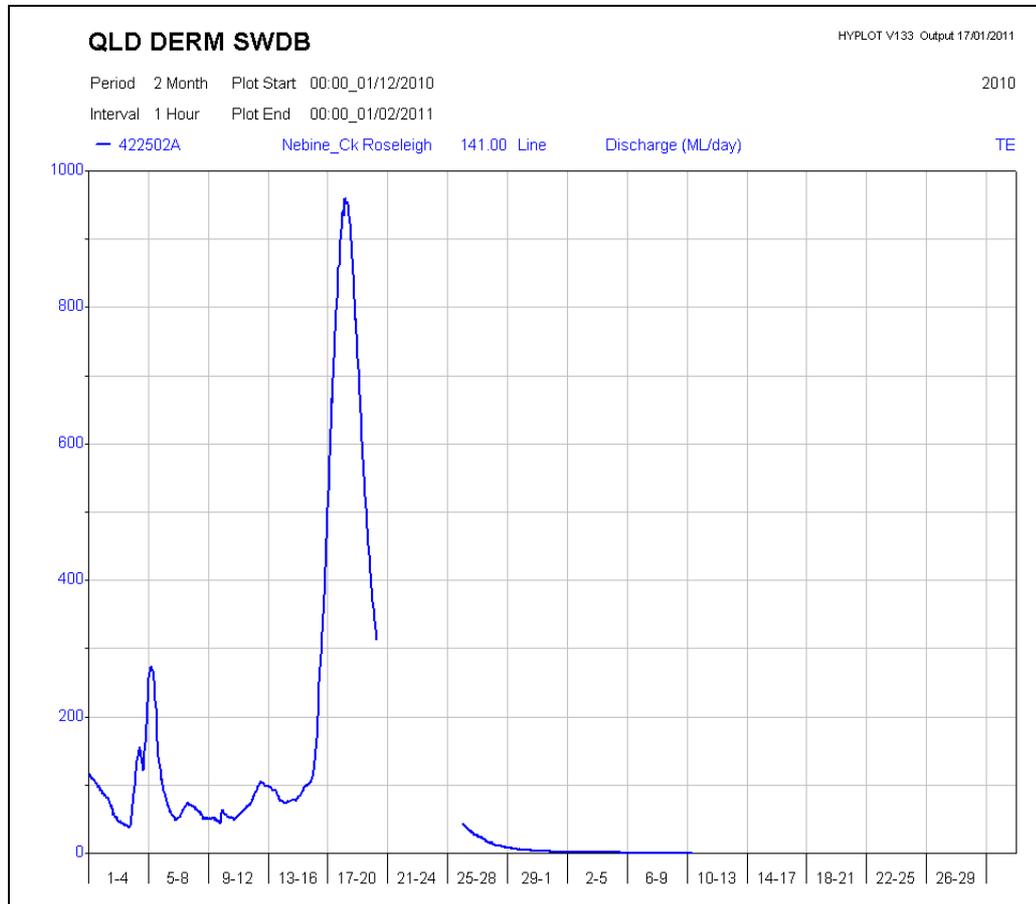


- Numerous flow events have been recorded in the Bulloo River since early December. The largest was recorded at the Quilpie gauging station which reached approximately **46,500 ML/day** on the 14th of December, 2010. This flow peaked about one week later downstream at the Autumnvale gauging station reaching approximately **23,000 ML/day**.
- Currently flow has diminished to about **300 ML/day** at Quilpie and Autumnvale.
- Total volume to pass gauging stations since the 1st December, 2010 is in excess of **230,000 ML** at Quilpie and **330,000 ML** Autumnvale.

Nebine/Mungallala Rivers

An ephemeral, unregulated system running through the Culgoa Floodplain National Park that straddles the Qld/N.S.W border before joining the Culgoa River.

Hydrograph from DERM's gauging station on Nebine Creek at Roseleigh (422502A) showing stream discharge (ML/day) since December 2010.

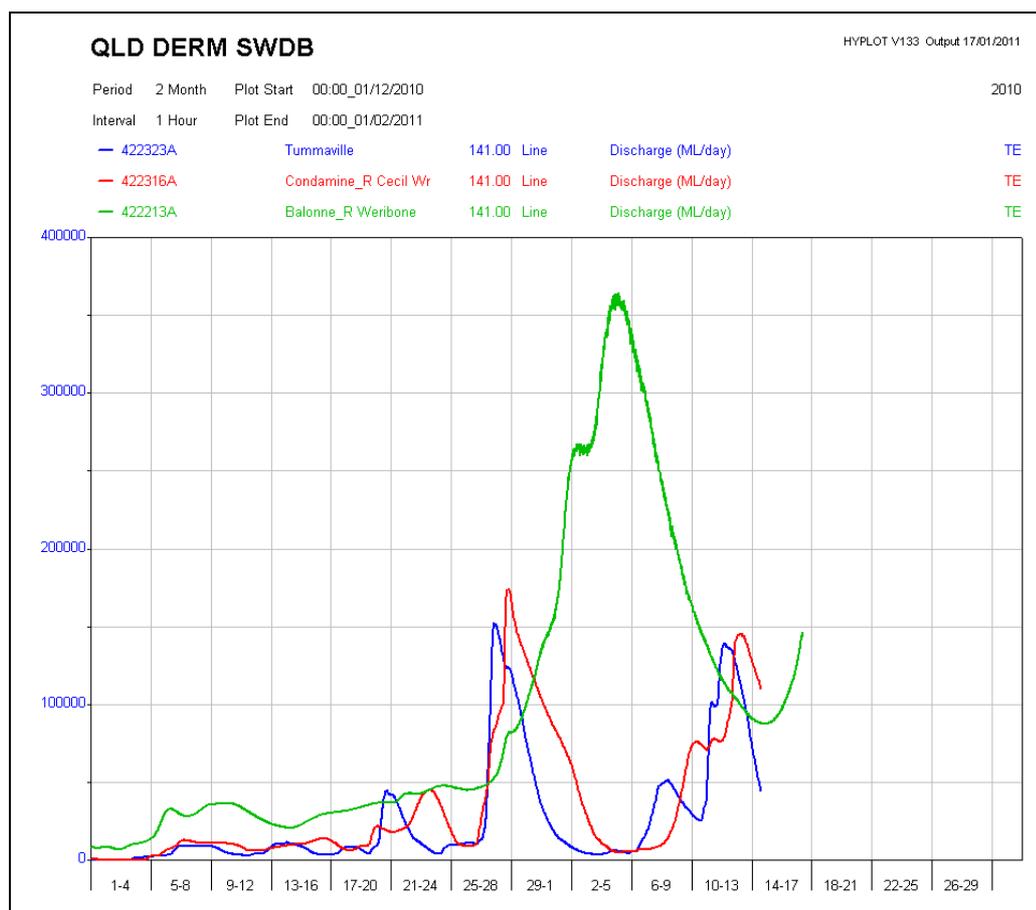


- Two small flow events have occurred since early December. The largest peaked at **886 ML/day** on the 18th December, 2010. Flow quickly diminished and has recorded almost no discharge since the beginning of 2011.

Condamine/Balonne Rivers

An ephemeral system sourcing in the Great Dividing Range east of Warwick, traversing the Darling and Western Downs before joining up with the Maranoa River which feeds south from the Carnarvon Range to flow into Beardmore Dam near St George.

Hydrograph from DERM's gauging station on the Condamine River at Tummaville (422323A) and Cecil Weir (422316A), and Balonne River at Weribone (422213A) showing stream discharge (ML/day) since December 2010.

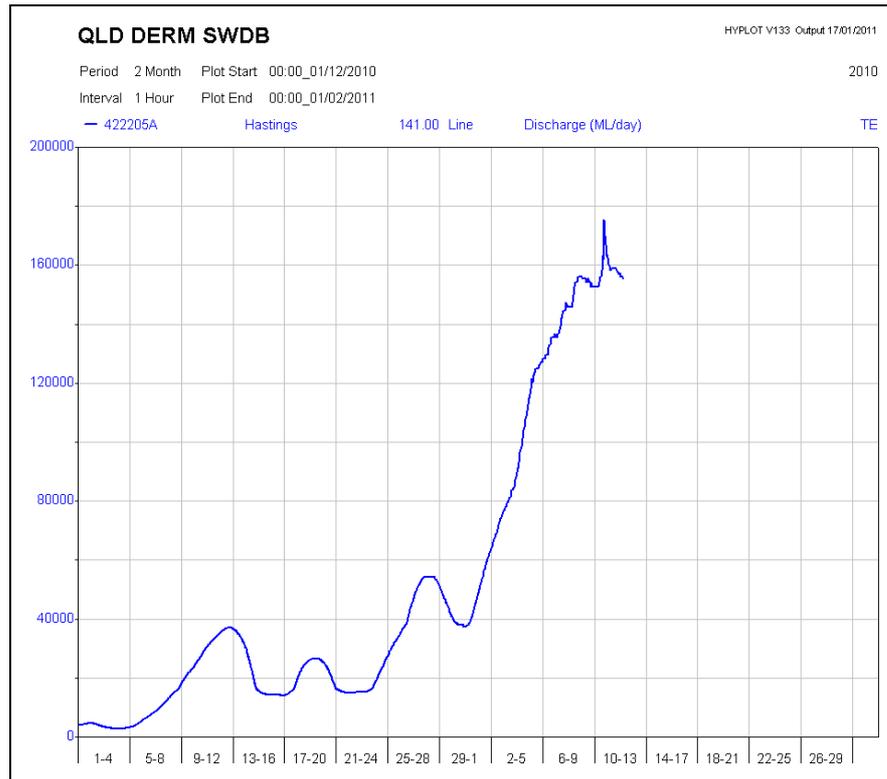


- Very high rainfall in the Condamine River catchment has resulted in two significant flood events in the system since Christmas. Both events reached a peak of about **300,000 ML/day** at Chinchilla. Flow is diminishing as flow moves downstream into the Balonne River system. Current flow at Surat is **180,000 ML/day** and rising. Flow at Weribone is approximately **146,000 ML/day** and rising. This flow will continue to St. George and the lower Balonne system in the coming weeks.
- Current flow is approximately **11,000 ML/day** at Tummaville, **53,000 ML/day** at Cecil Weir and **240,000 ML/day** at Chinchilla Weir, with all flows falling.
- Total volume to pass the gauging station at Tummaville and Cecil Weir since the 1st December, 2010 is in excess of **1,115,000 ML** and **2,950,000 ML** respectively.
- Water harvesting announcements in the Upper Condamine Water Management Area began on the 4th December, 2010 (Event 6) and remain current.

Lower Balonne River

A partially-regulated, ephemeral system that bifurcates south of St George, into the Culgoa, Narran, Bokhara and Birrie Rivers. The Narran River terminates in the Narran Wetlands between Brewarrina and Walgett; remaining channels meet the Barwon River west of Brewarrina.

Hydrograph from DERM's gauging station on the Balonne-Minor at Hastings (422205A) showing stream discharge (ML/day) since December, 2010.

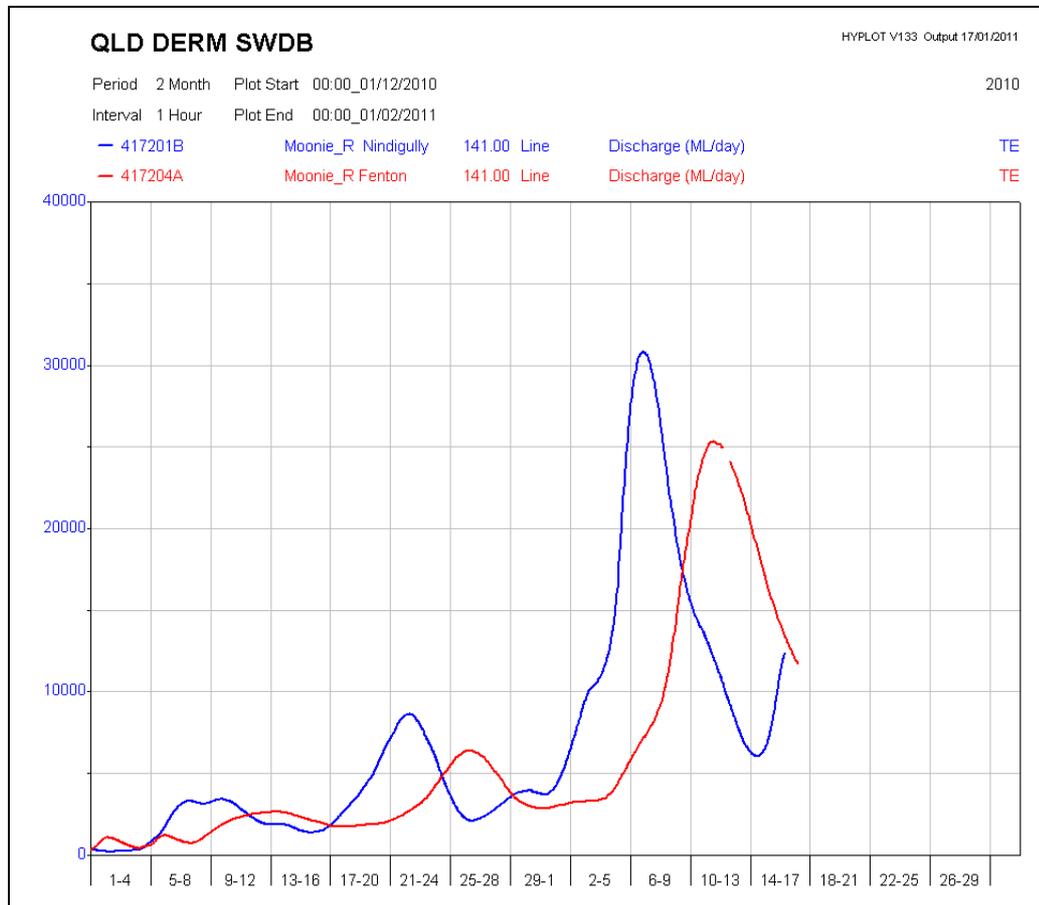


- Significant major flood flows have occurred in the lower Balonne system in the last week. Renewed rises will occur as flood flows in the Balonne River, currently in the Surat region arrive in the coming weeks.
- The current flow at St George is approximately **177,000ML/day** which is at the low point in the trough between two flood peaks. It is anticipated that an approximate flood peak of **266,000ML/day** will occur sometime later in the week.
- Flow at the Hastings gauging station located on the lower Balonne River peaked about the 12th January, 2011 at approximately **156,000 ML/day**.
- Total volume to pass the Hastings and Whyenbah gauging stations from December until 12th January, 2011 is in excess of approximately **2,800,000 ML**.
- Water harvesting announcements for the Lower Balonne Water Management Area continue with holders of water harvesting entitlements with flow conditions up to and including **120,000 ML/day** able to commence taking water in accordance with entitlement conditions.

Moonie River

An ephemeral system which commences near Tara and joins the Barwon River in NSW north of Collarenebri.

Hydrograph from DERM's gauging stations on the Moonie River at Nindigully (417201B) and Fenton (417204A) showing a stream discharge (ML/day) since December, 2010

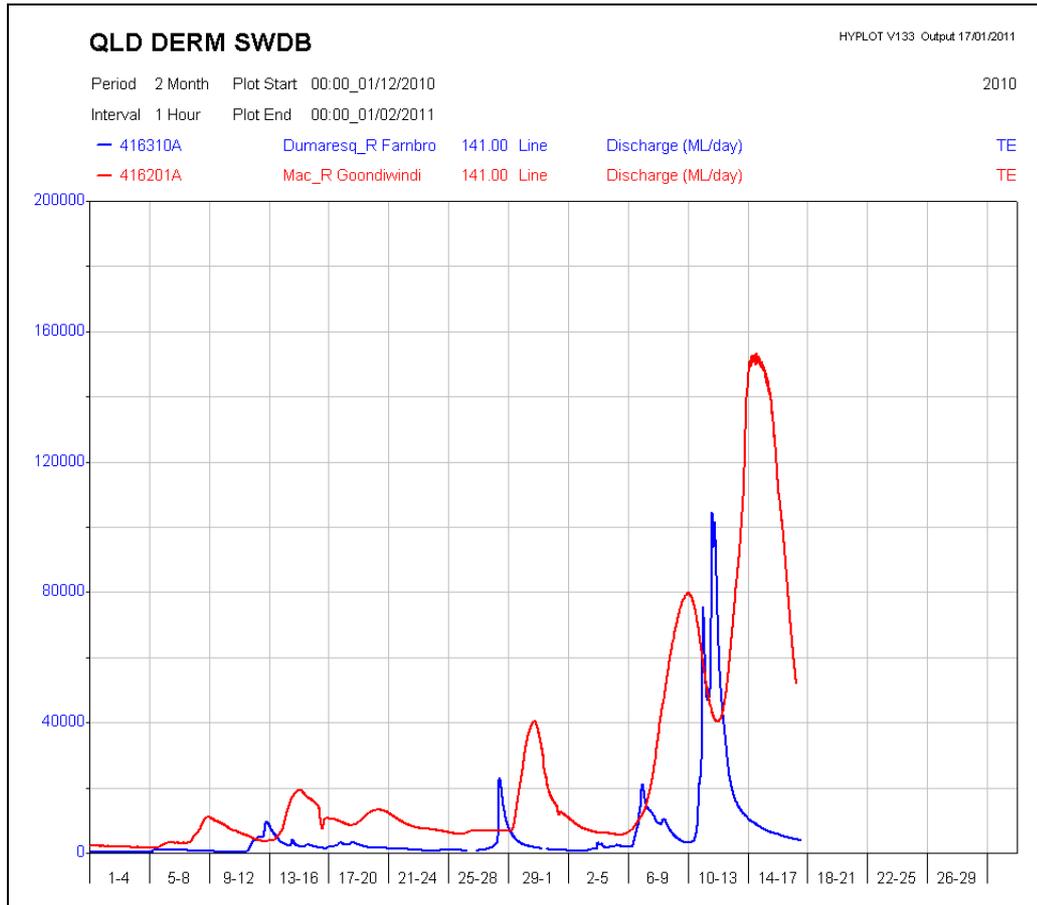


- Three flow events have occurred in this system since the beginning of December. The most significant of these occurred on the 6th January, 2011 which reached approximately **30,000 ML/day**. This flow peaked at approximately **25,000 ML/day** 5 days later downstream at Fenton.
- A fourth flow event is currently arriving at the Nindigully gauging station which is recording **12,408 ML/day** and rising. This flow will continue downstream to Fenton and into N.S.W in the coming week. Current flow at the Fenton gauging station is **11,757 ML/day**.
- Total volume to pass the Nindigully and Fenton gauging stations since 1st December is approximately **311,000 ML** and **257,000 ML** respectively.

Border Rivers

A partially regulated system which is largely defined by the Macintyre River feeding from NSW to join the Dumaresq River border stream and Macintyre Brook from Queensland. Storages include Glenlyon, Pindari and Coolmunda Dams. The Macintyre River becomes the Barwon where it is joined by the Weir River. Downstream of Mungindi the river ceases to form the NSW/Qld border and traverses into NSW as the start of the Barwon Darling system.

Hydrograph from DERM's gauging station on the Dumaresq River at Farnbro (416310A) and Macintyre River at Goondiwindi (416201A) showing stream discharge (ML/day) since December 2010.



- Numerous flow events have occurred in the Border Rivers since the beginning of December. The Dumaresq and Macintyre Rivers recorded a large flow event peaking at over **100,000 ML/day** in the Dumaresq River and over **150,000 ML/day** in the Macintyre River a few days later on the 14th January, 2011.
- Flow on the Macintyre River at Goondiwindi town gauging station this morning was approximately **52,000 ML/day** and falling. Total volume to pass the Goondiwindi gauging station since December is over **1,000,000 ML**.
- Water harvesting announcements are current for allocation holders on the Border Rivers, Macintyre Brook, Lower Weir Rivers Water Management Areas and Callandoon Creek Management Area.

Note:

Flow data in this report is based on the latest available **telemetry data** and **has not been quality controlled**.

DERM's Data User Agreement is available on the DERM's website at the following address:

http://www.derm.qld.gov.au/water/monitoring/current_data/user_licence.html

Should you have any further enquiries in regard to this report, please contact Martin Moran, Senior Natural Resource Officer, or Steven Williams, Natural Resource Officer of the Department of Environment & Resource Management on telephone (07) 4688 1299.