



Barwon-Darling River Flood Information

Issue 7 | 30 April 2010

This is the seventh information paper issued by the NSW Office of Water to provide advice to communities, industries and landowners about the passage of floodwaters through the Barwon-Darling River to the Menindee Lakes and the Lower Darling River.

The filling of Lake Cawndilla – a rare sight, having been dry since 2002.



Photo dated 29 April 2010, courtesy of Barry Philp, Statewater, Menindee.

The momentum of flood water is beginning to slow. The peak on the Darling River has now passed Tilpa and is expected to reach Wilcannia late on Sunday before falling slowly. The river may start to rise again as additional flows come into the Darling River above Wilcannia from the Paroo River.

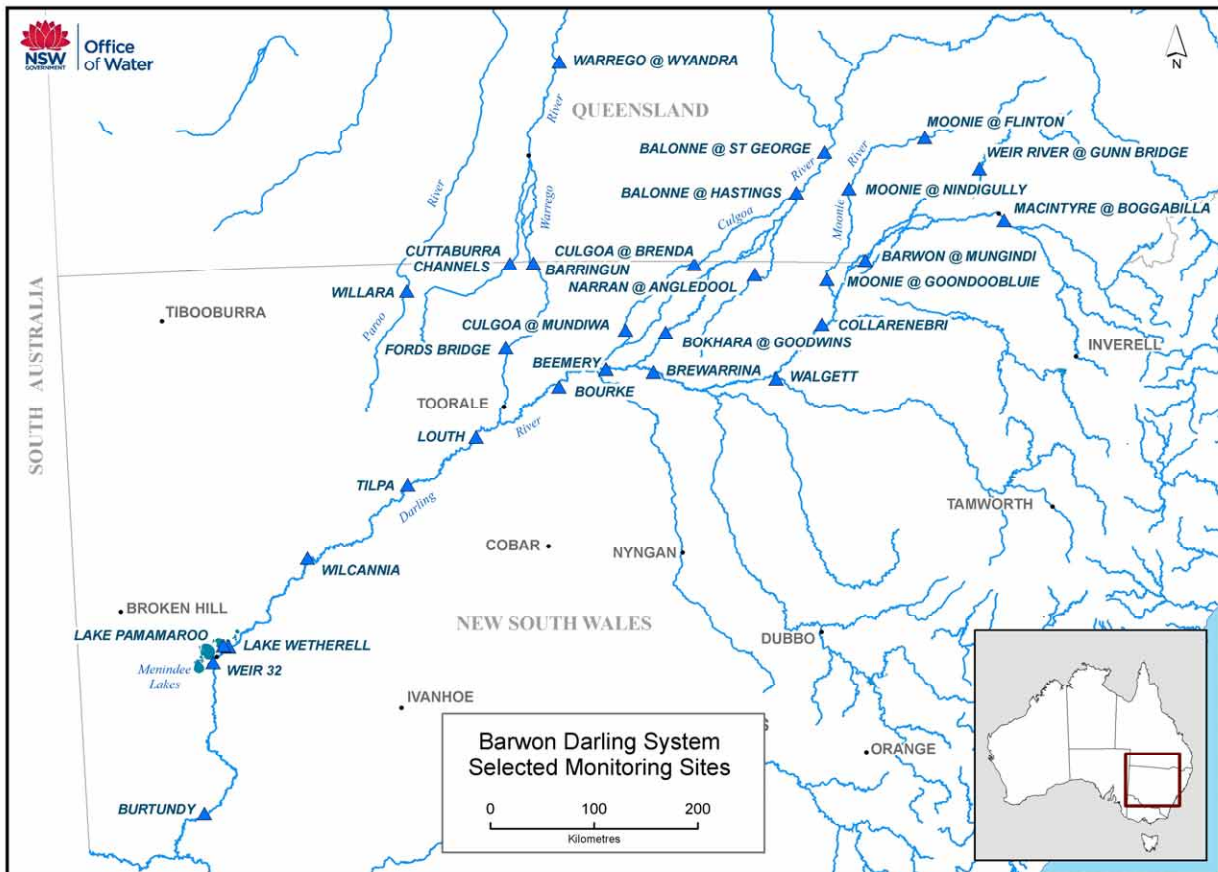
Flows in the upper Darling, upstream of Bourke, are now at low levels.

The volume of flow from the Paroo River is still uncertain. Flow from the Paroo into the Darling is a very rare event therefore there is very little data available on which to predict the expected total inflow to the Menindee System. Nevertheless the Office of Water has estimated that the probable total volume stored in the lakes at the end of the flood will be

about 1,700,000 megalitres. This is enough to fill the lakes but not to cause them to overflow, consequently there will be no unregulated flood flows downstream of the Menindee Lakes.

As the progress of the flood water is now quite slow, the NSW Office of Water will move to fortnightly production of this information paper in future.

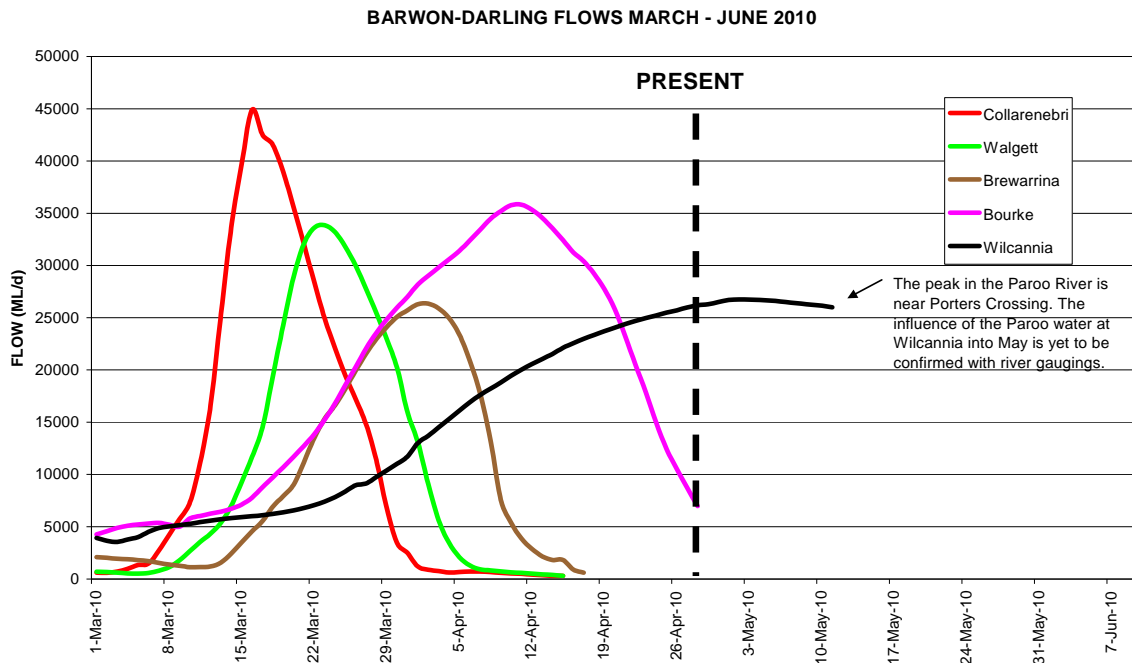
Monitoring flows and river levels



This map shows the location of gauging stations used to monitor and report on the passage of flows. Daily updates of the flows and heights at these and other gauging stations throughout NSW are available on the NSW Office of Water website, www.water.nsw.gov.au. Follow the links to 'real-time data/ rivers and streams'.

Following the flood

Hydrographs at selected locations show flows and their respective flow peaks.



The points to note are:

- The relatively large hydrograph at Bourke compared with Brewarrina is due to the inflows downstream of Brewarrina from the Culgoa system of rivers.
- The peak from Bourke reached Tilpa on April 23 and is expected at Wilcannia this weekend. The river upstream of Tilpa has receded.
- The hydrograph at Wilcannia includes inflows from the Warrego and Paroo Rivers between Bourke and Wilcannia.

The forecast flows and arrival dates at Wilcannia are indicative only. The volumes, flow rates and timing of the Paroo River inflows will not be clear until river gauging crews have been able to measure flows in the vicinity of Mount Macpherson.

Stream Flows (at 28 April 2010)

	Height (m)	Flow (GL/d *)	Comments
Darling River			
Bourke	4.9 F	6.9	Peaked 35.9GL/d (11/04) Volume 1104GL
Louth	7.2 F	19	Peaked 37.3GL/d (20/04) Volume 1102GL
Tilpa	9.4 F	30	Peaked 32.7GL/d (23/04) Volume 1030GL
Wilcannia	9.1 R	26	Volume 790GL
Menindee Lakes Scheme (MLS)			
Lake Wetherell	61.56	Vol 183	
Lake Pamamaroo	60.77	Vol 300	Total MLS = 982GL, 57%
Lake Menindee	58.45	Vol 401	
Lake Cawndilla	54.66	Vol 99	
Weir 32	1.64 S	0.3	Regulated flows
Lower Darling River			
Burtundy	0.95	0.8	

R= Rising, F = Falling, S = Steady

* Flows are in gegalitres per day (GL/d): 1 gegalitre = 1000 megalitres = 1 billion litres.

** Volumes (GL) are the total flow passing this station since 1 March 2010.

Current river flows

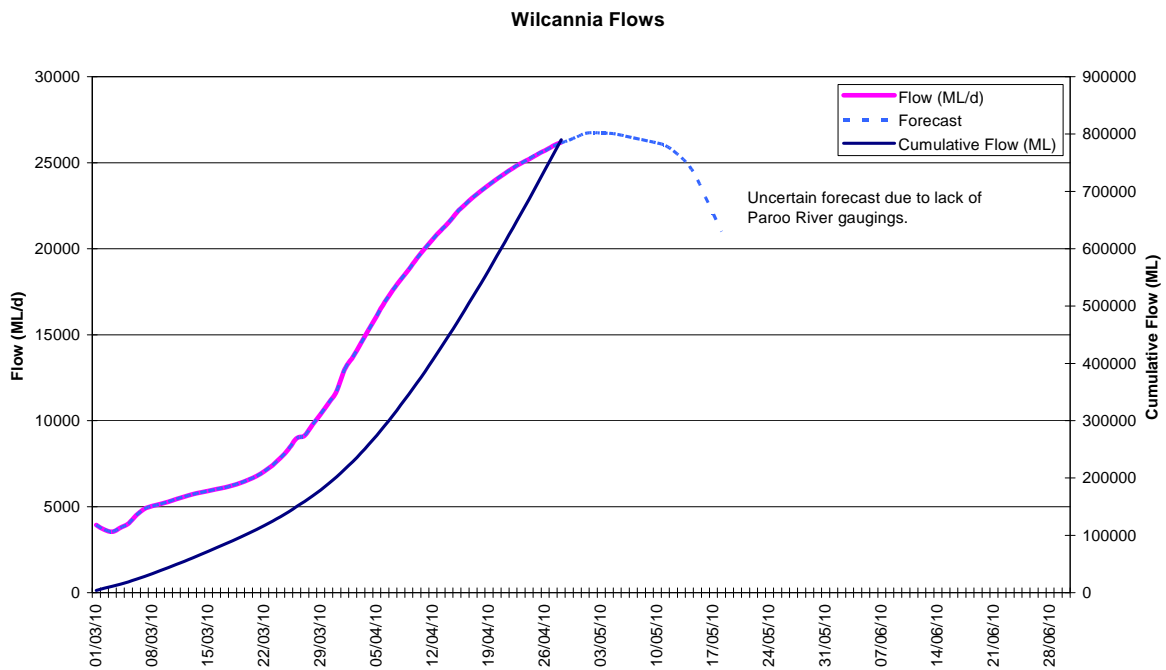
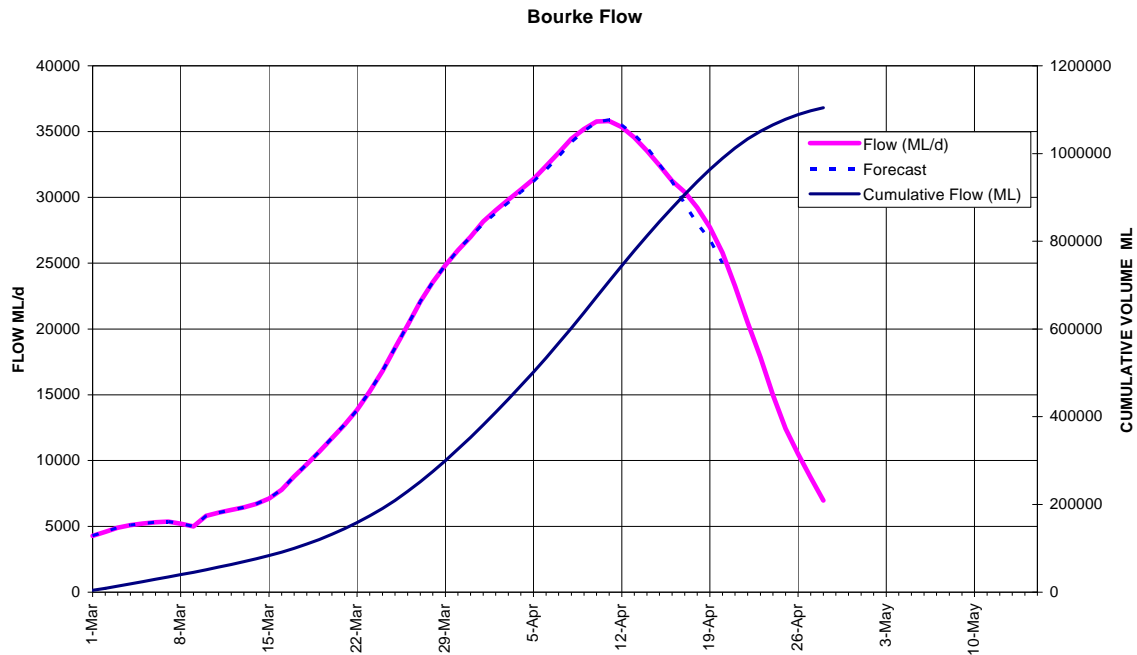
Paroo River

The Paroo River is now running its full length and flowing into the Darling River for the first time in twenty years. The Paroo floodwaters from Queensland are now passing into the Darling River about 30km upstream of Wilcannia. The total volume of these flows has progressively reduced over the length of their journey of nearly 1,000km because large quantities of water have been naturally consumed in replenishing the numerous arid floodplains, channels and billabongs in the region, all of which have been dry for many years. The environment is already responding markedly to these rare flows, but it means the total volume of water arriving at Menindee Lakes is much less than the volume that started the journey in central Queensland. The Paroo River will continue to discharge to the Darling throughout May as the catchment slowly drains.

Darling River

Flows through Bourke have totalled 1,100GL this month after flows peaked on 11 April 2010. The peak passed Tilpa on 23 April 2010 and is expected to reach Wilcannia late this weekend. Suitable gauging sites are being identified to take a range of flow measurements in the lower Paroo over the next week. These measurements will allow flow volumes and timing

to be confirmed so that reliable estimates can be made of the flow volumes expected through Wilcannia and ultimately Menindee Lakes.



Menindee Lakes

Inflows to the Menindee Lakes system are steadily increasing as water from Wilcannia arrives. Lake Wetherell is now at 95 per cent of capacity and Lake Pamamaroo is surcharged at 108 per cent of capacity. With Lakes Menindee and Cawndilla collectively at 40 per cent of capacity, the total system storage is currently 982GL and rising.

It is anticipated that storage will rise to about 1400GL by the third week of May. The final inflow volume will be dependant on contributions from the Paroo River during May but

current estimates indicate that total storage will not exceed about 1700GL and therefore a physical spill from the lakes through this flood event is unlikely without further significant rainfall and inflows.

Outflows from the lakes to Weir 32 have been reduced to the target 300ML/day. This is a typical flow rate for April. Releases from the lakes are now managed by the Murray-Darling Basin Authority.

Extraction Management

Water users in the Barwon-Darling and lower Darling will be able to access the available water according to their licence conditions and supplementary water announcements.

Communications

Updates will be provided weekly, where possible, and will be available from the NSW Office of Water's website at www.water.nsw.gov.au

The information provided is advisory only. For real -time and daily information please visit the Office's website at www.water.nsw.gov.au. For current river level predictions and flood warnings you should consult the Bureau of Meteorology website www.bom.gov.au

Contact Bunty Driver 0407 403234

© State of New South Wales through the Department of Environment, Climate Change and Water, 2010
This work may be freely reproduced and distributed for most purposes, however some restrictions apply. Contact the Department of Environment, Climate Change and Water for copyright information.

Disclaimer: While every reasonable effort has been made to ensure that this document is correct at the time of publication, the State of New South Wales, its agencies and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document. This information does not constitute legal advice. Users are advised to seek professional advice and refer to the relevant legislation, as necessary, before taking action in relation to any matters covered by this information sheet.

NOW 10_098