Department of Primary Industries
Office of Water

Community Information Communiqué

Management of Menindee Lakes 2011-2012
Issue 3 – 10 February 2012

Introduction

Heavy rainfall and flooding in northern NSW and Queensland has triggered pre-releases from the Menindee Lakes system for the third time in two years. With the Menindee lakes storage levels already increasing as a result of high flows earlier this summer, there is limited capacity to manage the impending additional flow.

As a result, the NSW Office of Water and State Water Corporation began flood pre-release operations on Thursday 2 February 2012, increasing releases from 15,000 megalitres per day to a target of 29,000 megalitres per day by Tuesday 14 February.

However, as the scale of flooding in the upstream valleys is becoming apparent, the rate of releases from Menindee Lakes will now continue to rise further to target **35,000 megalitres per day by Friday 17 February**.

These releases to the Lower Darling will make room in the storage for the second period of high inflows that are expected to arrive in March and April 2012, and will protect the township of Menindee from extensive flooding.

Currently the various flood peaks are still making their way along the Gwydir, Namoi, Moonie, Warrego and Balonne/Culgoa/Bokhara river systems. Flood flows from the Moonie, Namoi and Gwydir Rivers will flow into the Barwon-Darling system first, followed by flood flows from the other Queensland Rivers.

The full extent of these flood flows into the Barwon-Darling system is not yet fully clear, but it is expected to be significantly larger than last summer, with flood peaks even higher than those experienced in 1998. This could result in the largest flood in the Barwon-Darling system since 1976.

The NSW Office of Water, together with State Water Corporation will continue to manage releases from the Menindee Lakes to the Lower Darling River and Great Darling Anabranch.

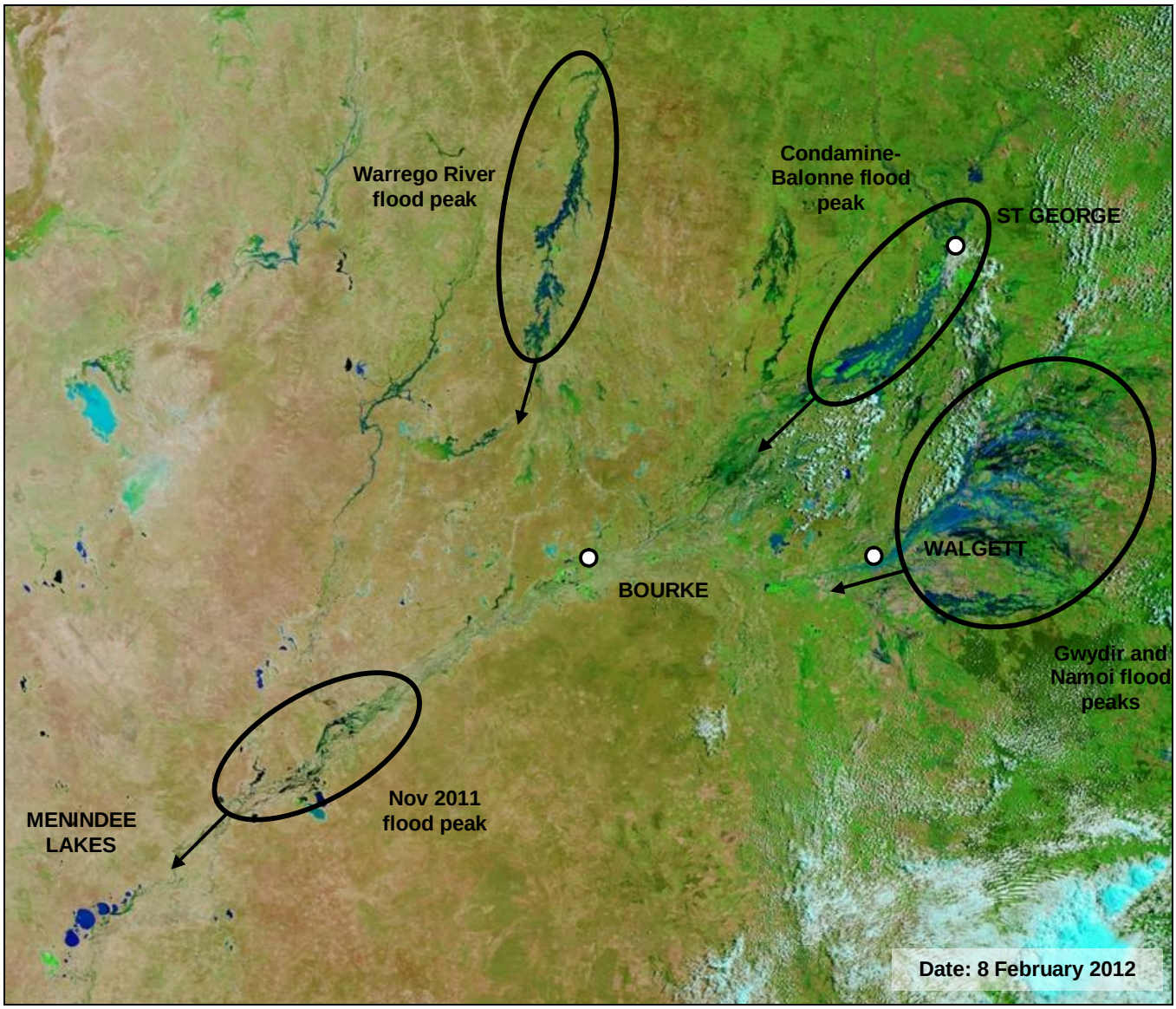
This information paper and subsequent updates will provide more detail on the inflows, storage levels, operations and management of the Menindee Lakes, particularly over the next few weeks as the scale of the approaching flood becomes better understood.

Current flows

Current water levels and flows as at 10 February 2012

Location	Height (m)	Flow (ML/d)	Comment	Location	Height (m)	Flow (ML/d)	Comment
Mungindi	7.22	15,350	Falling	Louth	8.99	30,943	Falling
Mogil Mogil	8.80	74,886	Peaking	Tilpa	11.23	39,592	Falling
Collarenebri (total)	8.28	218,728	Rising	Wilcannia	9.86	31,025	Approaching peak
Walgett	13.14	213,647	Rising fast	Weir 32	6.39	22,179	Rising
Brewarrina (total)	3.64	19,129	Rising	Pooncarie	6.29	11,749	Rising
Bourke	8.32	24,217	Rising	Burtundy	6.07	13,621	Steady

Satellite image of the Barwon-Darling catchment
Image: MODIS Australia6 Subset - Terra 250m Bands 7-2-1 Image for 2012/095 (8 February 2012)
Source: NASA/GSFC, MODIS Rapid Response 2012.



River Operations

Darling River Flows and Menindee Storage Volume

Inflows to Menindee Lakes have been increasing over the last month following floods in the Gwydir and Border Rivers valleys last November, and are expected to peak in mid-February at approximately 32,000 ML per day. Pre-releases have been underway since last December to provide sufficient airspace to mitigate these inflows.

These pre-releases peaked in early January at 23,000 ML per day, and were slowly receding until the onset of renewed flooding last week. As a result of these releases, the level in the Menindee Lakes storages had fallen from 105% to 87% by 12 January, before then increasing again. Currently, the Menindee Lakes storages are at 94% of capacity.

To prepare for significant additional inflow, pre-releases from Menindee Lakes will need to increase significantly over the coming weeks. Releases are already planned to reach 29,000 ML per day by Tuesday 14 February and will continue to rise to a target of 35,000ML per day by Friday, 17 February. This will restrict access to the Pooncarie Road and inundate some low-lying properties.

With outflows due to exceed inflows, the gates on the main weir may soon be fully removed from the water, allowing free passage of flow through Lake Wetherell to the Darling River channel. Once this occurs, the pre-release rate will be largely determined by inflows.

Target water levels and flows at Weir 32 until 17 February 2012

Date	Estimate Weir 32 pool level (m)	Weir 32 Flow (ML/d)
Friday 10 February	6.44	23,000
Saturday 11 February	6.50	24,000
Sunday 12 February	6.56	25,000
Monday 13 February	6.66	27,000
Tuesday 14 February	6.75	29,000
Wednesday 15 February	6.84	31,000
Thursday 16 February	6.93	33,000
Friday 17 February	7.02	35,000

Once the second peak approaches Menindee Lakes, further increases in release rates will almost certainly be required, and this will result in the inundation of residences near the River at Menindee. Residents who are at risk should prepare to move stock, equipment and any valuable possessions.

At this early stage, the flooding is likely to reach at least the levels that occurred during the 1998 floods, where the peak flow at Burke reached 230,000 ML per day (13.78m gauge height) and Menindee Releases to the Lower Darling reached 46,500 ML per day through Weir 32 (7.45m gauge height). This is approximately equivalent to 10.0m at the Menindee town gauge.

Water levels in the Lower Darling River at Pooncarie have just begun to rise due to increased releases from Menindee Lakes while Burtundy will begin to rise over the next few days. The releases being targeted in the coming week will result in higher downstream peaks than those experienced in 2011. These peak flows from last year were 22,000 ML per day (7.6m gauge height) at Pooncarie and 20,000 ML per day (7.4m gauge height) at Burtundy.

Spill to the Great Darling Anabranch from the Lower Darling River is also expected to be significant. During high flows the Anabranch will receive approximately 50% of flows through Weir 32. Cawndilla outlet is releasing 1,500 ML per day and, combined with Tandou Creek flows, could contribute up to 2,000 ML per day to the Anabranch through Packers Crossing. It is anticipated that full connectivity throughout the Anabranch system will last for at least another two months, with significant flows expected to reach the Murray River.

How this flood compares to previous events

The table below shows a comparison of the current flood events with previous floods.

Year	Max height at Bourke (m)	Total Volume at Bourke (GL)	Max height at Wilcannia (m)	Total flow at Wilcannia (incl. Talyawalka Ck) (GL)	Max height Weir 32 (m)
1974	14.09	8,200	11.07	6,450	7.63
1976	14.17	14,000	11.59	10,500	8.07
1983	13.27	7,200	10.65	5,500	7.06
1990	12.99	9,000	11.0	8,150	7.37
1998	13.78	9,700	10.83	6,700	7.45
2010	10.78	2,370	9.43	2,400	5.44
2011	12.56	5,800	10.5	5,000	7.10
2012	**13.9***	**6,000***	**10.6***	**5,000***	**7.2****

* Predicted values ** Likely to increase

Releases from the Menindee Lakes at 10 February 2012

Location	ML/d
Main weir	18,100
Lake Wetherell outlet	2,300
Lake Pamamaroo outlet	1,200
Lake Menindee outlet	1,600
Lake Cawndilla outlet	1,500
Total	**24,700**

Communication and additional information

As conditions are changing rapidly at present, the NSW Office of Water and State Water will continue to monitor the situation and further advice will be issued later this week.

Where do I go for additional information?

Contact **State Water**: Menindee Officer on Duty Barry Philp: **T** 0429 784334

Contact **NSW Office of Water**: Bunty Driver **T** 0407 403234 or visit the website www.water.nsw.gov.au