

Regional customer drought update

14 January 2019



Key messages

Good rainfall of around 50mm was received over the southern and central tablelands areas. The central west slopes and plains also received good rainfall of around 25mm. The north east and western parts of the state again remained dry.

Overall, regional valley storages vary significantly in security, with the Namoi, Barwon Darling and Lower Darling at high risk with cease to flow either in place or imminent.

The Macquarie will be at high risk in autumn 2019 while the Gwydir, Lachlan, Murrumbidgee and Murray at risk mid 2019 if significant rainfall does not occur.

The drought conditions in the state's Central West, Far West and North West regions are the worst affected to date. As well as bringing hardship to local farmers and surrounding communities, the stressed river network is also impacting the riverine environment. These impacts are being felt most acutely in the form of declining overall water quality, blue-green algae outbreaks and fish kills. A number of fish kills were reported in recent weeks in the Lower Darling, downstream of Keepit and in Wyangala Dam.

Increase reports of red alerts are occurring for blue green algae with increasing temperatures and reduction in flows along the rivers due to the drought.

There has been widespread media coverage of the fish kills in the Menindee Lakes area.

Minister for Primary Industries Niall Blair visited Menindee on 9 January and committed the NSW Government to helping the Menindee community and the ecosystem in Western NSW recover as quickly as possible following a major fish kill in the Darling River. Mr Blair met with locals, Central Darling Shire Council, Wentworth Shire Council and experts from the Department of Primary Industries (DPI) Fisheries and WaterNSW. WaterNSW will deliver water to support the feeding, breeding, and movement needs of these native fish species when more water is available in the Darling River. WaterNSW is continuing to monitor water quality throughout the dams and river systems as the drought continues across the Murray-Darling Basin.

WaterNSW is undertaking a drought roadshow in the Macquarie valley from 15-17 January. Community meetings will be held in Warren, Narromine, and Mudgee as well as closed meetings with Bogan, Cobar and Dubbo councils.

In the Namoi, the 324 order has now been lifted and water orders have been delivered. However, no further releases to the Lower Namoi are possible until inflows occur as Keepit is practically empty and cease to flow conditions are extending from Keepit to Narrabri.

In the Macquarie, there remains a restriction on access to 70% of carryover. Any improvements in resources to Burrendong Dam will need to consider high priority commitments for 2019-20, before this order is eased.

Bulk water transfer of 35 gigalitres from Windamere to Burrendong Dam has been commenced on 1st January 2019. A second 13 GL phase of the transfer is scheduled for mid-year if conditions remain dry, leaving a minimum of 70 GL in Windamere.

Construction of Lower Darling block banks is complete, and filling is in progress. Filling these banks will result in cease to flow in some river sections over coming weeks, and a temporary water restriction order is now in place. Releases from Menindee to these banks is reducing this week as Lake Pamamaroo empties. Releases will commence from Wetherell for the Lower Darling, at low rates, for the Lower Darling from Menindee to the top bank (Karrola), as confidence in the Wentworth to Broken Hill pipeline means Wetherell can now supply the Lower Darling.

The temperature forecast for the week is to reach heatwave conditions in all parts of the state.

No rainfall is forecast for the first half of the week. Second part of the week could possibly see 1 – 5mm in central and eastern parts of the state.

Last week's weather

Rainfall of 15 to 50mm was recorded in the central and eastern parts of the state. The north east of the state remained dry as did the western parts of the state. The southern and central tablelands received the highest rainfall of approximately 50mm. The central west slopes and plains also received good rainfall of 15 to 25mm.

This week's weather forecast

A high pressure system is expected to remain over the Tasman Sea during the coming week, allowing the temperature to build over New South Wales as hot air from central Australia gets drawn into the state.

For the first part of the week, there is no rainfall forecast for New South Wales. As the week progresses, rainfall of 1 – 5mm is forecast to be received in the eastern and southern parts of the state. Again, the western parts of the state is predicted to remain dry.

For the start of the week, most of the state will see heatwave temperatures of 39 – 45 degrees. The eastern parts of the state should reach around 36 degrees. This temperature pattern is forecast to continue until Saturday. On Saturday, the Northern parts of the state will remain over 45 degrees, with the central and southern parts of the state seeing temperatures reaching 30 – 39 degrees.

Operational Update

Lower Darling: A Red Alert level warning (high alert) for blue-green algae has been issued for the Darling River at Burtundy in the Lower Darling Region.

Construction of all four temporary banks in the Lower Darling is now complete the upper block banks are reaching the design capacity and are likely to be close to full when releases from the lakes cease.

Releases from Pamamaroo are being reduced due to low water levels and poor water quality and the pipes in the banks will be closed to store this water. This will lead to cease to flow conditions between the banks' pools. Small releases (50ML/d) from Wetherell will maintain flows between Menindee and the first bank at Karoola.

WaterNSW wrote to customers along the lower Darling advising those wishing to install individual block banks (in locations between the four temporary banks) to forward applications to WaterNSW for fast track approvals, via standard conditions. This will allow the timing of the construction and filling of these private block banks to be co-ordinated to ensure all customers have access to water.

On 4 December the Government requested WaterNSW implement restrictions on water accounts for our Lower Darling customers. A Temporary Water Restriction Order restricts the use of any available water to critical human needs and permanent plantings, plus the use of high security water from Copi Hollow.

High levels of blue green algae continue within the lakes and Lower Darling River. This is having an impact on water quality and restricting access to the lakes, especially Copi Hollow, for recreational use.

A second fish kill occurred with up to one million fish being impacted. The cause of the fish kill is likely to be the result of a rapid change in air temperature and low dissolved oxygen. Dissolved oxygen levels were high in the top 1m of the water column but when the temperature dropped this water mixed with the anoxic lower water oxygen levels dropped to close to zero.

Namoi: The block release from Keepit to deliver all orders placed by 5 November ceased on 16 December, with Keepit Dam now at 0.4% of active capacity.

Delivery of these orders, and a small amount of additional orders from the expression of interest are now complete. No further block releases are planned without further inflow, and Keepit is now practically empty.

WaterNSW is working with Road and Maritime Services to place a marine order on Keepit Dam to limit motor boating access to the dam due to the increase public safety risk with very

low water levels and limited area available for activities. Navigational warning was put in place by RMS advising potential visitors of the public safety limitations on the 19 December.

Low flows downstream of Keepit and increasing temperatures resulted in a fish kill in this reach of the river. High temperatures and low flows can reduce oxygen levels in the water column which puts native fish at risk.

Macquarie: WaterNSW is continuing to monitor water quality throughout the dams and river systems as the drought continues across the Murray-Darling Basin.

First phase of the Windamere bulk water transfer (BWT) has been commenced on 1 January 2019. Burrendong is planned to be drawn down to about 4% by end of summer. Deliveries to town water and stock and domestic supplies will be maintained from this volume in Burrendong Dam to at least the end of 2018-19 in the Macquarie. The second parcel of bulk water transfers will be released in spring 2019, if conditions remain very dry, to extend critical supplies in the Macquarie for 2019/20. This second stage of the BWT will leave 70GL in Windamere which is a very secure supply for that valley for at least 7 years.

The information session on the 4 December in Mudgee for the local community confirmed; the commencement date of 1 January, the communications plans, the volume per month, but limited the peak releases to 900ML/d rather than the peaks (1,500ML/d) and troughs proposed by OEH to provide environmental outcomes from the BWT. Customers were concerned that higher releases would lead to more suspended solids in the water that would clog irrigation equipment filters in the peak irrigation months of January and February.

The level in Burrendong Dam is expected to drop steadily to about 4% by end of summer. Burrendong Dam had been drawn below 10% on five similar occasions (June 1995, Jan 1998, Apr 2003, May 2004 and Jan 2007).

Details

Valley		Storage Volume (GL)	Weekly inflows (GL)	Releases ML/d	Comment	GS % AWD	AWD Inflows Required
Valley	Dams						
Border	Pindari	73	1	2,274	Releases are being made to meet d/s irrigation demand for both NSW and QLD customers	2.7	18.3
	Glenlyon	69	1.8	1,750			
Gwydir	Copeton	215	1.2	2820	Releases are being made to meet d/s irrigation and environmental demand.	0	36
Namoi	Split Rock	20	0	85	Split Rock bulk water transfer complete. Keepit releases for Lower Namoi block release ceased 16 Dec with Keepit now at 0.4% of capacity. No further releases to Lower Namoi until inflows occur.	0	80
	Keepit	9	0	0			
Peel	Chaffey	41	0	165	Chaffey Dam releases for Tamworth and irrigation demand, in roughly 35:65 ratio. Level 1 water restriction for Tamworth.	38	N/A***
Macquarie	Burrendong	158	1.2	2,820	Current releases from Burrendong Dam are for increasing irrigation demand. Delivery of environmental flows commenced at Burrendong Dam on 12 July 2018 and finished on 11 Dec 2018, with a total delivery of about 127 GL. Current release from Windamere dam are for the bulk water transfer.	0	317
	Windamere	137	2	594			

Valley		Storage Volume (GL)	Weekly inflows (GL)	Releases ML/d	Comment	GS % AWD	AWD Inflows Required
Valley	Dams						
Lachlan	Wyangala	494	2	3,534	Current releases from Wyangala Dam are for irrigation, TWS and S&D demand.	0	267
	Carcoar	14	0.04	82	Current releases from Carcoar Dam are for irrigation and S&D demand. Due to drought conditions, end of system daily environmental flow requirements is only met intermittently.		
Murrumbidgee	Burrinjuck	430	3.5	1,500	Release for: irrigation, planned environmental water (186ML/d at Balranald and 50ML/day at Darlot) and planned/held environmental water to Lowbidgee.	7	180
	Blowering	612	0.3*	6,600			
Murray	Hume	1,078	35.0*	14,500	Transfers from Dartmouth & Hume to Lake Victoria continues, at lower rate, for South Australia.	0	130
Barwon-Darling			0	N/A	Cease to flow conditions: Walgett – no flow since 21 July 2018; Bourke – no flow since 27 August; Wilcannia – no flow since 8 September	N/A	N/A
Lower Darling	Menindee	60	0	150	Four block banks have been constructed on the lower Darling with releases currently filling banks. Copi Hollow bank has been constructed and has been filled to 12GL to secure water for Broken Hill.	0	N/A

* Includes inflows from Snowy Hydro, already budgeted.

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More information

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