



# River Murray Water Resources Report

Issue 49: 6 November 2009

## Observations at a glance

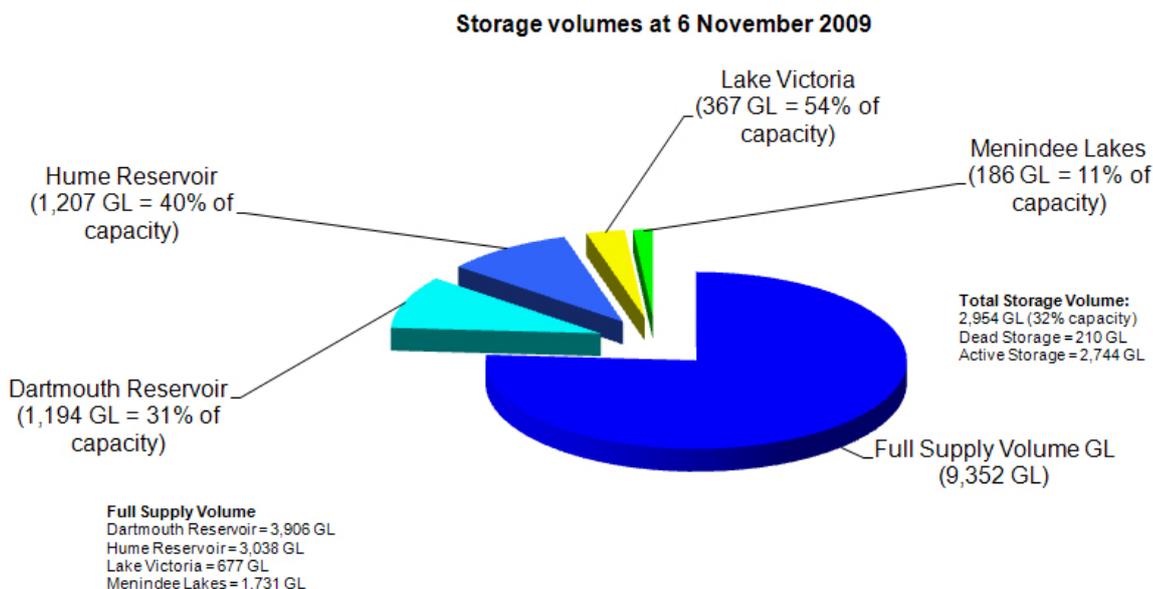
- Irrigators are currently able to access 46% of their allocation and 100% of their approved carry-over water volume.
- The volume of water in upstream storages is currently 2,954 GL (32% capacity), compared to about 2,410 GL (26% capacity) at the same time last year.
- River Murray system inflows during September and October 2009 were 1,335 GL, more than the entire inflow received in 2006-07 (970 GL).
- Salinity levels above Lock 1 remain fairly low. However, downstream of Lock 1 salinity levels remain high due to low water levels.

## Murray-Darling Basin storages

The volume of water in storage in Hume and Dartmouth Reservoirs, Lake Victoria and Menindee Lakes is currently 2,954 GL (32% capacity), compared to about 2,410 GL (26% capacity) at the same time last year.

Current storage levels are shown in **Figure 1**.

**Figure 1: Murray-Darling Basin storages**



All water currently in storage in Hume, Dartmouth and Lake Victoria under Murray-Darling Basin Authority control is fully committed to the state water entitlements (including carry-over) and transmission losses that occur during the delivery of this water.

The volume in the Murrumbidgee Valley storages (Blowering and Burrinjuck) is 1,080 GL (40% capacity). The Goulburn Valley storage (Lake Eildon) is 1,116 GL (33% capacity).

## Rainfall and River Murray inflows

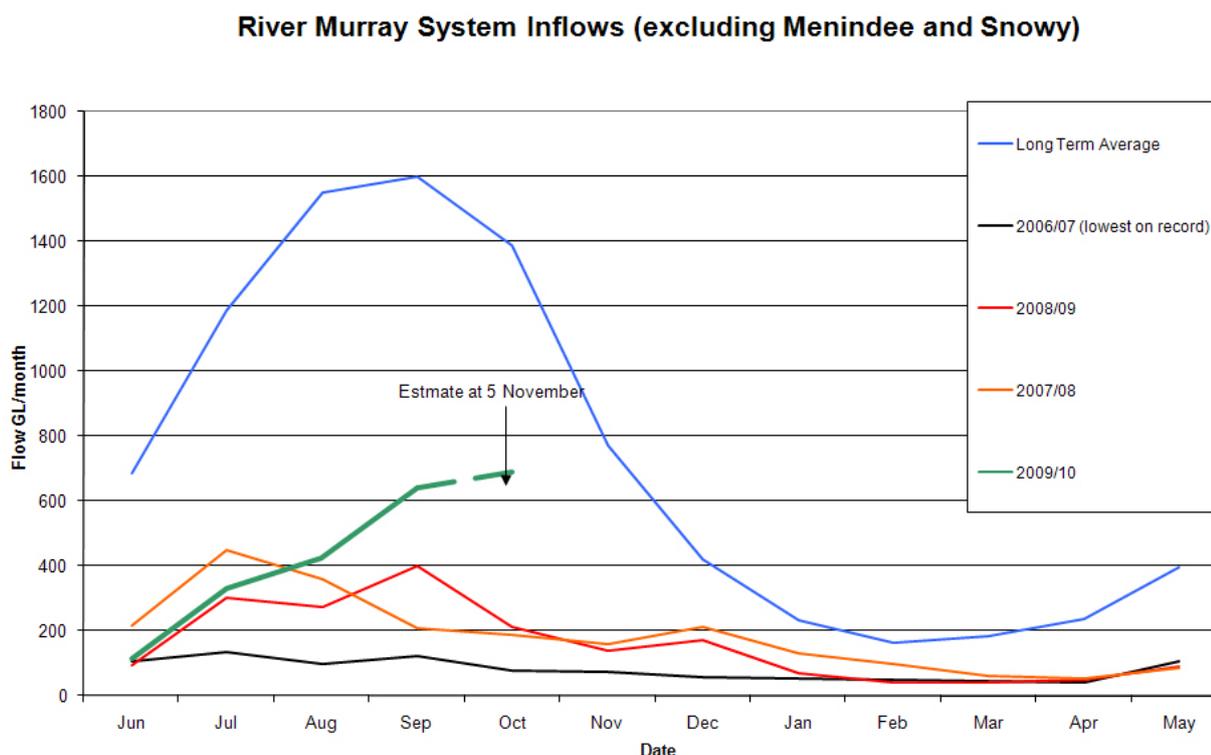
Rainfall over the past two months has improved River Murray system inflows and water availability to all states. River Murray system inflows during September and October 2009 were 1,335 GL, more than the entire inflow received in 2006-07 (970 GL).

River Murray system inflows since the start of the 2009-10 water year (June-October) were about 2,205 GL and are currently tracking as the 17<sup>th</sup> driest in 118 years of record. The period from June to October typically yields 73% of the annual River Murray system inflows. From November onwards the likelihood of higher flows from the River Murray system starts to diminish, as historically only 27% of the average annual inflow occurs between November and May.

Over the past week, relatively dry conditions and high temperatures have reduced streamflow responses in the majority of the Upper Murray catchment, and increased losses along the River Murray, including in South Australia.

Figure 2 shows the monthly River Murray inflows.

Figure 2: River Murray inflows



## River operations

The flow to South Australia has been increased to 4,500 ML/day. The normal entitlement flow across the border in November is 6,000 ML/day.

All weir pools are slightly above their normal full supply level, however it is expected levels will return to normal or close to pool level over the coming week.

Some of the flow to South Australia is currently being directed through Chowilla Creek. Once this water enters the Lock 5 pool (after a few days travel time) further water will be used to recover weir pools and provide for a target flow past Lock 1 of about 1,600 ML/day.

Information about river operations upstream of the South Australian border is available from the Murray-Darling Basin Authority website [www.mdba.gov.au](http://www.mdba.gov.au)

## Salinity and water levels

Salinity levels above Lock 1 remain fairly low. However, downstream of Lock 1 salinity levels remain high due to low water levels. Average salinity in Lake Alexandrina is currently 5,560 EC. Average salinity in Lake Albert is currently 8,920 EC.

The average water level in Lake Alexandrina is currently about minus 0.77m AHD, and in Lake Albert the average water level is about minus 0.32m AHD.

**Table 2** shows the current water levels and salinity at selected locations.

**Table 2: Water and salinity levels**

	Actual Water Levels at 6/11/09		Full Supply Level Level	Variation from Pool Level	Current EC Level
	U/S m AHD	D/S m AHD	U/S of Weir m AHD	U/S of Weir m AHD	
Lock 6	19.21	16.21	19.25	-0.09	227
Lock 5	16.21	13.25	16.30	-0.09	297
Lock 4	13.15	10.15	13.20	-0.05	378
Lock 3	9.75	6.15	9.80	0.03	539
Lock 2	6.07	3.24	6.10	-0.03	629
Lock 1	3.18	-0.54	3.20	-0.02	651
Lake Alexandrina (average)	-0.77				5,560
Lake Albert (average)	-0.32				8,920
Goolwa	0.72				10,747
Water levels below Lock 1 are affected by wind and will vary throughout the day					
EC Readings below Lock 1 are daily averages and will vary throughout the day					

## Carry-over

Irrigators can now access 100% of their approved carry-over volume. The carry-over policy and further information is available at

[www.dwlbc.sa.gov.au/murray/drought/index.html#Carryoverwater](http://www.dwlbc.sa.gov.au/murray/drought/index.html#Carryoverwater)

## Water allocations in South Australia and interstate

River Murray irrigation allocations in South Australia are currently at 46%. For further information view the Minister's latest River Murray announcement (2 November) at [www.dwlbc.sa.gov.au/media.html](http://www.dwlbc.sa.gov.au/media.html)

The current allocation levels in South Australia, Victoria and New South Wales, together with the volume of these allocations, is outlined in **Table 2**. It is important to note that the volumes for NSW and Victoria include tributary water, in addition to water provided to those states under the water sharing arrangements.

The latest information about allocations in New South Wales is available at [www.naturalresources.nsw.gov.au/mediarelnr/mr\\_toc\\_currnr.html](http://www.naturalresources.nsw.gov.au/mediarelnr/mr_toc_currnr.html) or [http://www.dwe.nsw.gov.au/water/avail\\_alloc.shtml](http://www.dwe.nsw.gov.au/water/avail_alloc.shtml)

The latest information about allocations in Victoria is available at [http://www.g-mwater.com.au/news/media-releases/2009\\_media\\_releases](http://www.g-mwater.com.au/news/media-releases/2009_media_releases)

**Table 2: Current allocation levels in South Australia, Victoria and New South Wales (including the volume of these allocations)**

<b>Allocation type and %</b>	<b>Volume Allocation GL*</b>
SA High Security 46%	260
NSW Murray High Security 97%	179
NSW Murray General Security 10%	167
NSW Murrumbidgee High Security 95%	342
NSW Murrumbidgee General Security 14%	264
Vic Murray High Reliability Water Shares 53%	583
Vic Murray Low Reliability Water Shares 0%	0
Vic Goulburn High Reliability Water Shares 40%	398
Vic Goulburn High Reliability Water Shares 0%	0

\*Volumes for NSW and Victoria include tributary water, in addition to water provided to those states under the water sharing arrangements.

## New environmental water reserves for the Lower Lakes

Earlier this week, Premier Mike Rann announced that billions of litres of extra environmental water will be reserved in upstream dams and then released into the Lower Lakes over summer and autumn. The extra water has come as a result of increased inflows into the River Murray.

The State Government aims to secure between 120 and 170 GL for the Lower Lakes over the next five months. This will be in addition to the purchase of 50 GL announced earlier this year, already in storage in the Hume and Dartmouth dams.

For further information read the full announcement at [www.dwlbc.sa.gov.au/assets/files/water\\_for\\_lower\\_lakes\\_2nov09.pdf](http://www.dwlbc.sa.gov.au/assets/files/water_for_lower_lakes_2nov09.pdf)

## Weather outlook

The Bureau of Meteorology recently released its national rainfall and temperature outlook for the Murray-Darling Basin for the period November 2009-January 2010. This outlook shows there 40% chance of exceeding median rainfall, and 55-65% chance of exceeding median maximum daytime temperatures.

### Further information on River Murray conditions and rainfall forecasts can be obtained from the following websites:

Department of Water, Land and Biodiversity Conservation [www.dwlbc.sa.gov.au](http://www.dwlbc.sa.gov.au)

SA Murray-Darling Basin NRM Board [www.samdbnrm.sa.gov.au](http://www.samdbnrm.sa.gov.au)

Murray-Darling Basin Commission [www.mdbc.gov.au](http://www.mdbc.gov.au)

SA Water Daily Reports [www.riverland.net.au/%7Eheinze/ex-flow-frame.htm](http://www.riverland.net.au/%7Eheinze/ex-flow-frame.htm)

Bureau of Meteorology [www.bom.gov.au](http://www.bom.gov.au)

Queensland Department of Primary Industry [www.longpaddock.qld.gov.au](http://www.longpaddock.qld.gov.au)

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