



# South Australia

# River Murray Water Resources Report



ISSUE 24: 3 October 2008

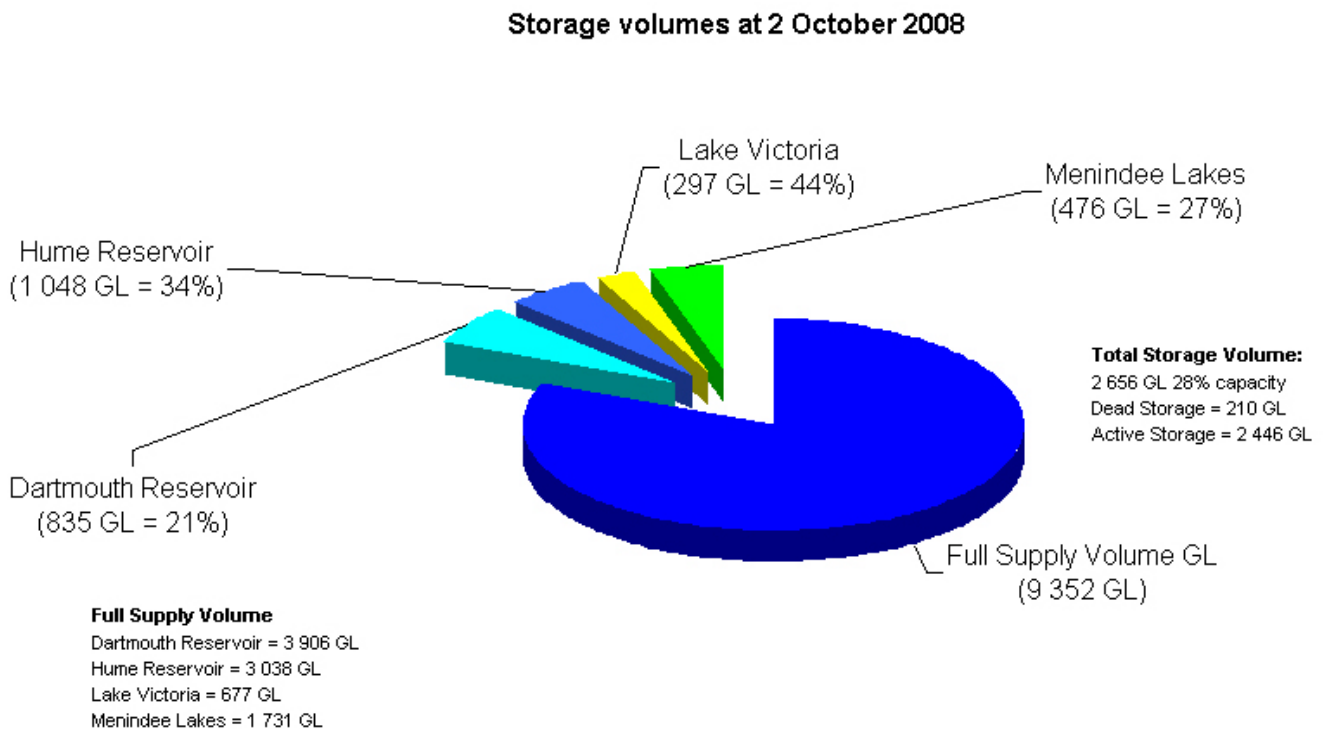
## Observations at a glance

- River Murray irrigation allocations increased from 6% to 11% on 1 October 2008 following a small improvement in the volume of water available to South Australia.
- The volume of water in upstream storages is currently 2 656 GL (28% capacity), compared to about 2 125 GL (23% capacity) at the same time last year.
- The forecast total inflows to the River Murray system for September 2008 have increased from 270 GL to 405 GL following considerable rainfall in some locations late last month.
- Below Lock 1 water levels remain low and salinity levels remain high due to reduced flows into South Australia.

## Murray-Darling Basin storages

The volume of water in storage in Hume and Dartmouth Reservoirs, Lake Victoria and Menindee Lakes is currently 2 656 GL (28% capacity), compared to about 2 125 GL (23% capacity) at the same time last year. Storage levels are shown in **Figure 1**.

Figure 1: Murray-Darling Basin storages at 2 October 2008



## River Murray inflows

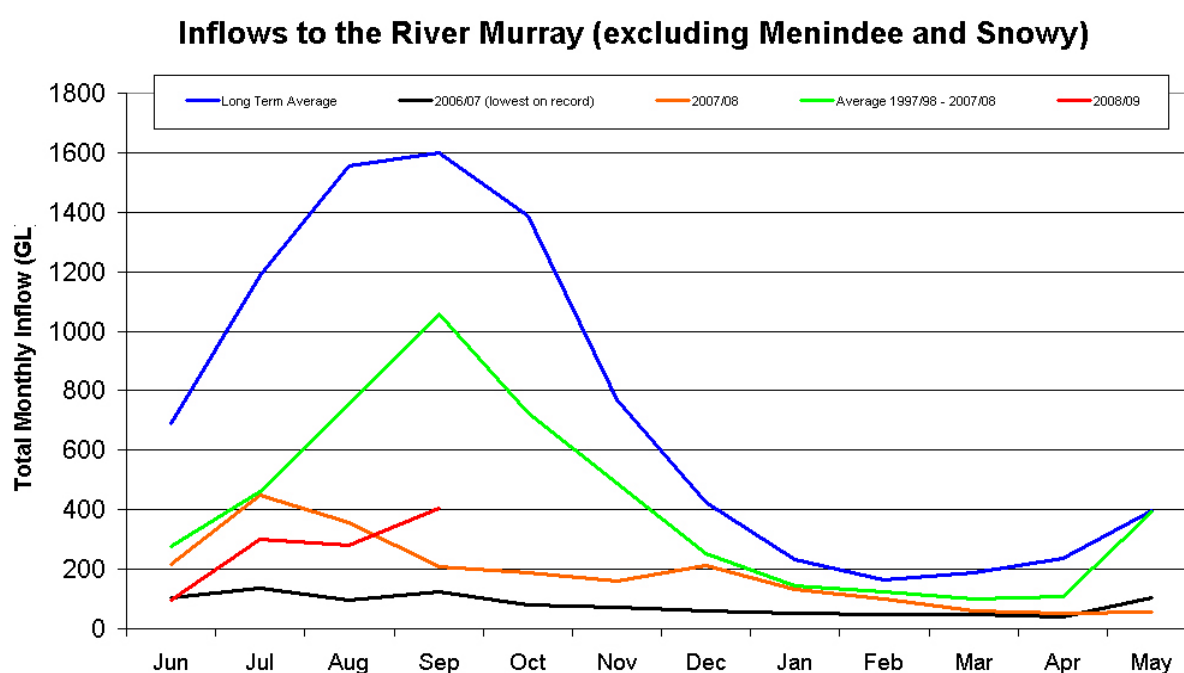
Considerable rain fell over the Murray and Snowy catchments on 22-23 September 2008 improving inflows into the River Murray system and Snowy Hydro storages. More than 100mm were recorded at Thredbo and 30mm at many other locations. However, below average rainfall was received at many sites across the Murray-Darling Basin.

The recent rainfall improved the inflow forecast for September to 405 GL (up from the previous forecast of 270 GL). **Table 1** and **Figure 2** outline the inflows during the June-September period in selected years against the long-term average. The July-October period is critical for River Murray system inflows because about 65% of the total annual inflow is received during these months.

**Table 1: River Murray System inflows: selected years compared to long-term averages**

	2008-09 (GL)	2007-08 (GL)	2006-07 (GL)	Long-Term Average (GL)
<i>June</i>	95	217	106	690
<b>July</b>	300	450	135	1 190
<b>August</b>	280	358	98	1 550
<b>September</b>	405	210	120	1 610
<b>TOTAL</b>	<b>1 080</b>	<b>1 235</b>	<b>459</b>	<b>5 040</b>

**Figure 2: Inflows to the River Murray**



## River operations

Flows to South Australia have been increased to 3 200 ML/day to allow a flow of 2 000 ML/day over Lock 1 during October 2008. During late September 2008, flows into South Australia were increased slightly to minimise the risk of weir pools immediately upstream of weirs above Lock 1 falling below the normal full supply level.

## Salinity and water levels

Water levels in the weir pools above Lock 1 are being maintained at, or very close to, full supply levels and salinity remains fairly low.

Downstream of Lock 1 salinity levels remain high due to low water levels. Salinity in Lake Alexandrina (at Milang) is currently 4 165 EC compared to about 2 329 EC at the same time last year. Salinity in Lake Albert (at Meningie) is currently 5 360 EC compared to about 2 630 EC at the same time last year.

The water level in Lake Alexandrina (at Milang) is currently -0.27m AHD, compared to about 0.23m AHD at the same time last year. The water level in Lake Albert (at Meningie) is currently -0.24m AHD, compared to about 0.21m AHD at the same time last year.

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

**Table 2: Water and salinity levels at selected locations**

	Actual Water Levels at 2/10/08		Full Supply Level Level	Variation from Pool Level	Current EC Level
	U/S mAHD	D/S m AHD	U/S of Weir m AHD	U/S of Weir m AHD	
<b>Lock 6</b>	19.21	16.26	19.25	-0.04	249
<b>Lock 5</b>	16.27	13.22	16.30	-0.03	286
<b>Lock 4</b>	13.16	10.11	13.20	-0.04	359
<b>Lock 3</b>	9.76	6.19	9.80	-0.04	537
<b>Lock 2</b>	6.08	3.30	6.10	-0.02	565
<b>Lock 1</b>	3.18	-0.09	3.20	-0.02	568
<b>Lake Alexandrina (Milang)</b>	-0.27				4 165
<b>Lake Albert (Meningie)</b>	-0.24				5 360
<b>Goolwa</b>	-0.22				14 675
<a href="#">Lake Alexandrina and Albert water and salinity Levels based on 5 day average</a>					
<a href="#">Water levels below Lock 1 are affected by wind and will vary throughout the day</a>					
<a href="#">EC Readings below Lock 1 are daily averages and will vary throughout the day</a>					

## Water allocations in South Australia and interstate

River Murray irrigation allocations in South Australia increased from 6% to 11% on 1 October 2008 (11% allocation requires a total of 62.7 GL). SA irrigators have been able to access 100% of their carry-over water since 1 September (96.5 GL).

Allocations in New South Wales and Victoria are summarised as follows:

- NSW High Security = 80% (a total of 198 GL)
- NSW Murrumbidgee High Security = 95% (283 GL) and 5% General Security (102 GL)
- NSW Lower Darling High Security = 100% (12 GL), General Security = 20% (6GL) and relaxation of the temporary trade rules
- VIC Murray High Reliability Water Share = 13% (151.4 GL)
- VIC Goulburn High Reliability Water Share = 9% (89.5 GL)

## Weather outlook

The Bureau of Meteorology has released its rainfall and temperature outlook for October to December 2008. It shows there is a 40-55% chance of exceeding median rainfall over the southern Murray-Darling Basin and a 55-65% chance of exceeding median rainfall in the northern Murray-Darling Basin.

The latest temperature forecast for October to December 2008 shows a strong shift towards warmer conditions over the southern Murray-Darling Basin, where there is a 65-80% chance of exceeding median maximum temperatures. In the northern Murray-Darling Basin there is a 60-70% chance of exceeding median temperature.

### 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/~heinz/mdbcrep.htm](http://www.riverland.net.au/~heinz/mdbcrep.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)

#### DISCLAIMER

The Department of Water, Land and Biodiversity Conservation, its employees and servants do not warrant or make any representation regarding the use, or results of use of the information contained herein as to its correctness, accuracy, currency or otherwise. The Department of Water, Land and Biodiversity Conservation, its employees and servants expressly disclaim all liability or responsibility to any person using the information or advice contained herein.