



South Australia

River Murray Water Resources Report



ISSUE 28: 5 December 2008

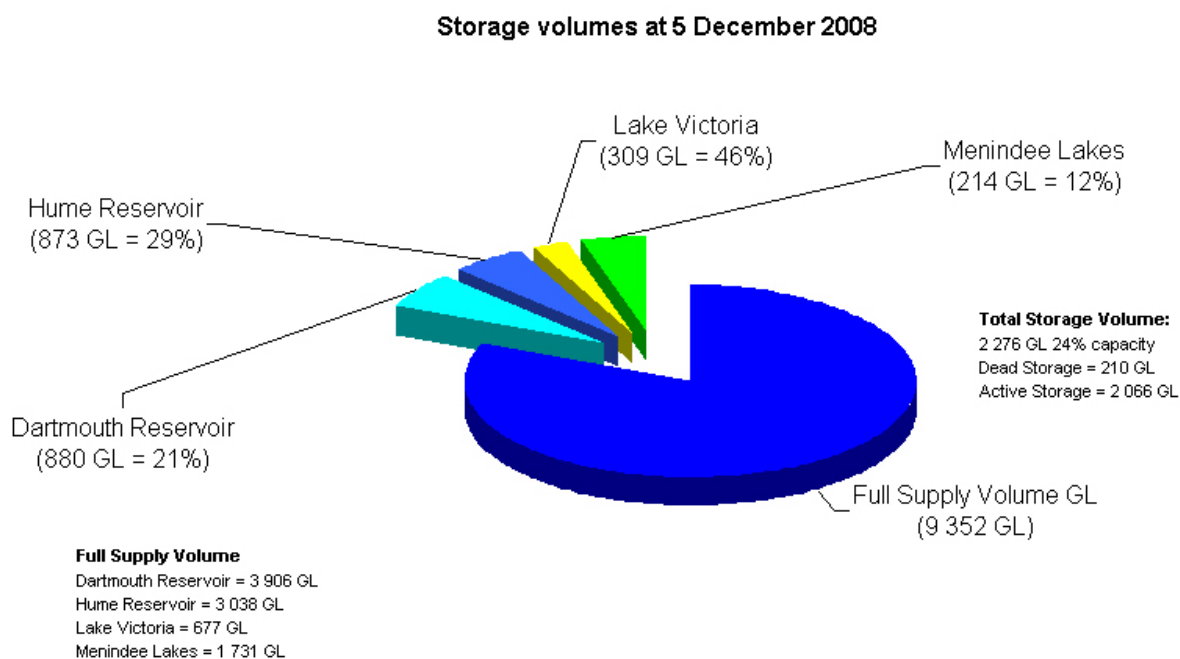
Observations at a glance

- River Murray irrigation allocations remained unchanged at 15% from 1 December 2008.
- Licensed River Murray irrigators will be able to carry-over water not used in 2008-09 for use in the 2009-10 water year.
- The State Government has applied to the Commonwealth Government for advance approvals required as part of the \$10 million management strategy to avoid acidification in the Lower Lakes.
- The volume of water in upstream storages is currently 2 276 GL (24% capacity), compared to about 1 854 GL (20% capacity) at the same time last year.
- 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 2 276 GL (24% capacity), compared to about 1 854 GL (20% capacity) at the same time last year. Current storage levels are shown in **Figure 1**.

Figure 1: Storage levels at 5 December 2008



River Murray inflows

Table 1 and **Figure 2** outline the inflows from June to November in selected years against the long-term average. The July to October period is critical for River Murray system inflows because about 65% of the total annual inflow is received during these months. River Murray system inflows between November and March only yield about 20% of annual inflows.

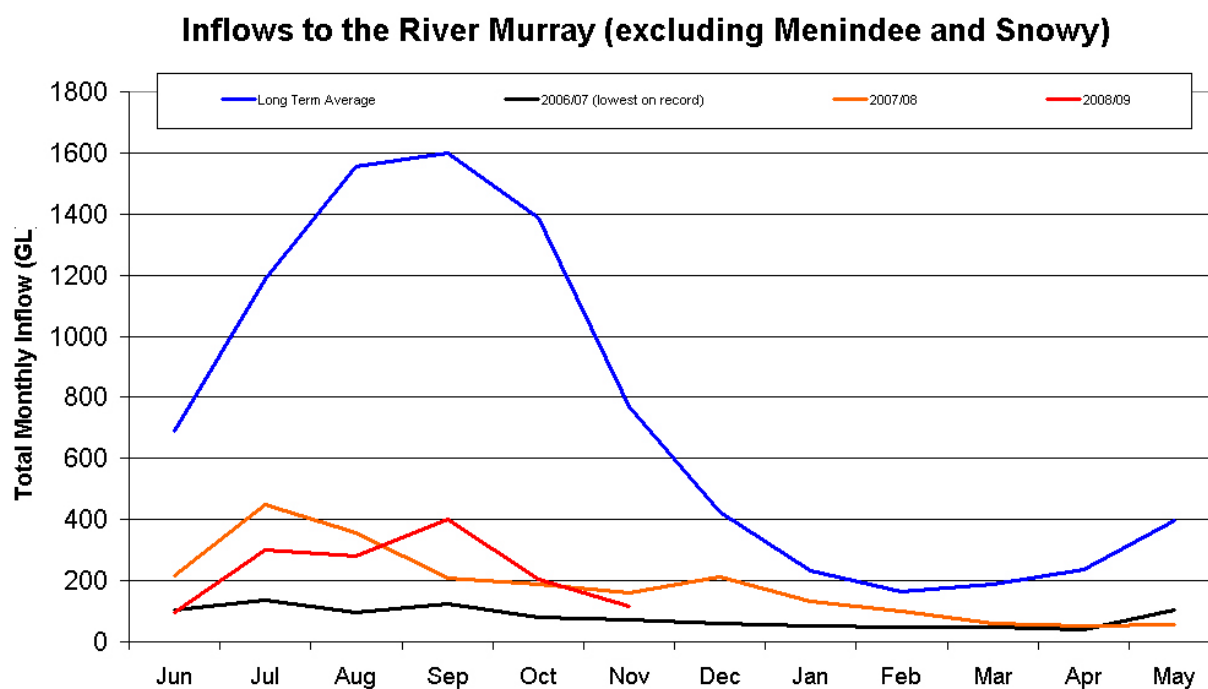
Table 1: River Murray System inflows selected years v long-term average

	2008-09 (GL)	2007-08 (GL)	2006-07 (GL)	Long-Term Average (GL)
June	95	217	106	690
July	300	450	135	1 190
August	280	358	98	1 550
September	400	210	120	1 610
October	200	190	80	1 390
November	140*	159	72	771
TOTAL	1 415	1 584	611	7 201

*Predicted total inflow for November 2008

The monthly inflows for the River Murray system have been tracking below average for the past 37 consecutive months. The 2008-09 water year is currently tracking as the seventh driest in 117 years of record.

Figure 2 River Murray System Inflows



River operations

Flows to South Australia have been reduced slightly to 4 400 ML/day, to reach a target flow of about 1 650 ML/day at Lock 1. Some weir pools above Lock 1 are below their normal full supply levels. Water is currently being siphoned into Lake Bonney, and this has had a minor impact on the level of Lock 3 weir pool. It is anticipated that weir pools above Lock 1 will return close to normal full supply levels soon. However, all weir pools will need to be carefully managed over summer.

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. Salinity in Lake Alexandrina (at Milang) is currently 4 959 EC compared to about 2 894 EC at the same time last year. Salinity in Lake Albert (at Meningie) is currently 6 716 EC compared to about 3 538 EC at the same time last year.

The water level in Lake Alexandrina (at Milang) is currently -0.58m AHD, compared to about -0.05m AHD at the same time last year. The water level in Lake Albert (at Meningie) is currently -0.39m AHD, compared to about 0.03m AHD at the same time last year.

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

Table 2: Salinity and water levels at selected locations

	Actual Water Levels at 5/12/08		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	19.18	16.26	19.25	-0.07	266
Lock 5	16.25	13.25	16.30	-0.05	265
Lock 4	13.15	10.20	13.20	-0.05	322
Lock 3	9.79	6.22	9.80	-0.01	358
Lock 2	6.10	3.30	6.10	0.00	424
Lock 1	3.20	-0.41	3.20	0.00	538
Lake Alexandrina (Milang)	-0.58				4 959
Lake Albert (Meningie)	-0.39				6 716
Goolwa	-0.55				19 579
Lake Alexandrina and Albert water and salinity Levels based on 5 day average					
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					

Water allocations in South Australia and interstate

South Australia

River Murray irrigation allocations remained at 15% from 1 December 2008 as drought conditions continue across the Murray-Darling Basin. For further information see the Minister's full 17 November announcement at www.dwlbc.sa.gov.au/assets/files/081117_Allocations.pdf

New South Wales and Victoria

Current allocation levels interstate are:

NSW

- Murray High Security 95%
- Murray General Security 2%
- Murrumbidgee High Security 95%
- Murrumbidgee General Security 9% and a further 2% after February 2009
- Lower Darling High Security 100%
- Lower Darling General Security 40%

Victoria

- Vic Murray High Reliability Water Share 24%
- Vic Goulburn High Reliability Water Share 21%

The latest allocation announcement issued in New South Wales can be found here:
www.naturalresources.nsw.gov.au/mediarelnr/mr_toc_currnr.html

The latest allocation announcement issued in Victoria can be found here:
www.g-mwater.com.au/news/media-releases/media-releases-2008/

Lower Lakes seawater option

The State Government has applied to the Commonwealth Government for advance approvals required as part of the \$10 million management strategy to avoid acidification in the Lower Lakes.

The management strategy outlines acidification triggers for alkalinity and water levels at the Lower Lakes, which would determine if action needed to with regard to allowing a minimum amount of seawater into the Lakes to manage the acidification risk. The triggers are the detection of calcium carbonate levels at 25 milligrams per litre, or if water levels reach 1.5 metres below sea level in Lake Alexandrina or 0.5m below sea level in Lake Albert.

Minister for the River Murray, Karlene Maywald, has stressed the move is not a decision to let seawater into the Lower Lakes, but is part of the preparations required in case the drought continues. The strategy would involve just enough seawater to maintain the water level at a critical threshold to avoid acidification, not flooding and refilling the Lower Lakes completely.

The preferred option is to maintain the Lower Lakes in a freshwater condition for as long as is practically possible, and preferably through the current drought to a full freshwater recovery.

For further information see the full announcement at
www.dwlbc.sa.gov.au/assets/files/mr_081127_Lakes_referral.pdf

Carry-over in 2009-10

Licensed River Murray irrigators will be able to carry-over water not used in 2008-09 for use in the 2009-10 water year. While the final details of the 2009-10 carry-over scheme are yet to be finalised, it is likely to be similar to the 2008-09 scheme.

Minister for the River Murray, Karlene Maywald, is currently working with the River Murray Advisory Committee of the SA Murray-Darling Basin NRM Board to finalise the final details of the scheme, but the advance notice allows irrigators to continue planning to better manage for 2009-2010 the limited water available.

Further details about the 2009-10 carry-over scheme will be announced in the Minister's next River Murray allocation update on 15 December 2008.

Weather outlook

The Bureau of Meteorology's rainfall and temperature outlook for November 2008 to January 2009 shows there is a 45-50% chance of exceeding median rainfall over the Murray-Darling Basin. It also shows there is a 60-65% chance of exceeding median maximum 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
SA Murray-Darling Basin NRM Board www.samdbnrm.sa.gov.au
Murray-Darling Basin Commission www.mdbc.gov.au
SA Water Daily Reports www.riverland.net.au/~heinz/mdbcrep.htm
Bureau of Meteorology www.bom.gov.au
Queensland Department of Primary Industry www.longpaddock.qld.gov.au

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