

River Murray Water Resources Report

Issue 33: 6 March 2009

Observations at a glance

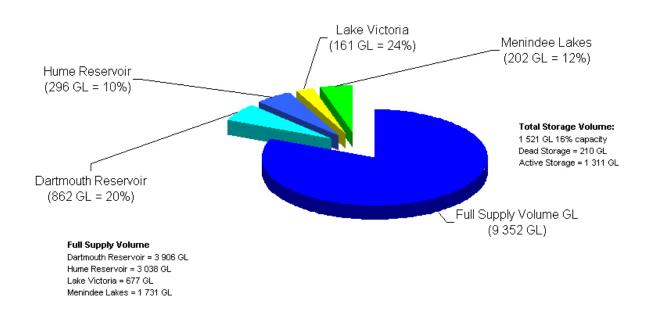
- River Murray irrigation allocations in South Australia remain at 18% as extreme drought conditions continue across the Murray-Darling Basin.
- The volume of water in upstream storages is currently 1 521 GL (16% capacity), compared to about 1 931 GL (21% capacity) at the same time last year.
- Applications to carry-over water for use in 2009-10 have now closed.
- 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 1 521 GL (16% capacity), compared to about 1 931 GL (21% capacity) at the same time last year. Current storage levels are shown in **Figure 1**.

Figure 1: Murray-Darling Basin storages

Storage volumes at 6 March 2009





Water allocations in South Australia and interstate

River Murray irrigation allocations in South Australia remain at 18% as extreme drought conditions continue across the Murray-Darling Basin. View the Minister's latest allocations announcement at www.dwlbc.sa.gov.au/assets/files/MR_allocations16feb09.pdf

The latest information about allocations in New South Wales is available at www.naturalresources.nsw.gov.au/mediarelnr/mr toc currnr.html

The latest information about allocations in Victoria is available at www.g-mwater.com.au/news/media-releases/media-releases-2008/

River Murray inflows

River Murray inflows have dropped to historically low levels following below average rainfall and above average temperatures in the upper Murray catchment over the past two months. **Table 1** outlines inflows from this year and recent years, compared to the past 10 years and the long-term average.

Table 1: 2008-09 inflows compared to previous years

	2008-09	2007-08	2006-07	Long-term average	Average over past 10 years
Inflows June- February (GL)	1 710	2 030	770	8 015	4 285

During February 2009 about 50-60 GL flowed into the River Murray system. **Figure 2** shows monthly River Murray inflows.

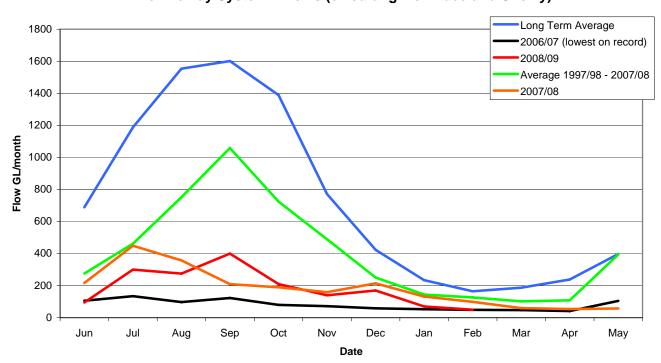
The prospect of any significant improvement in River Murray water resources over summer remains low and recent flooding around Bourke, NSW, is not expected to provide any improvement to South Australia.

Rainfall in northwest NSW in late February has provided some useful inflows into the Darling River system. This inflow, together with inflows from the Barwon and Border Rivers, is expected to increase inflows into Menindee Lakes to about 200 GL. The storage volume in Menindee Lakes will not reach the 640 GL required for Menindee Lakes to revert to Murray-Darling Basin Authority control.

The NSW Government has indicated this water will be used for securing Broken Hill town water supply for at least 21 months, to secure water for Lower Darling permanent plantings for 2009-10 and to underwrite water for critical human needs in the Murray Valley. This also includes the delivery of conveyance and carry-over in 2009-10 if required.



Figure 2: Monthly River Murray inflows



River Murray System Inflows (exlcuidng Menindee and Snowy)

River operations

Flow to South Australia has been reduced to 4 030 ML/day compared to the normal March entitlement flow of 6 000 ML/day. However, it is expected that weir pools above Lock 1 can be maintained close to their normal full supply levels.

This month the flow over Lock 1 will be maintained between 1 700 ML/day and 1 800 ML/day in order to meet current demands, including providing for an average flow past Wellington of 900 ML/day.

Flow estimates are regularly revised to take into account local rainfall and evaporation losses. Water is being conserved where necessary.

Table 2 shows the current levels of weir pools and the minimum target levels.

Table 2: River Murray weir pool levels

Location	Full supply level (m AHD)	Current weir pool level (m AHD)	Minimum target weir pool level (m AHD)	
Lock 6	19.25	19.23	19.18	
Lock 5	16.30	16.26	16.26	
Lock 4	13.20	13.14	13.10	
Lock 3	9.80	9.80	9.77	
Lock 2	6.10	6.17	6.06	
Lock 1	3.20	3.24	3.15	



There is not enough water available to maintain all weir pools at the normal full supply level while maintaining flows over Lock 1 to allow for extractions and the annual flow of 350 GL past Wellington.

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 5 858 EC compared to about 3 910 EC at the same time last year. Salinity in Lake Albert (at Meningie) is currently 9 169 EC.

The water level in Lake Alexandrina (at Milang) is currently –1.0m AHD, compared to about –0.39m AHD at the same time last year. The water level in Lake Albert (at Meningie) is currently –0.55m AHD, compared to about –0.50m AHD at the same time last year.

Table 3 shows the current water levels and salinity at selected locations.

Table 3: Water and salinity levels

	Actual Water Levels at 6/03/09		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	
Lock 6	19.23	16.24	19.25	-0.02	273
Lock 5	16.26	13.22	16.30	-0.04	302
Lock 4	13.14	10.11	13.20	-0.06	364
Lock 3	9.80	6.28	9.80	0.00	393
Lock 2	6.17	3.34	6.10	0.07	423
Lock 1	3.24	-0.61	3.20	0.04	522
Lake Alexandrina (Milang)	-1.00				5 858
Lake Albert (Meningie)	-0.55				9 169
Goolwa	-0.95				32 047
	·				
Water levels below Lock 1 are a	affected by wind an	d will vary througho	ut the day		
EC Readings below Lock 1 are	daily averages and	will vary throughout	the day		

Carry-over applications closed

Applications to carry-over irrigation allocations not used in 2008-09 into the 2009-10 water year have now closed. Late applications will not be accepted.

The carry-over policy and further information is available at www.dwlbc.sa.gov.au/murray/drought/index.html#Carryoverwater



Weather outlook

The Bureau of Meteorology's outlook for March to May 2009 shows there is a 50-55% chance of exceeding median rainfall over the Murray-Darling Basin. It also shows there is a 40-45% 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/%7Eheinz/ex-flow-frame.htm

Bureau of Meteorology www.bom.gov.au

Queensland Department of Primary Industry www.longpaddock.qld.gov.au

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