



# River Murray Water Resources Report

Issue 35: 6 April 2009

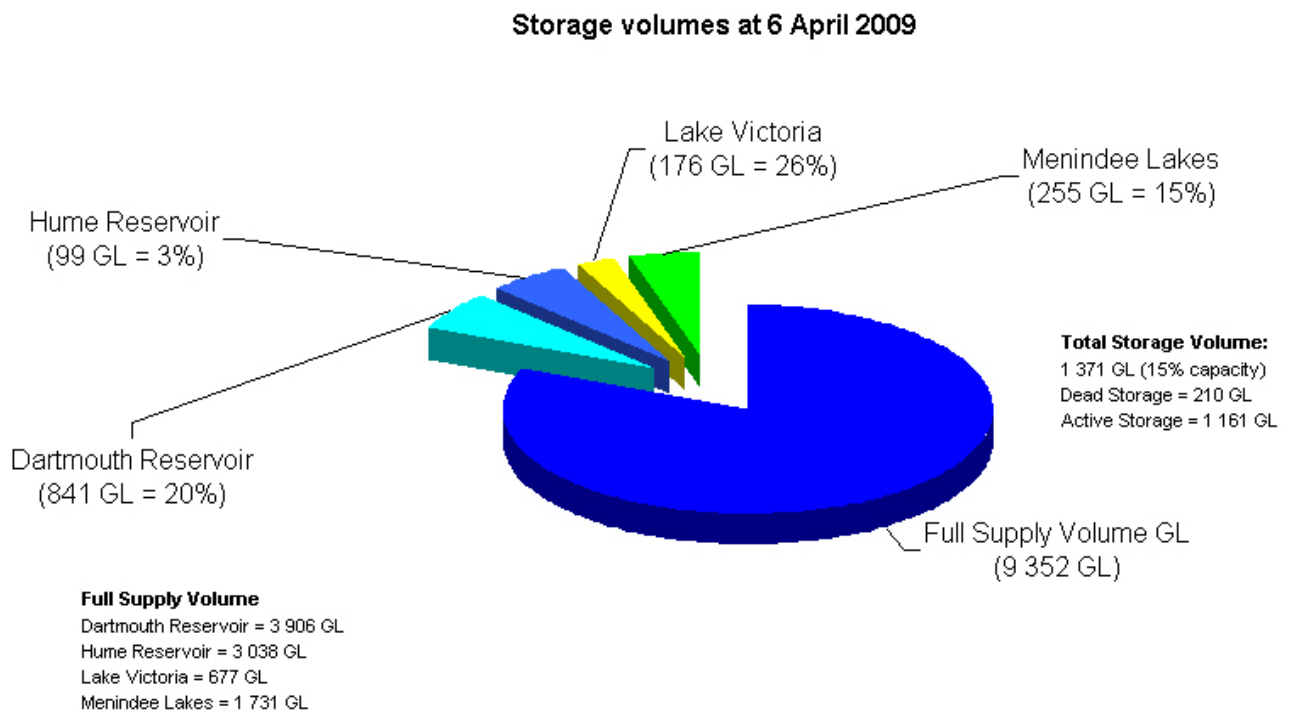
## Observations at a glance

- 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 1 371 GL (15% capacity), compared to about 1 890 GL (20% capacity) at the same time last year.
- Rainfall across the upper Murray catchment and in South Australia remained very low 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 1 371 GL (15% capacity), compared to about 1 890 GL (20% capacity) at the same time last year. Current storage levels are shown in **Figure 1**.

Figure 1: Murray-Darling Basin storages



## River Murray inflows

Rainfall across the upper Murray catchment and in South Australia remained very low last month. Hot conditions during February and early March may result in extremely low inflows for March. As a consequence, there has been no improvement in the amount of water available for allocations in South Australia, New South Wales and Victoria.

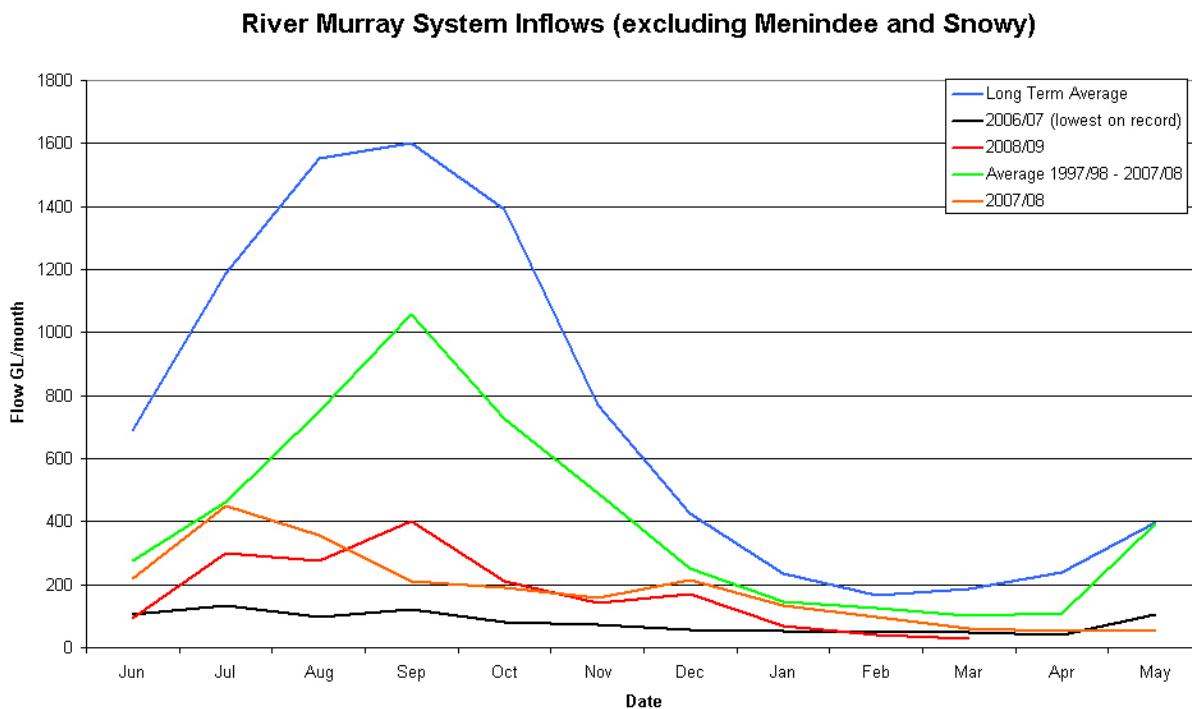
**Table 1** outlines the cumulative inflows from June-March in selected years against the long-term average. The 2008-09 water year continues to track as the seventh driest year on record.

**Table 1: River Murray system June-March inflows in selected years v the long-term average**

	2008-09	2007-08	2006-07	Long-Term Average	Last 10 Years
<b>Rounded Totals (June to March)</b>	1 730 GL	2 090 GL	820 GL	8 200 GL	4 385 GL

Figure 2 shows monthly River Murray inflows.

**Figure 2: River Murray system inflows (excluding Menindee and Snowy)**



## River operations

Flow into South Australia will be reduced to an average of 2 900 ML/day during April 2009 in order to meet estimated demands, which include irrigation diversions and wetland rewetting. This compares to an average flow of 2 400 ML/day during April last year, and the normal minimum entitlement flow for April of 4 500 ML/day.

The flow past Lock 1 during April will be about 1 500 ML/day.

The daily flows will be adjusted to take into account the re-wetting of some wetlands in accordance with the SA Murray-Darling Basin Natural Resource Management Board's re-wetting program. This program began in March and will continue into April.

## 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 5 652 EC compared to about 3 870 EC at the same time last year. Salinity in Lake Albert (at Meningie) is currently 11 981 EC.

The water level in Lake Alexandrina (at Milang) is currently -1.05m AHD, compared to about -0.45m AHD at the same time last year. The water level in Lake Albert (at Meningie) is currently -0.53m AHD, compared to about -0.50m 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**

	Actual Water Levels at 6/04/09		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	
<b>Lock 6</b>	19.22	16.21	19.25	-0.03	177
<b>Lock 5</b>	16.25	13.20	16.30	-0.05	209
<b>Lock 4</b>	13.15	10.04	13.20	-0.05	318
<b>Lock 3</b>	9.77	6.20	9.80	-0.03	392
<b>Lock 2</b>	6.10	3.25	6.10	0.00	435
<b>Lock 1</b>	3.19	-0.71	3.20	-0.01	467
<b>Lake Alexandrina (Milang)</b>	-1.05				5 652
<b>Lake Albert (Meningie)</b>	-0.53				11 981
<b>Goolwa</b>	-1.03				31 862
<small>Water levels below Lock 1 are affected by wind and will vary throughout the day</small>					
<small>EC Readings below Lock 1 are daily averages and will vary throughout the day</small>					

## Algal bloom update

Algal blooms occur naturally and most commonly during warmer months in water bodies with reduced flow and low turbidity. Such conditions currently exist in the River Murray.

The Murray Regional Algal Coordinating Committee (RACC) has issued a red alert for blue-green algae for the River Murray, for the stretch from Hume Dam to Torrumbarry Weir. For further information call the RACC hotline on 1800 999 457 or see the media release at [www.naturalresources.nsw.gov.au/mediarelnr/mr\\_toc\\_currn.html](http://www.naturalresources.nsw.gov.au/mediarelnr/mr_toc_currn.html)

The RACC has implemented its contingency response, including an initial media announcement and increased monitoring at sites along the River Murray.

The New South Wales Department of Water and Energy (DWE), together with the RACC, has reviewed the sampling strategy and increased the frequency of sampling and analysis.

DWE has implemented an extensive reporting framework that includes the Commonwealth, Victorian and South Australian Governments, and the Murray-Darling Basin Authority (MDBA).

The dominant species identified (*Microcystis* and *Anabaena* spp.) may cause gastroenteritis in humans if consumed and skin and eye irritations after contact.

Based on the current monitoring the following alerts have been announced:

- Red alerts are present at Hume Reservoir, Corowa, Lake Mulwala, Yarrawonga weir downstream, Cobram, Tocumwal, Barmah and Barham; and
- Amber alerts are present at Albury, Mulwala main canal at the off-take from Lake Mulwala, Yarrawonga weir downstream, Cobram, Picnic Point, Echuca, Torrumbarry Weir upstream and downstream, Murray Downs and Toolybuc.

On 29 March the MDBA arranged for an aerial survey of the River Murray from Hume Dam to Swan Hill to be undertaken during which photographs and a video were taken.

Algae scums were clearly visible on the surface of Lake Hume and Lake Mulwala. The main channel of the River Murray from Lake Hume to Swan Hill was generally discoloured rather than showing surface scums due to mixing. Backwaters and isolated billabongs showed surface water scums.

## **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\\_allocations16Mar09.pdf](http://www.dwlbc.sa.gov.au/assets/files/MR_allocations16Mar09.pdf)

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)

The latest information about allocations in Victoria is available at [www.g-mwater.com.au/news/media-releases/media-releases-2008/](http://www.g-mwater.com.au/news/media-releases/media-releases-2008/)

## **Temporary water trade deadlines**

Irrigators are reminded that all River Murray water trades with New South Wales must be finalised by 31 May 2009. All trades with Victoria must be finalised by 2 June 2009.

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

## Weather outlook

The Bureau of Meteorology's outlook for April to June 2009 shows there is a 30-60% chance of exceeding median rainfall over the Murray-Darling Basin. It also shows there is a 35-60% 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](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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