



South Australia

River Murray Water Resources Report



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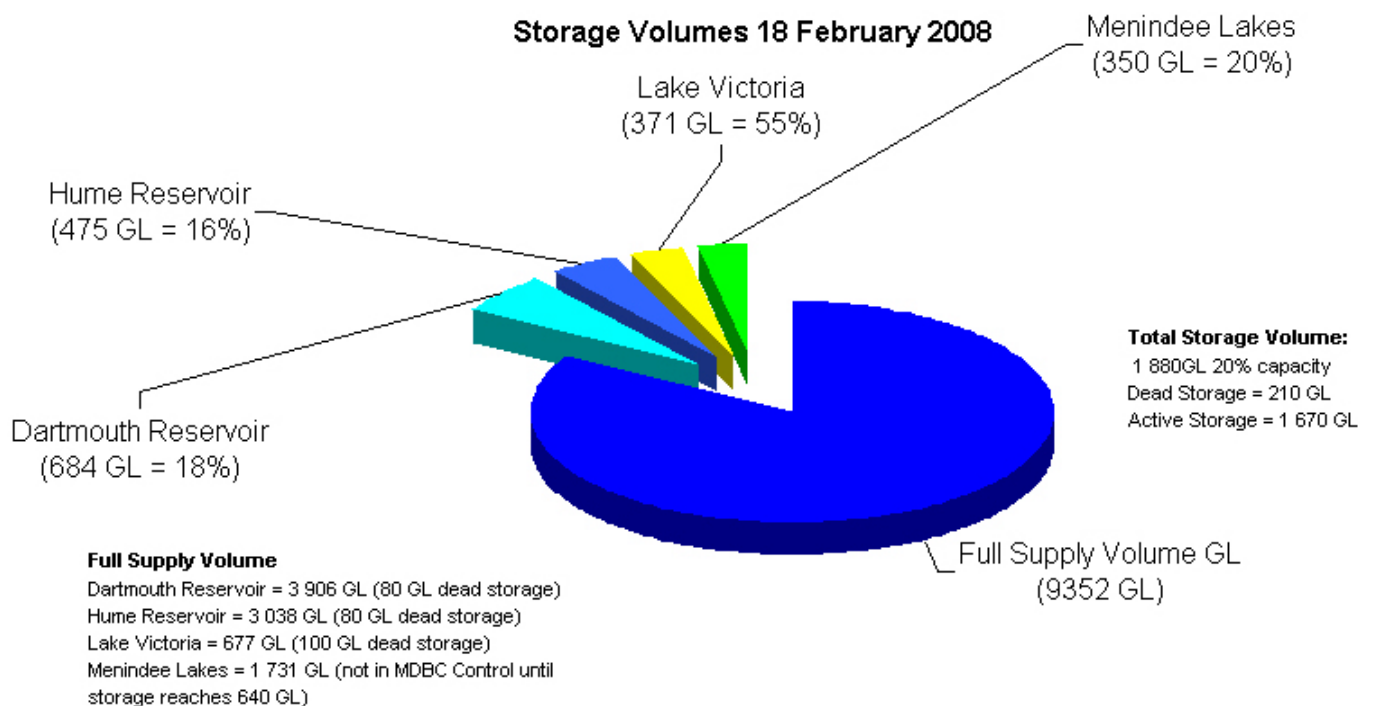
Observations at a glance

- Despite rainfall being above average for the majority of the River Murray catchment since November 2007, inflows for the year still remain well below the long-term average.
- River Murray inflows during February 2008 are expected to be similar to January 2008 during which 130 GL were received.
- The majority of the inflows into the River Murray system are currently coming from the tributaries, with little improvement to inflows into Hume and Dartmouth Reservoirs.
- South Australian irrigation allocations remain at 32%.

Summary of Murray-Darling Basin storages

Despite receiving near average rainfall across the Hume and Dartmouth catchments over the past few months, the outlook for 2008-09 remains poor unless there are substantial inflows. The volume of water in Murray-Darling Basin storages on 18 February 2008 was 1 880 GL (20% capacity), slightly more than at the same time last year (1 215GL, 13% capacity). Figure 1 outlines the current storage volumes in each of the major storages. The long-term average storage volume for mid-February is approximately 5 800 GL.

Figure 1: Volume of water in storage at 18 February 2008



The New South Wales Government has released 110 GL from Menindee Lakes, which has increased the amount of water in Lake Victoria by about 80 GL. Lake Victoria's volume is expected to increase from the current level of 375 GL to about 400 GL in coming weeks. The peak storage volume will depend on losses and any further releases from Menindee Lakes. Most of South Australia's water requirements will now be supplied with water from Lake Victoria. This will allow a reduction in transfers from Hume Reservoir to Lake Victoria, conserving water in the upper storages.

Rainfall and inflows

The majority of rain experienced in early February fell over the northern parts of the Murray-Darling Basin. More than 50-100mm has fallen across the Hume and Dartmouth catchments. However, despite this recent rainfall, inflows into the storages, and from the unregulated tributaries such as the Ovens and Kiewa Rivers, remain low because the catchments are so dry.

Rainfalls across the Moonie, Condamine, Balonne, and Macintyre catchments in the northern parts of the Basin ranged from 50-150mm. Further west in the Warrego catchment more than 150mm has been recorded so far this month. The continuing rainfall has contributed to further tributary inflows from the Moonie, Culgoa and Weir Rivers. There will be some additional inflows into the Barwon-Darling River from these tributaries. Minor flood warnings are still current for sections of the Moonie and Balonne rivers.

Little of the rainfall in the northern parts of the Murray-Darling Basin from December 2007 to mid February 2008 will reach the River Murray in the southern part of the Basin. The majority of this water has flowed over floodplains and into wetlands, from where it will not return to the river systems. Some of the water has soaked into the previously very dry soils, and other water has been lost through evaporation. Some of the water has been captured by farm dams in the northern part of the Basin and is being used by local irrigators. However, because there has been so much rain across these areas in the northern part of the Basin, the soil in these areas is now wet. This means that any further rainfall in these areas may result in more water flowing into the Darling River system, and some of this water could potentially reach the River Murray.

The inflows in the Darling River system are not likely to be sufficient to raise the level in Menindee Lakes to the point where these storages come back into Murray-Darling Basin Commission control. It is highly unlikely that there will be any significant flows to South Australia as a result of rainfall in the northern part of the Basin.

Information on rainfall statistics can be obtained from the Bureau of Meteorology website www.bom.gov.au

River operations

South Australia's daily flow has been reduced to 3 500 ML/day to match estimated demands and losses. The salinity mitigation flow of 700 ML/day continues to be delivered.

While salinity levels above Lock 1 remain low, salinity levels continue to increase below Lock 1 due to reduced flows across the border. For example, salinity at Murray Bridge is currently 920 EC compared to 430 EC at the same time last year.

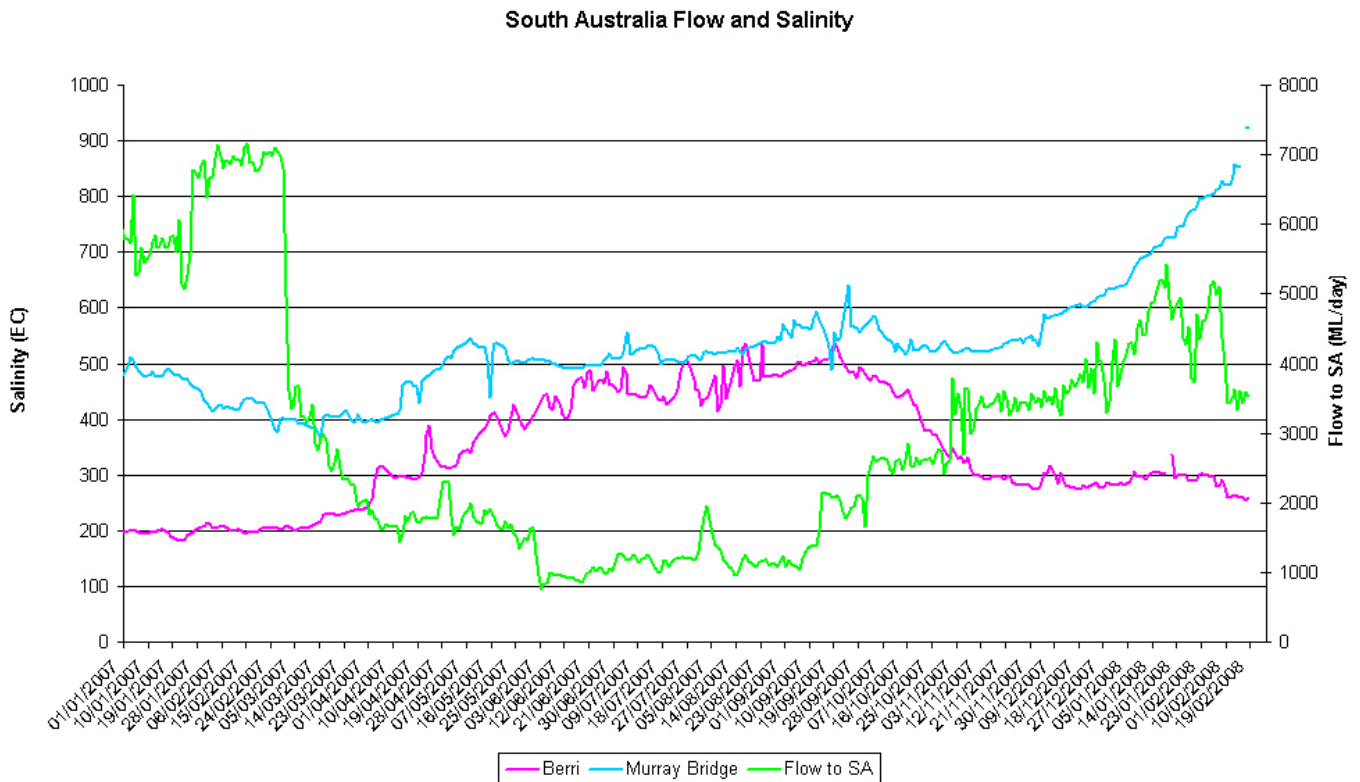
Water levels below Lock 1 continue to decline. In Lake Alexandrina the water level is currently – 0.30m AHD (30cm below mean sea level) and will continue to decline until further water is available. A large amount of water will be required for water levels to return to the normal full supply level of 0.75m AHD. Low water levels and very high salinities continue to severely impact on water availability for both irrigation and stock and domestic use around Lakes Alexandrina and Albert.

Table 1 outlines the water level and salinity data at the weir pools and Lakes Alexandrina and Albert. Figure 2 shows flows and salinity levels in South Australia.

Table 1: Water and salinity levels at 18 February 2008

	Actual Water Levels at 18/02/08		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	19.26	16.28	19.25	0.01	179
Lock 5	16.30	13.30	16.30	0.00	179
Lock 4	13.25	10.08	13.20	0.05	229
Lock 3	9.82	6.25	9.80	0.02	352
Lock 2	6.16	3.33	6.10	0.06	397
Lock 1	3.28	-0.03	3.20	0.08	505
Lake Alexandrina (Milang)	-0.31				3735
Lake Albert (Meningie)	-0.51				nat available
Goolwa					22498
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					

Figure 2: South Australia flow and salinity



Current water availability and irrigation allocations

River Murray water allocations in South Australia remain unchanged at 32% as a result of continuing low inflows into Murray-Darling Basin Commission storages and the River Murray.

Inflows during January and early February 2008 resulted in only a slight increase in resources to be shared between South Australia, New South Wales and Victoria. The improvement to shared resources from 10 January to 13 February 2008 was only 48 GL. Another dry period is currently being experienced in the southern part of the Murray-Darling Basin, which will impact on the water available for sharing.

South Australia is currently entitled to a total volume of 1 052 GL for the whole of 2008 based on the assessment by the Murray-Darling Basin Commission on 13 February 2008 of the shared resources available. Of this volume, 350 GL is available for diversions and 702 GL is available for dilution, losses and a reserve for 2008-09 to meet critical human needs.

Under the current water sharing rules, the three states share improvements in the inflows to the shared resources only. These are the inflows into Hume and Dartmouth Reservoirs and the Kiewa River, releases from the Snowy Hydro-electric Scheme plus regulated releases into Lake Victoria from Hume Reservoir. The shared resources do not include inflows to tributaries in New South Wales and Victoria, such as the Goulburn, Ovens, Darling and Murrumbidgee Rivers.

Carry-over and water trade

South Australian irrigators can carry-over all of their allocations not used in 2007-08 into the 2008-09 water year. Every effort will be made to ensure that this water can be made available to irrigators from 1 July 2008; however, neither the date of availability nor the total volume available can be guaranteed. Carry-over water application forms must be lodged with the Department of Water, Land and Biodiversity Conservation between 1 March 2008 and 31 March 2008, inclusive. Late applications will not be accepted. Further information, including application forms, can be found at

<http://www.dwlbc.sa.gov.au/murray/drought/index.html#Carryoverwater>

At 18 February 2008, the amount of interstate water traded into South Australia was 54 GL from NSW and 23 GL from Victoria. Since 1 July 2007, less than 700 ML have been traded out of South Australia on a temporary basis.

Weather outlook

The Bureau of Meteorology has provided new rainfall and temperature forecasts for the period February 2008 to April 2008. These forecasts show there is a 50% chance of exceeding median rainfall and a 50% chance of exceeding the median maximum temperature across the southern Murray-Darling Basin during this period.

For further information visit: www.bom.gov.au/climate/drought/drought.shtml

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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