



Observations at a glance

- Below average rainfall over the past three months has significantly reduced inflows into the River Murray and Murray-Darling Basin storages.
- Inflows of 210 GL were recorded during September 2007, slightly above the September 2006 inflow of 127 GL.
- Inflows from June to September 2007 were about 1 230 GL. This was higher than the 935 GL received during the entire 2006-07 water year.
- Salinity levels in the River Murray in South Australia continue to rise despite the daily flow across the border being increased to 2 600 ML/day.

Summary of Murray-Darling Basin storages

The total storage volume at 8 October 2007 was 2 130 GL (23% capacity) compared to 3 330 GL (35% capacity) at the same time in October 2006. The long-term average storage volume for the end of October is 7 190 GL (77% capacity).

This extremely low storage volume means that the outlook for increased water availability during 2007-08 continues to be severely constrained and is much worse than at the same time last year. It is also worse than at the same time in 2002-03. Water remains limited throughout the southern Murray-Darling Basin. The Murray-Darling Basin Commission (MDBC) is working to conserve as much water as possible and is making use of weir pools upstream of South Australia to supply downstream requirements.

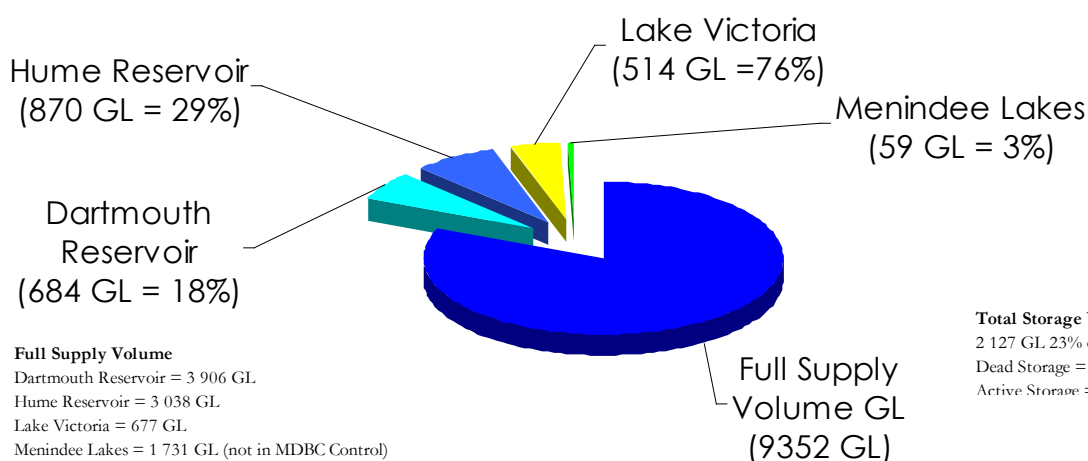
The total volume of water available in storage (2 130 GL) is the lowest for this time of the year since 1957, before the construction of Dartmouth Reservoir (an important drought reserve), the Menindee Lakes storage, and the expansion of Hume Reservoir.

While storage volumes (Figure 1) have risen very slowly over the past month, they are forecast to start declining soon with the onset of warmer weather which will increase the demand for irrigation water. Lake Victoria storage has started to decline, and depending on the weather and inflows over the coming months, the storage levels could fall below 100 GL by the end of February 2008 (this 100 GL level is regarded as "dead storage" because it cannot be accessed without pumping).

Further information about storages can be found in Figures 1 and 2.

Figure 1: Storage volumes

Storage Volumes 8 October 2007

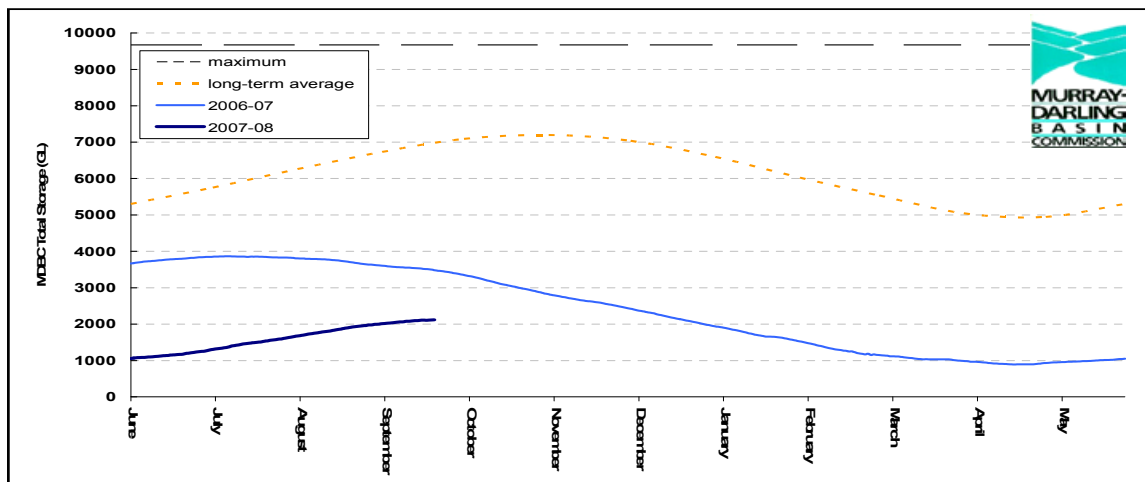


River Murray inflows

River Murray inflows remain at extremely low levels due to low rainfall. Inflows from June to September 2007 were about 1 230 GL compared to 935 GL for the whole of 2006-07. While inflows have been better than at the same time last year, storage volumes remain extremely low and this is significantly impacting on water resource availability.

The prospect of receiving substantial inflows during the rest of 2007-08 is poor because most of the inflows are usually received during winter and spring.

Figure 2: Inflows plus starting storage



Managing under low flow conditions

Because of the current low inflows, the MDBC has focused on minimising losses along the River Murray system. Initiatives have included the partial lowering of some weir pools to reduce evaporative losses and temporarily closing wetlands to reduce evaporation and save water.

Temporarily disconnecting wetlands is extremely important as it reduces the amount of salt and nutrient rich water entering the River Murray, and it also decreases the probability of blue green algae outbreaks.

The South Australian Government has also undertaken various efforts to reduce leakage through the barrages. Different methods have been tried at each barrage depending on the type of barrage construction.

Strong winds at high tide can cause seawater to spray or splash over the barrages in the Lower Lakes. An additional row of stopboards has been installed at the Goolwa, Mundoo and Boundary Creek barrages to minimise this spray or splashover.

Drought contingency planning for 2007-08 and beyond

The South Australian Government has been involved in developing contingency plans to manage the available water in 2007-08 and beyond. Actions undertaken to save water include temporarily disconnecting wetlands, restricting domestic outdoor watering, and requiring industry to complete water use efficiency plans.

The State Government has also been involved in discussions with partner Governments about the amount of water required for critical human needs and dilution flows into 2008-09 to mitigate rising salinity levels. Options being considered to secure water for 2008-09 include; a strategic reserve, inflows from tributaries not usually available for interstate sharing and drawing on weir pools. At this stage, no decision has been made.

SA River Murray operations

The reduced water availability to South Australia means that the daily flow across the border is currently averaging only 2 600 ML/day compared to the normal October minimum entitlement flow of 5 500 ML/day. The flow of 2 600 ML/day includes a salinity "dilution flow" of 700 ML/day to minimise peak salinity levels in South Australia. Based on forecast demands, the daily flow will increase to about 3 300 ML/day in November 2007. This is still well below the normal November minimum entitlement flow of 6 000 ML/day.

Table 1: Water and salinity levels (at 8 October 2007)

	Actual Water Levels		Full Supply Level	Variation from Pool Level	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	16.27	19.25	0.01	222
Lock 5	16.31	13.26	16.30	0.01	345
Lock 4	13.20	10.05	13.20	0.00	472
Lock 3	9.80	6.27	9.80	0.00	614
Lock 2	6.17	3.32	6.10	0.07	640
Lock 1	3.27	0.15	3.20	0.07	700
Lake Alexandrina	0.23				2415
Lake Albert (Meningie)	0.21				2647
Goolwa					18246
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					

South Australian River Murray water allocations

Minister for the River Murray, Karlene Maywald recently announced that South Australian annual irrigation allocations have been lifted to 16 percent, from October 1 2007. This increase means that the full 120 GL available to South Australia for diversion under the revised water sharing rules has been fully allocated (this includes 30 GL of carry-over). The small increase, however, does not indicate an improvement in the outlook for the River Murray.

Bureau of Meteorology outlook: October to December 2007

There is a 50 percent chance of exceeding the median rainfall for the October to December period in the runoff producing areas of the catchment in north-eastern Victoria.

There is a 75-80 percent chance that the southern Murray-Darling Basin will experience above-average maximum temperatures. This is a worrying prediction because if temperatures are high, evaporation rates and crop water requirements will increase.

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.rivermurray.sa.gov.au/AWMN/awsview.php
 Murray-Darling Basin Commission www.mdbc.gov.au
 SA Water Daily Reports www.riverland.net.au/%7Eheinze/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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