South Australia

River Murray
Water Resources Report

Government of South Australia

Issue 2: 20 July 2007

Observations at a Glance

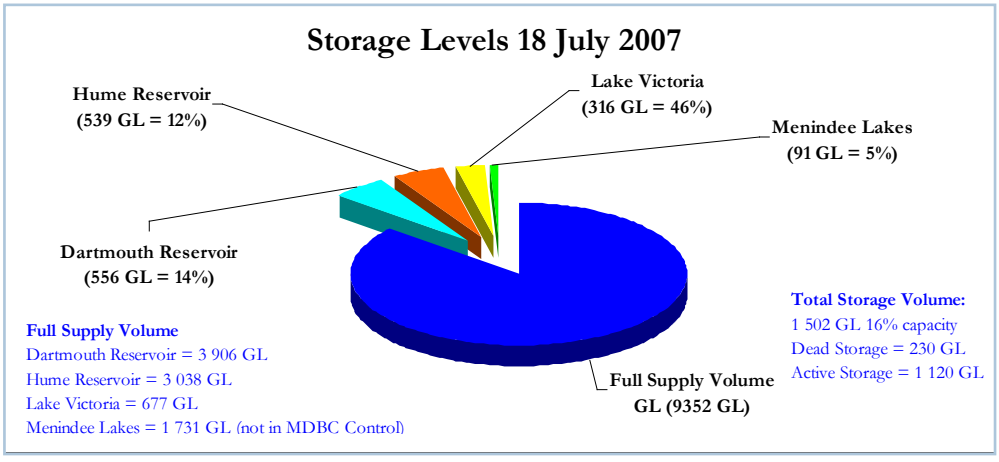
- River Murray storage levels have improved as a result of recent rainfall in north-eastern Victoria.
- Good flows from the Ovens and Kiewa Rivers have resulted in higher flows in transit along the River Murray. This will result in an increase in storage volume in Lake Victoria.
- Despite the welcome rainfall, significant persistent rainfall is required to break the continuing period of low inflows into the River Murray and storages.
- Significant drought years last century were followed by years of average rainfall. Despite this rainfall however, inflows in these years were only half of the long-term average.
- A series of rainfall events in quick succession is required over the coming months to increase storage levels and water availability.

Summary of Murray-Darling Basin Storages

Inflows into Hume and Dartmouth Reservoirs have increased as a result of higher inflows from the unregulated tributaries that feed into these storages. Snowy Hydro releases from the Murray 1 Power Station also continue to increase the level in Hume Reservoir, while improved inflows from the Ovens and Kiewa Rivers (downstream of Hume and Dartmouth Reservoirs) have contributed to an increase in the storage level in Lake Victoria. Figure 1 outlines the current storage position at 18 July 2007. The total volume of water in storage is 1 502 GL (16%) compared to 3 850 GL (41%) at the same time last year. The volume of water in storage has risen by approximately 200 GL over the last two weeks. However, much more water is required to bring storage levels close to the long-term end of July average storage of 6 220 GL, or 66% capacity.

River Murray inflows (excluding Snowy Hydro releases) have started to improve as a result of recent rainfalls, however they remain well below the long-term average inflow. Figure 2 indicates how the current inflows (260 GL so far in July) are tracking compared to the long-term average inflows, the 2006 inflows and the previous monthly minimum inflow. Substantial inflows are required to "break" the drought conditions in the Murray-Darling Basin. The long-term median inflow for July is 850 GL.

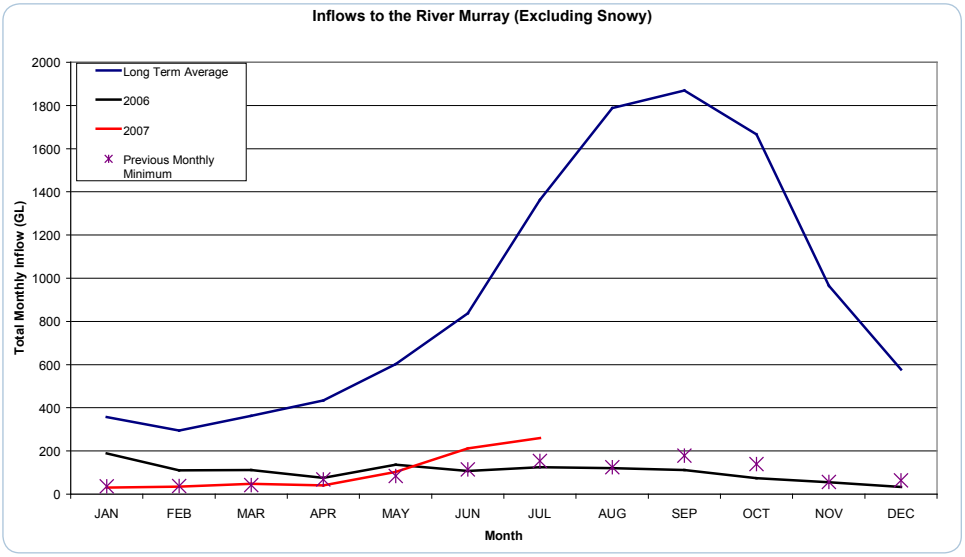
Figure 1: Storage levels



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/%7Eheinz/ex-flow-frame.htm**
Bureau of Meteorology **www.bom.gov.au**
Queensland Department of Primary Industry **www.longpaddock.qld.gov.au**

Figure 2: River Murray inflows



South Australian River Murray Water Entitlements

All licensed River Murray irrigators are currently restricted to accessing 4% of their licensed allocation. The Minister for the River Murray has announced that 14 GL will be available for carry-over. This level of restriction and the amount available for carry-over will be reviewed on a monthly basis and any change will be dependent on rainfall and inflows across the Murray-Darling Basin and in South Australia. For further information on River Murray water restrictions and carry-over, please visit the DWLBC website.

SA River Murray Operations

Lock 6 to the Barrages

Due to ongoing low inflow conditions, the current flows to South Australia are below the normal July entitlement flow of 3 500 ML/day. The current flow is averaging only 1 120 ML/day and this is impacting on water levels in some weir pools, particularly in the upper reaches of all weir pools and below Lock 1. Information about pool levels can be found in Table 1.

Table 1: Water and salinity levels

	Actual Water Levels at 18/7/07		Full Supply 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	19.18	16.27	19.25	-0.07	228
Lock 5	16.34	13.24	16.30	0.04	284
Lock 4	13.21	9.92	13.20	0.01	448
Lock 3	9.80	6.24	9.80	0.00	577
Lock 2	6.13	3.27	6.10	0.03	515
Lock 1	3.28	0.05	3.20	0.08	437
Lake Alexandrina	0.21				1850
Lake Albert (Meningie)	0.22				2540
Goolwa					19 000
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					

Salinity Information

Due to the significant reductions to South Australia's entitlement flow, salinity levels along the River Murray have been increasing. Figure 3 shows the current salinity levels at selected locations.

Figure 3: Current salinity levels at selected locations