



South Australia

River Murray Water Resources Report



Issue 3: 3 August 2007

Observations at a Glance

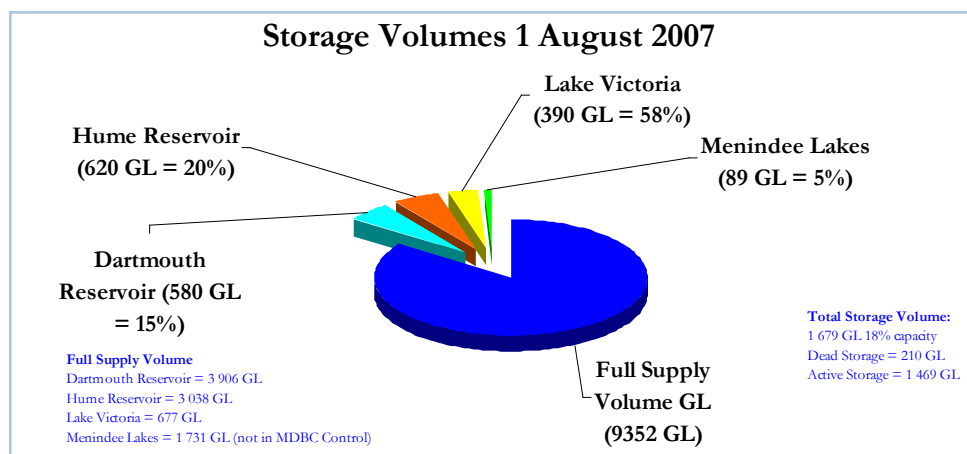
- Low rainfall over north-eastern Victoria during the past two weeks has led to a gradual reduction in inflows into the River Murray and storages.
- A series of rainfall events in quick succession is required over the coming months to increase storage levels and water availability.
- The main rainfall and runoff period (August – October) for the River Murray is now beginning.
- Salinity levels continue to rise as a result of low flow conditions in South Australia.
- South Australian River Murray water allocations have increased to 13% and sufficient water is available to fulfil carry-over commitments from 2006-07.

Summary of Murray-Darling Basin Storages

As a result of low rainfall, unregulated inflows have only resulted in a slight increase in the storage volume of Dartmouth Reservoir. Snowy Hydro releases from the Murray 1 Power Station and unregulated inflows have increased the storage volume of Hume Reservoir. River Murray system inflows (excluding Snowy Hydro releases) during July 2007 were approximately 405 GL, compared to 125 GL during July 2006. This was well below the long term average July inflow of about 1 350 GL.

The total volume of water in storage is currently 1 679 GL, compared to the long-term average of 6 220 GL for this time of year, and 3 850 GL at the same time last year. Substantial rainfall will be required over the coming months to recover storages and improve inflows into the River Murray.

Figure 1: Storage Levels



Bureau of Meteorology Outlook August – October 2007-08

The chances of exceeding the median rainfall for the August to October period are between 45-50% across north-eastern Victoria (this is where a significant amount of inflows enter the River Murray from unregulated sources such as the Ovens and Kiewa Rivers). The chances for above-normal maximum temperatures are 60-70% for much of the southern Murray-Darling Basin.

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/%Eheinz/ex-flow-frame.htm

Bureau of Meteorology www.bom.gov.au

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

River Murray

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Figure 2: River Murray Inflows

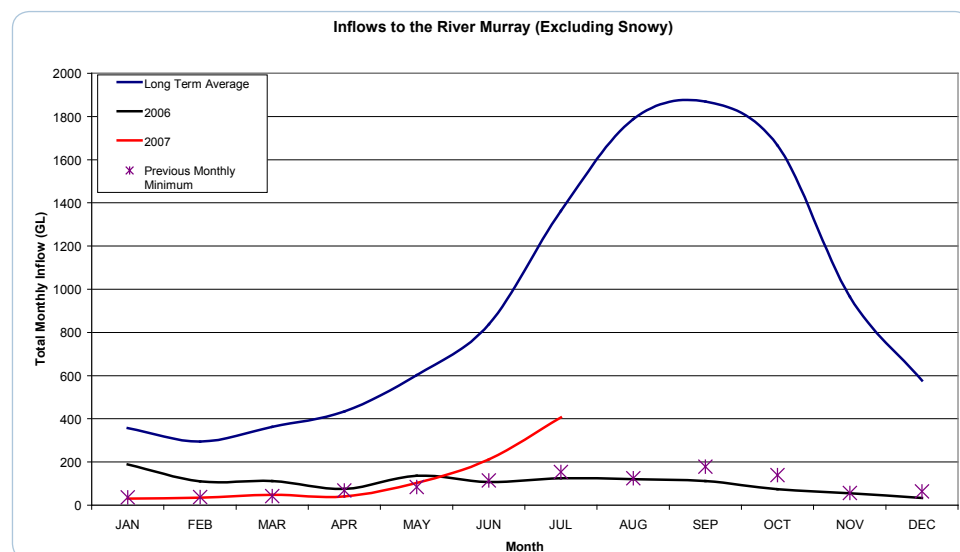


Table 1: Water and salinity levels (at 2 August 2007)

	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	19.23	16.30	19.25	-0.02	304
Lock 5	16.36	13.24	16.30	0.06	341
Lock 4	13.24	9.92	13.20	0.04	466
Lock 3	9.82	6.28	9.80	0.02	593
Lock 2	6.19	3.27	6.10	0.09	642
Lock 1	3.31	0.18	3.20	0.11	476
Lake Alexandrina	0.21				1880
Lake Albert (Meningie)	0.22				2310
Goolwa					15440

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 Entitlements

In late July, Minister Maywald announced an increase to irrigation allocations and the commitment to meet the full volume of carry-over (30 GL set aside from 2006-07). This means that irrigators who have entered into the carry-over arrangements will be able to access their share as advised through correspondence from the Department of Water, Land and Biodiversity Conservation. All licensed River Murray irrigators are currently restricted to 13% of their licensed allocation for 2007-08 and must not exceed the authorised level of use at any time.

Irrigators have the ability to trade water to cover any additional watering requirements. The necessary forms (and guidelines for movement of carry-over water) can be obtained online at www.dwlbc.sa.gov.au/licensing/forms/river_murray.html

SA River Murray Operations

Lock 6 to the Barrages

South Australia's normal August Entitlement Flow is 4 000 ML/day but a flow of 1 120 ML/day is being targeted during August 2007 as a result of the low Entitlement Flow predicted for South Australia for 2007-08. Weir pools are being maintained above full supply level immediately upstream of the weir with the exception of Lock 6, which is slightly below the normal full supply level. Information on pool levels can be found in Table 1. Water levels within Lake Alexandrina continue to remain stable at 0.21m AHD. This is significantly below the level of 0.83m AHD recorded at the same time last year.

The flow to South Australia is being managed to meet the demands for metropolitan Adelaide, country towns and private stock and domestic diversions, as well as the anticipated irrigation requirement and the expected losses between the State border and Wellington. These flows should allow the maintenance of normal pool levels in all weir pools upstream of Lock 1. The water level downstream of Lock 1 has remained almost unchanged over the past few weeks as a result of local rainfall and inflows.

Salinity Information

River Murray salinity levels have generally been increasing between Morgan and the border over the past three months. As flows to South Australia have dropped, two factors have contributed to this rise. There is less water to dilute the incoming salt, and the very long travel times mean the river water has more time to pick up extra salt.

In addition, lower water levels upstream of most weir pools (as a result of the very low flows) have allowed some more saline water to drain into the river from backwaters, contributing to the salt load.

Salinity levels from Lock 3 to Morgan are currently about 600 EC with this water traveling slowly downstream (about 1km per day). The biggest reduction in water levels has occurred in the Lock 3-Lock 4 reach where Lock 4 downstream has dropped from 10.5m AHD in February 2007 to 9.92m AHD currently (figures 3 and 4). The drop in flows and water levels downstream of Lock 4 since the end of February 2007 have led to a slow rise in salinity levels. This saline water has now reached Morgan.

Figure 3: River Murray Salinity Levels

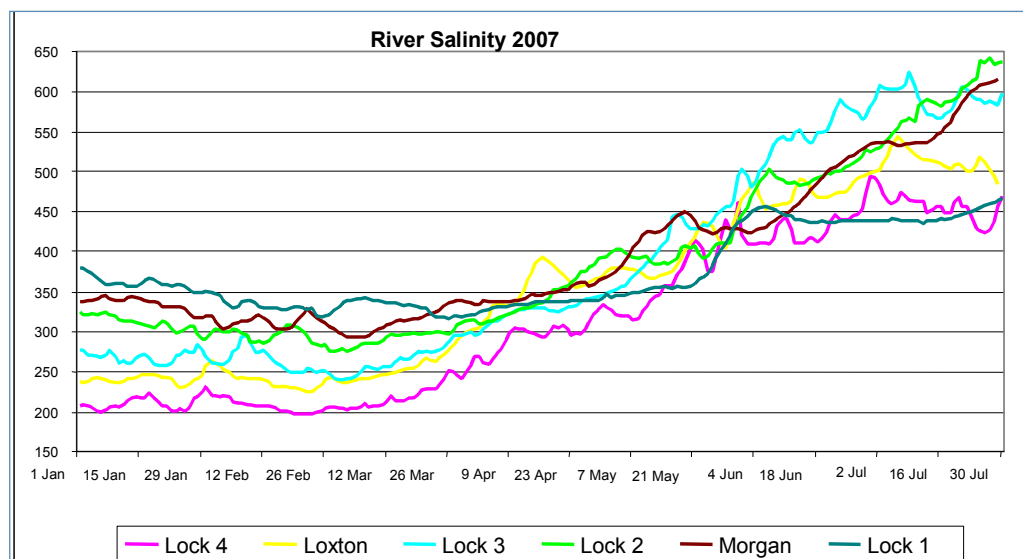
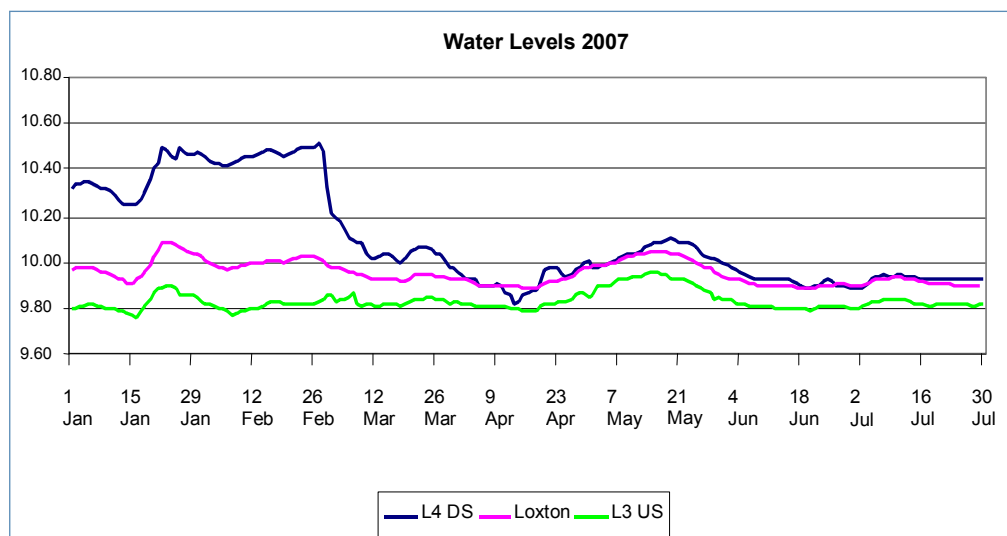


Figure 4: Water Levels at selected locations



Flows allocated to South Australia will be managed to minimise the impacts of rising river salinity over the coming months.

Salinity in Lake Alexandrina continues to increase as a result of losses from Lakes Alexandrina and Albert, together with seawater incursions. This situation is being closely monitored and every effort is being made to minimise the impacts of seawater incursion into the lakes. Several new monitoring stations are being installed in the river between Mannum and Wellington and in the Goolwa channel and Lake Alexandrina.

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