Issue 19: 20 June 2008

Observations at a glance

- Minister for the River Murray, Hon Karlene Maywald MP, has announced irrigators will begin
 the 2008-09 water year on 1 July 2008 with a 2% opening allocation and access to 50% of
 their approved carry-over water volume.
- This follows slight improvements in conditions across the Murray-Darling Basin during May 2008
- However, River Murray storage volumes remain low, with a total storage of 1 986 GL (21% of capacity).
- During May 2008, about 80 GL flowed into the River Murray system, compared to the long-term May average of 390 GL.
- Salinity and water levels remain relatively stable upstream of Lock 1. However, low flows into South Australia mean that below Lock 1 water levels remain low and salinity levels remain high.

Murray-Darling Basin storages

Inflows to the River Murray system in 2007-08 (excluding inflow to Menindee Lakes and inflow from the Snowy Scheme) totalled around 2 230 GL. This was the sixth lowest on record and significantly below the long-term average of 8 900 GL. However, it was more than double the previous minimum of 970 GL that occurred in 2006-07. **Figure 1** shows current Murray-Darling Basin storage volumes.

Figure 1: Storage volumes at 20 June 2008

Storage volumes 20 June 2008 Lake Victoria (293 GL = 43%) Menindee Lakes (547 GL = 32%) Hume Reservoir (452 GL = 15%) Total Storage Volume: 1 986 GL 21% capacity Dead Storage = 210 GL Active Storage = 1 776 GL Dartmouth Reservoir (694 GL = 18%) **Full Supply Volume** Full Supply Volume GL Dartmouth Reservoir = 3 906 GL (80 GL dead storage) (9 352 GL) Hume Reservoir = 3 038 GL (80 GL dead storage) Lake Victoria = 677 GL (100 GL dead storage) Menindee Lakes = 1 731 GL (not in MDBC Control until storage reaches 640 GL)





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River Murray system inflows remain at historically low levels, including inflows into Hume and Dartmouth Reservoirs. The volume of water currently in storage is 1 986 GL (21% capacity), compared to 1 174 GL (13% of capacity) at the same time last year.

While the current storage figure is better than at the same time last year, that storage volume includes:

- water held in Menindee Lakes (547 GL all of which is under the control of NSW);
- water reserved for delivery and use in 2008-09 (for critical human needs and irrigation carry-over for 2008-09); and
- some water released from the Snowy Mountains Hydro-electric Scheme for 2008-09.

Releases from both Hume and Dartmouth Reservoirs remain at minimum rates to conserve water for 2008-09.

The weir pool at Mildura is in the process of being lowered to allow for maintenance work to be carried out at the weir. The lowering commenced on 11 June 2008 and the salinity downstream of Mildura Weir will rise over the next few weeks. This saline water will be directed into Lake Victoria to minimise the salinity impacts on South Australia.

River Murray water allocations

Irrigators will begin the 2008-09 water year on 1 July 2008 with a 2% opening allocation and access to 50% of their approved carry-over water volume. While drought conditions across the Murray-Darling Basin remain extremely serious, slight improvements during May have made a small opening allocation possible.

About 80 GL has been set aside so far to meet carry-over commitments. Once the final meter readings for 2007-08 are completed next month, it is anticipated that up to 80% of carry-over will be available from 1 September 2008.

For further information see the Minister's 16 June announcement at www.dwlbc.sa.gov.au/assets/files/080616_allocations.pdf

Salinity and water levels

Table 1 shows the current water levels and salinity at selected locations. Salinity at Lock 2 (upstream of Morgan) is currently 415 EC, compared to an average of about 475 EC at the same time last year. Salinity below Lock 1 remains high as a result of reduced flows to South Australia. Salinity at Murray Bridge averaged about 700 EC last week compared to about 490 EC at the same time last year. In Lake Alexandrina (Milang) salinity remains high due to the lack of freshwater flows. The current average is 4 200 EC.





Due to the limited water available to South Australia there is not enough water to maintain levels below Lock 1. Currently, the water level in Lake Alexandrina is –0.45m AHD compared to about 0.17m AHD in early June last year. Lake Albert is about –0.5m AHD. Cooler weather will result in reduced evaporation in the Lower Lakes, which will lead to water levels stabilising over

Table 1: Salinity and water levels

the next two months.

	Actual Water Levels at 20/06/08		Full Supply Level 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	19.38	16.41	19.25	0.13	272
Lock 5	16.46	13.43	16.30	0.16	312
Lock 4	13.36	10.12	13.20	0.16	379
Lock 3	9.92	6.36	9.80	0.12	394
Lock 2	6.27	3.37	6.10	0.17	420
Lock 1	3.31	-0.43	3.20	0.11	410
Lake Alexandrina (Milang)	-0.45				4 171
Lake Albert (Meningie)	-0.50				not available
Goolwa					22 103
Vater levels and salinity below Lock 1 are affected by wind and will vary throughout the day and are daily records					
EC Readings below Lock 1 are daily averages and will vary throughout the day					

To view regularly updated water level, flow and salinity data visit the Murray-Darling Basin Commission's River Information Centre at:

www.mdbc.gov.au/subs/rmw_backup/riverdata/imagemaps/default.htm

Weather Outlook

The Bureau of Meteorology advises there is a 50%-55% chance of exceeding median rainfall and temperatures during the period June to August.

The Bureau also produces four-day rainfall forecasts that can be viewed at www.bom.gov.au/jsp/watl/rainfall/pme.jsp

Outlook for 2008-09

The Department of Water, Land and Biodiversity Conservation has developed projections for flows to South Australia, based on data provided by the Murray-Darling Basin Commission. The projections show that, depending on how water is allocated, there is a:

- 75% chance allocations will be 32% (same as 2007-08) by the end of 2008-09.
- 50% chance allocations will be higher than 32% by the end of 2008-09.





Table 2 outlines the probability of regulated flows to South Australia during 2008-09, after imbalance repayments have been made, and also the volume of water likely to be available after critical human needs, dilution flow and system losses for 2008-09 (totalling 896 GL) have been met.

Table 2: Projections for flows into South Australia in 2008-09

Probability	Projected 2008-09 regulated flow to SA (GL)	Projected available water to SA* (GL)
100% chance	936	40
95% chance	987	91
90% chance	1 052	156
85% chance	1 164	268
75% chance	1 311	415
50% chance	1 605	709
25% chance	1 795	899

^{*} Distribution of available water will be determined on a monthly basis as resource availability becomes known. Priorities will include irrigation, accumulating water for critical human needs for 2009-10, and critical environmental needs.

By 1 July 2008, the Government will make available the profiles for monthly allocation of water under various inflow scenarios.

Very wet conditions will be required during the remainder of winter and into spring to increase the volume of water available to South Australia.

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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