River Murray Water Resources Report

Issue 48: 16 October 2009

Observations at a glance

- Irrigators are currently able to access 34% of their allocation and 100% of their approved carry-over water volume.
- The volume of water in upstream storages is currently 2,769 GL (30% capacity), compared to 2,605 GL (28% capacity) at the same time last year.
- River Murray system inflows during September 2009 were 640 GL, the highest monthly inflow since November 2005.
- Recent rainfall will help to improve inflows during October 2009 and the Murray-Darling Basin Authority is predicting a minimum of 550 GL.
- While there has been some improvement in the River Murray system the drought continues to significantly impact water resource availability across the southern connected Murray-Darling Basin.

Murray-Darling Basin storages

The volume of water in storage in Hume and Dartmouth Reservoirs, Lake Victoria and Menindee Lakes is currently 2,769 GL (30% capacity), compared to 2,605 GL (28% capacity) at the same time last year. While storage volumes have improved over the past few months, the storages remain well below the long-term average for mid-October of 7,140 GL (76% capacity).

Current storage levels are shown in Figure 1.

Figure 1: Murray-Darling Basin storages

Storage volumes at 16 October 2009 Lake Victoria (315 GL = 43% of capacity) Menindee Lakes Hume Reservoir (205 GL = 12% of (1,126 GL = 37% of capacity) capacity) Total Storage Volume: 2,769 GL (30% capacity) Dead Storage = 210 GL Active Storage = 2,559 GL Dartmouth Reservoir (1,123 GL = 29% of capacity) Full Supply Volume GL (9.352 GL) Full Supply Volume Dartmouth Reservoir = 3,906 GL Hume Reservoir = 3.038 GL Lake Victoria = 677 GL Menindee Lakes = 1,731 GL

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Rainfall and River Murray inflows

Considerable rainfall was recorded this past week across southern areas of the Murray-Darling Basin. There was also increased rainfall higher in the catchment, including the Snowy Mountains and Victorian alpine areas.

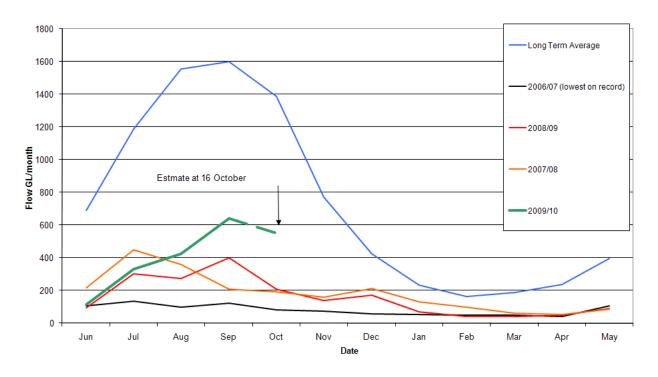
This rainfall has helped to increase flows in a number of important creeks and tributaries that provide inflows into Hume and Dartmouth and also the River Murray.

River Murray system inflows during September 2009 were 640 GL, which was the highest monthly inflow since November 2005 when 710 GL was received. The Murray-Darling Basin Authority (MDBA) has issued a preliminary inflow forecast of 550 GL for October 2009.

Figure 2 shows the monthly River Murray inflows.

Figure 2: River Murray inflows

River Murray System Inflows (excluding Menindee and Snowy)



River operations

The flow to South Australia has been increased to 2,600 ML/day. This will provide for a flow past Lock 1 of about 1,200 ML/day. The normal entitlement flow across the border in October is 5,500 ML/day.

All weir pools except above Lock 6 and below Lock 1 are at, or slightly above, the normal full supply level.

Information about river operations upstream of the South Australian border is available from the Murray-Darling Basin Authority website www.mdba.gov.au

Salinity and water levels

Salinity levels above Lock 1 remain fairly low. However, downstream of Lock 1 salinity levels remain high due to low water levels. Average salinity in Lake Alexandrina is currently 5,045 EC. Average salinity in Lake Albert is currently 9,310 EC.

The average water level in Lake Alexandrina is currently about <u>minus</u> 0.76m AHD, and in Lake Albert the average water level is about <u>minus</u> 0.20m AHD.

Table 2 shows the current water levels and salinity at selected locations.

Table 2: Water and salinity levels

	Actual Water Levels at 16/10/09		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	19.18	16.27	19.25	-0.09	220
Lock 5	16.32	13.26	16.30	0.02	313
Lock 4	13.21	10.10	13.20	0.01	474
Lock 3	9.90	6.20	9.80	0.03	524
Lock 2	6.11	3.30	6.10	0.01	618
Lock 1	3.29	-0.53	3.20	0.09	545
Lake Alexandrina (average)	-0.76				5,045
Lake Albert (average)	-0.20				9,310
Goolwa	0.53				11,254
Water levels below Lock 1 are a	iffected by wind an	l d will vary througho	ut the day		
EC Readings below Lock 1 are of	daily averages and	will vary throughout	the day		

Carry-over

Irrigators can now access 100% of their approved carry-over volume. The carry-over policy and further information is available at www.dwlbc.sa.gov.au/murray/drought/index.html#Carryoverwater

Water allocations in South Australia and interstate

River Murray irrigation allocations in South Australia are currently at 34%. For further information view the Minister's latest River Murray announcement (15 October) at www.dwlbc.sa.gov.au/media.html

The current allocation levels in South Australia, Victoria and New South Wales, together with the volume of these allocations, is outlined in **Table 2**. It is important to note that the volumes for NSW and Victoria include tributary water, in addition to water provided to those states under the water sharing arrangements.

The latest information about allocations in New South Wales is available at www.naturalresources.nsw.gov.au/mediarelnr/mr_toc_currnr.html or http://www.dwe.nsw.gov.au/water/avail_alloc.shtml

The latest information about allocations in Victoria is available at http://www.g-mwater.com.au/news/media-releases/2009 media releases

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Table 2: Current allocation levels in South Australia, Victoria and New South Wales (including the volume of these allocations)

Allocation type and %	Volume Allocation GL*		
SA High Security	194		
34%			
NSW Murray High Security	179		
97%			
NSW Murray General Security	84		
5%			
NSW Murrumbidgee High Security	342		
95%			
NSW Murrumbidgee General Security	76		
4%			
Vic Murray High Reliability Water Shares	433		
37%			
Vic Murray Low Reliability Water Shares	0		
0%			
Vic Goulburn High Reliability Water Shares	328		
33%			
Vic Goulburn High Reliability Water Shares	0		
0%			

^{*}Volumes for NSW and Victoria include tributary water, in addition to water provided to those states under the water sharing arrangements.

Weather outlook

The Bureau of Meteorology recently released its national rainfall and temperature outlook for the Murray-darling Basin for the period October-December 2009. This outlook shows there 30-50% chance of exceeding median rainfall, and 60-80% chance of exceeding median maximum daytime temperatures.

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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