River Murray Water Resources Report

Issue 47: 2 October 2009

Observations at a glance

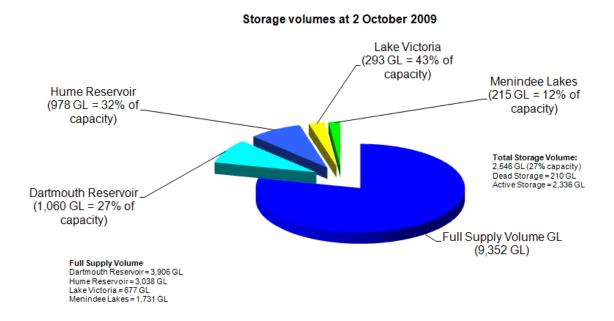
- Irrigators are currently able to access 25% of their allocation and 100% of their approved carry-over water volume.
- The volume of water in upstream storages is currently 2,546 GL (27% capacity), compared to 2,656 GL (28% capacity) at the same time last year.
- River Murray system inflows during September 2009 are expected to be about 640 GL, the highest monthly inflow since November 2005 (710 GL).
- Below Lock 1 water levels remain low and salinity levels remain high due to reduced flows into South Australia.

Murray-Darling Basin storages

The volume of water in storage in Hume and Dartmouth Reservoirs, Lake Victoria and Menindee Lakes is currently 2,546 GL (27% capacity), compared to about 2,656 GL (28% capacity) at the same time last year.

Current storage levels are shown in Figure 1.

Figure 1: Murray-Darling Basin storages



Rainfall and River Murray inflows

River Murray system inflows during September 2009 are expected to be about 640 GL, which is the highest monthly inflow since November 2005 when an inflow of 710 GL was received. Since June 2009, 1,508 GL of inflow has been recorded. While this is 438 GL more than the same period last year, it is still well below the long-term June-September average of 5,030 GL.

A comparison of the River Murray System inflows for the period June to September is listed in **Table 1**.

Table 1: River Murray System Inflows June to September (inclusive)

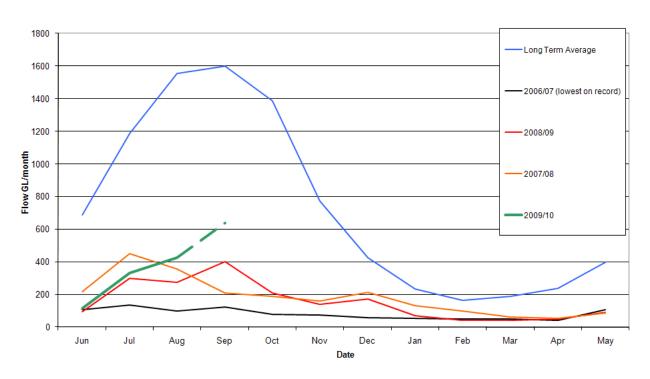
| Period June to September | River Murray System Inflow (GL) |
|--------------------------|---------------------------------|
| 2006-07 | 460 |
| 2007-08 | 1,230 |
| 2008-09 | 1,070 |
| 2009-10* | 1,508 |
| Long-term average | 5,030 |
| Last 10 years | 2,550 |

^{*} Assumes 640 GL of inflow during September 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 reduced to 2,400 ML/day as a result of recent rainfall. This flow will be reassessed in early October 2009 taking into account revised SA Water pumping demands, the increase of general allocations to 25%, anticipated losses and maintaining a flow over Lock 1 of 1,100-1,200 ML/day.

The normal entitlement flow across the border in October is 5,500 ML/day.

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 5,291 EC. Average salinity in Lake Albert is currently 9,146 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> 0.14m AHD.

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

Table 2: Water and salinity levels

| | Actual Water Levels at 2/10/09 | | Full Supply Level Level | Variation from Pool Level | Current EC Leve |
|---------------------------------|--------------------------------|---------------------|-------------------------|---------------------------|-----------------|
| | U/S mAHD | D/S m AHD | U/S of Weir m AHD | U/S of Weir m AHD | |
| Lock 6 | 19.18 | 16.29 | 19.25 | -0.09 | 261 |
| Lock 5 | 16.32 | 13.30 | 16.30 | 0.02 | 347 |
| Lock 4 | 13.24 | 10.14 | 13.20 | 0.04 | 437 |
| Lock 3 | 9.97 | 6.31 | 9.80 | 0.03 | 530 |
| Lock 2 | 6.22 | 3.35 | 6.10 | 0.12 | 603 |
| Lock 1 | 3.32 | -0.64 | 3.20 | 0.12 | 527 |
| Lake Alexandrina (average) | -0.76 | | | | 5,291 |
| Lake Albert (average) | -0.14 | | | | 9,146 |
| Goolwa | 0.33 | | | | 12,602 |
| Water levels below Lock 1 are a | ffected by wind an | d will vary through | out 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 25%. For further information view the Minister's latest River Murray announcement (1 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 3**. 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

Table 3: 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 25% | 143 |
| NSW Murray High Security 97% | 179 |
| NSW Murray General Security 1% | 17 |
| NSW Murrumbidgee High Security 95% | 342 |
| NSW Murrumbidgee General Security 3% | 57 |
| Vic Murray High Reliability Water Shares 29% | 334 |
| Vic Murray Low Reliability Water Shares 0% | 0 |
| Vic Goulburn High Reliability Water Shares 30% | 299 |
| 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.

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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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