



River Murray Water Resources Report

Issue 46: 18 September 2009

Observations at a glance

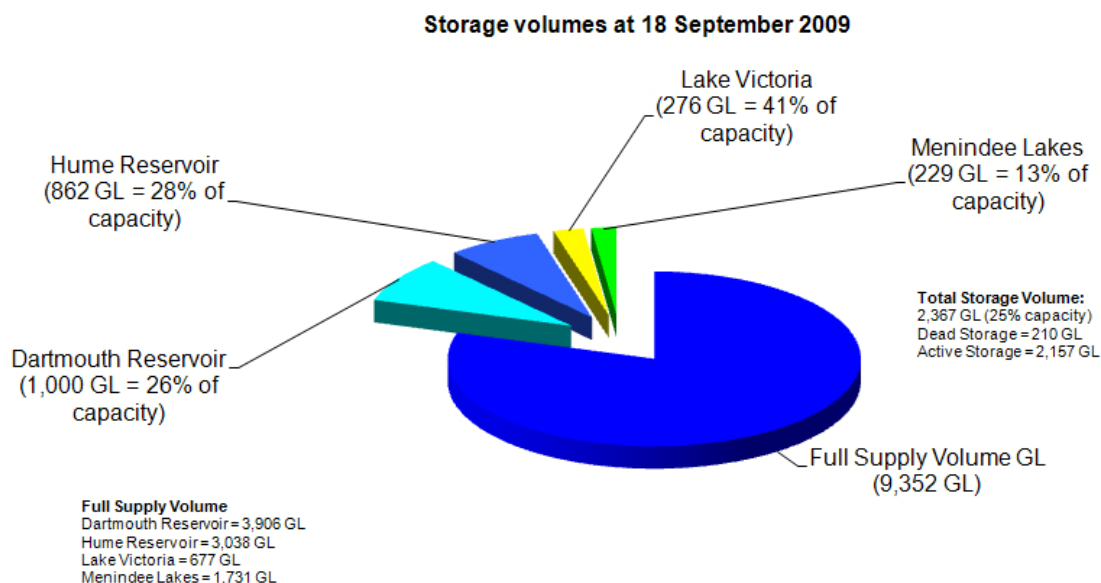
- Irrigators are currently able to access 16% of their allocation and 100% of their approved carry-over water volume.
- The volume of water in upstream storages is currently 2,367 GL (25% capacity), compared to about 2,587 GL (28% capacity) at the same time last year.
- The final inflow for August 2009 was 425 GL, and the estimated minimum inflow for September 2009 is 420 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 2,367 GL (25% capacity), compared to about 2,587 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

Rainfall across the upper Murray catchment during late August 2009 boosted River Murray system inflows for that month to 425 GL. This is the highest monthly inflow received in the last 24 months.

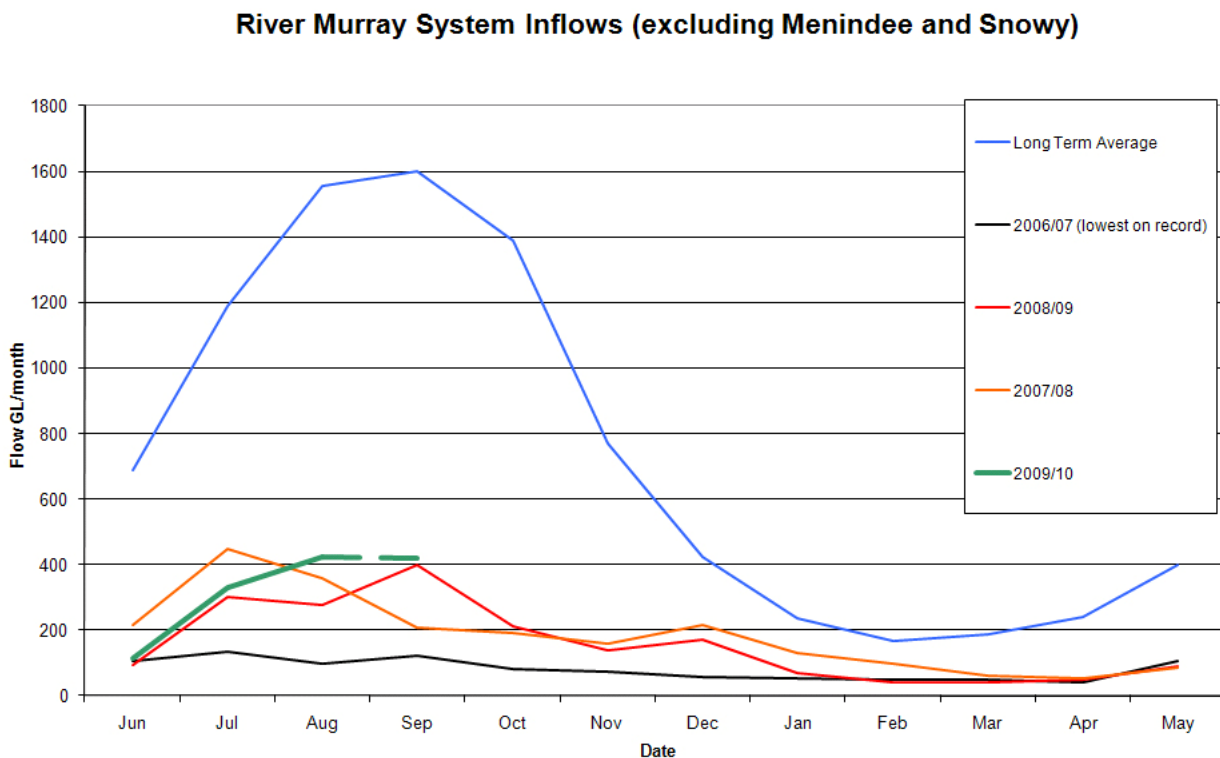
This rain, together with rain in early September, will improve the inflows for September. Previously the estimated minimum inflow for September was 200 GL and this has now been increased to 420 GL. This latest assessment was based on a conservative forecast undertaken in mid September.

If 420 GL of inflow is recorded this month, the River Murray system inflow for 2009-10 to the end of September will be about 1,290 GL, compared to the 1,070 GL received during the same period last year. Inflows so far during 2009-10 are equivalent to 67% of the inflow for the entire 2008-09 water year.

Rainfall models are predicting further rainfall across the upper Murray catchment over the next week.

Figure 2 shows the monthly River Murray inflows.

Figure 2: River Murray inflows



River operations

The flow to South Australia has been increased to 2,700 ML/day to account for increased allocations, warmer weather increasing river losses and the requirement to maintain a flow over Lock 1 of up to 1,200 ML/day.

This increased flow at the border means a number of small adjustments are being made to the flow at a number of key sites in the Chowilla system, including Slaney's Creek.

The normal entitlement flow for September is 4,500 ML/day. At the same time last year the flow to South Australia was averaging 2,700 ML/day.

From Monday 21 September, 26 GL will be delivered for a partial rewetting of Lake Bonney. This water is part of South Australia's 696 GL dilution and loss allowance and is not available for general allocation.

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 5,455 EC. Average salinity in Lake Albert is currently 9,140 EC.

The average water level in Lake Alexandrina is currently about minus 0.77m AHD, and in Lake Albert the average water level is about minus 0.18m AHD.

Table 1 shows the current water levels and salinity at selected locations.

Table 1: Water and salinity levels

| | Actual Water Levels at 18/09/09 | | 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 | 19.22 | 16.27 | 19.25 | -0.09 | 249 |
| Lock 5 | 16.32 | 13.29 | 16.30 | 0.02 | 354 |
| Lock 4 | 13.24 | 10.09 | 13.20 | 0.04 | 471 |
| Lock 3 | 9.83 | 6.24 | 9.80 | 0.03 | 515 |
| Lock 2 | 6.14 | 3.28 | 6.10 | 0.04 | 528 |
| Lock 1 | 3.27 | -0.65 | 3.20 | 0.07 | 504 |
| Lake Alexandrina (average) | -0.77 | | | | 5,455 |
| Lake Albert (average) | -0.18 | | | | 9,140 |
| Goolwa | -0.11 | | | | 15,311 |
| 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 | | | | | |

Water allocations in South Australia and interstate

South Australia

River Murray irrigation allocations in South Australia are currently at 16%. For further information view the Minister's latest River Murray announcement (15 September) at www.dwlbc.sa.gov.au/media.html

New South Wales

Earlier this week the NSW Water Commissioner announced an increase in water allocations for high security water users in the Murrumbidgee and Murray Valleys, and an initial general security allocation for water users in the Lower Darling River Valley below the Menindee Lakes.

Murrumbidgee high security allocations are now 60% of entitlement, while Murray Valley high security allocations have increased to 50% of entitlement. General security entitlement holders in the lower Darling Valley downstream of the Menindee Lakes have an allocation of 25%.

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

Victoria

Earlier this week Goulburn-Murray Water (G-MW) announced the Goulburn system would receive an allocation of 7% of high-reliability water shares (HRWS) and the Murray system allocation would increase by 11% HRWS to 13% HRWS. The Broken, Campaspe, Loddon and Bullarook systems remain without an allocation in 2009-10.

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

How River Murray water is made available to NSW, Victoria and South Australia during 2009-10

Water resources of the River Murray system are shared in accordance with the Special Water Sharing Arrangements for 2009-10. Tributary systems such as the Murrumbidgee in NSW, Ovens and Goulburn Rivers in Victoria remain a state asset and the relevant state authorities determine how water is allocated in these systems, as this water is not part of the Special Water Sharing Arrangements for 2009-10.

All states have different rules for sharing the water resources available to them and different processes for making seasonal allocation announcements.

The Murray-Darling Basin Authority (MDBA) is responsible for undertaking water availability assessments for the Murray system and provides each state with the volume of water available to it under the water sharing arrangements in operation at the time each assessment is made. Each water availability assessment takes into account a range of factors including inflows (both tributary and shared inflows), minimum water requirements for operational purposes (running the River Murray and storages), releases from the Snowy Hydro Scheme, each state's water usage to date, and obligations for New South Wales and Victoria to provide water to South Australia.

The water availability assessment is essentially a summary of what has occurred during a specific period of time and once the minimum commitments are met, then the remaining volume of water is available for sharing in accordance with the water sharing rules. The states are responsible for how this water is shared within the respective water sharing plans or allocation framework.

In the latest water availability assessment (based on the period of 26 August to 10 September 2009) there was an overall improvement of about 284 GL, with the shared improvement being about 210 GL. A range of factors contributed to this improvement including:

- Improved inflows during August;
- An increase to the minimum inflow for September 2009; and
- Increased Snowy Hydro Releases to the Murray System.

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

Weather outlook

The Bureau of Meteorology's national outlook for total rainfall over the period September to November shows a 30-40% chance of exceeding the median rainfall across most of the Murray-Darling Basin. There is a 65% chance of exceeding the median maximum temperature during the same period.

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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