



# River Murray Water Resources Report

Issue 53: 5 March 2010

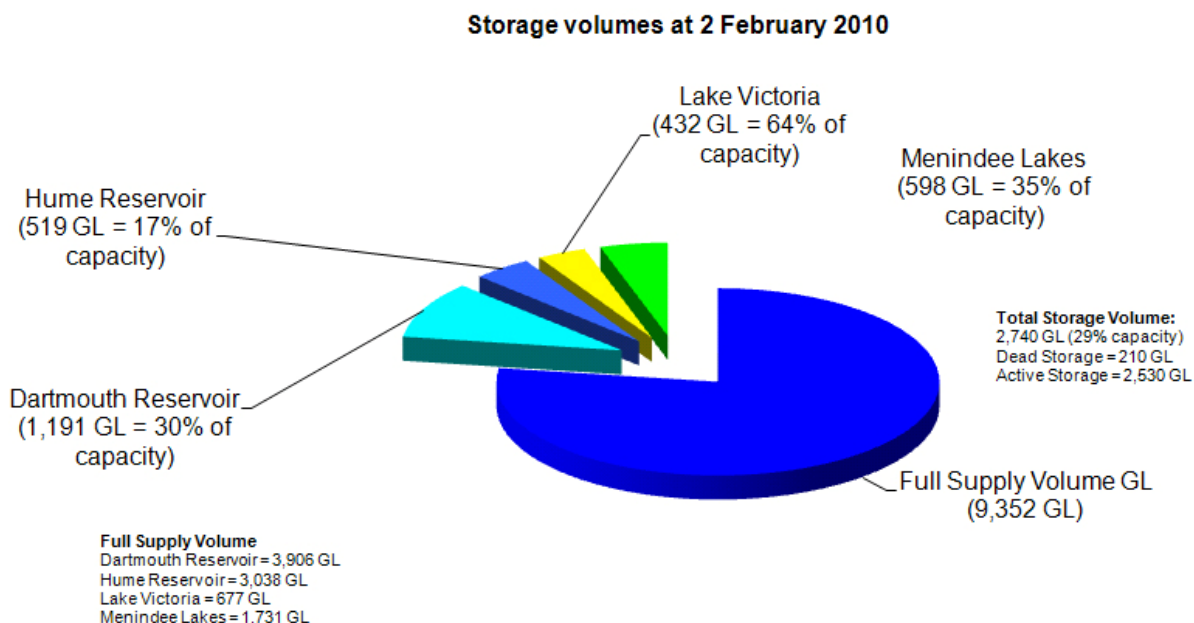
## Observations at a glance

- Irrigators are currently able to access 55% of their entitlement.
- Applications to carry-over water not used in 2009-10 for use in 2010-11 **must be lodged on or before 19 March 2010**.
- Notice of Restriction declared on the taking of water for irrigation purposes from the Goolwa Channel.
- The volume of water in upstream storages is currently 2,740 GL (29% capacity), compared to 1,521 GL (16% capacity) at the same time last year.

## Murray-Darling Basin storages

The volume of water in storage in Hume and Dartmouth Reservoirs, Lake Victoria and Menindee Lakes is currently 2,740 GL (29% capacity), compared to 1,521 GL (16% 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 have remained at low levels despite average rainfall across the upper Murray catchment over the past three months. The total River Murray system inflow so far in 2009-10 is 2,740 GL. This is well below the long-term average of 8,015 GL and the average over the last 10 years of 4,090 GL.

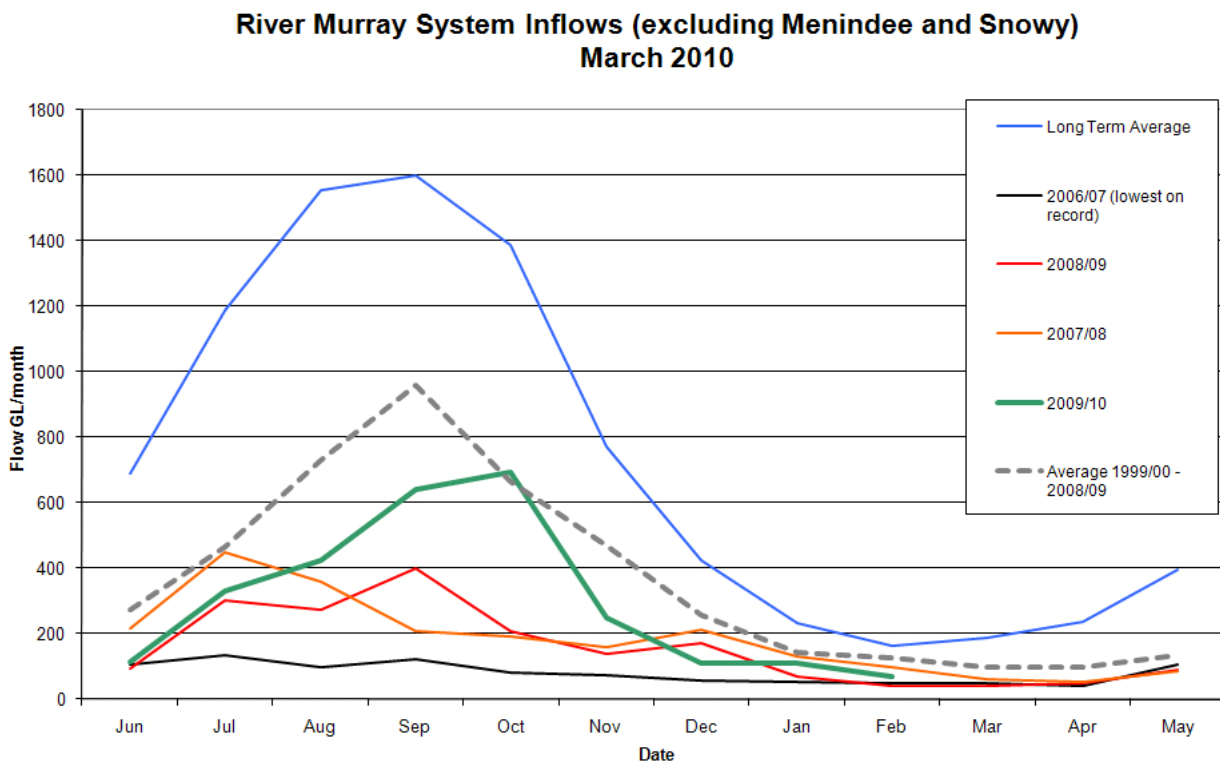
River Murray inflow during February 2010 has been estimated at 70 GL, which is higher than the 40 GL received in February 2008, but below the long-term February average of 165 GL. **Table 1** and **Figure 2** show the River Murray System inflows.

Table 1 River Murray System Inflows

Period June to February	River Murray System Inflow (GL) (Rounded totals)
2006-07	770
2007-08	2 030
2008-09	1 700
2009-10*	2 740
Long-term average	8 015
Last 10 years	4 090

\*Assumes 70 GL for February 2010 (final volume to be confirmed)

Figure 2: River Murray system inflows



Extensive rainfall caused widespread flooding across northern New South Wales during December 2009 and January 2010. From this flooding, South Australia secured 148.3 GL for the Lower Lakes. A further 20 GL was secured in January 2010 from the Commonwealth Environmental Water Holder specifically for Lake Albert. This 168.3 GL of water is in addition to the 170 GL already committed by South Australia for delivery to the Lower Lakes in 2009-10.

Record flooding is now occurring throughout parts of the South West region with widespread major flooding in the lower Condamine, Balonne and Maranoa Rivers as well as the Warrego, Paroo and Bulloo Rivers further to the west.

The rainfall in Queensland is expected to contribute significant flows in the Darling River. It is too early to forecast the volumes that will enter the system via the Warrego, Culgoa, Weir and Moonie Rivers. More rain is expected over the next week.

South Australia is continuing to work closely with other jurisdictions and the Murray-Darling Basin Authority to determine the best way to utilise any additional water flowing into the Murray-Darling Basin.

## River operations

Inflows from the Darling River started to arrive in the River Murray and Lake Victoria in late January and early February 2010. Given that the current flows to South Australia are mainly sourced from Lake Victoria, and Darling River water is highly turbid, the colour of water flowing to South Australia changed significantly during January and February 2010. This increased turbidity, together with increased flow rates over the border, has reduced the likelihood of algal blooms occurring during autumn in the River Murray within South Australia.

The flow to South Australia has remained high during January and February due to the delivery of the State's Lower Lakes Environmental Reserve (170 GL), which began in December 2009. This water should be delivered in full by the end of March 2010.

In addition to delivery of this 170 GL, a further 168.3 GL of water will be delivered to the Lower Lakes from late March to the end of June 2010. Further information about this water and its delivery can be found at:

[www.dwlbc.sa.gov.au/murray/drought/index.html#ExtrawaterforSAfromNSWfloods](http://www.dwlbc.sa.gov.au/murray/drought/index.html#ExtrawaterforSAfromNSWfloods)

Higher flow rates across the border are expected over the remainder of 2009-10 and all weir pools are slightly above their 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](http://www.mdba.gov.au)

## Salinity and water levels

Salinity levels between Lock 6 and Murray Bridge remain low. However below Wellington salinity levels in both Lakes Alexandrina and Albert remain high. The average salinity in Lake Alexandrina is currently 5,500 EC and in Lake Albert is currently 17,500 EC.

The average water level in Lake Alexandrina is currently about minus 0.88m AHD, and in Lake Albert the average water level is about minus 0.76m AHD.

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

**Table 2: Water and salinity levels**

	Actual Water Levels at 4/03/10		Full Supply Level Level	Variation from Pool Level	Current EC Level
	U/S m AHD	D/S m AHD	U/S of Weir m AHD	U/S of Weir m AHD	
Lock 6	19.24	16.46	19.25	-0.09	166
Lock 5	16.36	13.50	16.30	0.06	171
Lock 4	13.23	10.77	13.20	0.03	206
Lock 3	9.85	6.51	9.80	0.03	208
Lock 2	6.21	3.54	6.10	0.11	245
Lock 1	3.27	-0.24	3.20	0.07	274
Lake Alexandrina (average)	-0.88				5,500
Lake Albert (average)	-0.76				17,500
Goolwa	0.01				13,750
Water levels below Lock 1 are affected by wind and will vary throughout the day					
EC Readings below Lock 1 are averages and will vary throughout the day					

## Water allocations in South Australia and interstate

River Murray irrigation allocations in South Australia are currently at 55%. For further information view the latest River Murray announcement (1 March 2010) at [www.dwlbc.sa.gov.au/media.html](http://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) are outlined in **Table 3**. 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 <http://www.water.nsw.gov.au/>

The latest information about allocations in Victoria is available at [http://www.g-mwater.com.au/news/media-releases/2009\\_media\\_releases](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)**

System	%	Volume (GL)
South Australia (High Security)	55	314
NSW Murray (High Security)	97	178
NSW Murray (General Security)	20	334
NSW Murrumbidgee (High Security)	97	347
NSW Murrumbidgee (General Security)	24	378
NSW Lower Darling (High Security)	100	10
NSW Lower Darling (General Security)	100	78
Vic Murray (High Reliability Water Share)	66	780
Vic Goulburn (High Reliability Water Share)	60	597

## Carry-over applications close on 19 March 2010

South Australian irrigators can apply to carry over all of their allocations not used in 2009-10 into the 2010-11 water year. This includes water previously carried forward from 2008-09 that remains unused at 30 June 2010.

**Carry-over application forms must be lodged with the DWLBC on or before 19 March 2010. Late applications will not be accepted.**

Irrigators should carefully consider the volume of water that is likely to be unused for 2009-10 because the volume applied for cannot be adjusted after 19 March 2010.

An application form and copy of the carry-over policy can be found on the DWLBC website at [www.dwlbc.sa.gov.au/murray/drought/index.html#Carryoverwater](http://www.dwlbc.sa.gov.au/murray/drought/index.html#Carryoverwater)

## Notice of Restriction on taking water for irrigation from the Goolwa Channel

On 20 February 2010 a Notice of Restriction on the taking and use of water from the River Murray Prescribed Watercourse (Goolwa Channel) came into force.

The restriction ensures South Australia complies with a condition imposed under the *Environment Protection and Biodiversity Conservation Act 1999* approval for the Goolwa Channel Water Level Management Project, which specifically prevents water being taken for irrigation purposes from the pool of water created by the regulator at Clayton.

Further information on this Notice of Restriction can be obtained by phoning the DWLBC Berri office on (08) 8595 2053.

## Weather outlook

The Bureau of Meteorology recently released their national rainfall and temperature outlook for the Murray-Darling Basin for the period March to May 2010. The seasonal climate outlook shows a 50-55% chance of exceeding median rainfall, and a 40-65% chance of exceeding median maximum daytime temperatures.

## Riverbank erosion and cracking management

Riverbank erosion may occur where water flowing past riverbanks, properties or infrastructure begins to undercut the bank. Erosion may occur on a small or large scale, and while it may be linked to riverbank collapse, this is not always the case.

Due to increased flows into South Australia until the end of June 2010, residents below Lock 1 between Wellington and Blanchetown may notice a slight and gradual increase in water level and flow rate. This may make localised erosion more noticeable.

An information sheet about riverbank erosion and cracking management has been produced, and is available online at

[www.dwlbc.sa.gov.au/murray/drought/riverbank\\_collapse.html#Riverbankerosionandcrackingmanagement](http://www.dwlbc.sa.gov.au/murray/drought/riverbank_collapse.html#Riverbankerosionandcrackingmanagement)

Meanwhile, a 24-hour hotline (1800 751 970) continues to operate to allow the community to access general information about River Murray riverbank collapse, and to report new cracking along the riverbank between Lock 1 and Wellington. Calls to this hotline are free.

Major riverbank collapses should immediately be reported to **000**.

For further information, including the signs of potential collapse, visit

[http://www.dwlbc.sa.gov.au/murray/drought/riverbank\\_collapse.html](http://www.dwlbc.sa.gov.au/murray/drought/riverbank_collapse.html)

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