

---

# RIVER MURRAY UPDATE

---

Issue 7  
1 October 2010

DEPARTMENT FOR  
WATER



Government of South Australia  
Department for Water

## Rainfall and inflow summary

Average rainfall during the past three months has primed the River Murray catchment for spring inflows.

The inflow for September 2010 is expected to be around 2,900 GL, which is the highest September inflow since 1993. The long-term September average inflow is about 1,600 GL.

The high inflow is still resulting in unregulated flow along the Edward River and downstream of the Wakool Junction. Lake Victoria is filling rapidly from the higher flow and is currently at 92% capacity. The full supply volume in Lake Victoria is 677 GL.

While the River Murray system inflow has significantly improved, even greater inflow is required for recovery from the drought conditions. One month of above average inflow is not enough for the riverine environment to recover. Many of the floodplains along the lower River Murray have not received water for over a decade, and would require significant volumes of water over a number of years to recover.

Over the past month the volume of water in the major Murray-Darling Basin Authority (MDBA) storages has increased by about 1,800 GL. While this improvement is welcome, higher allocations and water use are expected during 2010-11, which will result in the gradual drawing down of storages.

Recent rainfall across northern areas of the Murray-Darling Basin has resulted in additional inflow into a number of rivers that flow into the Darling River system. Although further inflow to Menindee Lakes will occur, at this stage the forecast inflow is unlikely to be sufficient to surcharge Menindee Lakes to 2,050 GL.

The following table shows Murray-Darling Basin storages at 30 September 2010.

Storage @ 30 September 2010	Volume (GL)	% of Capacity	Approximate volume at this time last year (GL)	Change in volume from this time last year (GL)
Hume Dam	2,464	81	986	(+)1,478
Dartmouth Dam	1,765	45	1,062	(+)703
Menindee Lakes	1,793	104%	219	(+)1,574
Lake Victoria	626	92	292	(+)334
<b>Total volume</b>	<b>6,648</b>	<b>71</b>	<b>2,559</b>	<b>(+)4,089</b>

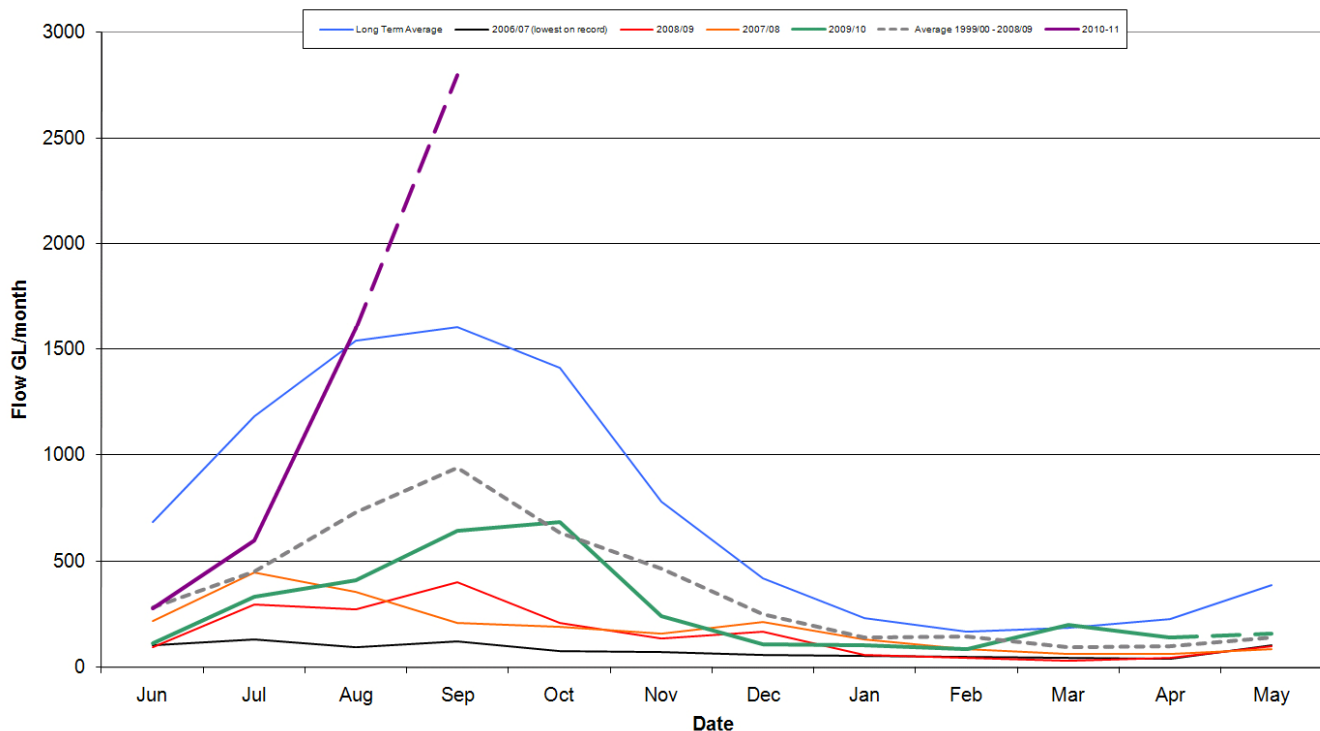
The following table shows River Murray system inflows (excluding Menindee) from June to September in various years.

MDBA Water Year (June to May)	June-September River Murray inflow (GL - rounded totals)
2005-06	3,700
2006-07	460
2007-08	1,230
2008-09	1,070
2009-10	1,500
<b>2010-11</b>	<b>5,380</b>
Past 10 years	5,010
Long-term average	2,400

## Inflow graph

The following graph shows River Murray system inflows (excluding Menindee and Snowy inflows) in various years.

### River Murray System Inflows (excluding Menindee Inflows and Snowy Releases)



## River operations in South Australia

South Australia has received more than 250 GL of unregulated flow during September 2010. The normal entitlement flow of 5,500 ML/day will be provided during October 2010 along with additional dilution flow (ADF) of 3,000 ML/day. The MDBA has advised South Australia that ADF will be supplied until the end of January 2011. Based on this latest advice about 550 GL of ADF will be received in total. ADF may be extended if the volume of Menindee Lakes remains above 1,300 GL beyond January 2011.

Any flow above the regulated flow of 8,500 ML/day during October 2010 will be unregulated flow. The MDBA has advised that South Australia is likely to receive a total unregulated flow volume of 670 GL (+/- 50 GL). The final unregulated flow volume will be dependent upon irrigation (limited) and environmental water use upstream of South Australia.

The flow to South Australia is expected to peak in mid October 2010 at about 30-35 GL/day. As the majority of weir pools are being maintained at their normal full supply levels, when the extra flow arrives there will be a noticeable rise in water level immediately downstream of each Lock, including Lock 1.

Based on the current flow outlook, the extra flow in South Australia will remain within channel capacity and no flooding is expected. Weir pools will be adjusted to reduce the impact of higher flow at a number of construction sites, including Chowilla, Lock 4 and Lock 2.

The water level immediately downstream of Lock 1 has started to rise above the normal operating level. The downstream water level is currently 1.3m AHD, which is 55cm above the normal 'Full Supply Level' of 0.75m AHD. This increased water level is likely to be noticeable under higher flow conditions to Swan Reach, after which the water level will flatten out.

Water users within this area below Lock 1 are encouraged to make any necessary temporary changes to pumping infrastructure to allow for higher flows over Lock 1 and any further rises in water levels.

Information about river operations upstream of the South Australian border is available online at <http://data.rivermurray.sa.gov.au/Telemetry/Default.aspx?App=RMW>

### Water allocations in South Australia and interstate

Minister for the River Murray, Paul Caica, today announced that general allocations have increased from 63 percent to 67 percent as a result of improved inflow in the River Murray system. A copy of the Minister's full 1 October 2010 announcement can be viewed at the Water for Good website (under the "Latest News" heading) at [www.waterforgood.sa.gov.au/](http://www.waterforgood.sa.gov.au/)

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>

The following table outlines the current water allocations in South Australia, New South Wales and Victoria.

System	1 Jul 2010	15 Jul 2010	2 Aug 2010	16 Aug 2010	1 Sep 2010	15 Sep 2010	1 Oct 2010
South Australia High Security	21%	24%	31%	34%	41%	63%	67%
NSW Murray High Security	0%	10% <sup>#</sup>	40%	70%	97%	97%	97%
NSW Murray General Security	0%	0%	0%	0%	8%	36%	36%
Murrumbidgee High Security	30%	30%	80%	95%	95%	95%	95%
Murrumbidgee General Security	0%	0%	0%	0%	9%	45%	47%
Lower Darling High Security	100%	100%	100%	100%	100%	100%	100%
Lower Darling General Security	100%	100%	100%	100%	100%	100%	100%
Victoria Murray High Reliability Water Share	0%	0%	2%	23%	57%	94%	97%
Goulburn High Reliability Water Share	0%	0%	5%	26%	41%	67%	70%

<sup>#</sup>NSW announced a 10% allocation on 20 July 2010

The combined High and General Security water entitlements of about 90 GL in the Lower Darling are very small compared to the other areas listed above. For example, in South Australia 90 GL equates to around 14% general allocation.

## Salinity and water levels

Salinity levels in Lake Alexandrina are currently averaging 2,650 EC. Salinity in Lake Albert remains high at about 10,000 EC.

The average water level in Lake Alexandrina is currently about plus 0.65m AHD, and in Lake Albert the average water level is about plus 0.4 AHD.

The following table shows the current water levels and salinity at selected locations.

	Actual Water Levels at 1/10/10		Full Supply Level U/S of Weir m AHD	Current EC level
	U/S m AHD	D/S m AHD		
Lock 6	19.30	17.44	19.25	235
Lock 5	16.18	14.28	16.30	185
Lock 4	13.22	11.70	13.20	185
Lock 3	9.76	7.44	9.80	195
Lock 2	6.12	4.35	6.10	165
Lock 1	3.19	1.33	3.20	165
Lake Alexandrina (average)	+0.65			2,650
Lake Albert (average)	+0.49		10,000	
Goolwa	+0.64		6,950	
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				

## Climate outlook

According to the Bureau of Meteorology, during October to December 2010 there is a 50%-60% chance of exceeding median rainfall across the Murray-Darling Basin, and a 40-75% chance of exceeding median maximum temperatures.

Information on the seasonal outlook can be accessed online at [www.bom.gov.au](http://www.bom.gov.au)

### **DISCLAIMER**

The Department for Water, its employees and servants do not warrant or make any representation regarding the use, or results of use of the information contained herein as to its correctness, accuracy, currency or otherwise. The Department for Water, its employees and servants expressly disclaim all liability or responsibility to any person using the information or advice contained herein.