RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

Flow to South Australia

Report #45/2012 Issued 10:00 am 16 November 2012

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 9 November 2012. The next flow report will be provided on Friday, 23 November 2012.

In this report, for ease of representation, large volumes of water are expressed in Gigalitres (GL), while smaller volumes are expressed in Megalitres (ML). One GL is equal to 1 000 ML.

WATER RESOURCES UPDATE

During October 2012 the total River Murray system inflow was approximately 770 GL, which is below the long-term October average of approximately 1 410 GL. Inflow to Menindee Lakes during October 2012 was approximately 40 GL, which is also lower than the long-term average of 170 GL.

The total flow to South Australia in October 2012 was approximately 1 070 GL, compared to 500 GL in October 2011. Unregulated flow has now ceased and the flow to South Australia currently comprises the November Entitlement Flow (nominal trade-adjusted flow of 6 000 ML/day), Additional Dilution Flow (3 000 ML/day) and water being provided through The Living Murray Program and the Commonwealth Environmental Water Holder, which is assisting by boosting the flow during the coming months for environmental purposes. South Australia is expected to continue to receive 3 000 ML/day of Additional Dilution Flow until the end of December 2012.

The major Murray-Darling Basin Authority controlled storages are effectively full and will support the delivery of large volumes of water for irrigation and environmental purposes, particularly if drier than normal weather conditions are experienced over summer and into autumn.

STORAGE VOLUMES

Murray-Darling Basin Authority storage volumes at 14 November 2012 and 14 November 2011

Storage	Full Supply Volume	14/11/2012	14/11/2011	Long-term average
	(GL)	(GL)	(GL)	(end of November)
Dartmouth	3 856	3 814 (99%)	2 876 (73%)	
Hume	3 003	2 928 (97%)	2 812 (97%)	
Lake Victoria	677	667 (99%)	669 (87%)	
Menindee Lakes	1 731*	1 883 (109%)	1 846 (107%)	
TOTAL	9 267	9 292 (100%)	8 203 (89%)	7 308 (79%)

*Menindee Lakes can be surcharged to 2 015 GL





RAINFALL AND TEMPERATURE OUTLOOK

The latest Bureau of Meteorology weather outlook for November 2012 to January 2013 indicates that there are equal chances of receiving a wetter or drier than normal season across the southeast of Australia with a wetter than normal season likely for southwest Queensland. Warmer temperatures are more likely over most of Australia.

SOUTHERN OSCILLATION INDEX

Indicators of the El Niño-Southern Oscillation remain at neutral levels. Climate models surveyed by the Bureau of Meteorology suggest sea surface temperatures in the tropical Pacific Ocean are likely to remain in the neutral range, but warmer than average through until at least early 2013. The Southern Oscillation Index (SOI) has remained within neutral values during the past fortnight.

WATER ALLOCATION OUTLOOK

Water access entitlement holders have 100 per cent water allocation in 2012-13 and the Murray-Darling Basin Authority continues to confirm that South Australia will receive 1 850 GL in 2013-14.

SOUTH AUSTRALIA'S STORAGE RIGHT

To date, South Australia has not deferred any Entitlement Flow for carryover into 2013-14. This is due to a number of factors including the current high risk of spill from storages. This situation may change and opportunities to defer water during 2012-13 for use in 2013-14 will be reassessed as the water year progresses and when conditions become more favourable to defer water.

FLOW OUTLOOK

The flow at the South Australian border is approximately 14 000 ML/day and is likely to remain around this rate during the coming week, depending on upstream operations and rainfall events. In accordance with the requirements of the Murray-Darling Basin Agreement, the Murray-Darling Basin Authority has issued an instruction to gradually fill Lake Victoria to 100 percent. Lake Victoria storage is currently at 99 percent capacity.

The flow over Lock 1 is also approximately 14 000 ML/day and is likely to reduce to around 13 000 ML/day during the coming week, depending on upstream operations and diversions.

It is important to note that flow forecasts in this advice are based on the information available at the time of preparation. They may change as new gauging information becomes available, or due to further rainfall events or changed operations upstream. Flow forecasts are dependent on predictions made by the Bureau of Meteorology, Murray-Darling Basin Authority and water management agencies in upstream jurisdictions. Forecasts will be revised as new information becomes available.

BARRAGE OPERATIONS AND WATER LEVELS IN THE LOWER LAKES

The water level in Lake Alexandrina is approximately 0.82 m AHD and the level in Lake Albert is approximately 0.78 m AHD. During the coming week, barrage operations will continue to target a water level of 0.80 m AHD in both Lower Lakes. The higher water level will maximise the opportunity to continue barrage releases during the approaching summer months.

Any salinity increases in the Goolwa Channel or upstream of the other barrages as a result of possible high tides are likely to be short-lived due to the volume of fresh River Murray water still flowing past Wellington into Lake Alexandrina. To see live salinity data at various locations on the River Murray and in the Lower Lakes please refer to the following website:

http://www.waterconnect.sa.gov.au/RMWD/Pages/default.aspx

Water levels and barrage operations are monitored closely by various agencies of the South Australian Government, Murray-Darling Basin Authority and the Commonwealth Environmental Water Office.





CONSTRUCTION WORKS

Construction of the Chowilla Creek Environmental Regulator will be ongoing until the end of 2013. For public safety reasons, the Chowilla Creek remains closed to navigation at the construction site.

On 5 November 2012, major maintenance works commenced at Lock 9 (Cullulleraine) upstream of South Australia. This maintenance is vital to the longevity of the structure and will take approximately six weeks. During this period Lock 9 will be closed to navigation for all river traffic.

RIVER MURRAY WATER LEVELS

SA Water and the Department of Environment, Water and Natural Resources have developed a River Murray Water Levels chart (below) to provide water levels at a number of locations from Lock 10 (near Wentworth) to Murray Bridge.

Location	River Km	Normal Pool Level	Current Level (m AHD)	1974 Flood Level (m AHD)	1993 Flood Level (m AHD)
Lock 10	825.0	30.80	30.88	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.44	30.03	29.44
Lock 8 Wangumma	725.7	24.60	24.64	27.60	27.19
Lock 7 Rufus River	696.6	22.10	22.19	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.30	21.03	20.50
Renmark	567.4	-	16.36	18.54	18.04
Lock 5	562.4	16.30	16.35	18.07	17.50
Lyrup	537.8	-	13.36	16.85	16.26
Berri	525.9	-	13.35	15.81	15.74
Lock 4	516.2	13.20	13.25	15.65	15.08
Loxton	489.9	-	10.51	15.05	14.12
Cobdogla	446.9	-	9.89	13.44	12.38
Lock 3	431.4	9.80	9.81	13.16	12.02
Overland Corner	425.9	-	6.77	12.73	11.58
Waikerie	383.6	-	6.45	11.26	10.24
Lock 2	362.1	6.10	6.21	10.28	9.30
Cadell	332.6	-	-	9.17	8.08
Morgan	321.7	-	3.48	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.23	6.81	5.38
Swan Reach	245.0	0.75	1.01	6.06	4.51
Mannum PS	149.8	0.75	0.83	3.15	1.90
Murray Bridge	115.3	0.75	0.80	2.06	1.26

River Murray Water Levels as at 14 November 2012

Note that the above water levels may be affected by local wind conditions.





River Murray Flow Report and Water Resource Update

FURTHER INFORMATION

The South Australian Government is running a campaign to fight for the health of the River Murray. If you have an interest in the River Murray you are encouraged to join the fight for a healthy river at: www.fightforthemurray.com.au

The Department of Environment, Water and Natural Resources has published a series of inundation maps for the River Murray. They are available at: www.waterconnect.sa.gov.au

Up-to-date River Murray flow and water level information can be accessed at the Department of Environment, Water and Natural Resources, SA Water and Murray-Darling Basin Authority websites: www.sawater.com.au/SAWater/Environment/TheRiverMurray/River+Murray+Levels.htm www.sawater.com.au/SAWater/Environment/TheRiverMurray/River+Murray+Levels.htm

Details of river height and rainfall information in the River Murray within Victoria and New South Wales are available at the Bureau of Meteorology website: <u>http://www.bom.gov.au/vic/flood</u>

Information on the discharge of acid drainage water into the Lower River Murray can be accessed online at <u>www.waterforgood.sa.gov.au</u>

Information provided by the Commonwealth Environmental Water Holder can be accessed at http://www.environment.gov.au/ewater/southern/murray/lower-murray.html

Information on The Living Murray can be accessed at http://www.mdba.gov.au/programs/tlm/

Regularly updated daily water level information can be found at the following websites:

SA Water

www.sawater.com.au/SAWater/Environment/TheRiverMurray/River+Murray+Levels.htm

Information is also available from the SA Water Hotline on 08 8595 2299

Department of Environment, Water and Natural Resources

http://www.waterconnect.sa.gov.au/RMWD/Pages/default.aspx

UPDATES- This advice remains current until the Department of Environment, Water and Natural Resources notifies otherwise.



