RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

Flow to South Australia

Report #16/2012 Issued 10:00 am 20 April 2012

This supersedes the previous flow report issued by the Department for Water on 13 April 2012. A further flow report will be provided on Friday 27 April 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 1000 ML.

WATER RESOURCES UPDATE

During March 2012 the River Murray system inflow was approximately 2200 GL, which is double the previous record in March 2011 of around 1050 GL. The March long-term average is approximately 220 GL. The high inflow occurred due to a low pressure system that produced unseasonably high rainfall across Victoria and NSW. Major flooding occurred in the Murrumbidgee River and across the north-eastern catchments in Victoria.

The March 2012 inflow to Menindee Lakes was around 1050 GL, well above the March long-term average of 190 GL. Releases from Menindee Lakes are continuing at a rate of 35,000ML/day. As a result, South Australia will continue to receive unregulated flow in April, May and June 2012.

The flow to South Australia peaked just below 60 GL/day in early April and has remained at this rate for a few weeks. South Australia has received more than 7300 GL since 1 July 2011, which includes a large volume of unregulated flow and environmental water from the Commonwealth Environmental Water Holder. The extended duration of higher flow will allow for continued discharge through the barrages and some inundation of low-lying floodplain and wetlands.

Most catchments remain wet with relatively full storages. The near-full storages enable a large volume of water to be made available to each state at the start of the 2012–13 water year. This includes providing South Australia with its full Entitlement Flow of 1850 GL in 2012–13 and reserving water towards the Minimum Reserve (to assist in securing Entitlement Flow) in 2013–14, in accordance with the Murray-Darling Basin Agreement (clause 103).





STORAGE VOLUMES

Murray-Darling Basin Authority storage volumes at 18 April 2012 and 18 April 2011

Storage	Full Supply Volume	18/4/2012	18/4/2011	Long-term average
	(GL)	(GL)	(GL)	(end of April)
Dartmouth	3856	3189 (83%)	2420 (63%)	
Hume	3003	2614 (87%)	2808 (94%)	
Lake Victoria	677	410 (61%)	449 (66%)	
Menindee Lakes	1731*	1540 (89%)	1971 (114%)	
TOTAL	9267 (100%)	7753 (84%)	7644 (82%)	5424 (59%)

^{*}Menindee Lakes can be surcharged to 2015 GL

RAINFALL OUTLOOK

The latest Bureau of Meteorology (BoM) rainfall outlook for April to June 2012 indicates that large parts of eastern Australia are likely to experience above-average rainfall. This outlook is mainly due to warmer than normal waters in the Indian Ocean. The 2011–12 La Niña event has now ended, with key indicators returning to neutral levels. Climate models surveyed by BoM suggest that neutral conditions will persist until at least early winter.

WATER ALLOCATION OUTLOOK FOR 2012-13

On 28 March 2012, the Minister for Water and the River Murray, Hon Paul Caica MP, announced that South Australian irrigators would begin the 2012–13 water year with 100 per cent water allocation.

Minister Caica stated that "given the current conditions, South Australia is prevented from deferring and storing entitlement flow for carryover under the Murray-Darling Basin Agreement, therefore there will be no ability to carry over water into the 2012–13 water year". The Minister also stated that "given irrigators will have 100 per cent water allocation, they should have enough water to meet their normal production without the need to use carryover".



FLOW OUTLOOK

During the past week the flow at the South Australian border has remained slightly below 60,000 ML/day. The flow is likely to stay at this rate for most of the next week before reducing to approximately 55,000 ML/day. South Australia is likely to then receive flows between 52,000 and 55,000 ML/day until early May 2012.

The flow over Lock 1 is expected to remain around 50,000 ML/day over the next week.

It is important to note that flow forecasts in this advice are based on the information available at this time. Forecasts may change as more reliable gauging information becomes available, or due to further rainfall events or changing upstream operations. 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 0.63m AHD and the level in Lake Albert is approximately 0.67m AHD.

Barrage releases will continue, although high Coorong water levels, high tides, high swells and wind will limit the ability to discharge water at certain times during the coming weeks. With high tides forecast over the coming weekend, shut-down of Goolwa and Mundoo barrages has begun, with all bays on Goolwa and Mundoo to be shut by today, Friday 20 April. Goolwa and Mundoo will be re-opened on Thursday 26 April when tide levels are reduced. Releases at Boundary Creek will continue during periods of reverse flows in order to maintain a salinity gradient and estuarine conditions. Releases will also be maintained at Tauwitchere and Ewe Island barrages and may also be subject to short-term reverse flows.

Note that the boat locks at Tauwitchere and Goolwa will continue to operate as normal.

Residents and landholders in the Goolwa, Hindmarsh Island and Mundoo areas may observe increased salinity in the area's waterways due to 'reverse head' conditions. With large volumes of fresh River Murray water flowing into the area, any salinity spikes are likely to be short-term.

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





RIVER MURRAY WATER LEVELS

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

River Murray Water Levels as at 18 April 2012

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	30.87	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.49	30.03	29.44
Lock 8 Wangumma	725.7	24.60	25.68	27.6	27.19
Lock 7 Rufus River	696.6	22.10	24.24	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.41	21.03	20.50
Renmark	567.4	-	16.55	18.54	18.04
Lock 5	562.4	16.30	16.30	18.07	17.50
Lyrup	537.8	-	14.66	16.85	16.26
Berri	525.9	-	14.28	15.81	15.74
Lock 4	516.2	13.20	13.86	15.65	15.08
Loxton	489.9	-	12.47	15.05	14.12
Cobdogla	446.9	-	10.58	13.44	12.38
Lock 3	431.4	9.80	9.86	13.16	12.02
Overland Corner	425.9	-	8.89	12.73	11.58
Waikerie	383.6	-	7.72	11.26	10.24
Lock 2	362.1	6.10	6.89	10.28	9.30
Cadell	332.6	-	-	9.17	8.08
Morgan	321.7	-	4.91	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.35	6.81	5.38
Swan Reach	245.0	0.75	1.91	6.06	4.51
Mannum PS	149.8	0.75	0.86	3.15	1.90
Murray Bridge	115.3	0.75	0.70	2.06	1.26

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





FURTHER INFORMATION

The Department for Water 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 for Water, SA Water and Murray-Darling Basin Authority websites:

http://data.rivermurray.sa.gov.au

<u>www.sawater.com.au/SAWater/Environment/TheRiverMurray/River+Murray+Levels.htm</u> http://www.mdba.gov.au/water/live-river-data

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: http://www.bom.gov.au/vic/flood

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

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

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

Department for Water

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

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

UPDATES- This advice remains current until the Department for Water notifies otherwise.

