RIVER MURRAY FLOW ADVICE AND WATER RESOURCE UPDATE

Flow to South Australia

Issued 10:00 24 June 2011

This supersedes the previous flow advice update issued by the Department for Water on 17 June 2011. A further flow advice will be provided on Friday 1 July 2011.

WATER RESOURCE UPDATE

River Murray system inflow continues to remain high as a result of wet catchments and continuing rainfall across key areas. During 2010-11 around 17,100 gigalitres (GL) flowed into the River Murray system, which is nearly double the long-term average inflow of approximately 8,780 GL.

The high inflow upstream has resulted in 15,050 GL flowing across the South Australian border to 22 June 2011. This flow will be the highest recorded since 1975-76 when 20,660 GL flowed to South Australia.

These conditions have provided for a number of large-scale watering events at significant ecological assets from the upper River Murray to the Murray Mouth and regular rainfall events during the irrigation season have decreased irrigation demand. This has resulted in improved storage volumes in the Murray-Darling Basin Authority controlled storages, which will provide more water for distribution in 2011-12.

Inflow to Menindee Lakes has also been high during 2010-11 in response to widespread above average rainfall across southern Queensland and western New South Wales. Menindee Lakes received around 5,850 GL, which is well above the long-term average of 1,890 GL.

Murray-Darling Basin Authority storage levels as at 22 June 2011 and 23 June 2010 year

Storage	Full Supply Volume GL	22/6/2011 GL	23/6/2010 GL	Long-term Average (June) GL
Dartmouth	3,856	2,468 (64%)	1,265 (32%)	
Hume	3,003	2,801 (93%)	758 (25%)	
Lake Victoria	677	429 (63%)	369 (54%)	
Menindee Lakes (FSL)	1,731	1,964 (113%)	1,506 (87%)	
TOTAL	**9,267 (100%)**	**7,662 (83%)**	**3,898 (42%)**	**6,170 (66%)**

FLOW OUTLOOK

All catchments remain wet and volumes in storage are higher compared to the same time last year. As a result, even with average rainfall, good stream flow responses will occur. Rainfall, inflow and storage conditions across the Murray-Darling Basin will be closely monitored over the next six months and, if necessary, operations such as pre-releases from storages will be undertaken to minimise potential risks associated with high flow and flood events.

Although flow to South Australia has gradually reduced over the last few months, return flows from environmental assets, tributaries and the delivery of environmental water entitlements have maintained flows upstream. This has enabled water to be released from the Murrumbidgee storages for environmental purposes. This environmental water release will flow into the River Murray and will be used for normal operating purposes including refilling of Lake Victoria, which commenced on 13 June 2011.

The flow to South Australia has increased to 20,000 ML/day and is likely to be maintained at this level for the next week. Flow will reduce to about 10,000-12,000 ML/day by mid July 2011, before increasing to around 20,000 ML/day by late July 2011, as water arrives from upstream. By early August, flow of 7,000 ML/day, comprising of 4,000 ML/day of normal regulated entitlement flow conditions and Additional Dilution Flow of 3,000 ML/day is expected. Flow at Lock 1 is 18,600 ML/day and may remain around this level over the coming weeks, depending on flow conditions upstream.

All locks and weirs upstream and within South Australia have been reinstated.

This outlook may change in response to the operation of Lake Victoria, further rainfall and improved inflow conditions upstream.

BARRAGE OPERATIONS AND WATER LEVELS IN THE LOWER LAKES

The water level in Lake Alexandrina is currently around 0.68m AHD. Water levels in Lake Alexandrina, Lake Albert and the Goolwa Channel have increased due to the closure of barrage gates. Over the coming months, the use of barrage operations, to lower and raise water levels to further freshen Lake Albert and remove accumulated salt from the Lower Lakes, will continue. It is anticipated that water levels will remain within a range of 0.55m to 0.8m AHD.

In order to decrease and increase water levels in both lakes, it is necessary for some of the barrage gates/bays to be opened and closed to maintain the desired water level target. Water levels and barrage operations are continually monitored by the Department for Water, SA Water and the Department of Environment and Natural Resources.

It is important to note that water levels in the Lower Lakes may also vary considerably with wind speed and direction. This, when combined with the high water level or high tides, could result in sea water backflow events and/or some inundation of low-lying areas around the edges of Lake Alexandrina, Lake Albert or the Goolwa Channel.

A number of seawater backflow events have occurred over May and June, which has caused elevated salinity levels upstream of each of the barrages. This situation has generally only lasted for a few days after each event, dissipating as water is again released to the Coorong. Elevated salinity levels have lasted slightly longer in some locations.

The Department for Water is also responsible for monitoring salinity in the Lower Lakes and maintains a network of salinity recording devices at a number of locations. Data collected from this monitoring network informs the Murray-Darling Basin Authority and Government of South Australia for barrage operations, conducting scientific analysis and formulating policy positions.

RIVER MURRAY WATER LEVELS

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

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

River Murray Water Levels as at 22 June 2011

Location	River Km	Normal Pool Level	Current Level (m AHD)
Lock 10	825.0	30.80	30.84
Lock 9 Kulnine	764.8	27.40	27.49
Lock 8 Wangumma	725.7	24.60	24.70
Lock 7 Rufus River	696.6	22.10	22.31
Lock 6 Murtho	619.8	19.25	19.33
Renmark	567.4	-	-
Lock 5	562.4	16.30	16.34
Lyrup	537.8	-	-
Berri	525.9	-	13.31
Lock 4	516.2	13.20	13.22
Loxton	489.9	-	10.76
Cobdogla	446.9	-	-
Lock 3	431.4	9.80	9.84
Overland Corner	425.9	-	-
Waikerie	383.6	-	-
Lock 2	362.1	6.10	6.14
Cadell	332.6	-	-
Morgan	321.7	-	-
Lock 1 Blanchetown	274.2	3.20	3.22
Swan Reach	245.0	0.75	1.01
Mannum PS	149.8	0.75	0.82
Murray Bridge	115.3	0.75	0.76

Note that water levels do not take into account local wind conditions.
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.