RIVER MURRAY FLOW ADVICE AND WATER RESOURCE UPDATE

Flow to South Australia

Issued 10:00, 14 October 2011

This supersedes the previous flow advice update issued by the Department for Water on 7 October 2011. A further flow advice will be provided on Friday 21 October 2011.

WATER RESOURCE UPDATE

The River Murray system inflow during September 2011 was approximately 890 gigalitres (GL). The long-term average inflow for the same period is 1,605 GL.

Inflow to the Upper River Murray and associated tributaries has started to decline. River Murray system inflow during October 2011 is expected to be at least 400 GL, which is below the average inflow for October. However this volume may increase if further rainfall is received during October.

The total flow to South Australia from 1 July 2011 to 12 October 2011 is around 3,070 GL.

Unregulated flow to South Australia is expected to continue until late October 2011. The possibility of further unregulated flow will depend on future rainfall events upstream and potential environmental watering events.

South Australia will receive Additional Dilution Flow of 3 GL/day until at least mid December 2011. Further extensions to the period of Additional Dilution Flow may occur if the storage volume triggers are maintained in Menindee Lakes, Hume and Dartmouth Reservoirs.

Storage Levels

Murray-Darling Basin Authority storage levels at 11 October 2011 and around the same time last year

Storage	Full Supply Volume GL	11/10/2011 GL	13/10/2010 GL	Long-term Average (end October) GL
Dartmouth	3,856	2,774 (74%)	1,764 (46%)	
Hume	3,003	2,952 (98%)	2,485 (83%)	
Lake Victoria	677	571 (84%)	651 (96%)	
Menindee Lakes (FSL)	1,731	1,912 (110%)	1,866 (108%)	
TOTAL	**9,267 (100%)**	**8,209 (89%)**	**6,766 (73%)**	**7,457 (80%)**

Although 100 percent allocation has been granted in South Australia in 2011-12 other jurisdictions are still making allocation announcements. The current allocation announcements, and the allocation announcements around the same time in 2010, are summarised below.

State Water Allocation Summary

State Entitlement Type	12/10/2011*	15/10/2010
South Australia High Security	100%	67%
NSW Murray High Security	97%	97%
NSW Murray General Security	21%	42%
Murrumbidgee High Security	95%	95%
Murrumbidgee General Security	63%	51%
Lower Darling High Security	100%	100%
Lower Darling General Security	100%	100%
VIC Murray High Reliability Water Share	71%	100%
VIC Goulburn High Reliability Water Share	100%	80%

*Carryover may be in addition to the current announced percentages in some systems

FLOW OUTLOOK

The flow to South Australia is currently around 16,000 megalitres per day (ML/day).

Refilling of Lake Victoria has commenced in accordance with the Lake Victoria operating rules. This will reduce the flow to South Australia over the next week to between 10,000 and 13,000 ML/day. Flow is then expected to rise to approximately 16,000 ML/day towards the latter part of October 2011. This outlook is subject to future rainfall events, losses, increased diversions and changed river operations upstream.

The flow over Lock 1 is currently around 14,600 ML/day and will progressively reduce over the coming weeks.

River Murray water users should note that water levels are returning to normal pool level and adjustments to pumping infrastructure may be required to maintain access to water. As the water level reduces, boat owners should be mindful of changed river conditions and may need to regularly check mooring ropes.

Over the coming months a multi-site environmental watering event may be implemented, which will require bulk water releases from upstream storages. The objective of this multi-site watering is to build upon the benefits from the high flow event and associated inundation during late 2010 and early 2011. During the watering event there will be unregulated flow to South Australia. Updates on the projected flow rates will be provided in future flow advices.

SALINITY OUTLOOK

As the flow to South Australia reduces and water levels return to the normal height, some locations along the River Murray will experience higher salinity. Salinity increases will be particularly noticeable in areas adjacent to the main channel.

During a high flow event that results in overbank flow, salt can be mobilised into the main channel of the River Murray from the floodplain, wetlands, creeks and groundwater as the flow recedes. During the drought salinity levels remained relatively low because water was being provided from the headwater storages and tributaries and the flow remained in channel.

The Additional Dilution Flow which is currently expected to continue until at least mid December 2011 will help mitigate some of the impact of localised salinity increases. To further reduce potential saline inflows, some drainage basins and other infrastructure are being closed.

The Department for Water is increasing salinity monitoring and will undertake detailed modelling of the salt loads.

Irrigators are reminded to regularly check the salinity level at their pump sites and to also access the Department for Water's River Murray Water Data website to obtain real-time salinity data from locations where monitoring sites are established. The data may be accessed via the following link:

http://data.rivermurray.sa.gov.au/Telemetry/Default.aspx?App=RMW.

BARRAGE OPERATIONS AND WATER LEVELS IN THE LOWER LAKES

The water level in Lake Alexandrina is currently around 0.77m AHD and the water level in Lake Albert is around 0.75m AHD. Barrage gates will be operated to maintain the water level in Lake Alexandrina around the current target water level of 0.8m AHD. This will continue to facilitate the freshening of Lake Albert.

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 vary considerably with wind speed and direction. This, when combined with the high water level or high tides, could result in seawater backflow events and/or some inundation of low-lying areas around the edges of Lake Alexandrina, Lake Albert or the Goolwa Channel. Barrage operations are being monitored by SA Water to minimise the impacts of any forecast backflow events.

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 assists the Murray-Darling Basin Authority and the Government of South Australia in determining 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 13 October 2011

Location	River Km	Normal Pool Level	Current Level (m AHD)
Lock 10	825.0	30.80	30.82
Lock 9 Kulnine	764.8	27.40	27.46
Lock 8 Wangumma	725.7	24.60	24.71
Lock 7 Rufus River	696.6	22.10	22.54
Lock 6 Murtho	619.8	19.25	19.28
Renmark	567.4	-	16.27
Lock 5	562.4	16.30	16.29
Lyrup	537.8	-	N/A*
Berri	525.9	-	13.27
Lock 4	516.2	13.20	13.21
Loxton	489.9	-	N/A*
Cobdogla	446.9	-	N/A*
Lock 3	431.4	9.80	9.86
Overland Corner	425.9	-	6.84
Waikerie	383.6	-	N/A*
Lock 2	362.1	6.10	6. 26
Cadell	332.6	-	N/A*
Morgan	321.7	-	3.50
Lock 1 Blanchetown	274.2	3.20	3.24
Swan Reach	245.0	0.75	0.92
Mannum PS	149.8	0.75	0.77
Murray Bridge	115.3	0.75	0.71

*N/A – reading not available.
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.