

RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

Report #20/2013

Issued 10:00 am 17 May 2013

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 10 May 2013. The next flow report will be provided on Friday, 24 May 2013.

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 April 2013, the total River Murray system inflow was approximately 130 GL, which is half the long-term April average of 260 GL. Inflow to Menindee Lakes during April 2013 was approximately 450 GL, which is nearly twice the long-term April average of 230 GL.

The total flow to South Australia during April 2013 was approximately 220 GL (including approximately 85 GL of environmental water), compared with 1 752 GL during April 2012. The flow to South Australia currently comprises the May Entitlement Flow and water provided through the Commonwealth Environmental Water Holder. The volume of environmental water being delivered during May 2013 is expected to be approximately 68 GL.

The major Murray-Darling Basin Authority (MDBA) controlled storages are holding around 70 per cent capacity. This will support the delivery of water into winter, particularly under ongoing dry conditions.

STORAGE VOLUMES

Murray-Darling Basin Authority storage volumes at 15 May 2013 and 15 May 2012

Storage	Full Supply Volume (GL)	15/05/2013 (GL)	15/05/2012 (GL)	Long-term average (end of May)
Dartmouth	3 856	3 573 (93%)	3 214 (83%)	
Hume	3 003	1 348 (45%)	2 629 (88%)	
Lake Victoria	677	320 (47%)	348 (51%)	
Menindee Lakes	1 731*	1 227 (71%)	2 007 (116%)	
TOTAL	9 267	6 468 (70%)	8 198 (88%)	5 728 (62%)

*Menindee Lakes can be surcharged to 2 015 GL

RAINFALL AND TEMPERATURE OUTLOOK

The latest Bureau of Meteorology weather outlook for May to July 2013 indicates that a wetter than normal season is more likely for southern Queensland and northern NSW. A drier than normal season is more likely for Victoria and south-eastern South Australia. Warmer temperatures are more likely over most of south-eastern Australia.



Government of South Australia
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WATER IS GOOD

WATER ALLOCATION OUTLOOK

Water access entitlement holders have a 100 per cent water allocation in 2012-13 and the Murray-Darling Basin Authority has confirmed that South Australia will receive its full Entitlement Flow of 1 850 GL in 2013-14.

SOUTH AUSTRALIA'S STORAGE RIGHT

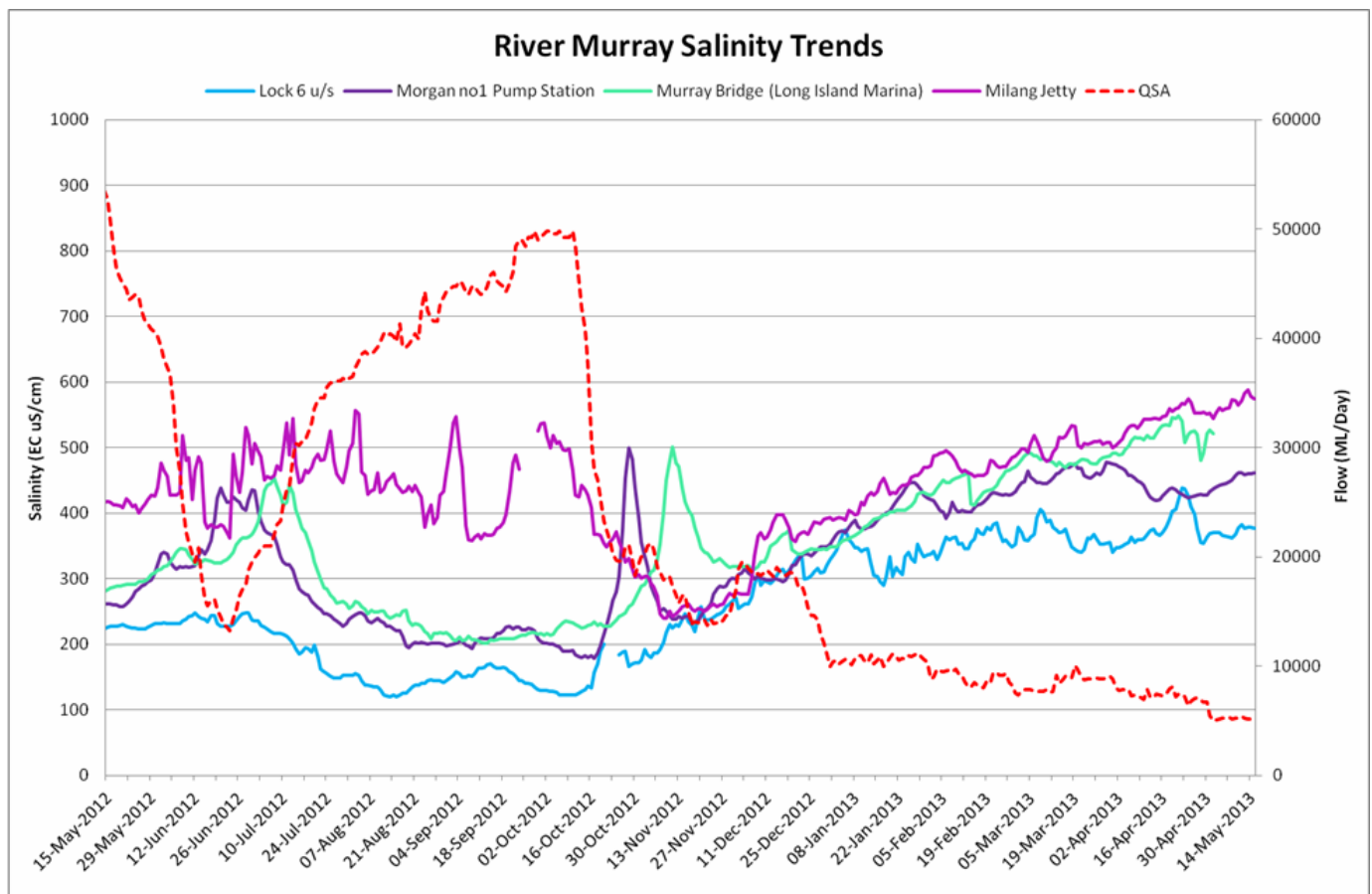
To date, South Australia has not deferred any Entitlement Flow for carryover into 2013-14. South Australian River Murray Water Access Entitlement Holders were informed in April 2013 (via letter) that no Entitlement Flow had been deferred for use in 2013-14.

WATER QUALITY

Under the Basin Plan a number of targets are identified, which all Basin States must have regard to in managing water flows. The targets for real-time salinity are identified as follows and salinity must not exceed these values for 95 per cent of the time:

- 580 EC at Lock 6
- 800 EC at Morgan
- 830 EC at Murray Bridge
- 1 000 EC at Milang

The following graph shows the salinity at these locations and the flow to South Australia (QSA) for the past twelve months. It also confirms that salinity has not exceeded the target at any of these four locations during this period.



Note: Data gaps are due to technical issues experienced at the site



FLOW OUTLOOK

The flow at the South Australian border is approximately 5 200 ML/day and is likely to remain around this rate during the coming week, depending on upstream operations and rainfall events. It comprises the May Entitlement Flow of 3 000 ML/day and environmental water provided to South Australia from the Goulburn and Broken Rivers and from the River Murray system storages.

Lake Victoria storage is at 70 per cent capacity.

As the River Murray is under regulated flow conditions, pool levels are near normal. All water users should be aware of the risk of submerged navigation hazards such as sandbars, particularly downstream of Locks 7 and 8.

The flow over Lock 1 is approximately 4 600 ML/day and is likely to remain around this rate during the coming week, depending on weather conditions, irrigation demand and environmental water delivery.

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 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. They 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 0.62 m AHD and approximately 0.67 m AHD in Lake Albert. During the coming week, barrage operations will target a water level between 0.60 m AHD and 0.65 m AHD in both Lakes. Any barrage releases will prioritise environmental water flows at Tauwitchere. All barrage fishways are in operation and are being supplemented with attractant flows in adjacent bays. SA Water will continue to operate the barrages to minimise any negative impacts from reverse flow events during high tide or swell conditions.

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

Morgan River Vessel Waste Disposal Station

On Monday 20 May 2013, the Morgan River Vessel Waste Disposal Station will be closed temporarily for improvements to the onshore plant, which will include replacement of the electrical control system, septic tank and concrete structure. This work will complement improvements made in 2012, which replaced the pontoon, gangway and offshore plant. The work is expected to be completed by the end of June 2013. During this period, vessels should divert to the Foxtale Marina to dispose of waste. Foxtale Marina is approximately 1.5 kilometres downstream of the Morgan River Vessel Waste Disposal Station.

Currency Creek

The Currency Creek Regulator is being removed by Maritime Constructions Pty Ltd. The dredge commenced operations on 24 April 2013. Removal of the regulator will take approximately 4 months to complete. Maritime Construction Pty Ltd will be operating 24 hours a day, 7 days a week until the work is completed.

Mildura Weir Pool Lowering (upstream of South Australia)

The Mildura Weir pool will be drawn down from Monday, 27 May 2013 so essential maintenance work can be undertaken on the weir's underwater concrete base. The work will take approximately eight to eleven weeks to complete. Boat access through the weir will not be possible during this period.



It is expected that the lower river level could lead to an increase in saline groundwater entering the river in this location. Any salinity spikes in downstream flows will be diverted through Lake Victoria to be diluted before flowing into South Australia.

Chowilla

Construction of the Chowilla Creek Environmental Regulator and associated structures is ongoing. For public safety reasons the Chowilla Creek remains closed to navigation at the construction site.

RIVER MURRAY WATER LEVELS

Below is a table of River Murray water levels at a number of locations from Lock 10 (near Wentworth) to Murray Bridge.

River Murray Water Levels as at 15 May 2013

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	30.80	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.46	30.03	29.44
Lock 8 Wangumma	725.7	24.60	24.73	27.60	27.19
Lock 7 Rufus River	696.6	22.10	22.23	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.25	21.03	20.50
Renmark	567.4	-	16.31	18.54	18.04
Lock 5	562.4	16.30	16.30	18.07	17.50
Lyrup	537.8	-	13.27	16.85	16.26
Berri	525.9	-	13.26	15.81	15.74
Lock 4	516.2	13.20	13.24	15.65	15.08
Loxton	489.9	-	10.03	15.05	14.12
Cobdogla	446.9	-	9.84	13.44	12.38
Lock 3	431.4	9.80	9.79	13.16	12.02
Overland Corner	425.9	-	6.29	12.73	11.58
Waikerie	383.6	-	6.28	11.26	10.24
Lock 2	362.1	6.10	6.12	10.28	9.30
Cadell	332.6	-	3.32	9.17	8.08
Morgan	321.7	-	3.32	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.23	6.81	5.38
Swan Reach	245.0	0.75	0.67	6.06	4.51
Mannum PS	149.8	0.75	0.70	3.15	1.90
Murray Bridge	115.3	0.75	0.64	2.06	1.26

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



FURTHER INFORMATION

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/RMIM/

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.waterconnect.sa.gov.au/RMWD/Pages/default.aspx

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

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/rivers-reservoirs-aquifers/river-murray/acid-drainage-water/

Information provided by the Commonwealth Environmental Water Office can be accessed at:

www.environment.gov.au/ewater/southern/murray/lower-murray.html

Information on The Living Murray can be accessed at:

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

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

<http://www.environment.sa.gov.au/Home>

