RIVER MURRAY FLOW REPORT

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This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 22 August 2014. The next flow report will be provided on Friday, 5 September 2014.

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.

FLOW OUTLOOK

The flow at the South Australian border is approximately 7.5 GL/day and will decrease to around 5 GL/day during the coming week, depending on upstream river and storage operations, extractions, and rainfall events. The flow comprises the normal August Entitlement Flow of 4 GL/day plus unregulated flow. The flow to South Australia is receding rapidly back towards Entitlement Flow. Water users are reminded to regularly check water levels and infrastructure, particularly in the areas immediately downstream of the locks.

The flow over Lock 1 is approximately 9 GL/day and will decrease to around 4 GL/day during the coming week, depending on weather conditions and extractions.

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.

MANAGEMENT OF SOUTH AUSTRALIA'S DEFERRED WATER

The Murray-Darling Basin Authority advised that on 1 August 2014, South Australia had 42.9 GL of water deferred and stored in Dartmouth (29.6 GL for critical human water needs and 13.3 GL for private carryover use in future dry years). The 6.6 GL that was deferred and stored in Lake Victoria for private carryover purposes has spilled due to Lake Victoria filling. Volumes stored are adjusted for net evaporation losses until delivered to South Australia. South Australia cannot defer any water while receiving unregulated flow and is therefore not proposing to defer any Entitlement Flow during August 2014.

DEWNR is investigating opportunities to defer additional Entitlement Flow during 2014-15.

WEIR POOL OPERATIONS

The water levels in the Lock 1 and 2 weir pools have been partially raised and are being maintained within their normal operating range (up to 0.3 m above full supply level) using unregulated flow. Consideration is being given to further raising these weir pools using environmental water to slightly above their normal operating range to mimic historic natural water level variability. It is anticipated that the weir pools may be raised up to 0.5 m above full supply level, or 0.2 m above the maximum normal operating range. The objective is to promote a range of benefits, specifically restoration of ecological function. Further advice in relation to this potential action will be provided in a separate media release and a set of frequently asked questions documents.

CHOWILLA OPERATIONS

Testing of the new environmental water management infrastructure on the Chowilla Floodplain is planned from early September until the end of November 2014. Testing will involve use of the Chowilla Creek Environmental Regulator and ancillary structures. It will include the progressive raising of Lock 6 weir pool levels by up to 40 cm over a period of about eight weeks from late September through to mid-November, reaching the target height of 19.65 m AHD for about two weeks during mid-October. Testing will allow engineering checks to

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ensure that the structures can be operated as designed and will also provide ecological benefits for the floodplain. More information can be found at: Website: www.environment.sa.gov.au/chowilla-floodplain

BARRAGE OPERATIONS AND WATER LEVELS IN THE LOWER LAKES

The water level in Lake Alexandrina is approximately 0.72 m AHD and approximately 0.74 m AHD in Lake Albert. The levels are being raised to a target of 0.75 m AHD after a short period of draw-down. The aim of the short-term water level cycling event (raising, lowering, raising) is to assist with improving water quality in Lake Albert.

SA Water will continue to operate the barrages to minimise any negative salinity impacts from reverse flow events. When conditions are conducive to opening the barrages, releases are being prioritised through Tauwitchere and Goolwa. All fishways are in operation.

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/Systems/RTWD/SitePages/Home.aspx

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

WATER QUALITY – Blue-Green Algae

The New South Wales Government (through Regional Algal Coordinating Committees) has a red alert warning for toxic blue-green algae at Balranald on the Murrumbidgee River, where water is unsuitable for recreational and stock watering purposes.

Although toxic blue-green algal blooms pose no threat to South Australia at this stage, the Murray-Darling Basin Authority and the relevant South Australian Government agencies are regularly monitoring the situation.

NAVIGATION ISSUES

Sandbars in the vicinity of the Murray Mouth may cause navigation hazards. Mariners are advised to navigate with caution when operating in the area. Sandbars are also present along sections of the River Murray, downstream of Lock 7 and 8 and in South Australia. All watercraft users should be aware of the risk of submerged navigation hazards, and should regularly check river depth.

CONSTRUCTION WORKS

Yatco Lagoon

Work is underway to relocate pump offtakes from Yatco Lagoon. The installation of new pump offtakes on the River Murray will commence in the coming months. The construction work is expected to be completed by early 2015.

Deep Creek (Pike Floodplain)

Work to replace the Deep Creek regulating structure, construct a vertical slot fishway and install a coffer dam to block-off Deep Creek from the River Murray is underway. Deep Creek flow will be maintained throughout the construction period via a temporary diversion pipe. Construction is expected to be completed by mid-December 2014. Traffic conditions on the Lock 5 Road will be changed during this period.

Lake Victoria Outlet Regulator

Remedial works on the Lake Victoria Outlet Regulator are underway and are expected to be completed in early September 2014. The works are necessary to improve the structural integrity of the regulator.

Camping is not permitted in the area immediately downstream of the regulator during the construction period. There are alternate camping sites nearby, along Rufus River.

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 on 27 August 2014

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	30.83	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.53	30.03	29.44
Lock 8 Wangumma	725.7	24.60	25.00	27.60	27.19
Lock 7 Rufus River	696.6	22.10	22.10	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.26	21.03	20.50
Renmark	567.4	-	-	18.54	18.04
Lock 5	562.4	16.30	16.32	18.07	17.50
Lyrup	537.8	-	13.28	16.85	16.26
Berri	525.9	-	13.18	15.81	15.74
Lock 4	516.2	13.20	13.18	15.65	15.08
Loxton	489.9	-	10.28	15.05	14.12
Cobdogla	446.9	-	-	13.44	12.38
Lock 3	431.4	9.80	9.81	13.16	12.02
Overland Corner	425.9	-	6.66	12.73	11.58
Waikerie	383.6	-	6.57	11.26	10.24
Lock 2	362.1	6.10	6.40	10.28	9.30
Cadell	332.6	-	-	9.17	8.08
Morgan	321.7	-	3.62	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.49	6.81	5.38
Swan Reach	245.0	0.75	0.87	6.06	4.51
Mannum PS	149.8	0.75	0.70	3.15	1.90
Murray Bridge	115.3	0.75	0.69	2.06	1.26

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

FURTHER INFORMATION

The WaterConnect website is South Australia's comprehensive water information portal and can be accessed at: http://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:
http://www.waterconnect.sa.gov.au/Systems/RTWD/SitePages/Home.aspx
www.sawater.com.au/SAWater/Environment/TheRiverMurray/River+Murray+Levels.htm
http://www.mdba.gov.au/river-data/live-river-data

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

Information on the management of acid drainage water in the Lower River Murray can be accessed online at:
http://www.epa.sa.gov.au/environmental_info/water_quality/acid_sulfate_soils_ass/lower_river_murray_reclaimed_irrigation_area_lmria

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 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:
http://www.mdba.gov.au/about-basin/environmental-sites

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

Department of Environment, Water and Natural Resources
http://www.environment.sa.gov.au/Home

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