



# RIVER MURRAY WEEKLY REPORT

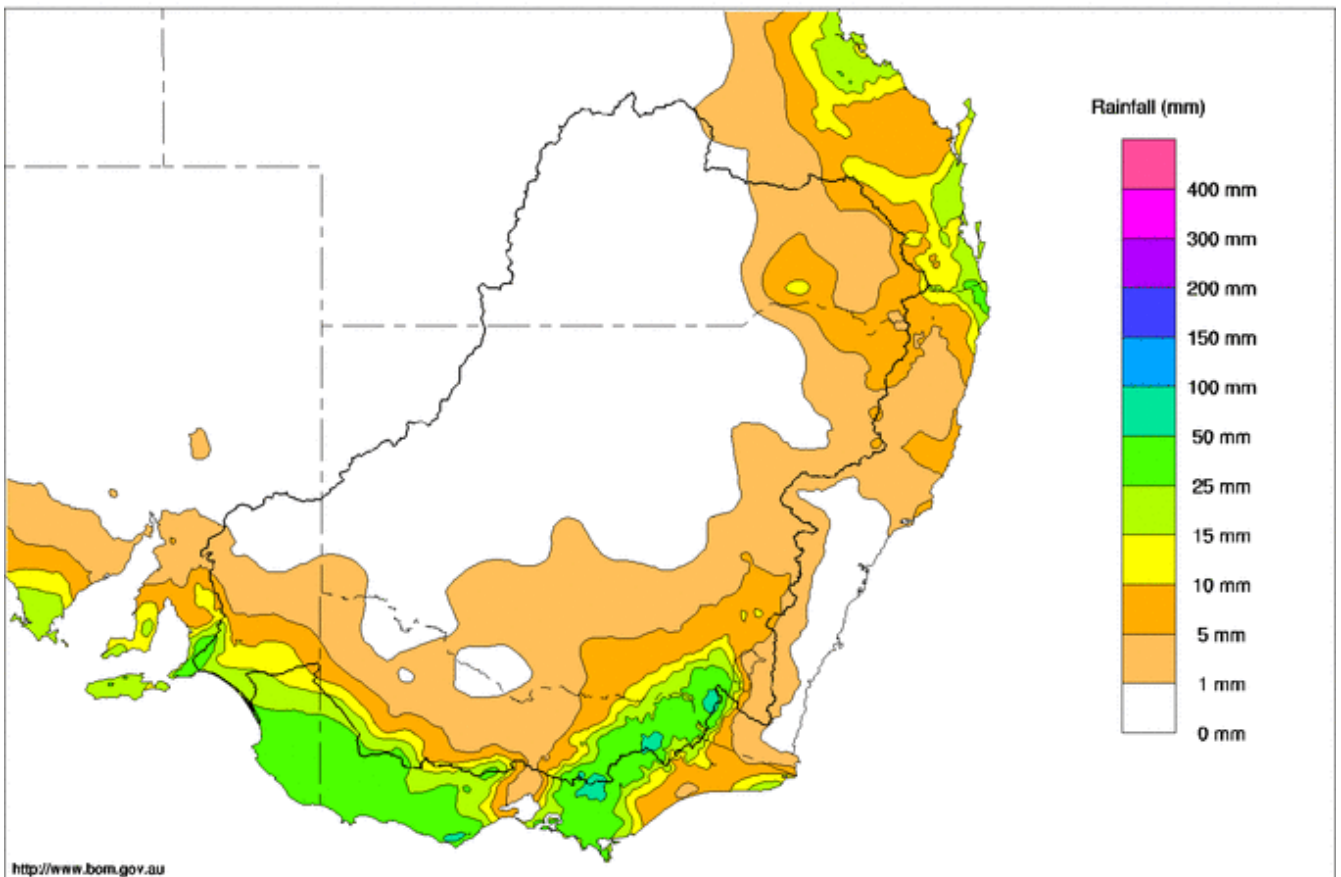
FOR THE WEEK ENDING WEDNESDAY, 11 JULY 2018

Trim Ref: D18/34036

## Rainfall and inflows

In the past week precipitation was mostly concentrated across the southern divide in Victoria and New South Wales and the Mount Lofty ranges in South Australia with lighter falls around the inland slopes and northern ranges (Map 1). In Victoria, the highest totals fell as snow in the north-east ranges and included 107 mm at Rocky Valley and 57 mm at Mount Buffalo; and in the Wimmera where 57 mm was recorded at Mount William. In New South Wales, the highest totals were recorded as snow across the Snowy Mountains, including 64 mm at Perisher Valley AWS and 40 mm at Thredbo — two stations just outside the Basin. In South Australia, highest totals included 40 mm at Macclesfield and 33 mm at Mount Barker in the Mount Lofty Ranges and 23 mm at Meningie on the Lower Lakes.

Murray-Darling Rainfall Totals (mm) Week Ending 11th July 2018  
Australian Bureau of Meteorology



<http://www.bom.gov.au>

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Map 1 - Murray-Darling Basin rainfall map week ending 11 July 2018 (Source: Bureau of Meteorology).

In response to this week's rain, the flow in the upper Mitta Mitta River at Hinnomunjie peaked around 2,500 ML/day. Biggara, on the upper Murray, reached around 1,200 ML/day. Downstream from Hume, inflows from the Kiewa River measured at Bandiana, increased to 1,700 ML/day and the flow in the Ovens River at Wangaratta peaked at 2,700 ML/day.



## River operations

- Releases from Hume increase
- Refilling of Lake Mulwala and Stevens Weir pool to commence in the coming week
- Higher flows in the Murray downstream of Torrumbarry as Goulburn pulse travels downstream

MDBA active storage increased by 44 GL this week to 4,967 GL (59% capacity). This is around 750 GL less than for the same time last year and the long-term average for this time of year (Figure 1).

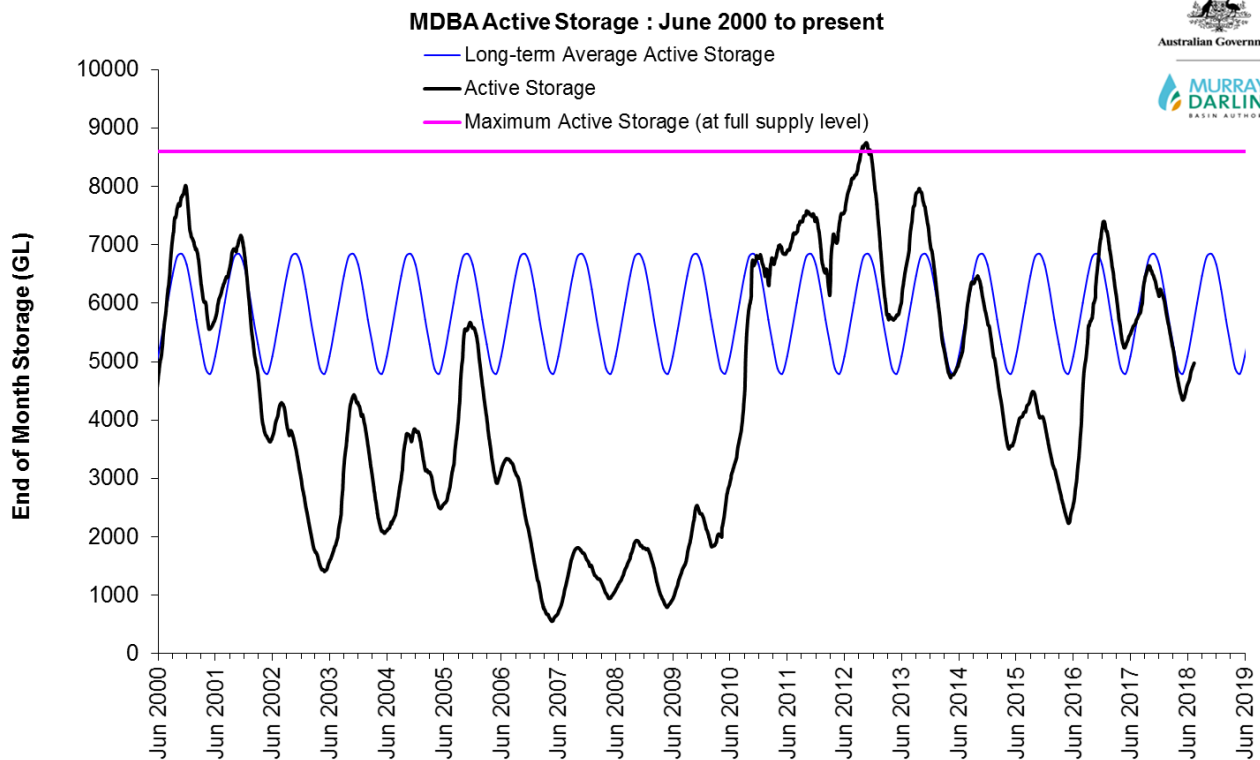


Figure 2 – MDBA active storage for the period 1 June 2000 to present

The storage volume at **Dartmouth Reservoir** increased by 6 GL to 3,433 GL (89% capacity). A flow pulse released from Dartmouth Dam to benefit water quality in the lower Mitta Mitta River reached around 2,400 ML/day over the weekend before returning to a minimum flow of 500 ML/day.

At **Hume Reservoir**, the storage volume increased by 40 GL to 1,364 GL (45% capacity). The release from Hume was at, or close to the minimum release of 600 ML/day for much of the week. Late in the week the release increased, reaching 2,100 ML/day, to meet environmental demands downstream of Yarrawonga Weir. The release is expected to increase further over the coming days.

Downstream at **Lake Mulwala**, the lake will commence refilling in the coming week and reach the normal operating level of around 124.7 m AHD in early August ready for the start of the irrigation season (see the attached media release for more information). Since early June the lake level has been held around 4.5 metres below the normal operating level to help manage the invasive water weed *Egeria densa*. The drawdown has also provided an opportunity to undertake works on the lake foreshore.

The release from **Yarrawonga Weir** averaged around 3,000 ML/day. Next week the release is expected to increase to around 6,500 ML/day as a pulse is delivered downstream on behalf of environmental water holders. Over the coming weeks environmental water may be used to target flows up to 9,500 ML/day downstream of Yarrawonga. Releases will be made to vary the flow and will be guided by what would have happened naturally if there were no dams upstream. Regulators into the Barmah-Millewa forest will be opened to allow water to enter the forest. This water will also provide environmental benefits all the way to the Murray Mouth in South Australia.



The **Edward River** and **Gulpa Creek** offtakes are currently passing 410 ML/day and 140 ML/day respectively with all gates raised clear of the water. Inflows to the Edward-Wakool system through the Edward and Gulpa offtakes can be expected to fluctuate over winter in response to flow changes in the River Murray downstream of Yarrawonga Weir.

Downstream on the Edward River, WaterNSW will [commence filling](#) of **Stevens Weir** pool in the coming week following the completion of maintenance works on the weir and at the offtake regulators. The flow downstream of Stevens Weir reduced to around 700 ML/day and will ease further as inflows reduce and the weir pool is filled.

Inflow to the Murray from the **Goulburn River** remained high this week as delivery of the winter pulse continued. Flow at McCoys Bridge eased to 7,200 ML/day and is expected to steadily recede back to around 1,000 ML/day by the end of July. This winter fresh aims to improve water quality and benefit aquatic animals and vegetation along the Goulburn River and further downstream along the Murray. This pulse has been planned by the Goulburn Broken Catchment Management Authority (CMA) in consultation with the Commonwealth Environmental Water Office and the Victorian Environmental Water Holder. For more information visit the [Goulburn Broken CMA website](#).

Flow at **Torrumbarry Weir** averaged around 9,700 ML/day. Adjustments to the weir pool level helped manage the flow around this rate to protect the lock refurbishment works currently underway on the downstream side of the weir. This included capturing water and temporarily raising the weir pool by 27 cm back towards the full supply level (FSL) as the peak passed. As the flow recedes, the pool level will gradually return to around 30 cm below FSL and continue to vary around this level. Later in July the pool will be raised back to FSL ahead of the start of the irrigation season. More information is available at the [MDBA website](#).

River users in the **Echuca** district and downstream should be aware that water levels will fall noticeably over the coming week. The fluctuations in river level are due to the Goulburn flow pulse moving through the system and the re-lowering of the Torrumbarry weir pool.

The diversion into National Channel was briefly increased to 1,800 ML/day over the weekend to help manage the flow downstream of Torrumbarry Weir as the peak of the Goulburn pulse moved through the system. The diversion has now reduced back to around 1,000 ML/day. This water is being delivered to the Gunbower Creek and Forest. More information on the Gunbower Forest watering can be found on the [North Central Catchment Management Authority \(NCCMA\) website](#).

At **Swan Hill**, the flow rose from 7,400 ML/day to the current flow of 9,800 ML/day as the Goulburn flow pulse continues to move downstream along the Murray.

Inflow from the **Murrumbidgee River**, measured at Balranald, is around the end of system target for July of 830 ML/day.

At **Euston**, the weir pool is being varied to target between 30 and 40 cm below FSL. Lowering Euston weir is part of the [weir pool variability program](#) which aims to help restore a more natural wetting and drying regime for river banks and wetlands. The downstream release is currently 10,700 ML/day and is expected to peak around 11,500 ML/day in the coming week.

The **Menindee Lakes** storage volume reduced 5 GL to 201 GL (12% capacity). WaterNSW continues to manage the Menindee Lakes in accordance with the [Lower Darling Annual Operations Plan](#). The [release from Weir 32](#) is targeting minimum flow rates of around 130 ML/day with the aim to maintain flow in the lower Darling at Burtundy. However late this week, as part of drought contingency measures, WaterNSW commenced installation of two temporary block banks across the lower Darling to assist in maintaining supply to domestic, stock and permanent plantings along the lower Darling. Once these are installed the release from Weir 32 will be reduced and flow at Burtundy is expected to reduce further. A [red alert](#) warning (high alert) for blue-green algae remains in place for the lower Darling at Ellerslie, directly downstream of Burtundy.

On the Murray at **Wentworth Weir**, the release increased to 8,000 ML/day and is expected to continue rising over the coming week.





**Photo 1: Kayaking on Spur Creek while water is being delivered to Gunbower forest (photo courtesy of Shannon O'Brien, Sydney Harbour Kayaks)**

The **Locks 7** and **9** weir pools continue to target a water level 10 cm below FSL and will vary between FSL and 10 cm below FSL over the coming weeks. The **Lock 8** weir pool is targeting 30 cm below FSL.

At **Lake Victoria**, the storage volume decreased by 2 GL to 364 GL (54% capacity). The inlet to the Lake is currently closed while SA Water test the installation of the bulkhead gates at the Control Regulator. The Control Regulator is designed to stop the lake from emptying if one of the Frenchman's Creek embankments were to burst. The testing is part of normal asset maintenance activities. The storage volume is expected to remain steady over the coming week.

The flow to **South Australia** increased to 6,500 ML/day and is expected to reach around 10,000 ML/day in the coming week. This flow is comprised of the normal South Australian entitlement flow, the Goulburn flow pulse and environmental releases from Hume.

Downstream at **Lock 3 (Overland Corner)**, the lock remains [temporarily closed for a major refurbishment](#) which commenced in mid-June. These works are expected to take up to 14 weeks to complete.

The 5-day average water level in the **Lower Lakes** is currently 0.65 m AHD with the level expected to continue rising in coming weeks. When conditions allow, small barrage releases have been prioritised through Tauwitchere and Goolwa barrages. Barrages releases averaged 430 ML/day and all fishways remain open.

**For media inquiries contact the Media Officer on 02 6279 0141**

ANDREW REYNOLDS  
Executive Director, River Management



**Water in Storage**

**Week ending Wednesday 11 Jul 2018**

MDBA Storages	Full Supply Level	Full Supply Volume (GL)	Current Storage Level	Current Storage		Dead Storage (GL)	Active Storage (GL)	Change in Total Storage for the Week (GL)
	(m AHD)		(m AHD)	(GL)	%			
Dartmouth Reservoir	486.00	3 856	479.32	3 433	89%	71	3 362	+6
Hume Reservoir	192.00	3 005	181.91	1 364	45%	23	1 341	+40
Lake Victoria	27.00	677	24.20	364	54%	100	264	-2
Menindee Lakes		1 731*		201	12%	(- -) #	0	-5
<b>Total</b>		<b>9 269</b>		<b>5 362</b>	<b>58%</b>	<b>--</b>	<b>4 967</b>	<b>+39</b>
Total Active MDBA Storage							59% ^	

**Major State Storages**

Burrinjuck Reservoir	1 026	415	40%	3	412	+0
Blowering Reservoir	1 631	1 126	69%	24	1 102	+11
Eildon Reservoir	3 334	1 796	54%	100	1 696	-12

\* Menindee surcharge capacity – 2050 GL

\*\* All Data is rounded to nearest GL \*\*

# NSW has sole access to water when the storage falls below 480 GL. MDBA regains access to water when the storage next reaches 640 GL.

^ % of total active MDBA storage

**Snowy Mountains Scheme**

Snowy diversions for week ending 10 Jul 2018

Storage	Active Storage (GL)	Weekly Change (GL)	Diversion (GL)	This Week	From 1 May 2018
Lake Eucumbene - Total	739	-9	Snowy-Murray	+16	321
Snowy-Murray Component	325	-11	Tooma-Tumut	+0	34
Target Storage	1 170		Net Diversion	16	287
			Murray 1 Release	+20	373

**Major Diversions from Murray and Lower Darling (GL) \***

New South Wales	This Week	From 1 July 2018	Victoria	This Week	From 1 July 2018
Murray Irrig. Ltd (Net)	0.0	0	Yarrowonga Main Channel (net)	0	0
Wakool Sys Allowance	-0.3	0	Torrumbarry System + Nyah (net)	8.4	11
Western Murray Irrigation	0.1	0	Sunraysia Pumped Districts	0.4	0
Licensed Pumps	0.6	1	Licensed pumps - GMW (Nyah+u/s)	1	0
Lower Darling	0.1	0	Licensed pumps - LMW	4.6	1
<b>TOTAL</b>	<b>0.5</b>	<b>1</b>	<b>TOTAL</b>	<b>14.4</b>	<b>12</b>

\* Figures are derived from actual and estimates where data is unavailable. Please note that not all data may have been available at the time of creating this report.

\*\* All data above is rounded to nearest 100 ML for weekly data and nearest GL for cumulative data\*\*

**Flow to South Australia (GL)**

\* Flow to SA will be greater than normal entitlement for this month due to environmental flows.

Entitlement this month	108.5 *
Flow this week	38.6
Flow so far this month	57.8
Flow last month	132.5

(5 500 ML/day)

**Salinity (EC) (microSiemens/cm at 25° C)**

	Current	Average over the last week	Average since 1 August 2017
Swan Hill	130	120	100
Euston	120	120	-
Red Cliffs	130	130	150
Merbein	110	120	150
Burtundy (Darling)	710	700	680
Lock 9	120	120	160
Lake Victoria	190	170	230
Berri	250	250	290
Waikerie	390	410	340
Morgan	440	440	350
Mannum	400	400	370
Murray Bridge	410	410	400
Milang (Lake Alex.)	530	770	720
Poltalloch (Lake Alex.)	690	660	650
Meningie (Lake Alb.)	1 620	1 590	1 590
Goolwa Barrages	11 060	10 120	3 020





**River Levels and Flows**

**Week ending Wednesday 11 Jul 2018**

River Murray	Minor Flood Stage (m)	Gauge	Height	Flow (ML/day)	Trend	Average Flow this Week (ML/day)	Average Flow last Week (ML/day)
		local (m)	(m AHD)				
Khancoban	-	-	-	6 580	F	3 650	5 670
Jingellic	4.0	2.10	208.62	7 820	R	5 000	6 430
Tallandoon ( Mitta Mitta River )	4.2	1.67	218.56	1 140	F	1 590	790
Heywoods	5.5	1.54	155.17	1 010	R	740	1 050
Doctors Point	5.5	1.81	150.28	2 790	R	1 740	1 780
Albury	4.3	0.94	148.38	-	-	-	-
Corowa	4.6	0.65	126.67	1 750	R	1 510	2 330
Yarrowonga Weir (d/s)	6.4	0.60	115.64	3 190	R	3 030	3 950
Tocumwal	6.4	1.12	104.96	3 170	S	3 380	4 130
Torrumbarry Weir (d/s)	7.3	3.02	81.57	9 340	R	9 710	7 720
Swan Hill	4.5	1.76	64.68	9 840	F	9 530	5 240
Wakool Junction	8.8	3.65	52.77	10 520	R	9 260	5 780
Euston Weir (d/s)	9.1	1.99	43.83	10 660	R	8 810	5 860
Mildura Weir (d/s)	-	-	-	8 580	F	6 950	5 900
Wentworth Weir (d/s)	7.3	3.01	27.77	8 010	R	6 410	5 500
Rufus Junction	-	3.48	20.41	6 400	R	5 060	4 470
Blanchetown (Lock 1 d/s)	-	0.66	-	4 970	R	4 270	4 420
<b>Tributaries</b>							
Kiewa at Bandiana	2.8	1.81	155.04	1 680	R	1 170	920
Ovens at Wangaratta	11.9	8.83	146.51	2 680	S	1 800	1 100
Goulburn at McCoys Bridge	9.0	4.49	95.91	7 240	F	7 750	7 560
Edward at Stevens Weir (d/s)	5.5	1.04	80.81	690	F	800	1 010
Edward at Liewah	-	1.89	57.27	1 170	S	1 180	1 170
Wakool at Stoney Crossing	-	1.28	54.77	220	F	230	250
Murrumbidgee at Balranald	5.0	1.33	57.29	850	F	930	600
Barwon at Mungindi	6.1	3.10	-	0	F	0	0
Darling at Bourke	9.0	4.03	-	130	S	200	310
Darling at Burtundy Rocks	-	0.68	-	60	S	60	50

Natural Inflow to Hume	5 500	4 930
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(i.e. Pre Dartmouth & Snowy Mountains scheme)

**Weirs and Locks** Pool levels above or below Full Supply Level (FSL)

Murray	FSL (m AHD)	u/s	d/s		FSL (m AHD)	u/s	d/s
Yarrowonga	124.90	-4.89	-	No. 7 Rufus River	22.10	+0.05	+1.16
No. 26 Torrumbarry	86.05	-0.17	-	No. 6 Murtho	19.25	+0.05	+0.17
No. 15 Euston	47.60	-0.32	-	No. 5 Renmark	16.30	+0.12	+0.18
No. 11 Mildura	34.40	+0.02	+0.20	No. 4 Bookpurnong	13.20	+0.04	+0.66
No. 10 Wentworth	30.80	+0.00	+0.37	No. 3 Overland Corner	9.80	+0.00	+0.25
No. 9 Kulnine	27.40	+0.05	-0.07	No. 2 Waikerie	6.10	+0.04	+0.17
No. 8 Wangumma	24.60	-0.19	+0.27	No. 1 Blanchetown	3.20	+0.01	-0.09

**Lower Lakes FSL = 0.75 m AHD**

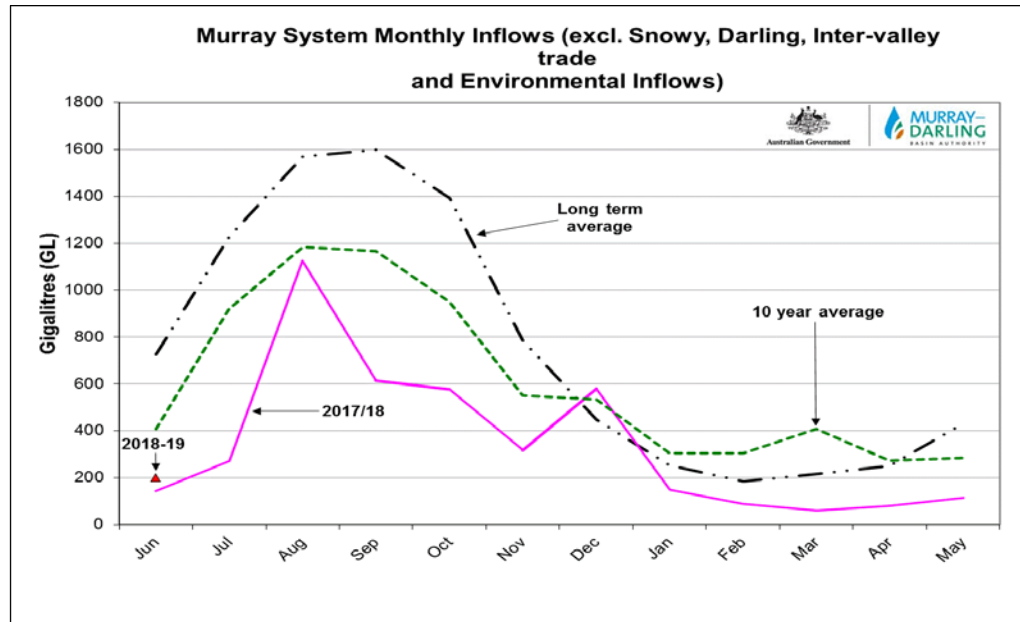
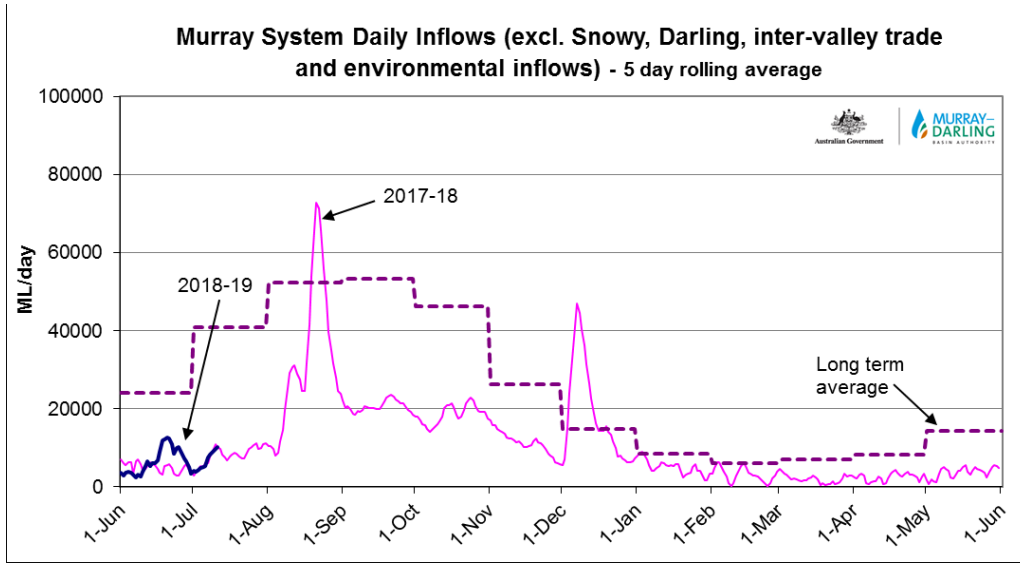
Lake Alexandrina average level for the past 5 days (m AHD)	0.65
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**Barrages**

**Fishways at Barrages**

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot 1	Vertical Slot 2	Dual Vertical Slots
Goolwa	128 openings	0.62	All closed	-	Open	Open	-
Mundoo	26 openings	0.66	All closed	-	-	-	Open
Hunters Creek	-	-	-	-	Open	-	-
Boundary Creek	6 openings	-	1	-	Open	-	-
Ewe Island	111 gates	-	All closed	-	-	-	Open
Tauwicheere	322 gates	0.67	2	Open	Open	Open	-

AHD = Level relative to Australian Height Datum, i.e. height above sea level



State Allocations (as at 11 Jul 2018)

NSW - Murray Valley

High security	97%
General security	0%

Victorian - Murray Valley

High reliability	41%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	3%

Victorian - Goulburn Valley

High reliability	32%
Low reliability	0%

NSW - Lower Darling

High security	100%
General security	0%

South Australia - Murray Valley

High security	100%
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NSW : <http://www.water.nsw.gov.au/water-management/water-availability>  
 VIC : <http://nvrn.net.au/seasonal-determinations/current>  
 SA : <http://www.environment.sa.gov.au/managing-natural-resources/river-murray>



Australian Government



# JOINT MEDIA RELEASE

13 July 2018

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## Lake Mulwala level on the rise after effective weed control

Lake Mulwala is on the rise over the next four weeks following the lowering of the lake over winter for successful weed control and completion of works around the lake foreshore.

Murray–Darling Basin Authority (MDBA) head of River Management, Andrew Reynolds, said locals and visitors to Lake Mulwala and Yarrawonga Weir might notice changes to water levels until early August.

“We are starting to re-fill Lake Mulwala to its normal operating level, which should happen by early August, in time for the new irrigation season,” Mr Reynolds said.

“The drawdown was managed in a way that posed minimal risk of impacting on available water resources in the coming season.

“Stream flows from the Kiewa and Ovens rivers are being used to help re-fill the lake, along with water releases from Hume Dam. The actual completion of re-filling the lake is dependent on the amount of rain that falls in the catchments.

“It’s been great to see the community interest generated by the lowering of the lake. We originally planned to lower it by 3.5 metres and then revised it down by another metre to ensure effective weed control.

“Lake Mulwala is important to the local community and we are very aware that any significant change in the lake level can have social and economic effects. However, this winter’s lowering has been a drawcard for Mulwala.

“Locals and visitors have flocked to see what the lake looks like without water in it. We even had people asking not to re-fill the lake until after school holidays so that they could have time to visit with their families.”

GMW Managing Director, Pat Lennon, said that the lake’s winter drawdown was important because it allowed for effective control of the highly invasive aquatic weed *Egeria densa*.

“By lowering the lake we can target the aquatic weed which the community told us was impacting on the lakes’ usage, making it harder to swim, fish, launch boats and water ski,” Mr Lennon said.

“Throughout the drawdown we’ve seen the weed dry out and die off, which has been helped by the dry conditions of late. We also had half a dozen or so good frosts, which helps kill off the *Egeria*.

“As with previous winter drawdowns, this year appears to have been highly effective in controlling the waterweed, although we won’t know the full extent until the next survey is undertaken in autumn.



“Along with reducing the weed’s impact on recreational activities we used the opportunity to upgrade the retaining wall along the Yarrawonga foreshore and made some improvements to boat ramps.”

Mr Lennon said he appreciated the community support for the weed removal process.

“We recognise the impact on recreation however management of weed infestation is important for lake health as well as managing infestations into GMW’s channel systems.”

Last year GMW and the MDBA released the *Waterweed Wipeout* app. The tool is designed to help the community better understand the management techniques used to control the invasive weed. *Waterweed Wipeout* is free and available from the App Store and Google Play for Apple and Android phones and tablet devices.

In accordance with the longstanding Murray–Darling Basin Agreement, River Murray operations assets are owned by a ‘Joint Venture’ comprising of the states of New South Wales, Victoria and South Australia and the Australian Government. The MDBA is tasked to operate the River Murray system on behalf of the Joint Venture.

GMW is the state constructing authority responsible for managing and maintaining Lake Mulwala under the direction of the MDBA.

ENDS

For more information, contact the MDBA Media office at [media@mdba.gov.au](mailto:media@mdba.gov.au) or 02 6279 0141 or Richard Bryce at GMW on (03) 5826 3470.

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