



# River Murray Weekly Report

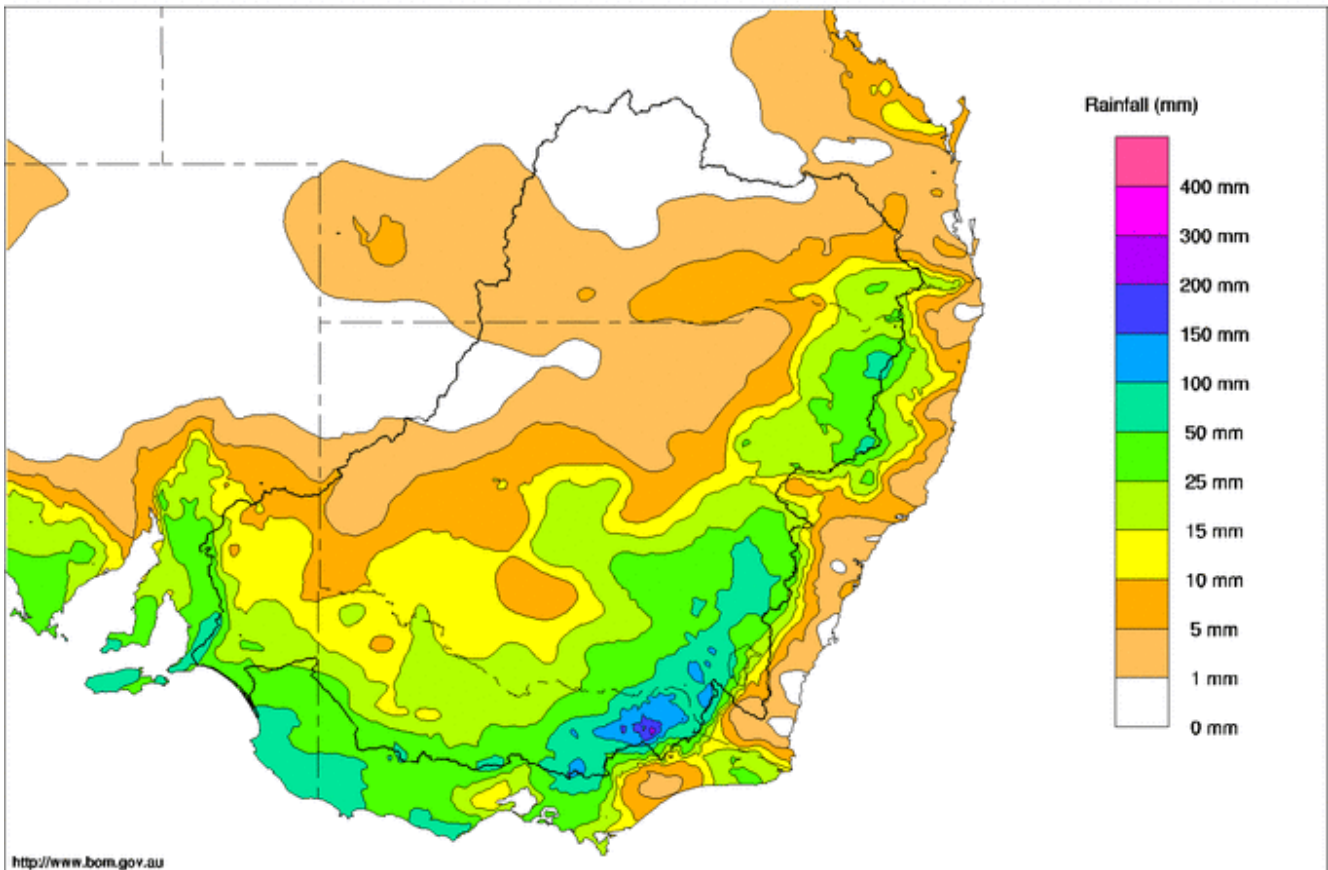
For the week ending Wednesday, 21 July 2021

Trim Ref: D21/29404

## Rainfall and inflows for the week

Rainfall was widespread across the Murray Darling Basin this week, with the heaviest totals recorded across the upper Murray catchments (Map 1). In north east Victoria, Hunters Hill recorded 139 mm, while upstream of Dartmouth Dam, Gibbo Park recorded 106 mm. In the Ovens catchment, Mt Buffalo recorded 157 mm and Harris Lane recorded 162 mm. In New South Wales, Burrinjuck Dam on the Murrumbidgee river recorded 71 mm while Khancoban on the southwest slopes recorded 87 mm.

Murray-Darling Rainfall Totals (mm) Week Ending 21st July 2021  
Australian Bureau of Meteorology



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

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Map 1 – Murray-Darling Basin rainfall for the week ending 21 July 2021. Source: Bureau of Meteorology.

Following this week’s rainfall, good streamflow responses were observed in the Murray tributaries. On the Ovens River, Rocky Point gauge reached a peak around 22,000 ML/day, while further downstream the flow at the Peechelba gauge peaked around 26,000 ML/day. Specific information about flows at key locations can be found at the MDBA’s [River Murray data](#) webpage. Up-to-date river data for sites in the upper Murray can also be found on BoM’s [website](#) and in the Murray River Basin Daily River Report at the WaterNSW [website](#).

# River Murray Weekly Report

## River operations

- Inflows from Ovens and Kiewa rivers increase Yarrawonga weir releases above channel capacity
- Barmah-Millewa forest regulators opened to manage river levels
- Unregulated flows announced on the River Murray downstream of Hume Reservoir
- Elevated inflows from the Murrumbidgee River at Balranald continue
- Further rainfall forecast for the southern Basin over the coming week

## River Levels

River users can monitor River Murray levels and flow forecasts at key locations on the MDBA's [River Murray data](#) webpage to assist in planning any river activities. Up-to-date river data for sites can also be found on BoM's [website](#), at the WaterNSW real-time data [website](#), Victoria's DELWP water monitoring [website](#) and South Australia's WaterConnect [website](#).

## Water quality impacts

The Murray and Lower Darling Regional Algal Coordinating Committee has amber alerts in place for **blue-green algae** at several sites on the River Murray and Kolety/Edward-Wakool River systems. The locations of these sites are available on the [WaterNSW](#) website. It is important that water users regularly keep up to date with algal alerts, notices, and health warnings. This information is available through [Goulburn-Murray Water](#) and [WaterNSW](#).

## River operations

Total **active storage** increased by 311 GL over the last week to 5,659 GL (66% capacity).

At **Dartmouth Reservoir**, the [storage](#) increased by 45 GL last week to 2,620 GL (68% capacity). The release, measured at Colemans gauge, reduced this week to the minimum of 200 ML/day. The release is forecast to increase to around 2,200 ML/day over coming days for hydro-electric power generation. In response to the good rainfall, Tallandoon on the Mitta Mitta river reached a peak around 4,000 ML/day.

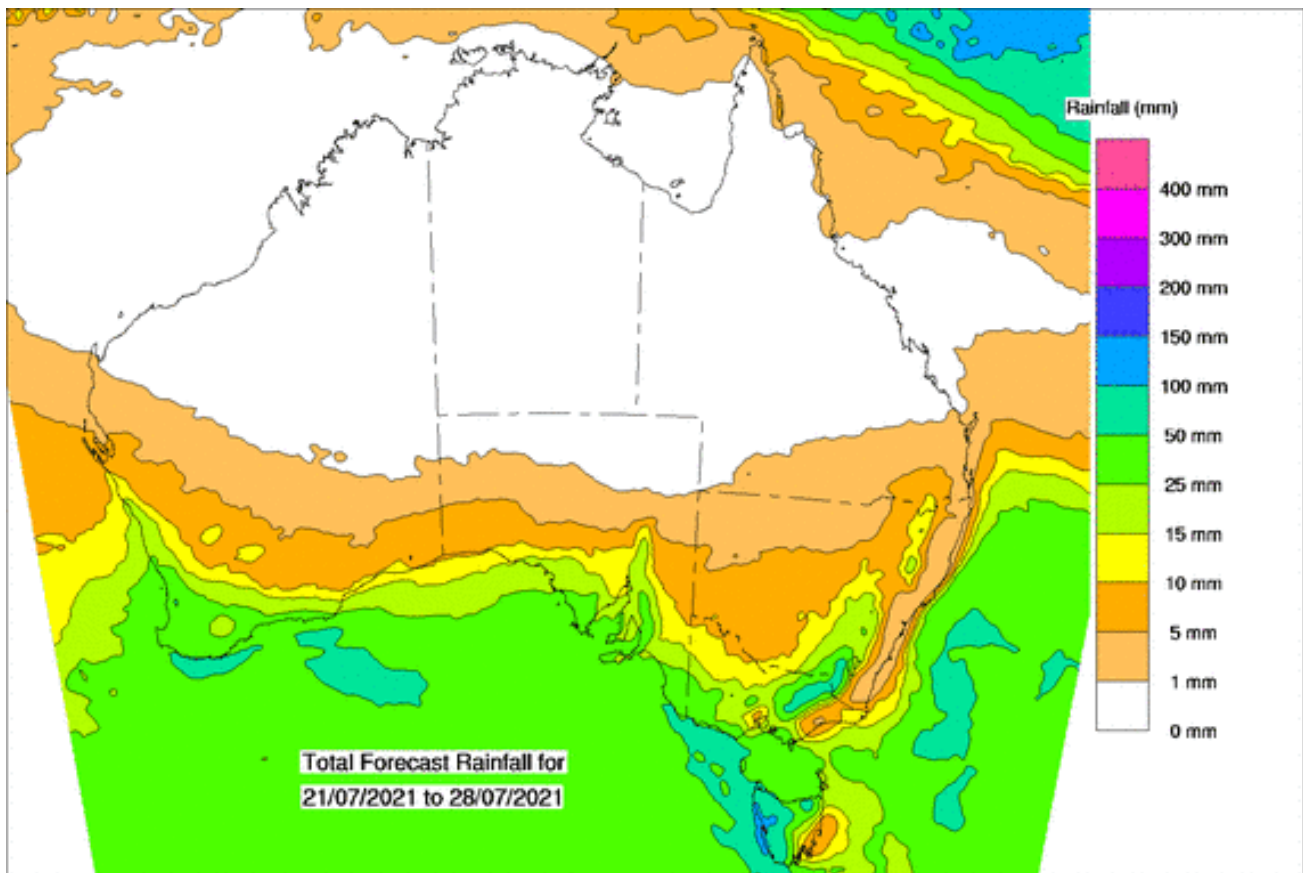
Over the past week the **Hume Reservoir** [storage](#) increased by 178 GL to 2,099 GL (70% capacity). The release has remained at the minimum of 600 ML/day and will continue at this rate over the coming week as continuing elevated inflows from the Kiewa and Ovens Rivers meet and exceed the required flow in the Murray downstream.



Photo 1 – King River flow in response to recent rainfall (Photo courtesy Claire Rossi)

# River Murray Weekly Report

The **Lake Mulwala** level is currently near 124.70 m AHD, within the normal operating range (124.6 to 124.9 m AHD). There have been small diversions of around 100 ML/day during the week to the Yarrawonga Main Channel as Goulburn-Murray Water continue to undertake maintenance works for weed management, while at Mulwala Canal diversions are around 2,000 ML/day as Murray Irrigation Limited access supplementary flows. In association with local rainfall and inflows from the Ovens and Kiewa Rivers, the release downstream of Yarrawonga has increased over the week and is currently around 27,000 ML/day. Over the coming week, the downstream release will vary in response to rainfall. Over the next 8-days, the BoM is [forecasting](#) another 50-100 mm over the upper Murray catchments (Map 2). Please remain aware of changing river levels and any warnings issued by the BoM.



Map 2 – Total forecast rainfall from 21 July to 28 July 2021. Source: Bureau of Meteorology.

With Yarrawonga releases exceeding 9,000 ML/day (approximate downstream channel capacity), forest regulators in the **Barmah and Millewa forests** were opened to manage river levels. Regulators will remain open over the coming week to accommodate the higher flows.

At **Kolety** (pronounced Kol-etch)/**Edward River** and **Gulpa Offtakes** flows are currently targeting around 1,600 ML/day and 250 ML/day, respectively. Downstream on the Kolety/Edward River at **Stevens Weir**, the pool level has risen in response to increasing flows upstream. Whilst the pool remains lower, flows along the Kolety/Edward River will vary as flows from the Murray, including return flows through the Millewa Forest, arrive at Stevens Weir. Any flows into the Wakool River, Yallakool Creek and Colligen Creek will also depend on changes in the river level as inflows vary upstream. Flows downstream of Stevens Weir have averaged around 2,550 ML/day and are expected to ease over the coming week as the weir pool continues rising.

On the **Goulburn River**, the flow measured at [McCoys Bridge](#) is currently around 6,400 ML/day as Goulburn-Murray Water deliver water for the environment as part of a high winter pulse. Over the coming week, flows at McCoys are forecast to reach a peak around 9,500 ML/day before gradually receding. For more information see the [Goulburn-Murray Water website](#). Information regarding opportunities for allocation trade between the Goulburn and Murray Valleys is available at the Victorian water register [website](#).



# River Murray Weekly Report

[Diversions](#) to **National Channel** have reduced this week to around 360 ML/day. Diversions are being used to maintain base flows in the Pyramid Creek system and at Kerang Weir on behalf of environmental water holders. The release from **Torrumbarry Weir** averaged around 6,900 ML/day and is forecast to increase over the coming week as elevated flows from the Goulburn river and Yarrawonga weir arrive.

The Torrumbarry Weir pool has been lowered to 85.75 m AHD, around 30 cm below the full supply level (FSL). The pool will continue to be varied between 30 cm below FSL and FSL over the coming week as part of the weir pool variability program. In the weeks ahead, the pool level is expected to return to around FSL. Varying pool levels helps restore a more natural wetting and drying cycle to riverbanks and adjacent wetlands within the influence of the weir pool. The lowering of the pool also assisted Goulburn-Murray Water with maintenance works at the weir in mid-June.

As conditions change with river levels or weir pools, river users and landholders should remain aware of the changing water level in case adjustments need to be made to pumps, moorings and recreational activities.

In the upper Murrumbidgee, WaterNSW has advised that both Blowering and Burrinjuck Dams are effectively full. Releases from both storages are being managed to maintain airspace for flood mitigation and environmental purposes. WaterNSW has announced access to [supplementary water](#) for the Murrumbidgee River.

Inflow from the **Murrumbidgee River** measured at [Balranald](#) has remained steady averaging around 7,100 ML/day this week. Over the coming week, flows are expected to reduce slightly. The [Murrumbidgee IVT](#) balance is open for trade from the Murray to the Murrumbidgee (92.3 GL) but remains closed to trade from the Murrumbidgee to the Murray.

At **Euston Weir**, the [weir pool level](#) had been targeting around 20 to 30 cm below the FSL as part of normal weir pool variability. Over the last week, the pool has gradually been rising and will continue to rise with increasing flows from upstream. It is expected to return to FSL in the coming weeks. The [downstream release](#) has averaged around 15,100 ML/day and is currently near 15,600 ML/day. Flows are forecast to increase over the coming weeks as inflows from the Goulburn winter pulse and increased releases downstream of Yarrawonga weir arrive.

At **Mildura Weir**, maintenance works scheduled for July has now been cancelled after an employee was confirmed as a close contact of a confirmed coronavirus (COVID-19) case. Works have subsequently shut down and the site is being restored and made safe. The weir is back in and as a result the river level is rising. The pool will return to FSL by next week. The works will be re-scheduled for winter 2022 or before then if there is a flood or high river flows. More information is available from the [MDBA website](#). Flows downstream are currently around 15,000 ML/day and are forecast to reduce over the coming week.



Photo 2 – Mildura weir pool lowering (Photo courtesy Owen Russell)

# River Murray Weekly Report

At **Menindee Lakes**, total volume in storage increased to 1,141 GL (66% capacity) this week.

Inflows to Menindee Lakes continued to increase this week with the flow upstream at Wilcannia currently around 5,750 ML/day and rising. Recent rainfall across several NSW tributaries of the Darling River has resulted in flow responses and additional inflow into the system, that is expected to further boost inflows into the Menindee Lakes over the coming weeks. Minor flood warnings have been issued by the BoM for several tributaries with a warning for minor flooding for the Barwon River at Mungindi. Please refer to the [BoM website for full details on flood warnings](#).

Environmental water holders are using entitlements to maintain higher Menindee Lakes releases with a target flow at Weir 32 of 500 ML/day – slightly above the normal required minimum. This action will benefit native fish in the Barka/lower Darling River during July.

Over the coming months, the MDBA will continue to revise forecasts and operational plans to determine the volume and timing of water released from Menindee Lakes to support the Murray system. This process will be on-going and will take account of the operating rules of the Murray-Darling Basin Agreement, the '[Objectives and Outcomes for River Operations in the River Murray System](#)' as well as the more specific opportunities and risks driven by system conditions, water security, delivery efficiency, and environmental and community considerations. Further updates will be provided in the Annual Operating Outlook (published by the MDBA in August) and future weekly reports as updated plans and release decisions are made. More information on the management of Menindee lakes is also available in a [webinar](#) hosted by the MDBA in May 2021.

At **Wentworth Weir**, the weir pool level continues to be managed around FSL. The downstream flow averaged near 15,700 ML/day, a result of elevated flows from the Murrumbidgee. Into next week, flows are likely to ease back with exact flows dependent on the Mildura weir pool refilling. Just upstream of Wentworth Weir at Curlwaa, the Abbotsford Bridge will be closed in mid-July for up to 10 weeks. This is to allow essential maintenance work to upgrade its mechanical lift span. More information can be found [here](#).

At **Lock 9** the weir pool has been raised to a level around 20 cm above FSL to help maximise diversions into Lake Victoria as higher flows arrive from upstream. The **Lock 8** weir pool has continued to be raised targeting near FSL. **Lock 7** is targeting around 55 cm above FSL to increase flow into the Lindsay River to facilitate pumping for water for the environment into Lake Wallawalla.

The [storage](#) at **Tar-ru/ Lake Victoria** increased by 50 GL to 473 GL (70% capacity) and will continue to rise during July. Over the last week, inflows from the Murray tributaries have continued to boost inflows upstream of Lake Victoria. This meant that the flow into Lake Victoria reached the maximum capacity of the inlet regulator on July 15. As a result, the required flow to South Australia has been exceeded. In response, [unregulated flow](#) is now available on the River Murray downstream of Hume Reservoir and on the Edward System. Any extensions to the announcement will be subject to on-going rain and elevated inflows. General information on River Murray unregulated flows can be accessed on the MDBA [webpage](#) and updates will be provided in coming Weekly Reports. Information on access to supplementary water licences in NSW is available from [WaterNSW Water insights](#).

The [flow](#) to **South Australia** is currently around 7,000 ML/day and forecast to reduce over the coming week before increasing again over coming weeks.

The **Lower Lakes** 5-day average water level is 0.75 m AHD. Barrage releases will continue to be made, when conditions allow, to push fresh water into the Coorong to support a productive environment for fish and birds. For information on barrage releases and South Australia's Entitlement flow, see the South Australian Department for Environment and Water Weekly [River Murray Flow Report](#).



# River Murray Weekly Report

For media inquiries contact the Media Officer on 02 6279 0141

ANDREW REYNOLDS  
Executive Director, River Management



**Australian Government**



# River Murray Weekly Report

## Water in Storage

Week ending Wednesday 21 Jul 2021

MDBA Storages	Full Supply Level (m AHD)	Full Supply Volume (GL)	Current Storage Level (m AHD)	Current Storage		Dead Storage (GL)	Active Storage (GL)	Change in Total Storage for the Week (GL)
				(GL)	%			
Dartmouth Reservoir	486.00	3 856	464.90	2 620	68%	71	2 549	+45
Hume Reservoir	192.00	3 005	187.02	2 099	70%	23	2 076	+178
Lake Victoria	27.00	677	25.23	473	70%	100	373	+50
Menindee Lakes		1 731*		1 141	66%	(480 #)	661	+37
<b>Total</b>		<b>9 269</b>		<b>6 333</b>	<b>68%</b>	<b>--</b>	<b>5 659</b>	<b>+311</b>
Total Active MDBA Storage							66% ^	

### Major State Storages

Burrinjuck Reservoir	1 026	1 015	99%	3	1 012	+37
Blowering Reservoir	1 631	1 583	97%	24	1 559	+17
Eildon Reservoir	3 334	2 073	62%	100	1 973	+88

\* 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 20 Jul 2021

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2021
Lake Eucumbene - Total	671	+27	Snowy-Murray	+17	309
Snowy-Murray Component	378	-7	Tooma-Tumut	+9	61
Target Storage	1 170		Net Diversion	8	247
			Murray 1 Release	+23	380

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

New South Wales	This Week	From 1 July 2021	Victoria	This Week	From 1 July 2021
Murray Irrig. Ltd (Net)	1.2	1	Yarrowonga Main Channel (net)	0.6	1
Wakool Sys Allowance	0.0	1	Torrumbarry System + Nyah (net)	0	0
Western Murray Irrigation	0.0	0	Sunraysia Pumped Districts	0	1
Licensed Pumps	0.8	3	Licensed pumps - GMW (Nyah+u/s)	0	0
Lower Darling	0.0	0	Licensed pumps - LMW	0.3	2
<b>TOTAL</b>	<b>2.0</b>	<b>5</b>	<b>TOTAL</b>	<b>0.9</b>	<b>4</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	52.3	(7 500 ML/day)
Flow so far this month	112.7	
Flow last month	116.3	

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

	Current	Average over the last week	Average since 1 August 2020
Swan Hill	80	90	90
Euston	-	-	-
Red Cliffs	120	130	120
Merbein	-	110	130
Burtundy (Darling)	300	310	400
Lock 9	130	120	130
Lake Victoria	130	130	120
Berri	200	210	170
Waikerie	260	280	220
Morgan	290	280	230
Mannum	300	300	240
Murray Bridge	360	330	260
Milang (Lake Alex.)	760	770	750
Poltalloch (Lake Alex.)	540	520	930
Meningie (Lake Alb.)	1 500	1 470	1 640
Goolwa Barrages	7 410	10 140	1 890

**River Levels and Flows****Week ending Wednesday 21 Jul 2021**

	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)				
<b>River Murray</b>							
Khancoban	-	-	-	8 530	R	5 390	6 050
Jingellic	4.0	3.19	209.71	19 440	S	16 910	10 580
Tallandoon ( Mitta Mitta River )	4.2	2.07	218.96	2 600	R	2 460	2 140
Heywoods	5.5	1.45	155.08	600	S	600	600
Doctors Point	5.5	2.25	150.72	5 950	F	5 030	3 100
Albury	4.3	1.31	148.75	-	-	-	-
Corowa	4.6	1.80	127.82	7 180	F	5 290	3 540
Yarrowonga Weir (d/s)	6.4	2.87	117.91	20 770	R	12 770	8 960
Tocumwal	6.4	2.88	106.72	15 170	R	10 450	8 990
Torrumbarry Weir (d/s)	7.3	2.61	81.16	7 760	R	6 930	6 730
Swan Hill	4.5	1.36	64.28	7 040	F	7 070	7 140
Wakool Junction	8.8	3.52	52.64	10 510	R	10 070	8 780
Euston Weir (d/s)	9.1	2.59	44.43	15 630	R	15 130	12 760
Mildura Weir (d/s)	-	-	-	14 900	F	16 150	12 150
Wentworth Weir (d/s)	7.3	3.51	28.27	15 230	F	15 690	11 630
Rufus Junction	-	3.46	20.39	6 510	R	7 010	3 200
Blanchetown (Lock 1 d/s)	-	0.94	-	6 660	R	6 040	3 000
<b>Tributaries</b>							
Kiewa at Bandiana	2.8	2.98	156.21	7 190	R	5 460	2 470
Ovens at Wangaratta	11.9	12.00	149.68	21 200	F	15 910	5 080
Goulburn at McCoys Bridge	9.0	4.21	95.63	6 430	R	2 600	1 320
Edward at Stevens Weir (d/s)	5.5	2.29	82.07	2 450	F	2 550	2 530
Edward at Liewah	-	2.91	58.29	2 400	R	2 090	1 160
Wakool at Stoney Crossing	-	1.20	54.69	130	R	130	140
Murrumbidgee at Balranald	5.0	5.07	61.03	6 950	F	7 070	6 510
Barwon at Mungindi	6.1	6.14	-	7 880	R	6 700	3 630
Darling at Bourke	9.0	5.25	-	9 060	R	8 030	5 980
Darling at Burtundy Rocks	-	0.87	-	470	F	470	460

Natural Inflow to Hume	27 840	9 410
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(i.e. Pre Dartmouth &amp; Snowy Mountains scheme)

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

<b>Murray</b>	FSL (m AHD)	u/s	d/s		FSL (m AHD)	u/s	d/s
Yarrowonga	124.90	-0.20	-	No. 7 Rufus River	22.10	+0.59	+1.17
No. 26 Torrumbarry	86.05	-0.30	-	No. 6 Murtho	19.25	+0.02	+0.17
No. 15 Euston	47.60	-0.09	-	No. 5 Renmark	16.30	+0.07	+0.28
No. 11 Mildura	34.40	-2.07	+0.58	No. 4 Bookpurnong	13.20	+0.09	+0.88
No. 10 Wentworth	30.80	+0.00	+0.87	No. 3 Overland Corner	9.80	+0.07	+0.39
No. 9 Kulnine	27.40	+0.15	+0.02	No. 2 Waikerie	6.10	+0.10	+0.29
No. 8 Wangumma	24.60	-0.09	+0.72	No. 1 Blanchetown	3.20	+0.05	+0.19

**Lower Lakes** FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.75
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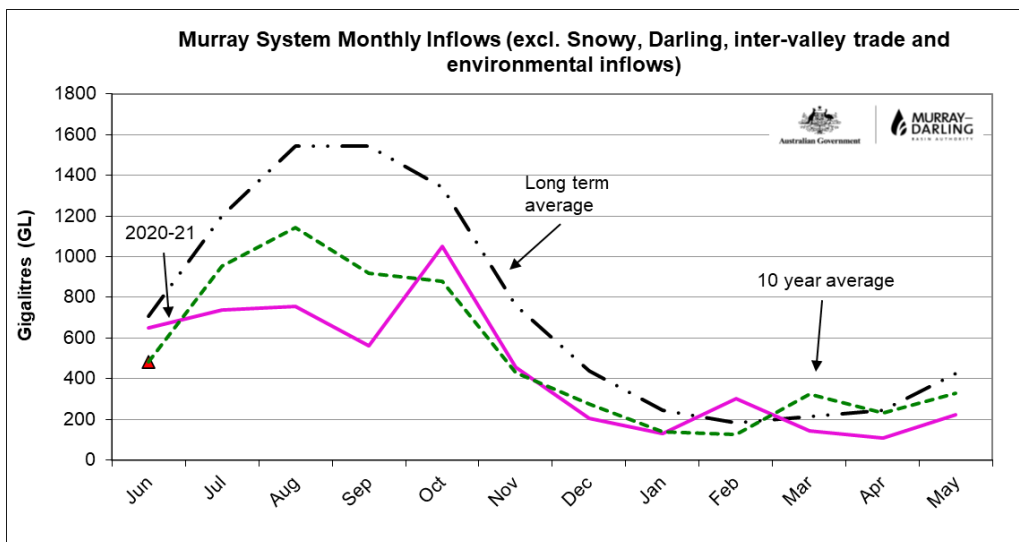
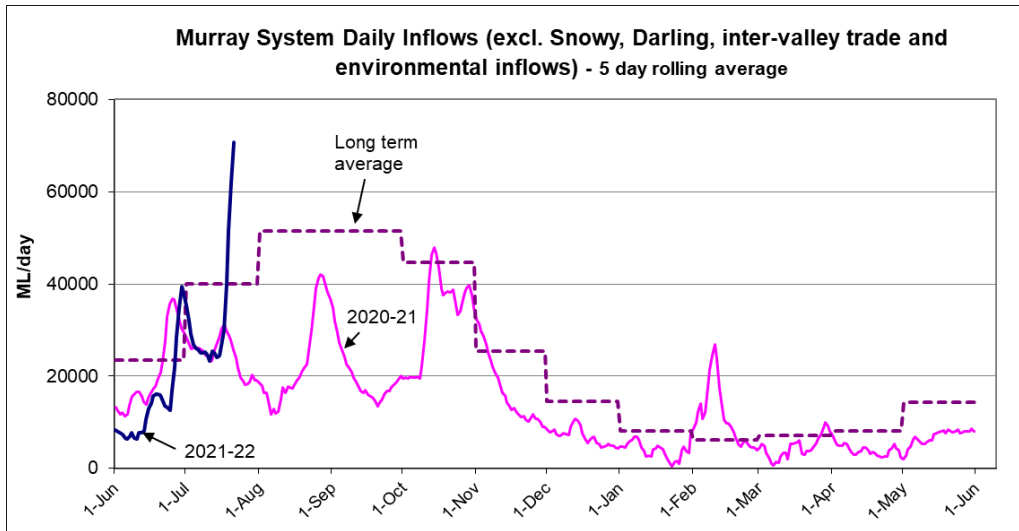
**Barrages****Fishways at Barrages**

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot 1	Vertical Slot 2	Dual Vertical Slots
Goolwa	128 openings	0.20	All closed	-	Open	Open	-
Mundoo	26 openings	0.76	All closed	-	-	-	Open
Hunters Creek	-	-	-	-	Open	-	-
Boundary Creek	6 openings	-	1	-	Open	-	-
Ewe Island	111 gates	-	All closed	-	-	-	Open
Tauwichee	322 gates	0.80	All closed	Open	Open	Open	-

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







**State Allocations (as at 21 Jul 2021)**

**NSW - Murray Valley**

High security	97%
General security	10%

**Victorian - Murray Valley**

High reliability	31%
Low reliability	0%

**NSW - Murrumbidgee Valley**

High security	95%
General security	50%

**Victorian - Goulburn Valley**

High reliability	37%
Low reliability	0%

**NSW - Lower Darling**

High security	100%
General security	100%

**South Australia - Murray Valley**

High security	100%
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NSW : <https://www.industry.nsw.gov.au/water/allocations-availability/allocations/summary>

VIC : <http://nvrn.net.au/seasonal-determinations/current>

SA : <https://www.environment.sa.gov.au/topics/river-murray/water-allocation/current-allocations>

