



# River Murray Weekly Report

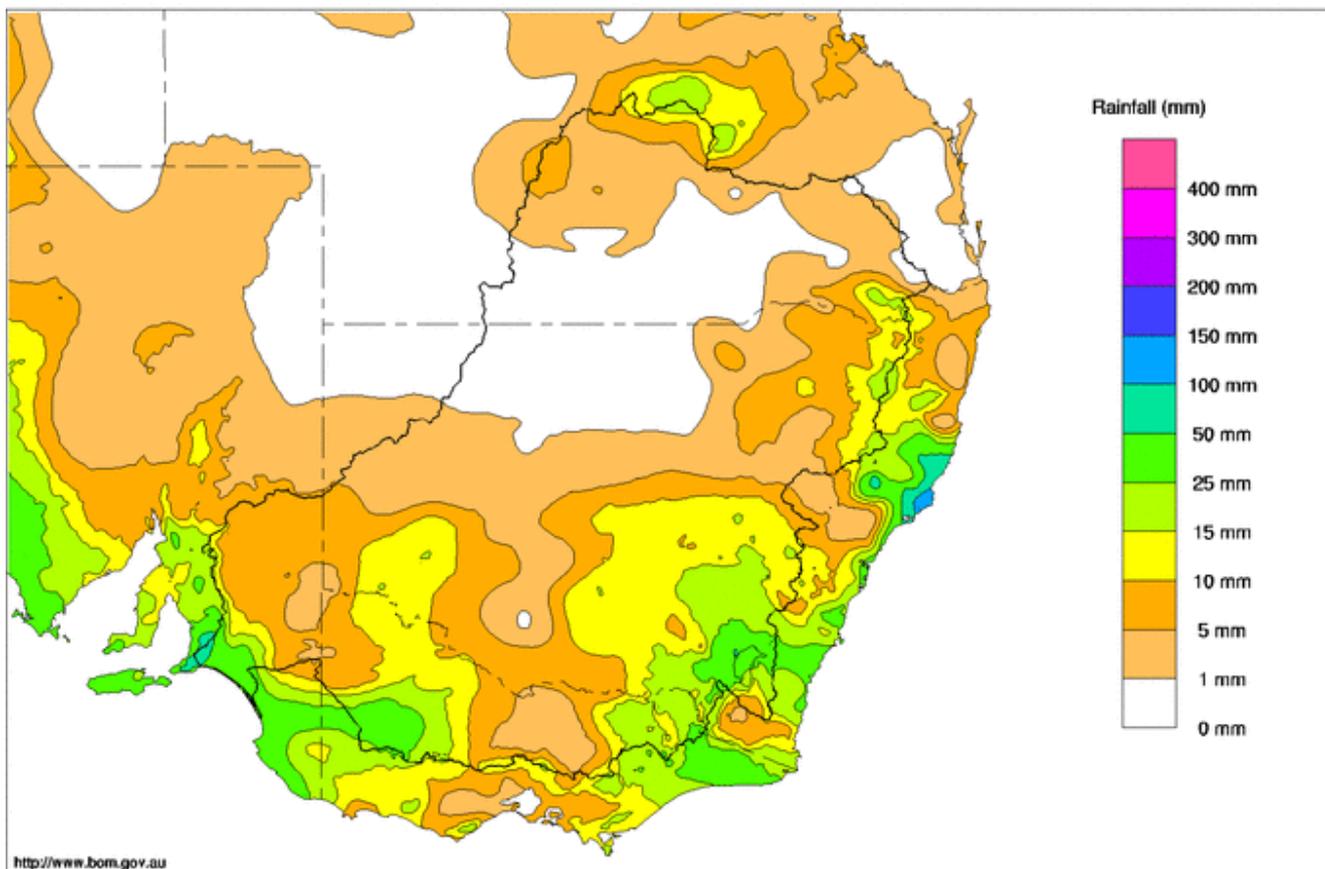
For the week ending Wednesday, 23 June 2021

Trim Ref: D21/25739

## Rainfall and inflows

Rainfall was patchy across the Murray Darling Basin this week, with the highest totals recorded in the southern Basin (Map 1). On the south-west slopes of New South Wales, Burrinjuck Dam on the Murrumbidgee River recorded 34 mm, whilst in the southern tablelands, Canberra recorded 31 mm. In Victoria, on the Ovens River, Harrietville recorded 27 mm, whilst Falls Creek in the Victoria Alps recorded 21 mm. In the southern Wimmera, Horsham recorded 40 mm, whilst in South Australia, Murray Bridge recorded 25 mm.

Murray-Darling Rainfall Totals (mm) Week Ending 23rd June 2021  
Australian Bureau of Meteorology



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

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Map 1 – Murray-Darling Basin rainfall for the week ending 23 June 2021. Source: Bureau of Meteorology.

Over the coming days, the Bureau of Meteorology is [forecasting](#) heavy rainfall totals across some southern areas, with totals of between 50 to 80 mm and isolated totals up to 120 mm across north-east Victoria. A flood watch has been [issued](#) for the Upper Murray, Mitta Mitta, Kiewa, Ovens and King river catchments. Specific information about flows at key locations can be found at the MDBA’s [River Murray data](#) webpage. As of 24 June, significant rainfall totals have already been observed across north-east Victoria, with 116 mm recorded at Mt Buffalo in 24 hours. In response, tributary inflows are on the rise. More information will be provided in next week’s report.

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## River operations

- Total active storage is continuing to increase
- Stevens Weir pool to remain lowered over winter
- Mildura Weir pool lowering planned for mid-July

## 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 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 121 GL over the last week to 4,855 GL (56% capacity).

At **Dartmouth Reservoir**, the [storage](#) increased 14 GL last week to 2,511 GL (65% capacity). The release, measured at Colemans gauge, is continuing to target 250 ML/day.

Over the past week the **Hume Reservoir storage** increased by 82 GL to 1,562 GL (52% capacity). The release has remained at the minimum of 600 ML/day. The release is expected to remain at the minimum rate over the coming week as inflows from the Kiewa and Ovens Rivers increase and contribute more to the flow in the Murray.

The **Lake Mulwala** level is currently near 124.78 m AHD, within the normal operating range (124.6 to 124.9 m AHD). Diversions to Mulwala Canal began this week, currently targeting around 500 ML/day. On the Victorian side, there has been no diversion to Yarrowonga Main Channel since 15 May. The release from **Yarrowonga Weir** averaged around 5,850 ML/day throughout the week and is forecast to increase over the coming week as higher flows are received from the Kiewa and Ovens Rivers.

The regulator gates at **Kolety** (pronounced Kol-etch)/**Edward River** and **Gulpa Offtakes** remain out of the water, meaning flows into these systems are varying with River Murray levels. Downstream on the Kolety/Edward River at **Stevens Weir**, the pool is being lowered to facilitate maintenance works in the coming week. Whilst the pool is lowered, and flow in the Kolety/Edward River is low, there will be no flow into Wakool River or Yallakool and Colligen Creeks. Flows downstream of Stevens Weir are expected to vary around 600 ML/day over the coming week.

On the **Goulburn River**, the flow measured at [McCoys Bridge](#) averaged around 1,200 ML/day. The flow is being managed above the normal minimum flow of 350 ML/day for the benefit of native fish in the lower Goulburn River, using entitlements held by environmental water holders. No IVT deliveries are planned for June. 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](#).

[Diversions](#) to **National Channel** have averaged around 350 ML/day for the week and are expected to remain at this level over the coming fortnight. Water is being used to maintain base flows in the Pyramid Creek system and Kerang Weir on behalf of environmental water holders. The release from **Torrumbarry Weir** averaged around 5,000 ML/day and is forecast to increase to around 6,000 ML/day over the coming days.

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 month as part of the weir pool variability program. Over the coming week the pool level is expected to be around 20 to 30 cm below FSL. Varying pool levels helps restore a more natural wetting and drying cycle to riverbanks and adjacent wetlands within the

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influence of the weir pool. The lowering of the pool also assisted Goulburn-Murray Water with maintenance works at the weir in mid-June. River users and landholders in the weir pool should remain aware of the changing water level in case adjustments need to be made to pumps, moorings and recreational activities.

Inflow from the **Murrumbidgee River**, measured at [Balranald](#) averaged around 750 ML/day, and are forecast to ease over the coming week. No Murrumbidgee IVT has been ordered for June. The [Murrumbidgee IVT balance](#) is currently around 96.0 GL and closed for trade to the Murray. In the upper Murrumbidgee, Blowering and Burrunjuck storages levels are around 94% and 84%, respectively. WaterNSW has extended access to [supplementary water](#) for the Murrumbidgee River and Yanco Creek in response to flows boosted by on-going inflows and airspace management releases at Blowering Dam.

At **Euston Weir**, the [weir pool level](#) is targeting around 20 to 30 cm below the FSL as part of normal weir pool variability. The [downstream release](#) has averaged 6,300 ML/day and is forecast to increase over the coming week to near 7,100 ML/day.

Pumping into the [Hattah lakes system](#) has now ceased. Around 30 GL was delivered to fill a number of lakes and provide benefits to the aquatic environment, wetland plants and animals. The action was undertaken on behalf of environmental water holders.

At **Mildura Weir**, essential maintenance works will be undertaken in July. To enable these works, the weir will be lowered, and the trestles removed. Lowering will commence on Monday 12 July. The last boat passage through the Mildura Lock will be 4:30 pm on Tuesday 13 July. The pool will return to FSL by mid-August. More information is available [here](#). (**Please note**, these dates and link to the media release have been corrected from the weekly report of 9 June).



Photo 1 – Tooleybuc Bridge on the River Murray (Photo Courtesy: A Craig, MDBA)

At **Menindee Lakes**, total volume in storage increased by 3 GL to 1087 GL (63% capacity) this week. WaterNSW are managing the inflows and releases from the storage to ensure Lake Wetherell and Lake Pamamaroo are storing the maximum volume possible when inflows cease. More information is available from WaterNSW's [WaterInsights](#).



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Inflows to Menindee Lakes have continued to ease over the week with the flow upstream at Wilcannia currently around 1,600 ML/day. Recent rainfall across several NSW tributaries to the Darling have resulted in small flow responses and additional inflow into the system. This is likely to maintain modest inflows to the Menindee Lakes over the coming weeks.

Over the last month water was released from Menindee Lakes to help meet River Murray system requirements ([media release](#)). A total of close to 60 GL was released from the Menindee Lakes with the release now complete. Flow rates were adjusted to improve environmental outcomes in the Barka/lower Darling River. For the remainder of June, environmental water holders plan to use entitlements to maintain 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.

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 ongoing 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 at the end of July) 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 has reduced over the week to the current flow around 6,900 ML/day. 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 continues to vary around the FSL. The **Lock 8** weir pool is currently around 35 cm below FSL. **Lock 7** is targeting around 55 cm above FSL and will continue to vary near this level to facilitate increased flows into Lindsay River and enable pumping into Lake Wallawalla during June for environmental outcomes.

The [storage](#) at **Tar-ru/ Lake Victoria** increased by 22 GL to 369 GL (55% capacity).

The [flow](#) to **South Australia** is currently targeting 5,000 ML/day and forecast to step up to target 5,500 ML/day over the weekend. During the first three weeks of June, the flow to South Australia was being maintained around 3000 ML/day whilst SA Water undertook their annual run-of-river salinity monitoring from Lock 7 to Morgan. The surveys measure salinity at each kilometer along the river and the difference in electric conductivity (EC) on consecutive days is assumed to be due to saline inflow. The data from the survey is analysed to assess salt loads to the River Murray and identifies locations for notable salt inflow so that future efforts to manage salinity can be targeted.

The **Lower Lakes** 5-day average water level is 0.70 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](#).

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

ANDREW REYNOLDS  
Executive Director, River Management



Australian Government



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## Water in Storage

Week ending Wednesday 23 Jun 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	462.76	2 511	65%	71	2 440	+14
Hume Reservoir	192.00	3 005	183.41	1 562	52%	23	1 539	+82
Lake Victoria	27.00	677	24.24	369	55%	100	269	+22
Menindee Lakes		1 731*		1 087	63%	(480 #)	607	+3
<b>Total</b>		<b>9 269</b>		<b>5 529</b>	<b>60%</b>	<b>--</b>	<b>4 855</b>	<b>+121</b>
Total Active MDBA Storage							56% ^	

### Major State Storages

Burrinjuck Reservoir	1 026	863	84%	3	860	+22
Blowering Reservoir	1 631	1 529	94%	24	1 505	-37
Eildon Reservoir	3 334	1 915	57%	100	1 815	+15

\* 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 22 Jun 2021

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2021
Lake Eucumbene - Total	633	n/a	Snowy-Murray	+42	188
Snowy-Murray Component	435	n/a	Tooma-Tumut	+0	25
Target Storage	1 240		Net Diversion	42	163
			Murray 1 Release	+47	227

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

New South Wales	This Week	From 1 July 2020	Victoria	This Week	From 1 July 2020
Murray Irrig. Ltd (Net)	0.7	626	Yarrowonga Main Channel (net)	0	211
Wakool Sys Allowance	-0.3	111	Torrumbarry System + Nyah (net)	0.7	369
Western Murray Irrigation	0.0	27	Sunraysia Pumped Districts	0.2	109
Licensed Pumps	0.8	261	Licensed pumps - GMW (Nyah+u/s)	4.7	47
Lower Darling	0.0	3	Licensed pumps - LMW	0.5	432
<b>TOTAL</b>	<b>1.2</b>	<b>1028</b>	<b>TOTAL</b>	<b>6.1</b>	<b>1168</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	90.0 *	
Flow this week	28.1	(4 000 ML/day)
Flow so far this month	76.1	
Flow last month	126.6	

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

	Current	Average over the last week	Average since 1 August 2020
Swan Hill	90	80	90
Euston	-	-	-
Red Cliffs	110	100	120
Merbein	110	100	130
Burtundy (Darling)	350	350	400
Lock 9	190	210	130
Lake Victoria	170	130	120
Berri	200	180	170
Waikerie	280	280	220
Morgan	280	280	220
Mannum	270	270	240
Murray Bridge	330	320	260
Milang (Lake Alex.)	770	750	750
Poltalloch (Lake Alex.)	580	530	970
Meningie (Lake Alb.)	1 480	1 440	1 660
Goolwa Barrages	2 260	3 520	1 630



## River Levels and Flows

Week ending Wednesday 23 Jun 2021

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	-	-	-	5 390	F	7 000	7 840
Jingellic	4.0	2.18	208.70	8 830	F	10 780	10 700
Tallandoon ( Mitta Mitta River )	4.2	1.45	218.34	660	F	700	950
Heywoods	5.5	1.46	155.09	600	S	600	1 090
Doctors Point	5.5	1.67	150.14	2 000	R	2 230	3 080
Albury	4.3	0.85	148.29	-	-	-	-
Corowa	4.6	0.74	126.76	2 230	F	2 680	3 610
Yarrowonga Weir (d/s)	6.4	0.96	116.00	5 440	F	5 860	4 840
Tocumwal	6.4	1.58	105.42	5 950	F	5 550	4 520
Torrumbarry Weir (d/s)	7.3	1.91	80.45	5 220	R	4 950	3 700
Swan Hill	4.5	1.10	64.02	5 230	R	4 610	4 000
Wakool Junction	8.8	2.58	51.70	6 250	R	5 600	5 540
Euston Weir (d/s)	9.1	1.31	43.15	6 870	R	6 290	6 660
Mildura Weir (d/s)	-	-	-	5 460	F	5 860	6 120
Wentworth Weir (d/s)	7.3	2.89	27.65	6 870	F	7 450	8 720
Rufus Junction	-	3.12	20.05	4 540	S	3 620	2 570
Blanchetown (Lock 1 d/s)	-	0.65	-	4 910	R	3 100	2 490
<b>Tributaries</b>							
Kiewa at Bandiana	2.8	1.73	154.96	1 530	R	1 620	1 790
Ovens at Wangaratta	11.9	8.52	146.20	1 890	F	2 510	2 610
Goulburn at McCoys Bridge	9.0	1.56	92.98	1 110	F	1 180	1 060
Edward at Stevens Weir (d/s)	5.5	0.73	80.50	420	F	270	760
Edward at Liewah	-	1.79	57.17	1 100	S	1 110	1 090
Wakool at Stoney Crossing	-	1.25	54.74	180	F	220	320
Murrumbidgee at Balranald	5.0	1.14	57.10	740	F	760	780
Barwon at Mungindi	6.1	4.27	-	3 040	R	2 180	800
Darling at Bourke	9.0	4.31	-	1 600	F	1 680	1 900
Darling at Burtundy Rocks	-	1.03	-	980	F	1 440	2 730

Natural Inflow to Hume	7 520	9 280
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(i.e. Pre Dartmouth &amp; 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	-0.12	-	No. 7 Rufus River	22.10	+0.61	+0.82
No. 26 Torrumbarry	86.05	-0.24	-	No. 6 Murtho	19.25	+0.00	+0.03
No. 15 Euston	47.60	-0.27	-	No. 5 Renmark	16.30	+0.03	+0.12
No. 11 Mildura	34.40	+0.04	+0.15	No. 4 Bookpurnong	13.20	+0.03	+0.59
No. 10 Wentworth	30.80	+0.06	+0.25	No. 3 Overland Corner	9.80	+0.07	+0.26
No. 9 Kulnine	27.40	-0.05	-0.32	No. 2 Waikerie	6.10	+0.08	+0.14
No. 8 Wangumma	24.60	-0.35	+0.65	No. 1 Blanchetown	3.20	-0.01	-0.10

## Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.70
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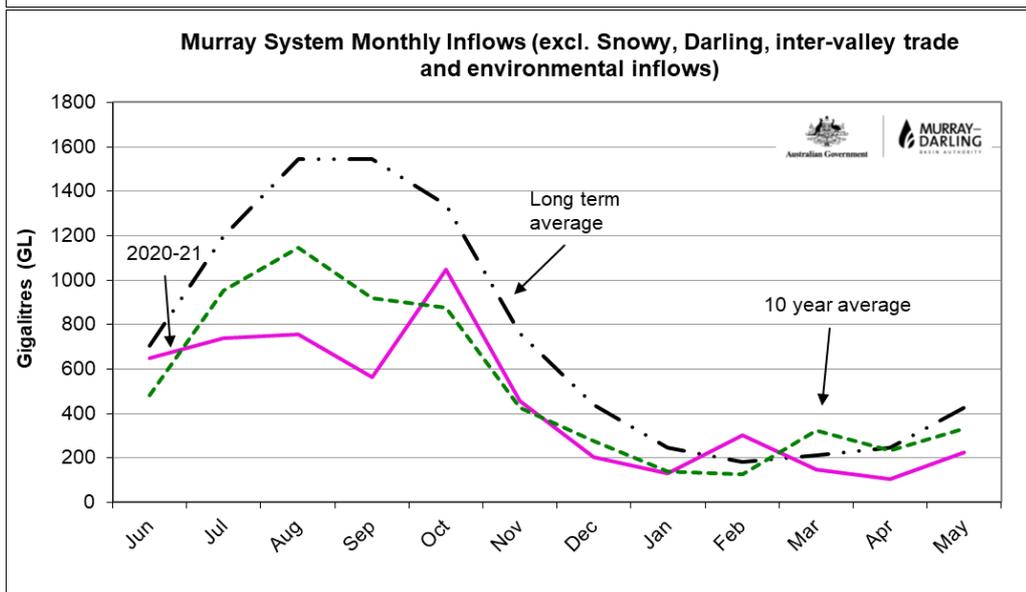
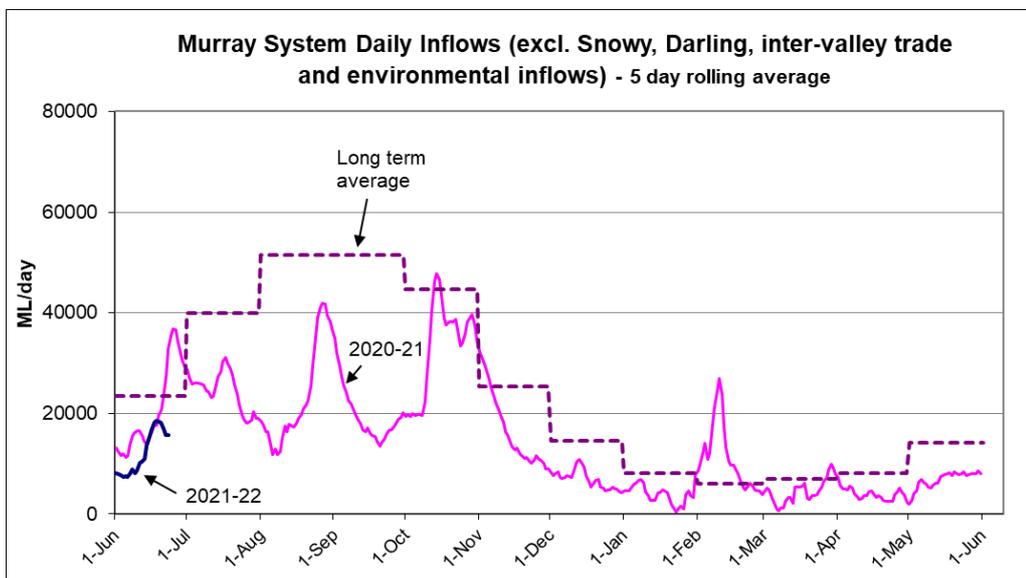
## Barrages

## Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot 1	Vertical Slot 2	Dual Vertical Slots
Goolwa	128 openings	0.79	1	-	Open	Open	-
Mundoo	26 openings	0.76	All closed	-	-	-	Open
Hunters Creek	-	-	-	-	Open	-	-
Boundary Creek	6 openings	-	All closed	-	Open	-	-
Ewe Island	111 gates	-	All closed	-	-	-	Open
Tauwichee	322 gates	0.77	3	Open	Open	Open	-

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





**State Allocations (as at 23 Jun 2021)**

**NSW - Murray Valley**

High security	97%
General security	50%

**Victorian - Murray Valley**

High reliability	100%
Low reliability	0%

**NSW - Murrumbidgee Valley**

High security	100%
General security	100%

**Victorian - Goulburn Valley**

High reliability	100%
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>

