



River Murray Weekly Report

For the week ending Wednesday, 15 January 2020

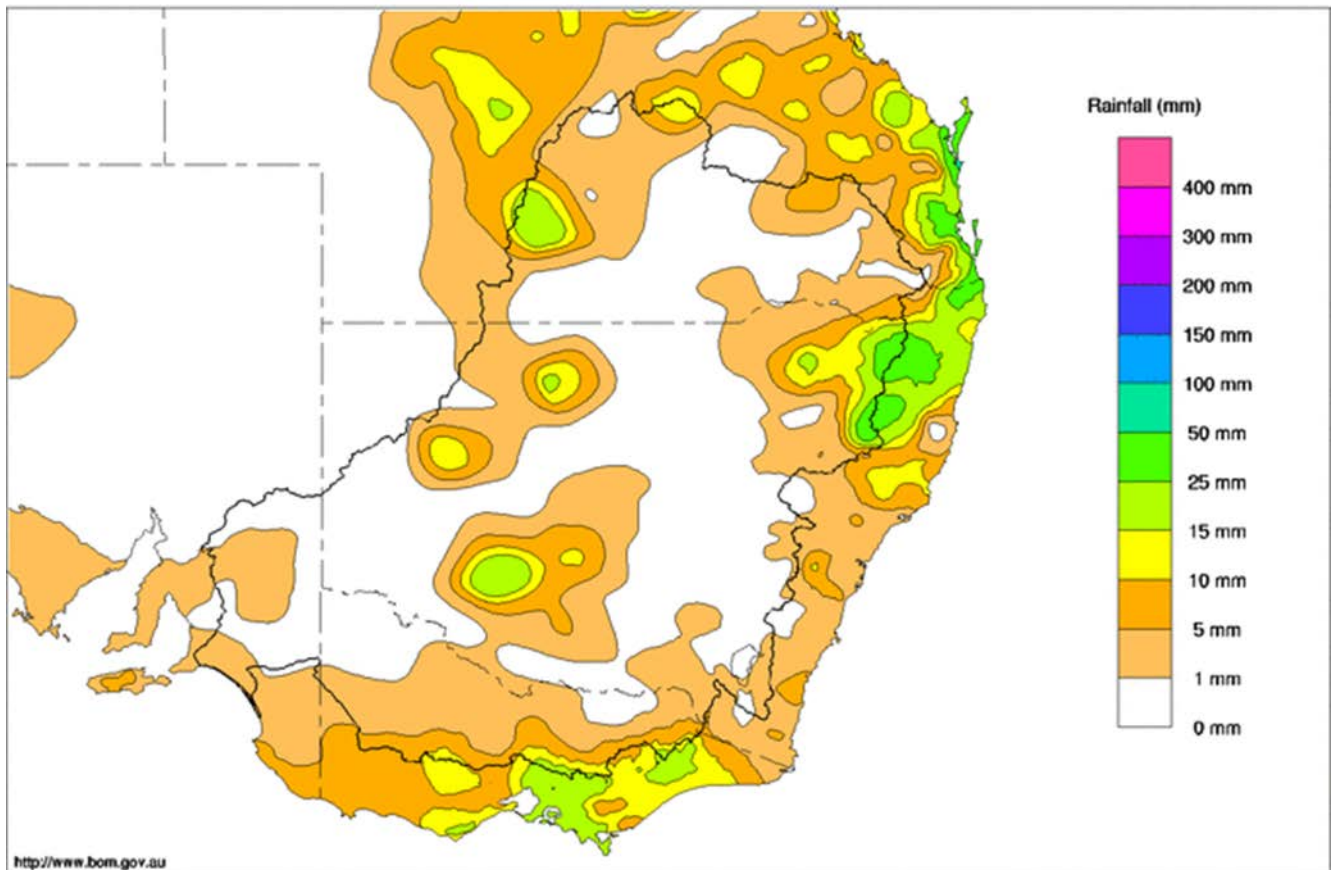
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Rainfall and inflows

There was patchy rainfall recorded across the Murray-Darling Basin this week (Map 1). In Victoria, rainfall was mostly light with higher totals along the southern Great Divide. In New South Wales, patchy storm activity resulted in rainfall totals up to 50 mm over the Northern Tablelands, including 28 mm at Glenn Innes. The central, northern and western Basin was mostly dry apart from localised showers and storms.

The Bureau of Meteorology is currently forecasting widespread rainfall across south eastern Australia including Basin catchments for the [coming 8 days](#).

Murray-Darling Rainfall Totals (mm) Week Ending 15th January 2020
Australian Bureau of Meteorology



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

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Map 1: Rainfall totals for week ending 15 January 2020 (Source: Bureau of Meteorology)

The upper Murray tributaries mostly receded this week and flows remain low. Specific information about flows at key locations in the upper Murray catchment including [Hinnomunjie Bridge](#) on the upper Mitta Mitta River, [Biggara](#) on the upper Murray, [Bandiana](#) on the Kiewa River as well as [Peechelba](#) on the Ovens River 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 at Bureau of Meteorology's (BoM) [website](#) and in the Murray River Basin daily river report at the WaterNSW [website](#).

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River operations

- Bushfire activity currently not impacting river operations.
- IVT deliveries continue from the Goulburn and Murrumbidgee valleys.
- Red Alerts for blue-green algae continue at numerous locations in the southern system.

Bushfire Impacts

The MDBA and state constructing authorities are continuing to monitor bushfire activity in the upper Murray catchment. To date, the fires have not posed any significant risk to any MDBA operated structures and have not impacted river operations. MDBA will continue to monitor the situation closely and will work with relevant fire and emergency management agencies where necessary. To stay updated on fire risks please visit:

New South Wales – [Rural Fire Service](#)

Victoria – [Vic Emergency](#)

South Australia – [Country Fire Service](#)

Water quality is likely to be impacted by fires as ash and sediment is washed into water courses following rain. However, the extent and timing of any impacts will depend on the location of the fires and intensity and duration of rainfall events. For information on current water quality and any impacts to your water supply, please contact your retail water supplier.

River operations

In the past week MDBA total active storage reduced by 99 GL to 2,781 GL (or 33% capacity). Murray System inflows (excl. Snowy, Darling, inter-valley trade and environmental tributary inflows) continue to track well below the long term average (see plot on last page of this report).

At **Dartmouth Reservoir**, the [storage](#) decreased by 14 GL to 1,965 GL (51% capacity). Over the last week the [release](#) from Dartmouth, measured at Colemans, remained steady at around 2,000 ML/day and has recently increased to 3,500 ML/day. Early in the coming week, the release is expected to increase to around 5,200 ML/day and will target near 6,500 ML/day after the weekend. These increased releases aim to transfer a total volume of around 120 GL during January to support water levels at Hume Reservoir, where natural inflows remain very low due to the on-going lack of rainfall. Very dry catchments may suppress flow responses in the Hume catchment even if reasonable rainfall returns. For more information see the [latest Dartmouth flow advice](#). Transfer requirements from Dartmouth to Hume Reservoirs are continually reviewed and revised in response to observed conditions and updated forecast demands across the system. In the months ahead, Dartmouth releases will continue to transfer water to Hume to support expected demands further downstream.

At **Hume Reservoir**, the [storage](#) decreased by 55 GL to 646 GL (21% capacity). The release from Hume varied between around 11,000 and 12,500 ML/day over the week and is currently near 11,500 ML/day.

At **Lake Mulwala**, the pool [level](#) remained above 124.75 m AHD and is currently near 124.80 m AHD. Diversions into Yarrowonga Main Channel and Mulwala Canal averaged 490 ML/day and 1,950 ML/day respectively. Of the diversion to Mulwala Canal, approximately 1,600 ML/day is water being diverted around the Barmah Choke through Murray Irrigation Limited (MIL) infrastructure and released predominantly into the Edward River (around 1,400 ML/day via Edward escape), with smaller volumes to the River Murray (around 100 ML/day from Perricoota escape) and Billabong Creek (reduced from 240 ML/day to 60 ML/day this week through the Finley Escape). Similarly, on the Victorian side around 135 ML/day continues to travel through Yarrowonga Main Channel and into the Broken Creek, again to bypass the Barmah Choke and transfer water to meet demands in the lower system. The release from **Yarrowonga Weir** is currently targeting 8,700 ML/day and is likely to remain near this flow rate over the coming week to meet expected downstream demands.

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Flows through the **Edward River** offtake remain at around 1,550 ML/day. On the **Gulpa Creek** diversion at Gulpa offtake remained around 240 ML/day. Downstream on the Edward River at Toonalook, the flow has held steady averaging 1,700 ML/day. At Stevens Weir, the flow continues to target around 2,500 ML/day.

There are a number of water quality alerts current across the Edward and Wakool Rivers including a [Red Alert](#) for blue-green algae at Stoney Crossing on the Wakool River. A Red Alert level warning indicates that people should not undertake activities where they may come into direct contact with the water. For more information on this and other alerts, visit the [WaterNSW](#) website.



Photo 1: Lake William Hovell, King River (Ovens River catchment). Photo: Tim Rossi, MDBA.

Flow in the **Goulburn River**, measured at McCoys Bridge, has receded steadily over the last week from 2,700 ML/day to the current flow near 2,400 ML/day. Flow is expected to recede to 1,700 ML/day over the coming week. This flow is above the normal January minimum flow rate of 350 ML/day due to the delivery of Inter Valley Trade (IVT) water to help meet demands on the River Murray as a result of trade from the Goulburn to the Murray Valley. The delivery of IVT from the Goulburn System has been managed in consultation with Goulburn-Murray Water (GMW) and Goulburn Broken Catchment Management Authority (GBCMA) in order to deliver flows at a variable rate to limit environmental impacts to the lower Goulburn River. Small volumes of IVT are also being delivered via the Broken Creek and Campaspe River. So far in January, around 35 GL has been called from the Goulburn System as specified on the [GMW website](#). Delivery of IVT water will continue over coming months in order to meet the demands of entitlement holders that have traded water from the Goulburn system. The current Goulburn IVT balance is decreasing due to the delivery of IVT and approaching 200 GL. More information regarding opportunities for allocation trade between the Goulburn and Murray Valleys is available at the Victorian water register [website](#).



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The **Torrumbarry Weir pool** is currently at the Full Supply Level (FSL) of 86.05 m AHD. [Diversions](#) to National Channel from the Torrumbarry weir pool have remained steady around 1,450 ML/day. Downstream of Torrumbarry Weir, the release increased from 7,700 ML/day to 8,200 ML/day this week, as higher flow from the Goulburn IVT arrived. The flow is expected to steadily decrease to around 7,200 ML/day over the coming week.



Photo 2: River Murray near Pental Island. Photo: Will Lucardie, MDBA.

Inflow from the **Murrumbidgee River**, measured at [Balranald](#), has averaged 1,150 ML/day. This is above the end of system target due to the delivery of IVT to the Murray. The MDBA has requested WaterNSW to deliver up to 40 GL for the months of January and February respectively. Approximately 100 ML/day of Murrumbidgee IVT is currently being delivered via the Billabong Creek, which reaches the Murray through the Edward-Wakool River system.

Trade from the Murrumbidgee to the Murray has been closed over the week with the current [Murrumbidgee IVT balance](#) around 100 GL. It will remain closed until the account returns to below 85 GL. This can occur if enough water is traded from the Murray back to the Murrumbidgee, or if sufficient IVT is delivered from the Murrumbidgee to the Murray. Further information on expected IVT deliveries from the Murrumbidgee is provided by WaterNSW.

At **Euston**, the [weir pool level](#) is targeting FSL. Over the past week the [downstream release](#) increased from 8,400 ML/day to 9,000 ML/day and is expected to increase further to around 9,500 ML/day.

The **Menindee Lakes storage** is approximately 7 GL (less than 1% capacity). A [Red Alert](#) for blue-green algae is in place for Lake Wetherell. WaterNSW continues to manage the Menindee Lakes in accordance with the [Lower](#)



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[Darling Annual Operations Plan](#). WaterNSW has advised that releases at Weir 32 are only planned to recommence when significant inflows are received into the Menindee Lakes. Inflows are currently zero and no significant inflows are expected in the near future.

As a result of the widespread drought conditions in NSW, extensive [water restrictions](#) remain in place. More information on drought management activities in NSW can be found on the NSW Government website - [Drought Hub](#). Links to other drought services and assistance can be also accessed via the MDBA [drought webpage](#).

At **Wentworth Weir**, the [pool level](#) is currently targeting 10 cm above FSL to assist pumpers in the upper reaches of the Darling River arm of the weir pool whilst there is no inflow from the Darling River. The downstream release is currently near 6,000 ML/day and is expected to remain around this rate for the coming week.

At **Locks 8 and 7**, the weir pool levels are being varied as part of the weir pool variability program. Currently, Lock 8 is targeting a level between 90 and 100 cm below FSL and Lock 7 is targeting a level between 50 and 60 cm below FSL. Lowering the weir pools below FSL is also expected to result in small water savings due to reduced seepage and evaporation as the area inundated by the weir pools reduces.

At **Lake Victoria**, the storage volume reduced by 29 GL to 364 GL (54% capacity). Lake Victoria's current storage volume is relatively low for this time of year. Current forecasts indicate the storage will continue to fall over the coming months as additional water is released to assist meet peak summer demands. Current planning forecasts indicate that Lake Victoria is likely to reach relatively low levels by early autumn 2020 if the dry conditions continue.

This week, the [flow to South Australia](#) averaged 8,150 ML/day, which comprises the delivery of monthly South Australian Entitlement plus net trade into the state as well as small volumes of environmental water. A target flow to South Australia of 8,100 ML/day is expected to continue around this rate for the remainder of January. For more information on South Australia's Entitlement flow, see the South Australian Department for Environment and Water's latest [River Murray flow report](#).

The **Lower Lakes** 5-day average water level has reduced by 1 cm over the last week to 0.59 m AHD. Releases are currently only occurring through fishways with all barrage gates now closed to help manage the level of the Lower Lakes through the warmer months. For information on barrage releases 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 15 Jan 2020

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	451.16	1 965	51%	71	1 894	-14
Hume Reservoir	192.00	3 005	175.22	646	21%	23	623	-55
Lake Victoria	27.00	677	24.20	364	54%	100	264	-29
Menindee Lakes		1 731*		7	0%	(- -) #	0	-0
Total		9 269		2 982	32%	- -	2 781	-99
Total Active MDBA Storage							33% ^	

Major State Storages

Burrinjuck Reservoir	1 026	320	31%	3	317	-8
Blowering Reservoir	1 631	628	38%	24	604	-14
Eildon Reservoir	3 334	1 364	41%	100	1 264	-29

* 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 14 Jan 2020

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2019
Lake Eucumbene - Total	999	n/a	Snowy-Murray	+19	278
Snowy-Murray Component	550	n/a	Tooma-Tumut	+1	183
Target Storage	1 520		Net Diversions	18	95
			Murray 1 Release	+24	439

Major Diversions from Murray and Lower Darling (GL) *

New South Wales	This Week	From 1 July 2019	Victoria	This Week	From 1 July 2019
Murray Irrig. Ltd (Net)	1.3	106	Yarrowonga Main Channel (net)	3.2	78
Wakool Sys Allowance	1.8	28	Torrumbarry System + Nyah (net)	7.8	172
Western Murray Irrigation	1.2	15	Sunraysia Pumped Districts	5	70
Licensed Pumps	4.3	74	Licensed pumps - GMW (Nyah+u/s)	1	13
Lower Darling	0.0	1	Licensed pumps - LMW	4.6	238
TOTAL	8.6	224	TOTAL	21.6	571

* 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)

* South Australia is receiving a reduced base entitlement this month due to low water availability. However, total flow to SA is slightly more than normal Entitlement due to environmental water delivery and trade to SA.

Entitlement this month	217.0 *	
Flow this week	57.0	(8 100 ML/day)
Flow so far this month	121.7	
Flow last month	223.0	

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

	Current	Average over the last week	Average since 1 August 2019
Swan Hill	80	70	70
Euston	-	-	-
Red Cliffs	30	30	50
Merbein	90	100	90
Burtundy (Darling)	-	-	1 220
Lock 9	110	120	100
Lake Victoria	120	110	110
Berri	140	150	140
Waikerie	200	200	210
Morgan	220	220	220
Mannum	260	270	260
Murray Bridge	230	230	290
Milang (Lake Alex.)	910	910	830
Poltalloch (Lake Alex.)	860	840	800
Meningie (Lake Alb.)	1 890	1 750	1 680
Goolwa Barrages	1 750	1 570	1 850



River Levels and Flows

Week ending Wednesday 15 Jan 2020

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	-	-	-	4 940	F	4 120	960
Jingellic	4.0	1.65	208.17	4 230	F	3 700	770
Tallandoon (Mitta Mitta River)	4.2	2.30	219.19	3 630	R	2 440	1 810
Heywoods	5.5	3.04	156.67	11 900	R	11 920	11 840
Doctors Point	5.5	2.83	151.30	12 870	R	12 690	12 630
Albury	4.3	1.83	149.27	-	-	-	-
Corowa	4.6	2.55	128.57	11 480	F	11 820	12 040
Yarrowonga Weir (d/s)	6.4	1.50	116.54	8 810	R	8 770	8 800
Tocumwal	6.4	2.05	105.89	8 700	S	8 770	8 720
Torrumbarry Weir (d/s)	7.3	2.72	81.26	8 160	S	8 150	7 180
Swan Hill	4.5	1.56	64.48	8 430	R	8 010	7 080
Wakool Junction	8.8	3.37	52.49	9 780	R	9 410	8 760
Euston Weir (d/s)	9.1	1.61	43.45	8 950	S	8 830	8 240
Mildura Weir (d/s)	-	-	-	7 240	F	7 340	6 540
Wentworth Weir (d/s)	7.3	2.88	27.64	5 960	F	5 720	4 980
Rufus Junction	-	3.66	20.59	7 730	S	7 780	7 780
Blanchetown (Lock 1 d/s)	-	0.74	-	4 020	F	4 930	4 450
Tributaries							
Kiewa at Bandiana	2.8	0.73	153.96	180	R	200	220
Ovens at Wangaratta	11.9	7.75	145.43	190	F	210	250
Goulburn at McCoys Bridge	9.0	2.26	93.68	2 420	F	2 550	2 300
Edward at Stevens Weir (d/s)	5.5	2.40	82.17	2 630	F	2 570	2 430
Edward at Liewah	-	2.86	58.24	2 330	S	2 330	2 360
Wakool at Stoney Crossing	-	1.38	54.87	390	S	400	400
Murrumbidgee at Balranald	5.0	1.58	57.54	1 160	F	1 150	1 190
Barwon at Mungindi	6.1	2.12	-	0	F	0	0
Darling at Bourke	9.0	3.13	-	0	F	0	0
Darling at Burtundy Rocks	-	0.50	-	0	F	0	0

Natural Inflow to Hume	540	590
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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	-0.10	-	No. 7 Rufus River	22.10	-0.45	+1.34
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.00	+0.14
No. 15 Euston	47.60	+0.01	-	No. 5 Renmark	16.30	+0.02	+0.23
No. 11 Mildura	34.40	+0.03	+0.16	No. 4 Bookpurnong	13.20	+0.03	+0.74
No. 10 Wentworth	30.80	+0.08	+0.24	No. 3 Overland Corner	9.80	+0.01	+0.22
No. 9 Kulnine	27.40	+0.00	-0.86	No. 2 Waikerie	6.10	+0.04	+0.14
No. 8 Wangumma	24.60	-0.94	-0.32	No. 1 Blanchetown	3.20	+0.00	-0.01

Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.59
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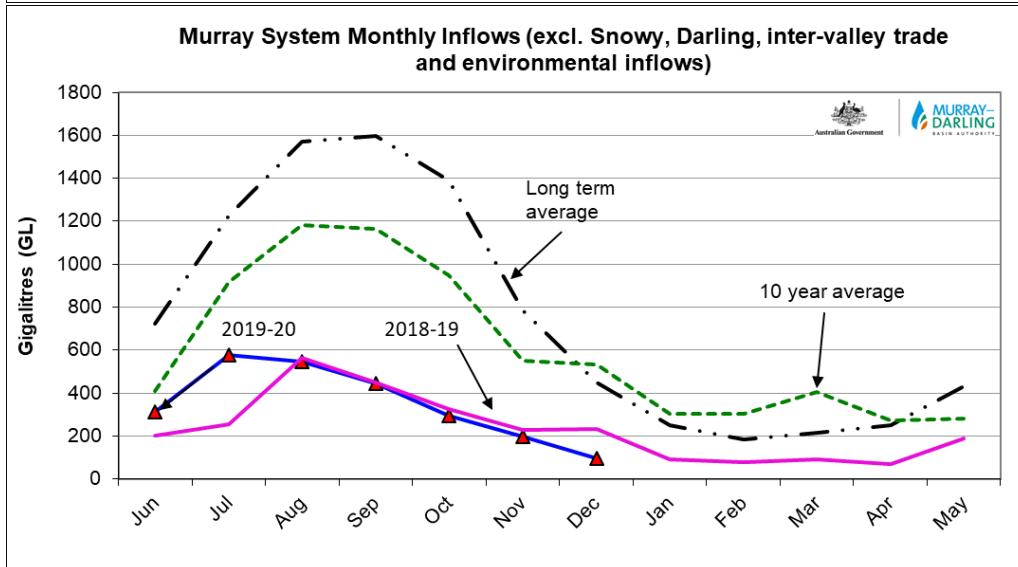
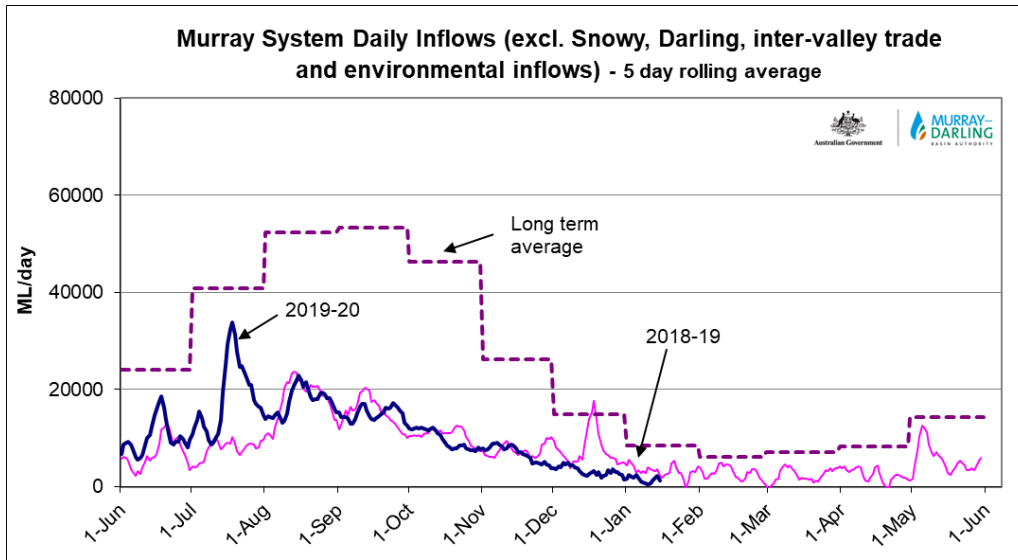
Barrages

Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot 1	Vertical Slot 2	Dual Vertical Slots
Goolwa	128 openings	0.50	All closed	-	Open	Open	-
Mundoo	26 openings	0.46	All closed	-	-	-	Open
Hunters Creek	-	-	-	-	Open	-	-
Boundary Creek	6 openings	-	All closed	-	Open	-	-
Ewe Island	111 gates	-	All closed	-	-	-	Open
Tauwichee	322 gates	0.48	All closed	Open	Open	Open	-

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





State Allocations (as at 15 Jan 2020)

NSW - Murray Valley

High security	97%
General security	0%

Victorian - Murray Valley

High reliability	56%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	6%

Victorian - Goulburn Valley

High reliability	68%
Low reliability	0%

NSW - Lower Darling

High security	30%
General security	0%

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 : <http://www.environment.sa.gov.au/managing-natural-resources/river-murray>

