



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 28TH JANUARY 2015

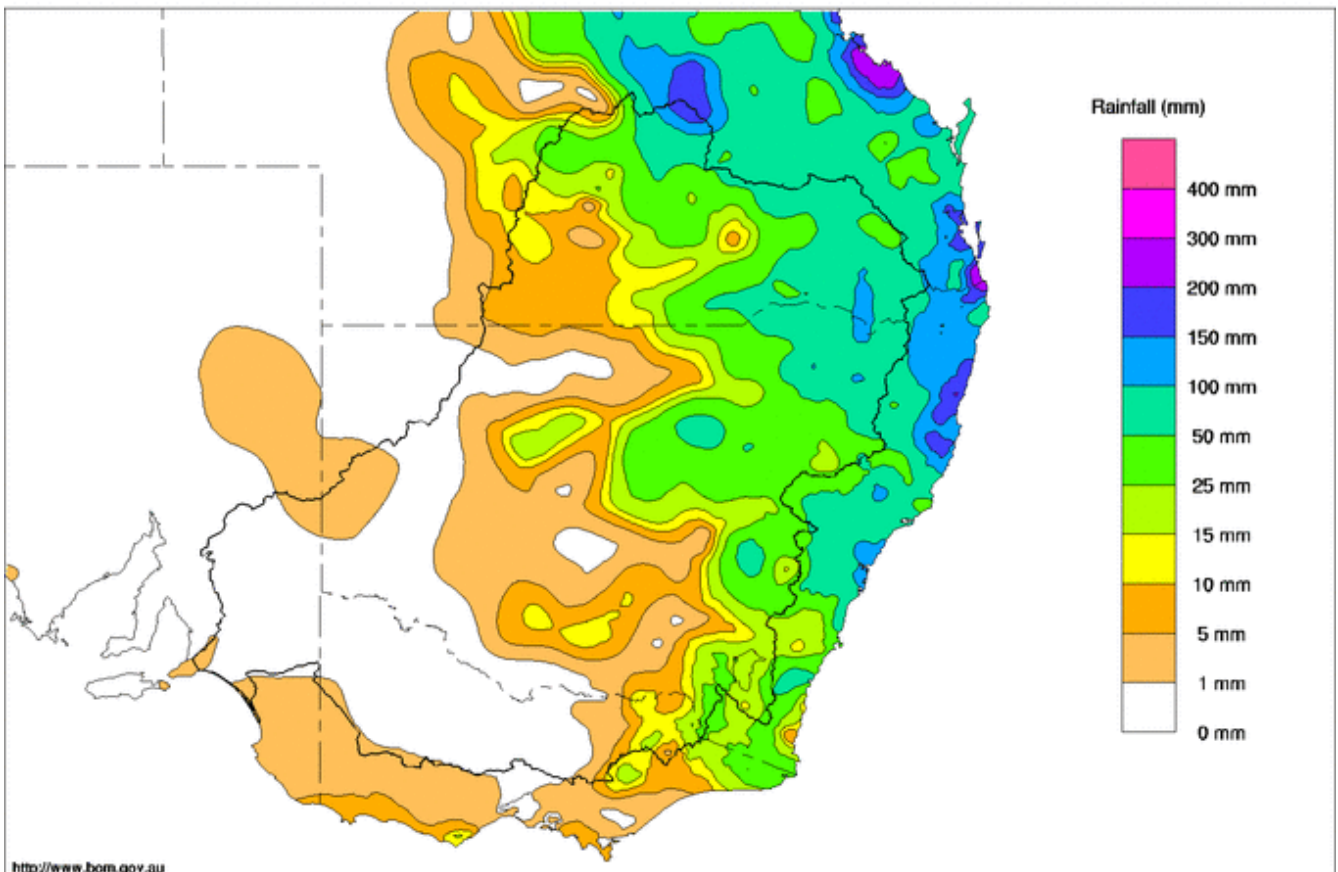
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Rainfall and Inflows

Trough systems over eastern Australia brought further rain to the eastern Murray-Darling Basin during the past week, while temperatures generally cooled across most districts as the week progressed. There were substantial rainfall accumulations along the northern NSW slopes and ranges, Queensland's Darling Downs as well as parts of the far northern Basin; although the highest rain totals were recorded outside the Basin along the east coast. The western Basin stayed mostly dry (Map 1).

The heaviest rain fell over the Gwydir, Border Rivers and upper Maranoa River catchments where weekly totals in excess of 50 mm were widespread. Notable totals in Queensland included 139 mm at Texas, 137 mm at Coolmunda Dam, and 109 mm at The Head. In NSW, there was 99 mm at Warialda, 91 mm at Pindari Dam, 90 mm at Tingha and 83 mm at Woolbrook.

Murray-Darling Rainfall Totals (mm) Week Ending 28th January 2015
Australian Bureau of Meteorology



Map 1- Murray-Darling Basin rainfall for the week ending 28th January 2015 (Source: Bureau of Meteorology).
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Along the upper Murray tributaries there were small stream flow rises midweek associated with storms, although generally these have since receded. For example, on the upper Murray, the flow at Biggara peaked at about 500 ML/day mid-week, but is now at around 400 ML/day. On the Ovens River, the flow at Rocky Point has receded from around 400 to 300 ML/day.



River Operations

- Water storage in Hume Reservoir falls below 50% capacity
- Measurable flow on the Darling River at Bourke following recent rain in the northern Basin

MDBA total storage decreased by 140 GL this week, with the active storage now at 4,834 GL (55% capacity).

At **Dartmouth** Reservoir, the storage decreased by 17 GL to 3,142 GL (81% capacity). The release, measured at Colemans gauge, was held at 3,000 ML/day for much of the week before increases commenced late in the week. A flow of 4,500 ML/day is planned for the coming days.

At **Hume** Reservoir, the storage volume reduced by 89 GL this week with the total storage decreasing to below 50% capacity at 1,448 GL (48% capacity) (Figure 1). Releases were varied between 15,000 and 19,000 ML/day during the week to meet downstream demands. The average daily flow at Doctors Point (downstream of the Kiewa River junction) was 18,600 ML/day.



Figure 1 - The lower Mitta Mitta River channel is now substantially exposed in the upper reaches of Hume Reservoir's 'Mitta arm' with the storage level decreasing to below 50% capacity (Photo: Tom Zouch, MDBA, 25 January 2015).

Total diversions into the two major irrigation offtakes from **Lake Mulwala** increased slightly this week, with around 7,000 ML/day currently being diverted. The pool level in Lake Mulwala is currently 124.74 m AHD and the downstream release from **Yarrowonga Weir** is steady at 10,100 ML/day.

On the **Edward** River system, the combined flow through the Edward River and Gulpa Creek offtakes is steady at around 1,900 ML/day. Diversions to Wakool Main Canal have increased to around 1,100 ML/day. The flow downstream of Stevens Weir has increased to around 2,100 ML/day.



On the **Goulburn River**, the flow at McCoys Bridge has receded this week, with the current flow at 1,450 ML/day. This is expected to recede to approximately 1,000 ML/day over the coming days, then remain steady during the first week of February.

At **Torrumbarry Weir**, diversions at National Channel have increased to 2,400 ML/day and are planned to remain close to 2,500 ML/day for the coming week. The flow downstream of Torrumbarry Weir has receded to 7,100 ML/day and is expected to decrease slowly over the coming week.

On the **Murrumbidgee River** the flow at Balranald is now steadily receding as the final volumes of the current Inter Valley Transfer (IVT) are delivered to the Murray. The flow at Balranald is expected to return to around 180 ML/day (the usual end-of-system target) by mid-February.

At **Euston Weir**, the flow has receded to 10,200 ML/day and is forecast to decrease below 8,000 ML/day in around one week's time.

On the **Darling River** system, recent rain in the northern Basin has generated renewed flows on several tributaries. There have been reasonable flows on the Warrego and Paroo Rivers for a few weeks, and modest flows have returned to the upper Gwydir and Border Rivers. A measurable flow has also returned to the Darling River at Bourke; however without further heavy rain, these flows remain well below those required to reach the lower Darling River or generate any significant volume of inflow to the Menindee Lakes.

At **Menindee Lakes**, the storage volume continues to decrease under the combined effect of the summer sun and minimum releases. The current combined storage volume is 147 GL (8% capacity) and the release continues to target a flow of 150 ML/day at Weir 32.

At **Wentworth Weir**, the flow is quite steady near a peak of around 9,400 ML/day.

At **Lake Victoria**, the storage volume has decreased by 24 GL to 438 GL (65% capacity). The flow to South Australia averaged 10,200 ML/day during the week and will be slightly lower in the coming days. The current flow rate is around 3,000 ML/day above the usual January entitlement flow rate due to the delivery of additional environmental water made available to sustain higher barrage outflows into the Coorong. Additional environmental water is now planned for delivery during February with flows expected to continue above 9,000 ML/day.

At the **Lower Lakes**, the 5-day average water level in Lake Alexandrina decreased by 1 cm to 0.63 m AHD. Higher barrage releases continued this week and included short flow pulses from Goolwa barrage aimed at reducing siltation in the Goolwa Channel and assist dredging. A similar operation is planned for Tauwitchere in the coming week, with flow rates of around 3,000 ML/day being maintained for several hours at the barrage to provide a pulse of fresher water into the Coorong's North Lagoon.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Management



Water in Storage

Week ending Wednesday 28 Jan 2015

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	474.42	3 142	81%	71	3 071	-17
Hume Reservoir	192.00	3 005	182.56	1 448	48%	23	1 425	-89
Lake Victoria	27.00	677	24.90	438	65%	100	338	-24
Menindee Lakes		1 731*		147	8%	(- -) #	0	-9
Total		9 269		5 175	56%	--	4 834	-140
Total Active MDBA Storage							57% ^	

Major State Storages

Burrinjuck Reservoir	1 026	557	54%	3	554	-27
Blowering Reservoir	1 631	535	33%	24	511	-8
Eildon Reservoir	3 334	2 430	73%	100	2 330	-47

* Menindee surcharge capacity – 2050 GL

** All Data is rounded to nearest GL **

NSW takes control of Menindee Lakes when storage falls below 480 GL, and control reverts to MDBA when storage next reaches 640 GL

^ % of total active MDBA storage

Snowy Mountains Scheme

Snowy diversions for week ending 27 Jan 2015

Storage	Active Storage (GL)	Weekly Change (GL)	Diversion (GL)	This Week	From 1 May 2014
Lake Eucumbene - Total	2 279	n/a	Snowy-Murray	+6	222
Snowy-Murray Component	1 136	n/a	Tooma-Tumut	+4	194
Target Storage	1 520		Net Diversion	2	28
			Murray 1 Release	+9	474

Major Diversions from Murray and Lower Darling (GL) *

New South Wales	This Week	From 1 July 2014	Victoria	This Week	From 1 July 2014
Murray Irrig. Ltd (Net)	29.0	591	Yarrowonga Main Channel (net)	9.7	189
Wakool Sys Allowance	3.6	39	Torrumbarry System + Nyah (net)	16.3	410
Western Murray Irrigation	1.0	17	Sunraysia Pumped Districts	3.4	73
Licensed Pumps	5.3	171	Licensed pumps - GMW (Nyah+u/s)	0.5	44
Lower Darling	2.5	49	Licensed pumps - LMW	20	206
TOTAL	41.4	867	TOTAL	49.9	922

* Figures derived from estimates and monthly data. 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 the delivery of additional environmental water.

Entitlement this month	217.0 *	
Flow this week	71.2	(10 200 ML/day)
Flow so far this month	237.3	
Flow last month	257.0	

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

	Current	Average over the last week	Average since 1 August 2014
Swan Hill	100	90	90
Euston	100	100	100
Red Cliffs	110	100	120
Merbein	100	100	130
Burtundy (Darling)	740	710	790
Lock 9	120	120	140
Lake Victoria	200	210	210
Berri	220	220	220
Waikerie	280	270	290
Morgan	280	270	280
Mannum	330	330	340
Murray Bridge	370	350	370
Milang (Lake Alex.)	760	750	750
Poltalloch (Lake Alex.)	690	670	590
Meningie (Lake Alb.)	2 360	2 370	2 390
Goolwa Barrages	1 210	1 220	1 150



River Levels and Flows

Week ending Wednesday 28 Jan 2015

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	-	-	-	1 260	F	1 800	860
Jingellic	4.0	1.47	207.99	2 940	F	2 790	2 680
Tallandoon (Mitta Mitta River)	4.2	2.34	219.23	3 620	R	3 360	4 450
Heywoods	5.5	3.39	157.02	18 310	F	17 740	14 670
Doctors Point	5.5	3.31	151.78	18 580	F	18 620	15 450
Albury	4.3	2.38	149.82	-	-	-	-
Corowa	3.8	3.61	129.63	18 320	R	17 250	14 030
Yarrowonga Weir (d/s)	6.4	1.67	116.71	10 170	R	10 140	9 700
Tocumwal	6.4	2.27	106.11	9 550	S	9 560	9 190
Torrumbarry Weir (d/s)	7.3	2.43	80.98	7 140	F	7 650	8 600
Swan Hill	4.5	1.38	64.30	7 300	S	7 520	9 160
Wakool Junction	8.8	3.29	52.41	9 120	F	9 880	10 250
Euston Weir (d/s)	8.8	1.89	43.73	10 240	F	10 930	10 160
Mildura Weir (d/s)	-	-	-	-	-	-	-
Wentworth Weir (d/s)	7.3	2.98	27.74	9 410	S	9 220	9 150
Rufus Junction	-	3.91	20.84	9 190	F	9 420	8 020
Blanchetown (Lock 1 d/s)	-	0.90	-	6 770	R	6 710	6 230
Tributaries							
Kiewa at Bandiana	2.7	0.92	154.15	430	F	690	550
Ovens at Wangaratta	11.9	7.83	145.51	280	F	320	480
Goulburn at McCoys Bridge	9.0	1.78	93.20	1 450	F	2 020	2 260
Edward at Stevens Weir (d/s)	-	2.02	81.79	2 030	S	1 950	1 530
Edward at Liewah	-	2.41	57.79	1 810	F	2 030	2 100
Wakool at Stoney Crossing	-	1.53	55.02	680	S	710	520
Murrumbidgee at Balranald	5.0	1.85	57.81	1 460	F	1 870	1 670
Barwon at Mungindi	-	3.21	-	120	S	180	470
Darling at Bourke	-	4.09	-	330	R	90	0
Darling at Burtundy Rocks	-	0.71	-	120	S	140	140

Natural Inflow to Hume	2 430	4 060
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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	-0.16	-	No. 7 Rufus River	22.10	+0.01	+1.58
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.03	+0.18
No. 15 Euston	47.60	-0.01	-	No. 5 Renmark	16.30	+0.01	+0.34
No. 11 Mildura	34.40	+0.05	+0.30	No. 4 Bookpurnong	13.20	-0.00	+1.06
No. 10 Wentworth	30.80	+0.10	+0.34	No. 3 Overland Corner	9.80	+0.01	+0.29
No. 9 Kulnine	27.40	-0.06	-0.09	No. 2 Waikerie	6.10	+0.02	+0.28
No. 8 Wangumma	24.60	-0.20	+0.19	No. 1 Blanchetown	3.20	-0.07	+0.15

Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.63
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Barrages

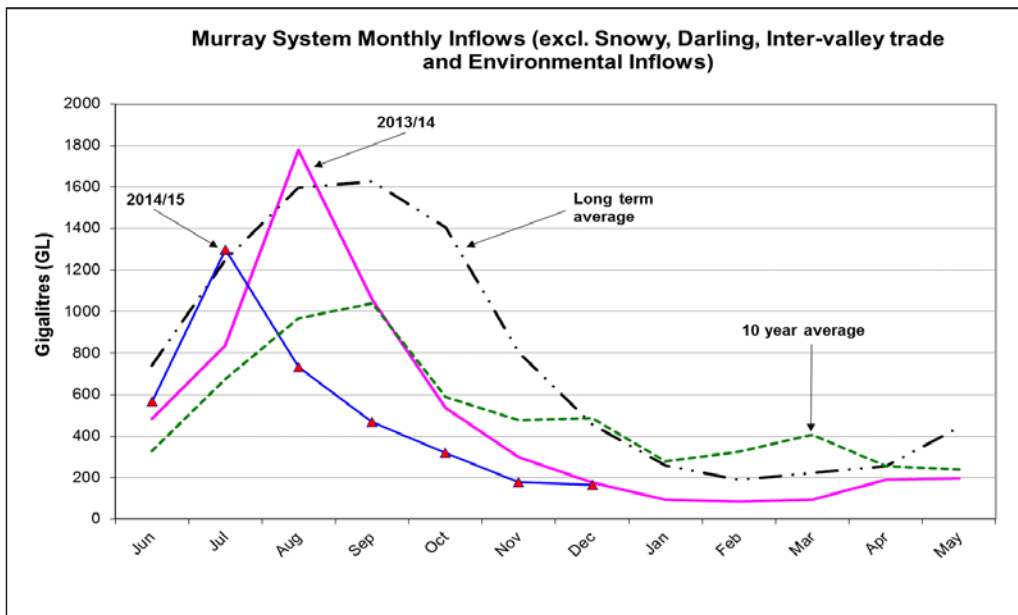
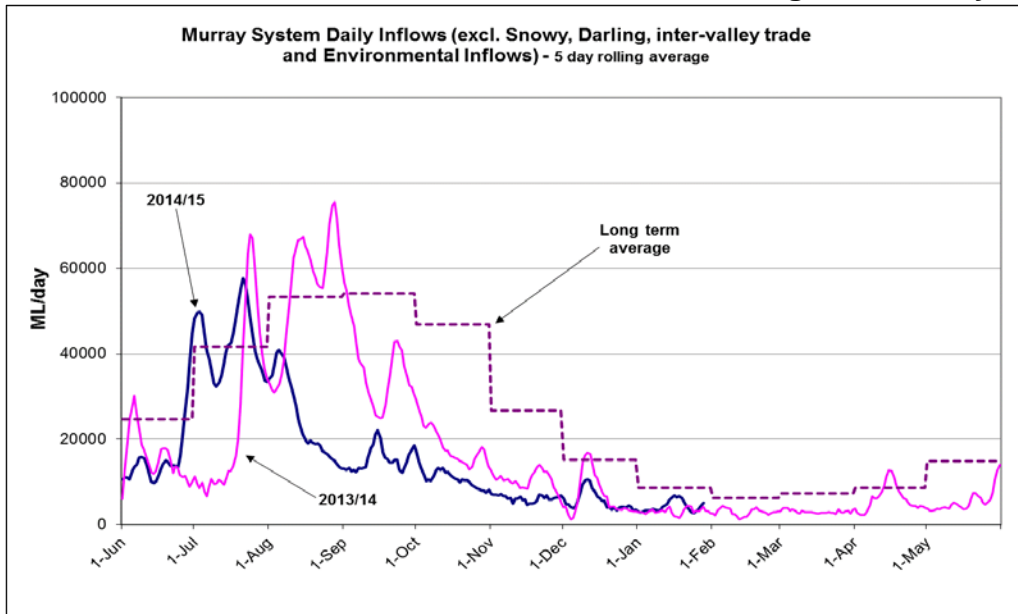
Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.74	4	-	Open
Mundoo	26 openings	0.64	All closed	-	-
Boundary Creek	6 openings	-	0.1	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwichee	322 gates	0.65	6	Open	Open

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



Week ending Wednesday 28 Jan 2015



State Allocations (as at 28 Jan 2015)

NSW - Murray Valley

High security	97%
General security	52%

Victorian - Murray Valley

High reliability	100%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	46%

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 : <http://www.water.nsw.gov.au/Water-management/Water-availability/Water-allocations/Water-allocations-summary/water-allocations-summary/default.aspx>

VIC : <http://www.nvrm.net.au/allocations/current.aspx>

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