



# RIVER MURRAY WEEKLY REPORT

## FOR THE WEEK ENDING WEDNESDAY, 01 DECEMBER 2010

Trim Ref: D10/34587

### Rainfall and Inflows

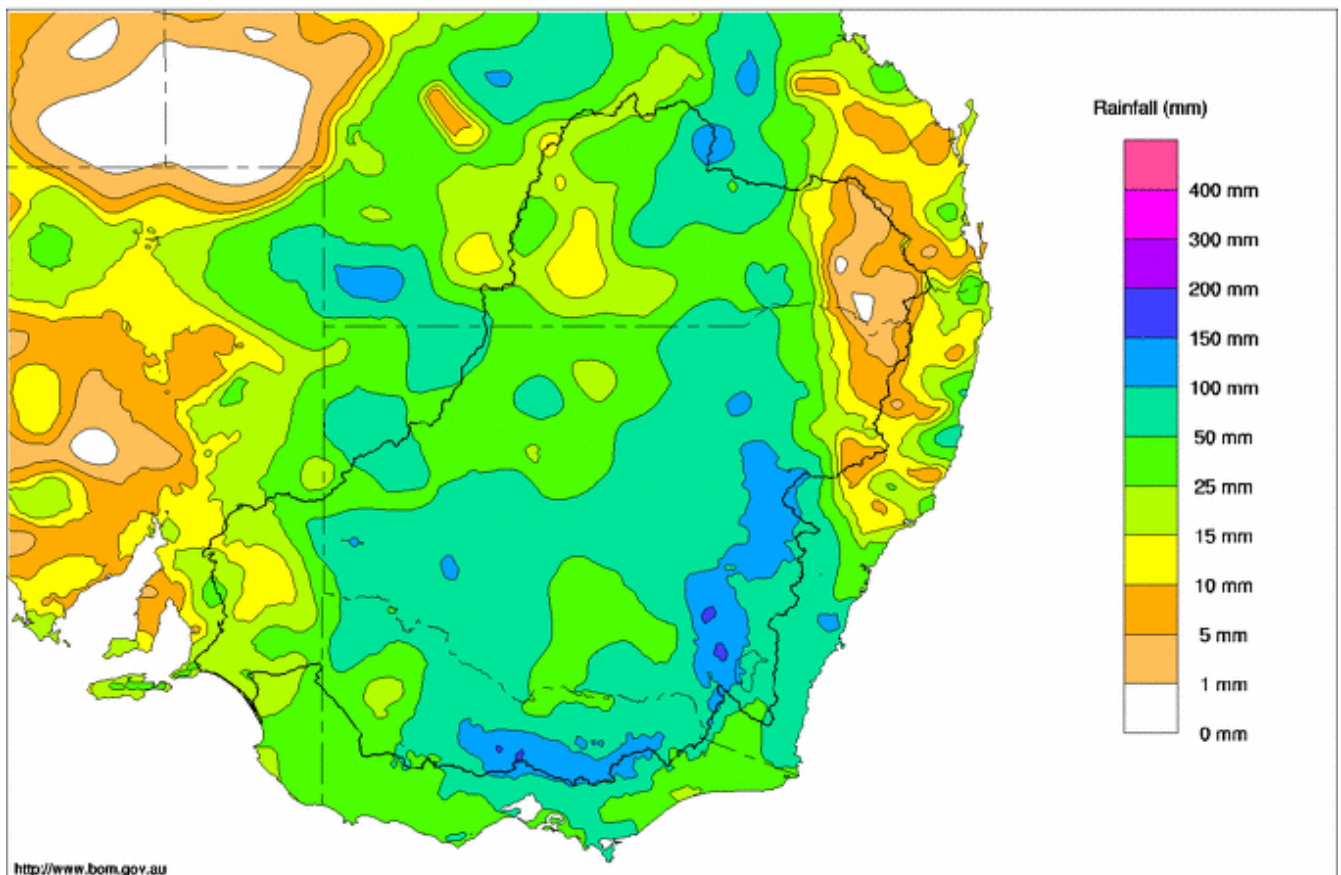
Widespread rain fell across the Murray–Darling Basin during last week, with many areas receiving at least 50 mm. The highest falls in south-east NSW were at Thredbo, Mudgee, and Orange - all recording over 100 mm of rain. In Victoria, the Goulburn Catchment received good rainfall with totals of around 100 mm in the upper catchment. In the Victorian Alps, Mt Buller recorded over 150 mm.

Tributary flows in the upper Murray have once again risen. The Tooma River at Pinegrove increased to 6,500 ML/day and the River Murray at Jingellic is now around 20,000 ML/day. At Wangaratta, on the Ovens River, flow peaked at around 15,500 ML/day.

Due to the high rainfall in south-east NSW, flow in the Macquarie River at Dubbo rose from 2,500 ML/day to around 60,000 ML/day on Thursday 3 December.

The Bureau of Meteorology has forecast further widespread rainfall for the next week.

Murray Darling Rainfall Totals (mm) Week Ending 1st December 2010  
Product of the National Climate Centre



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Issued: 01/12/2010

Map 1 - Murray-Darling Basin rainfall for the week ending 1st December 2010 (Source: Bureau of Meteorology)



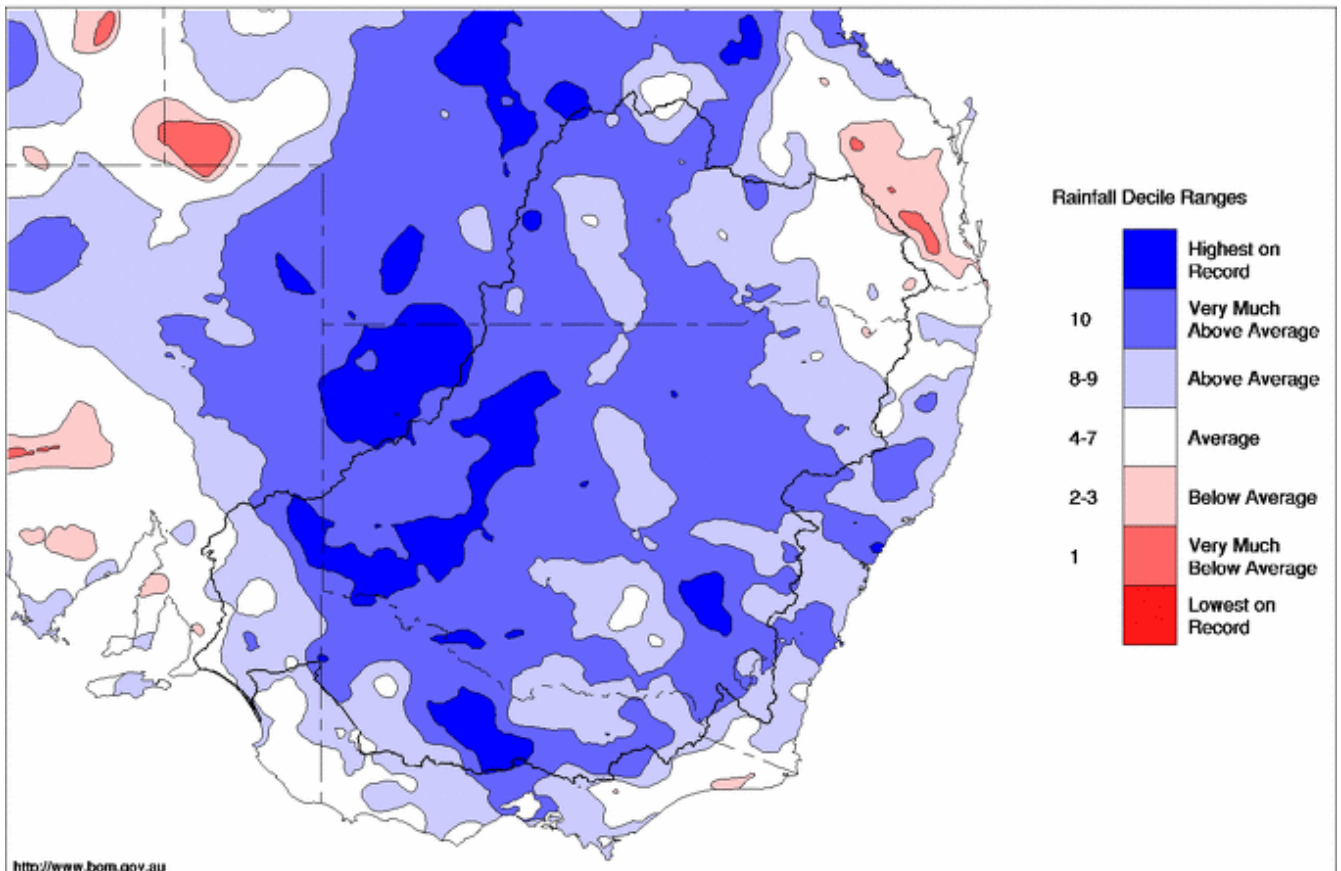
## November 2010 Summary

Rainfall for the Murray–Darling Basin was generally very much above average for November. The Bureau of Meteorology has reported that this November was the 5<sup>th</sup> wettest on record and the wettest since 2000 for both the basin and for NSW. In Victoria it was the wettest November since 1992.

Murray system inflows during November (excluding Menindee inflows and Snowy releases) were about 1,700 GL, which is more than double the long term November average of 776 GL and the highest November inflow since 1992 (2110 GL).

Murray-Darling Rainfall Deciles November 2010

Distribution Based on Gridded Data  
Product of the National Climate Centre



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

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Issued: 30/11/2010

Map 2 - Murray-Darling Basin rainfall deciles for November 2010 (Source: Bureau of Meteorology)

## River Operations

MDBA active storage (including Menindee Lakes) decreased by 8 GL to 6777 GL (79% Capacity) due to releases from Lake Victoria and Hume Reservoir. During November, active storage rose above the long term for average, the first time since August 2001.

Dartmouth Reservoir increased by 25 GL to 2050 GL (53% capacity). At Hume Reservoir the storage fell by 12 GL due to a combination of environmental water releases and spills. The release is currently targeting 25,000 ML/day at Doctors Point and is likely to remain around this level, or above depending on the extent of further rain, in the coming days.



Release from Yarrowonga Weir is currently 33,000 ML/day and may be increased further on Friday 3 December in response to inflows from the Ovens River. Diversion to Mulwala Canal, currently totalling about 3,500 ML/day, includes 2,400 ML/day which is being released to the Edward River system (at the Edward Escape just upstream of Deniliquin) to supplement flows for water quality purposes. Extra water is also being diverted via Yarrowonga Main Canal to Broken Creek to assist in dilution of the black water in the Murray upstream of Barmah.

On the Edward River the flow past Deniliquin has peaked at 16,500 ML/day on Tuesday 30 November. This peak was in response to the high releases from Yarrowonga Weir around two weeks ago and the flow in the Edward should now recede until the current high release from Yarrowonga Weir arrives in around a week's time.

In the River Murray, the flow past Torrumbarry Weir has increased from 20,800 to 39,000 ML/day with the gates at the weir now lifted clear of the water. This increase is mainly due to high inflows from the Campaspe River from heavy local rainfall. The Campaspe River at Rochester is now receding. However inflows from the Goulburn River (measured at McCoy's Bridge) are rising, with flow at 2 December at around 17,000 ML/day. It is expected that flow past Torrumbarry will continue to rise over the coming days.

At Euston, the flow is now 39,500 ML/day and is expected to continue to slowly rise in the coming week. Both Mildura and Wentworth Weirs are currently above full supply level.

The storage at Menindee Lakes has risen by 20 GL to 1,850 GL (107% capacity) and release is steady at around 16,400 ML/day at Weir 32. A further release of about 1,500 ML/day continues from Lake Cawndilla to help boost flows in the Great Darling Anabranch. It has now been confirmed that flow is returning from the Anabranch to the River Murray upstream of Lock 9 with flow at Bulpunga gauged at about 800 ML/day.

Inflows to Menindee Lakes are expected to remain fairly steady over the coming week. Upstream on the Darling River at Bourke, the flow receded from 23,510 ML/day last week to 17,600 ML/day at 1 December. High releases from Menindee Lakes are expected to continue throughout December and possibly beyond, depending on the extent of streamflow response to further rain forecast for the coming week.

The level of Lake Victoria continued to be lowered (by 35 cm) during the week and further lowering is expected to assist in the protection of vegetation and cultural heritage material. Total storage fell 41 GL to 579 GL (86% capacity).

Flow to South Australia increased to 54,700 ML/day with the flow over Lock 1 averaging 39,700 ML/day for the week. Release to the sea through the Barrages increased to 48,000 ML/day and this is expected to be increased in the coming week. The level in Lake Alexandrina increased during the week to 0.77 m AHD.

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

DAVID DREVERMAN  
Executive Director, River Murray



**Week ending Wednesday 01 Dec 2010**

**Water in Storage**

MDBA Storages	Full Supply Level (m AHD)	Full Supply Volume (GL)	Current Storage Level (m AHD)	Current Storage		Dead Storage (GL)	MDBA Active Storage (GL)	Change in Total Storage for the week (GL)
				(GL)	%			
Dartmouth Reservoir	486.00	3 856	453.09	2 050	53%	71	1 979	+25
Hume Reservoir	192.00	3 005	191.83	2 972	99%	23	2 949	-12
Lake Victoria	27.00	677	26.21	579	86%	100	479	-41
Menindee Lakes		1 731 *		1 850	107%	(480 #)	1 370	+20
<b>Total</b>		<b>9 269</b>		<b>7 451</b>	<b>80%</b>	<b>--</b>	<b>6 777</b>	<b>-8</b>

\* Menindee surcharge capacity 2050 GL

% of Total Active MDBA Storage = **79%**

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

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

**Major State Storages**

Burrinjuck Reservoir	1 026		N/A	N/A	N/A	N/A	N/A
Blowering Reservoir	1 631		1 654	101%	24	1 630	+22
Eildon Reservoir	3 334		2 296	69%	100	2 196	+64

**Snowy Mountains Scheme**

Snowy diversions for week ending 30-Nov-2010

Storage	Active storage (GL)	Weekly change (GL)	Diversions (GL)	This week	From 1 May 2010
Lake Eucumbene - Total	871	N/A	Snowy-Murray	+44	583
Snowy-Murray Component	583	N/A	Tooma-Tumut	+11	268
Target Storage	1 510		Net Diversion	32.1	314
			Murray 1 Release	+48	893

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

New South Wales	This week	From 1 July 2010	Victoria	This week	From 1 July 2010
Murray Irrig. Ltd (Net)	9.3	193.0	Yarrawonga Main Channel (net)	3.1	31.0
Wakool Sys Allowance	30.5	75.0	Torrumbarry System + Nyah (net)	0.3	101.0
Western Murray Irrig.	0.1	3.0	Sunraysia Pumped Districts	0.5	14.0
Licensed Pumps	1.7	29.0	Licensed pumps - GMW (Nyah+u/s)	0.4	3.0
Lower Darling	10.5	88.0	Licensed pumps - LMW	9.0	90.0
<b>TOTAL</b>	<b>52.1</b>	<b>388.0</b>	<b>TOTAL</b>	<b>13.3</b>	<b>239.0</b>

\* 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 is rounded to nearest 100 ML for the above\*\*

**Flow to South Australia (GL)**

Entitlement this month	217.0 *	
Flow this week	382.8	(54 700 ML/day)
Flow so far this month	57.6	
Flow last month	1,245.0	

\* Flow to SA will be greater than entitlement for December due to Additional Dilution Flow and Unregulated Flows.

**Salinity (EC)**

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2010
Swan Hill	130	130	140
Euston	130	130	130
Red Cliffs	140	160	140
Merbein	130	140	120
Burtundy (Darling)	230	230	260
Lock 9	230	230	180
Lake Victoria	170	170	170
Berri	260	240	190
Waikerie	-	260	210
Morgan	270	260	260
Mannum	260	260	280
Murray Bridge	260	260	290
Milang (Lake Alex.)	510	1 270	2 940
Poltalloch (Lake Alex.)	250	240	1 110
Meningie (Lake Alb.)	7 170	7 350	10 430
Goolwa Barrages	1 210	1 420	8 960



Week ending Wednesday 01 Dec 2010

River Levels and Flows

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	-	-	-	9 580	F	9 340	9 560
Jingellic	4.0	3.25	209.77	19 830	R	15 440	16 400
Tallandoon ( Mitta Mitta River )	4.2	1.91	218.80	1 900	S	1 980	2 150
Heywoods	5.5	3.34	156.97	19 580	R	19 690	21 260
Doctors Point	5.5	3.87	152.34	24 100	R	22 810	25 340
Albury	4.3	3.01	150.45	-	-	-	-
Corowa	7.0	4.15	130.17	26 420	S	27 790	33 170
Yarrowonga Weir (d/s)	6.4	3.69	118.73	29 180	S	26 930	35 420
Tocumwal	6.4	4.31	108.15	28 840	R	27 510	34 420
Torrumbarry Weir (d/s)	7.3	7.05	85.60	36 880	R	24 040	21 800
Swan Hill	4.5	3.32	66.24	20 200	R	19 930	20 700
Wakool Junction	8.8	7.25	56.37	35 060	R	33 610	31 860
Euston Weir (d/s)	8.8	5.24	47.08	38 750	R	37 120	35 390
Mildura Weir (d/s)	-	-	-	33 960	F	32 180	31 560
Wentworth Weir (d/s)	7.3	5.90	30.66	54 200	R	52 890	50 910
Rufus Junction	-	7.17	24.10	56 870	R	54 590	47 450
Blanchetown (Lock 1 d/s)	-	2.68	-	41 100	R	39 770	36 590
<b>Tributaries</b>							
Kiewa at Bandiana	2.7	2.80	156.03	5 800	R	3 950	4 530
Ovens at Wangaratta	11.9	11.17	148.85	15 430	F	9 520	8 360
Goulburn at McCoys Bridge	9.0	6.19	97.61	13 360	R	5 570	2 420
Edward at Stevens Weir (d/s)	-	5.46	85.23	13 100	F	12 190	11 040
Edward at Liewah	-	5.13	60.51	7 380	R	6 960	5 860
Wakool at Stoney Crossing	-	4.20	57.69	0	F	0	0
Murrumbidgee at Balranald	5.0	5.71	61.67	10 710	R	10 210	9 510
Barwon at Mungindi	-	5.04	-	5 080	R	3 970	2 840
Darling at Bourke	-	6.69	-	17 640	F	20 680	23 600
Darling at Burtundy Rocks	-	6.01	-	13 370	R	13 110	13 100

<b>Natural Inflow to Hume</b> (ie pre Dartmouth & Snowy Mountains scheme)	15 460	16 360
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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	-0.18	-	No. 7 Rufus River	22.10	+2.02	+4.82
No 26 Torrumbarry	86.05	-0.12	-	No. 6 Murtho	19.25	+0.13	+2.94
No. 15 Euston	47.60	-0.04	-	No. 5 Renmark	16.30	+0.15	+2.52
No. 11 Mildura	34.40	+0.05	+2.32	No. 4 Bookpurnong	13.20	+0.36	+3.55
No. 10 Wentworth	30.80	+0.15	+3.26	No.3 Overland Corner	9.80	+0.11	+2.80
No. 9 Kulnine	27.40	+0.42	+2.74	No. 2 Waikerie	6.10	+0.21	+2.89
No. 8 Wangumma	24.60	+1.23	+3.57	No 1. Blanchetown	3.20	+0.04	+1.93

Murrumbidgee	FSL (m AHD)	relation to FSL	d/s gauge ht.		Flow (ML/day)
			local (m)	(m AHD)	
No. 7 Maude	75.40	+0.30	5.72	75.07	16507
No. 5 Redbank	66.90	+0.14	5.73	67.03	10590

Lower Lakes

FSL = 0.75 m AHD

	(m AHD)
Lake Alexandrina average level for the past 5 days	0.77

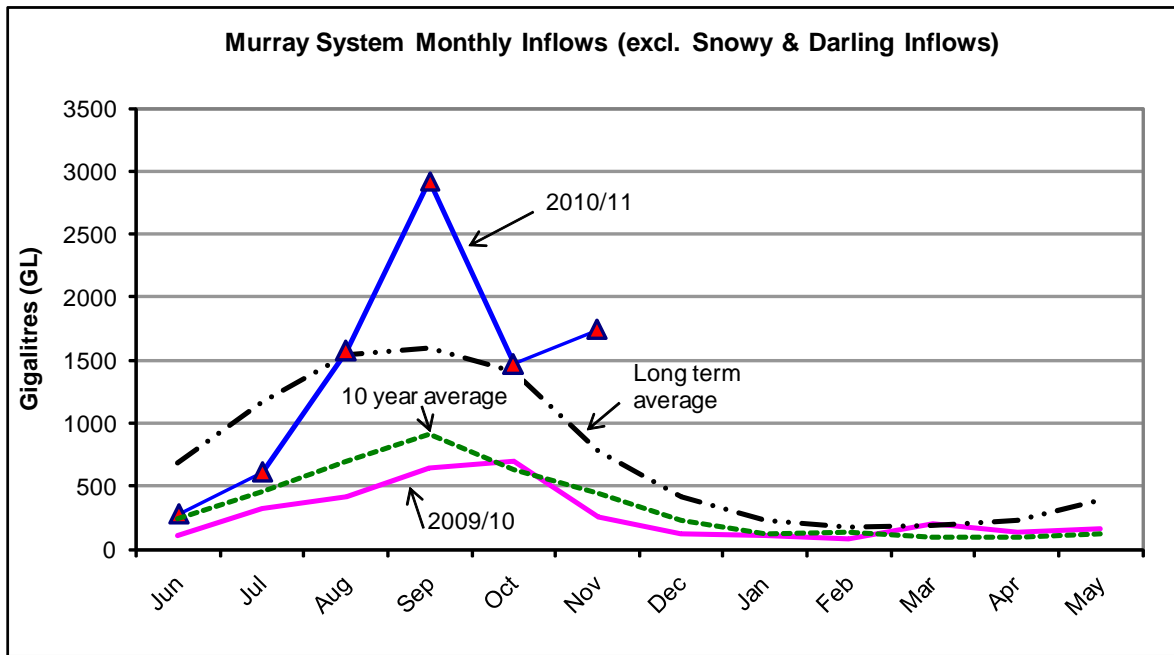
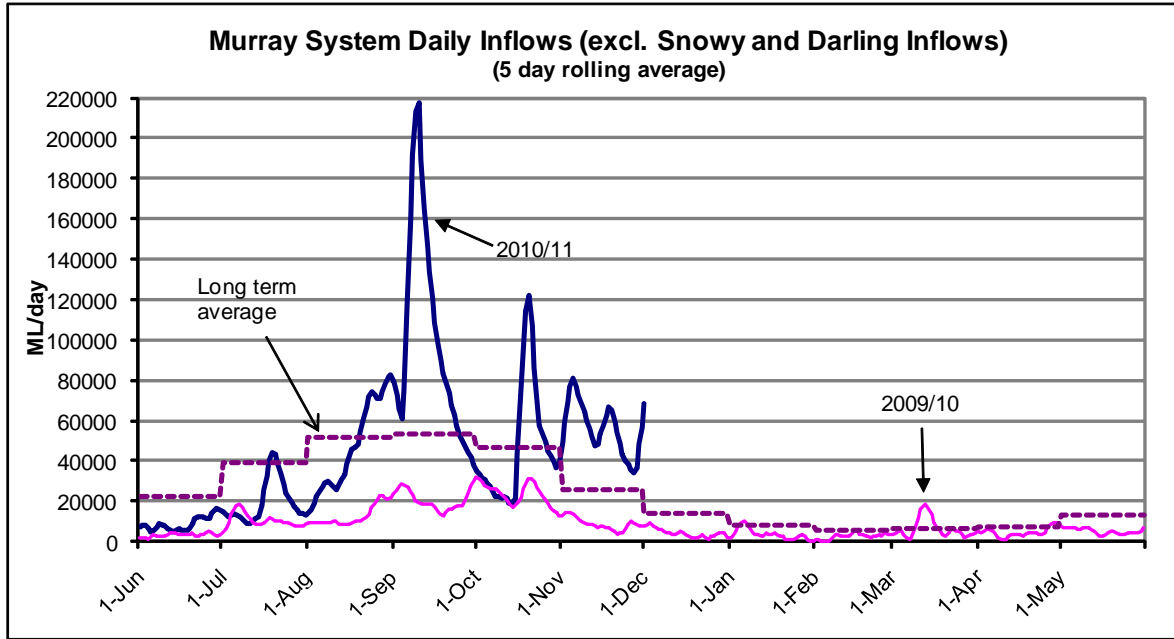
Barrages

Fishways @ Barrages

	Openings	Level (m AHD)	Status	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.68	57	-	Open
Mundoo	26 openings	0.76	3	-	-
Boundary Creek	6 openings	-	1	-	-
Ewe Island	111 gates	-	21	-	-
Tauwitchere	322 gates	0.77	72	Open	Open



Week ending Wednesday 01 December 2010



**State Allocations (as at 01 December 2010)**

**NSW - Murray Valley**

High security	97%
General security	64%

**Victoria - Murray Valley**

High reliability	100%
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**NSW - Murrumbidgee Valley**

High security	95%
General security	59%

**Victoria - Goulburn Valley**

High reliability	100%
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**NSW - Lower Darling**

High security	100%
General security	100%

**South Australia - Murray Valley**

High security	67%
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