



# RIVER MURRAY WEEKLY REPORT

FOR THE WEEKS ENDING WEDNESDAY, 31 DECEMBER 2008 & 7 JANUARY 2009

Trim Ref: D09/59

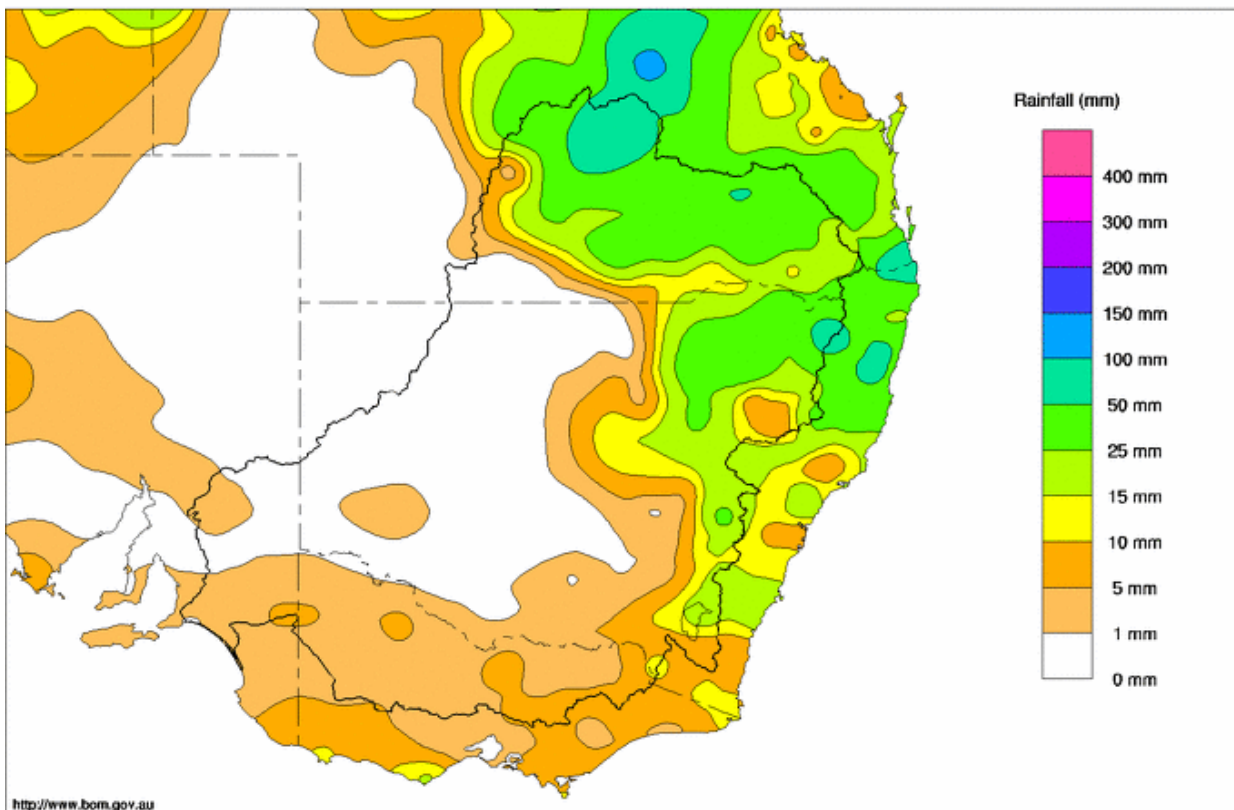
8 January, 2009

## Rainfall and Inflows

During the past two weeks there has been light to moderate falls of rain across the northern half of the Basin, particularly in the upper reaches of the Maranoa and Warrego Rivers in southern Queensland (see Maps 1 and 2).

However, in the southern half of the Basin very little rain has been recorded, particularly in Victoria and South Australia where most areas received less than 10 mm. The past week has also seen a rise in temperatures, with most towns along the Murray recording maximums in the mid to high 30's. This has caused a steady recession in stream flows for the upper Murray and its tributaries. For instance, at Wangaratta on the Ovens River, the flow has receded to 300 ML/day which is the lowest since April 2008. However, it is still higher than the extremely low flows (20 - 50 ML/day) recorded in January 2007.

Murray Darling Rainfall Analysis (mm) Week Ending 31st December 2008  
Product of the National Climate Centre

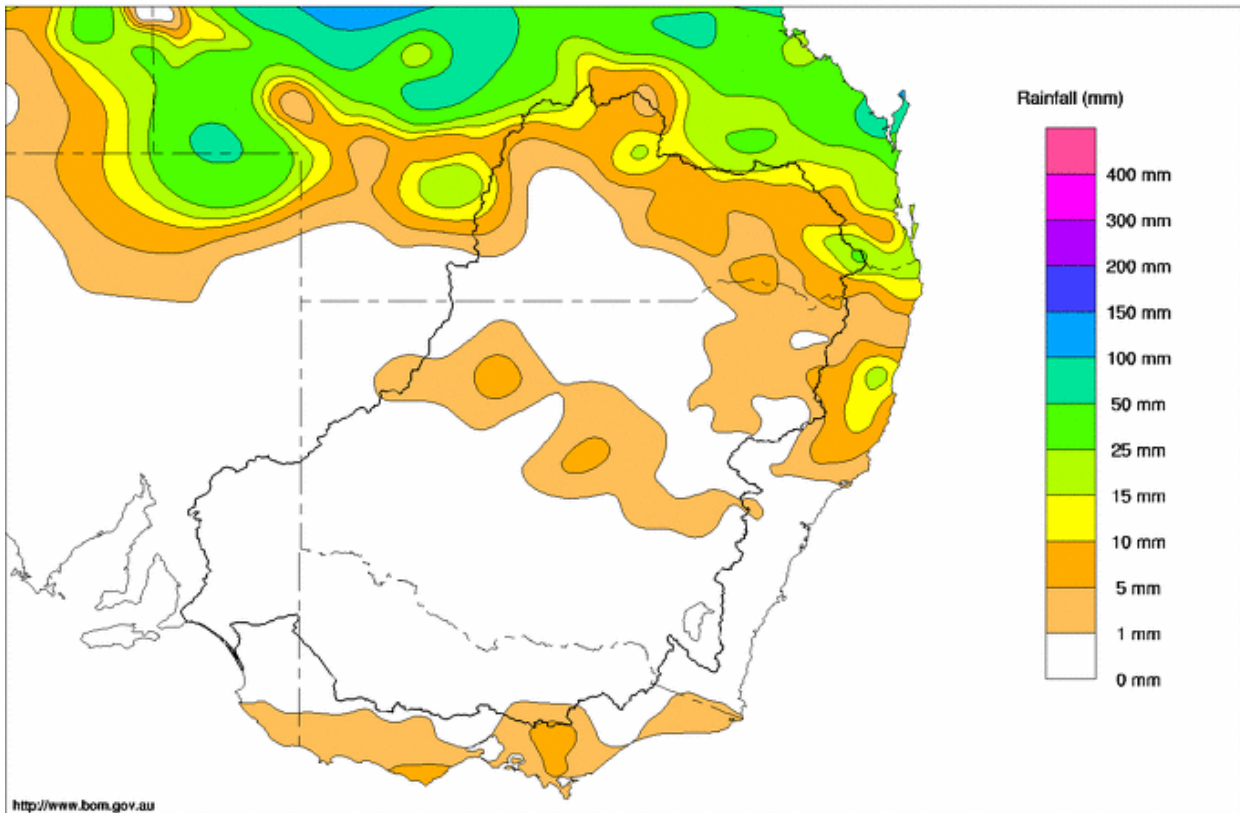


Map 1



Murray Darling Rainfall Analysis (mm) Week Ending 7th January 2009

Product of the National Climate Centre



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Issued: 07/01/2009

Map 2

## December 2008 summary

In December, rainfall was above average across most of the southern Basin (see Map 3). This followed on from November when rainfall was above average across all of the Basin except for South Australia. Despite two months of good rainfall, Murray system inflows for December were only 170 GL which is below the long term average of 420 GL. However the rain did ensure that inflows remained well above the 80 GL recorded in December 2006. December was also significantly colder than average and this helped reduce evaporative losses from water storages and along the river.

## River Operations

Over the Christmas – New Year period, MDBA active storage decreased by 115 GL to 1 742 GL (or 20 % capacity), which is a little higher than this time last year (1 450 GL or 17 % capacity).

Storage in Dartmouth Reservoir has remained fairly steady at 886 GL (23 % capacity). Dartmouth release, which is currently 350 ML/day, will be temporarily increased to 3 000 ML/day, commencing on Monday 12<sup>th</sup> January, and then reduced over the following four days to a slightly higher base flow of 450 ML/day. This is the 4<sup>th</sup> 'pulsed' release for the season and will transfer another small volume of water to Hume Reservoir.

Storage in Hume Reservoir decreased by 92 GL to 703 GL (or 23 % capacity), as a result of receding inflows and increasing releases. If the dry weather continues, the storage level might fall slightly below 20 % capacity by the end of the month. The flow at Doctors Point (downstream of Hume Dam and the Kiewa River) is currently 9 300 ML/day and is expected to remain fairly steady over the coming week.



The water level at Lake Mulwala is currently 124.7 m AHD (or 20 cm below full supply level) and should remain close to this level during the coming week. The release is also steady, at 7 500 ML/day. Further downstream, the release at Euston Weir is 6 100 ML/day and is likely to fall slightly during the coming week in response to increased irrigation demand and transmission losses.

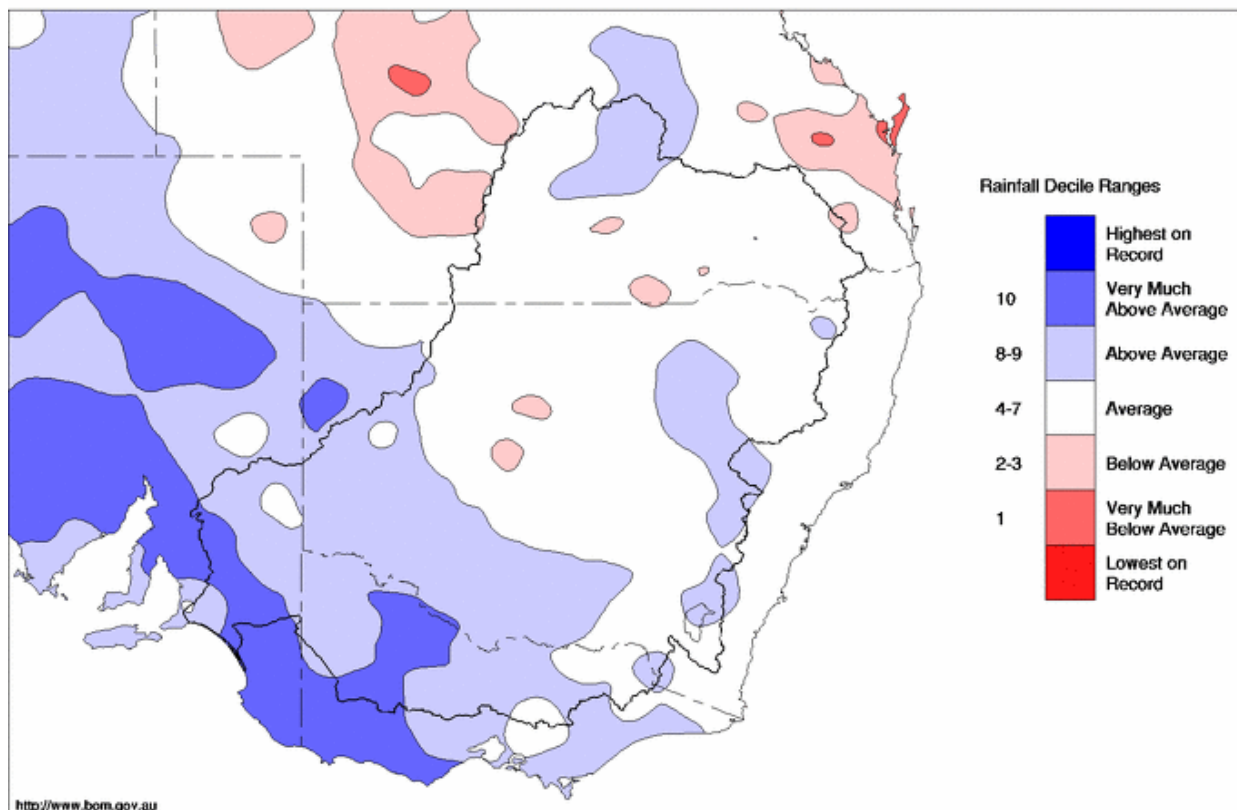
Over the past two weeks storage in Menindee Lakes (which is under NSW control) decreased by 22 GL to 142 GL (or 8 % capacity). The release from Menindee Lakes (currently 400 ML/day) has been steadily declining as Lake Pamamaroo is drained. The small volume of water remaining in Lake Wetherell will be stored by NSW as a supply of drinking water for nearby towns. Further upstream on the Darling River, a small flow (500 to 1 500 ML/day) has been passing Bourke for the past 3 weeks. Very little, if any, of this water is likely to reach Menindee Lakes.

Storage in Lake Victoria has been steady at about 360 GL (54 % capacity) but is now expected to gradually fall as the releases from Menindee Lakes continue to decline. The flow to South Australia is currently 4 300 ML/day and the flow past Lock 1 has been averaging about 1 300 ML/day.

During the past 2 weeks the water level in the Lower Lakes has been steadily declining. Lake Alexandrina is now at -0.6 m AHD which is lower than the previous record of -0.5 m in May 2008. As a result of the pumping from Lake Alexandrina, the water level in Lake Albert has remained steady at -0.4 m AHD. However, the salinity in Lake Albert continues to gradually rise and is currently 7 300 EC compared with 3 500 EC in January 2008.

Murray Darling Rainfall Deciles December 2008

Distribution Based on Gridded Data  
Product of the National Climate Centre



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

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Issued: 01/01/2009

Map 3

**For media inquiries contact: Sam Leone on 02 6279 0141**

DAVID DREVERMAN  
Executive Director, River Murray



**Week ending Wednesday 31 Dec 2008**

**Water in Storage**

MDBC Storages	Full Supply Level (m AHD)	Full Supply Volume (GL)	Current Storage Level (m AHD)	Current Storage		Dead Storage (GL)	MDBC Active Storage (GL)	Change in Total Storage for the week (GL)
				(GL)	%			
Dartmouth Reservoir	486.00	3 906	419.38	886	23%	80	806	-2
Hume Reservoir	192.00	3 038	176.20	754	25%	30	724	-41
Lake Victoria	27.00	677	24.19	364	54%	100	264	+4
Menindee Lakes		1 731 *		150	9%	(-) #	0	-15
<b>Total</b>		<b>9 352</b>		<b>2 154</b>	<b>23%</b>	<b>--</b>	<b>1 794</b>	<b>-55</b>

\* Menindee surcharge capacity 2050 GL

% of Total Active MDBC Storage = **21%**

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

**Major State Storages**

Burrinjuck Reservoir	1 026		523	51%	3	520	+7
Blowering Reservoir	1 631		589	36%	24	565	-24
Eildon Reservoir	3 390		762	22%	100	662	-4

**Snowy Mountains Scheme**

Snowy diversions for week ending 30-Dec-2008

Storage	Active storage (GL)	Weekly change (GL)	Diversion (GL)	This week	From 1 May 2008
Lake Eucumbene - Total	807	+11	Snowy-Murray	+0	355
Snowy-Murray Component	454	+1	Tooma-Tumut	+3	199
Target Storage	1 510		Net Diversion	-2.8	155
			Murray 1 Release	+0	535

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

New South Wales	This week	From 1 July 2008	Victoria	This week	From 1 July 2008
Murray Irrig. Ltd (Net)	0.0	64.0	Yarrawonga Main Channel (net)	5.3	56
Wakool System loss	0.0	21.8	Torrumbarry System + Nyah (net)	4.2	78
Western Murray Irrig.	1.0	10.4	Sunraysia Pumped Districts	4.4	48
Licensed Pumps	3.4	47.2	Licensed pumps - GMW (Nyah+u/s)	0.2	5
Lower Darling	0.3	4.9	Licensed pumps - LMW	7.6	32
<b>TOTAL</b>	<b>4.7</b>	<b>148.4</b>	<b>TOTAL</b>	<b>21.6</b>	<b>219</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.

**Flow to South Australia (GL)**

Entitlement this month	217 *	(4 200 ML/day)
Flow this week	29.7	
Flow so far this month	137	
Flow last month	125	

\* Reduced to approx. 140 GL during December drought contingency operations

**Salinity (EC)**

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2008
Swan Hill	60	60	70
Euston	110	110	100
Red Cliffs	-	-	130
Merbein	160	170	140
Burtundy (Darling)	430	420	380
Lock 9	280	270	220
Lake Victoria	270	270	250
Berri	380	370	370
Waikerie	-	-	500
Morgan	450	460	540
Mannum	720	730	580
Murray Bridge	680	670	570
Milang (Lake Alex.)	4 570	4 730	3 920
Poltalloch (Lake Alex.)	4 070	4 110	3 490
Meningie (Lake Alb.)	7 170	7 140	5 600
Goolwa Barrages	-	-	17 460



**Week ending Wednesday 31 Dec 2008**

**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	-	-	-	780	F	550	970
Jingellic	4.0	1.21	207.73	1 350	R	1 230	2 310
Tallandoon ( Mitta Mitta River )	4.2	1.40	218.29	470	F	1 200	580
Heywoods	5.5	2.47	156.10	8 480	R	7 480	5 930
Doctors Point	5.5	2.65	151.12	10 600	R	8 620	7 350
Albury	4.3	1.51	148.95	-	-	-	-
Corowa	7.0	1.94	127.96	7 670	R	7 320	6 570
Yarrowonga Weir (d/s)	6.4	1.33	116.37	7 430	F	7 500	7 520
Tocumwal	6.4	1.83	105.67	7 420	R	7 390	7 480
Torrumbarry Weir (d/s)	7.3	2.00	80.55	5 950	R	6 030	6 500
Swan Hill	4.5	1.20	64.12	5 830	F	6 170	6 420
Wakool Junction	8.8	2.54	51.66	6 280	F	6 610	6 620
Euston Weir (d/s)	8.8	1.44	43.28	7 240	F	7 630	7 700
Mildura Weir (d/s)	-	-	-	6 100	F	5 620	6 150
Wentworth Weir (d/s)	7.3	3.01	27.77	5 660	R	5 470	6 660
Rufus Junction	-	2.93	19.86	3 420	R	3 600	3 830
Blanchetown (Lock 1 d/s)	-	-0.33	-	1 270	F	1 370	1 530
<b>Tributaries</b>							
Kiewa at Bandiana	2.7	0.97	154.20	520	S	720	1 150
Ovens at Wangaratta	11.9	7.87	145.55	570	S	690	1 340
Goulburn at McCoys Bridge	9.0	1.10	92.52	340	F	350	430
Edward at Stevens Weir (d/s)	-	1.29	81.06	1 050	F	1 080	1 150
Edward at Liewah	-	1.81	57.19	1 120	F	1 110	1 050
Wakool at Stoney Crossing	-	0.98	54.48	0	F	10	30
Murrumbidgee at Balranald	5.0	0.58	56.54	310	F	510	670
Barwon at Mungindi	-	3.46	-	620	S	940	1 080
Darling at Bourke	-	4.21	-	910	R	790	830
Darling at Burtundy Rocks	-	1.01	-	1 000	S	1 110	1 600

<b>Natural Inflow to Hume</b> (ie pre Dartmouth & Snowy Mountains scheme)	3 040	5 490
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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	-0.20	-	No. 7 Rufus River	22.10	+0.00	+0.66
No 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	-0.06	+0.00
No. 15 Euston	47.60	+0.00	-	No. 5 Renmark	16.30	+0.02	+0.12
No. 11 Mildura	34.40	+0.05	+0.16	No. 4 Bookpurnong	13.20	+0.02	+0.34
No. 10 Wentworth	30.80	+0.06	+0.37	No.3 Overland Corner	9.80	+0.02	+0.09
No. 9 Kulnine	27.40	+0.07	+0.12	No. 2 Waikerie	6.10	+0.02	+0.09
No. 8 Wangumma	24.60	+0.13	+0.43	No 1. Blanchetown	3.20	+0.05	-1.08

Murrumbidgee	FSL (m AHD)	relation to FSL	d/s gauge ht.		Flow (ML/day)
			local (m)	(m AHD)	
No. 7 Maude	75.40	-0.60	0.675	70.025	313
No. 5 Redbank	66.90	-0.11	0.207	61.507	321

**Lower Lakes**

**FSL = 0.75 m AHD**

	(m AHD)
Lake Alexandrina average level for the past 5 days	-0.51

**Barrages**

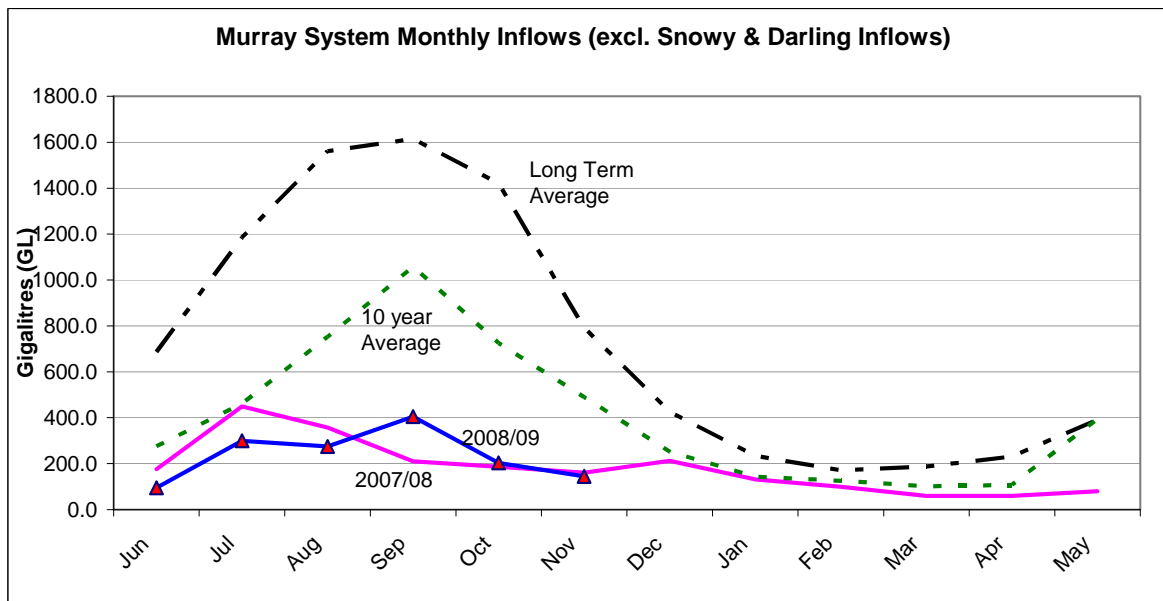
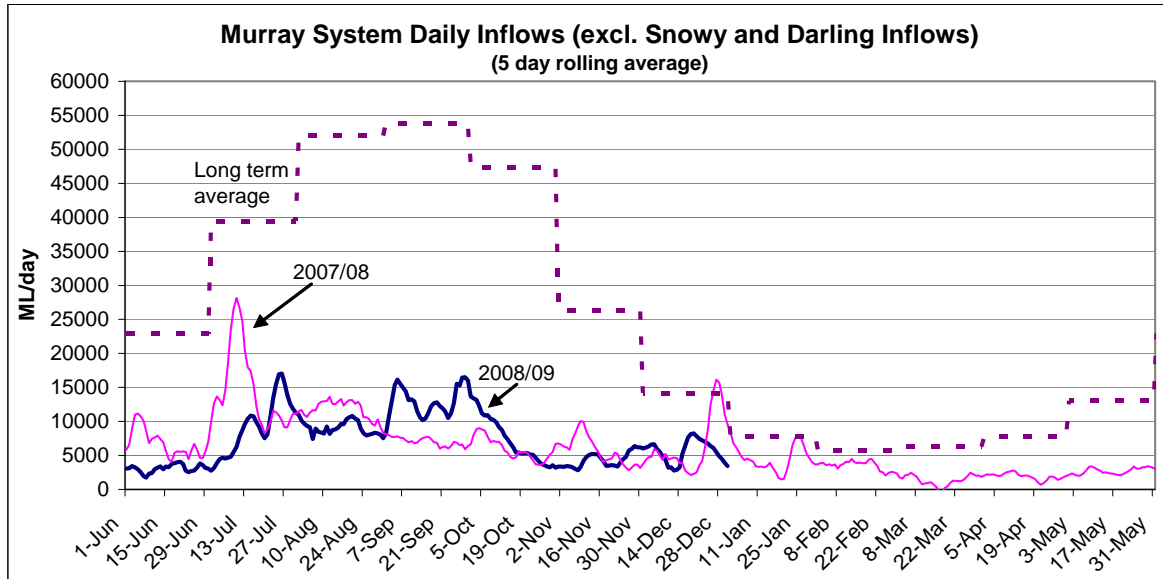
**Fishways @ Barrages**

	Openings	Level (m AHD)	Status	Rock Ramp	Vertical Slot
Goolwa	128 openings	-0.67	All closed	-	Closed
Mundoo	26 openings	-0.49	All closed	-	-
Boundary Creek	6 openings	-	All closed	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwitchere	322 gates	-	All closed	Closed	Closed

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



Week ending Wednesday 31st December 2008



**State Allocations (as at 31st December 2008)**

**NSW - Murray Valley**

High security	95%
General security	4%

**Victoria - Murray Valley**

high reliability	28%
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**NSW - Murrumbidgee Valley**

High security	95%
General security	12% (& extra 2% Feb 09)

**Victoria - Goulburn Valley**

high reliability	23%
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**NSW - Lower Darling**

High security	100%
General security	50%

**South Australia - Murray Valley**

High security	15%
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NSW : [http://www.naturalresources.nsw.gov.au/mediarelnr/mr\\_toc\\_currnr.html](http://www.naturalresources.nsw.gov.au/mediarelnr/mr_toc_currnr.html)

VIC : <http://www.g-mwater.com.au/water-resources/allocations/current.asp>

SA : <http://www.dwlbc.sa.gov.au/media.html>



**Week ending Wednesday 07 Jan 2009**

**Water in Storage**

MDBC Storages	Full Supply Level (m AHD)	Full Supply Volume (GL)	Current Storage Level (m AHD)	Current Storage		Dead Storage (GL)	MDBC Active Storage (GL)	Change in Total Storage for the week (GL)
				(GL)	%			
Dartmouth Reservoir	486.00	3 906	419.37	886	23%	80	806	-0
Hume Reservoir	192.00	3 038	175.65	703	23%	30	673	-51
Lake Victoria	27.00	677	24.18	363	54%	100	263	-1
Menindee Lakes		1 731 *		142	8%	(- ) #	0	-7
<b>Total</b>		<b>9 352</b>		<b>2 094</b>	<b>22%</b>	<b>- -</b>	<b>1 742</b>	<b>-60</b>

\* Menindee surcharge capacity 2050 GL % of Total Active MDBC Storage = **20%**

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

**Major State Storages**

Burrinjuck Reservoir	1 026		524	51%	3	521	+1
Blowering Reservoir	1 631		588	36%	24	564	-2
Eildon Reservoir	3 390		748	22%	100	648	-14

**Snowy Mountains Scheme**

Snowy diversions for week ending 06-Jan-2009

Storage	Active storage (GL)	Weekly change (GL)	Diversion (GL)	This week	From 1 May 2008
Lake Eucumbene - Total	804	-3	Snowy-Murray	+6	360
Snowy-Murray Component	448	-6	Tooma-Tumut	+1	201
Target Storage	1 520		Nett Diversion	4.2	159
			Murray 1 Release	+11	545

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

New South Wales	This week	From 1 July 2008
Murray Irrig. Ltd (Net)	0.0	66.5
Wakool System loss	0.0	21.8
Western Murray Irrig.	1.2	11.6
Licensed Pumps	3.7	51.0
Lower Darling	0.5	5.4
<b>TOTAL</b>	<b>5.4</b>	<b>156.2</b>

Victoria	This week	From 1 July 2008
Yarrawonga Main Channel (net)	0.0	58
Torrumbarry System + Nyah (net)	5.9	84
Sunraysia Pumped Districts	4.9	53
Licensed pumps - GMW (Nyah+u/s)	0.2	5
Licensed pumps - LMW	7.6	40
<b>TOTAL</b>	<b>18.6</b>	<b>240</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.

**Flow to South Australia (GL)**

Entitlement this month	217 *	
Flow this week	30.2	(4 300 ML/day)
Flow so far this month	30	
Flow last month	137	

\* Reduced to approx. 135 GL during January drought contingency operations

**Salinity (EC)**

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2008
Swan Hill	60	60	70
Euston	80	80	100
Red Cliffs	-	-	130
Merbein	140	150	140
Burtundy (Darling)	450	440	380
Lock 9	250	260	220
Lake Victoria	270	270	250
Berri	370	380	380
Waikerie	-	-	500
Morgan	470	460	530
Mannum	760	740	580
Murray Bridge	710	690	570
Milang (Lake Alex.)	4 500	4 520	3 950
Poltalloch (Lake Alex.)	4 660	4 440	3 530
Meningie (Lake Alb.)	7 400	7 250	5 670
Goolwa Barrages	-	-	17 460



Week ending Wednesday 07 Jan 2009

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	-	-	-	3 460	F	2 180	550
Jingellic	4.0	1.50	208.02	3 220	R	1 940	1 230
Tallandoon ( Mitta Mitta River )	4.2	1.36	218.25	420	S	430	1 200
Heywoods	5.5	2.47	156.10	8 770	R	7 920	7 480
Doctors Point	5.5	2.53	151.00	9 360	R	9 010	8 620
Albury	4.3	1.51	148.95	-	-	-	-
Corowa	7.0	1.98	128.00	7 860	F	8 270	7 320
Yarrowonga Weir (d/s)	6.4	1.33	116.37	7 510	S	7 650	7 500
Tocumwal	6.4	1.83	105.67	7 360	F	7 460	7 390
Torrumbarry Weir (d/s)	7.3	1.84	80.39	5 350	S	5 630	6 030
Swan Hill	4.5	1.14	64.06	5 480	F	5 670	6 170
Wakool Junction	8.8	2.43	51.55	5 830	F	6 020	6 610
Euston Weir (d/s)	8.8	1.26	43.10	6 130	R	6 660	7 630
Mildura Weir (d/s)	-	-	-	4 880	F	5 100	5 620
Wentworth Weir (d/s)	7.3	2.84	27.60	4 030	R	4 750	5 470
Rufus Junction	-	3.05	19.98	4 010	R	3 710	3 600
Blanchetown (Lock 1 d/s)	-	-0.41	-	1 240	F	1 320	1 370
<b>Tributaries</b>							
Kiewa at Bandiana	2.7	0.87	154.10	400	R	490	720
Ovens at Wangaratta	11.9	7.72	145.40	300	F	450	690
Goulburn at McCoys Bridge	9.0	1.08	92.50	310	S	320	350
Edward at Stevens Weir (d/s)	-	1.25	81.02	1 010	F	990	1 080
Edward at Liewah	-	1.72	57.10	1 020	F	1 060	1 110
Wakool at Stoney Crossing	-	0.93	54.42	0	S	0	10
Murrumbidgee at Balranald	5.0	0.46	56.42	210	F	240	510
Barwon at Mungindi	-	3.39	-	400	F	460	940
Darling at Bourke	-	4.27	-	1 350	F	1 490	790
Darling at Burtundy Rocks	-	0.93	-	740	F	850	1 110

<b>Natural Inflow to Hume</b> (ie pre Dartmouth & Snowy Mountains scheme)	560	3 000
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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	-0.20	-	No. 7 Rufus River	22.10	-0.05	+0.73
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No. 15 Euston	47.60	+0.00	-	No. 5 Renmark	16.30	+0.01	+0.09
No. 11 Mildura	34.40	+0.00	+0.07	No. 4 Bookpurnong	13.20	-0.02	+0.32
No. 10 Wentworth	30.80	+0.01	+0.20	No.3 Overland Corner	9.80	-0.01	+0.05
No. 9 Kulnine	27.40	-0.05	-0.05	No. 2 Waikerie	6.10	-0.04	+0.04
No. 8 Wangumma	24.60	-0.03	+0.23	No 1. Blanchetown	3.20	-0.03	-1.16

Murrumbidgee	FSL (m AHD)	relation to FSL	d/s gauge ht.		Flow (ML/day)
			local (m)	(m AHD)	
No. 7 Maude	75.40	-1.36	0.623	69.973	265
No. 5 Redbank	66.90	-0.22	0.187	61.487	302

Lower Lakes

FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days	(m AHD)
	-0.57

Barrages

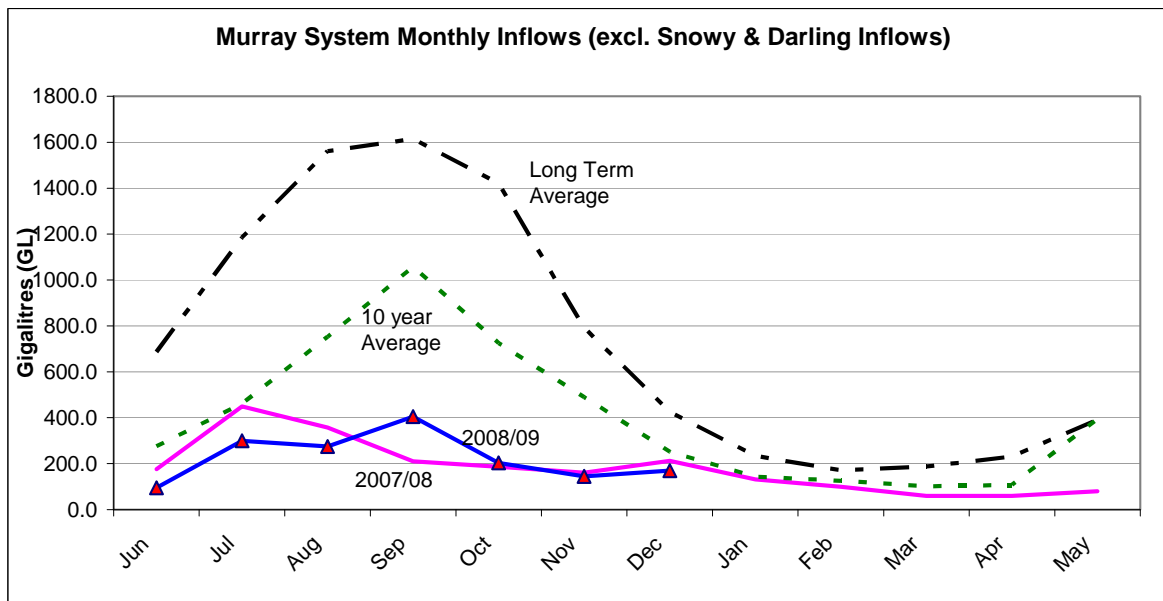
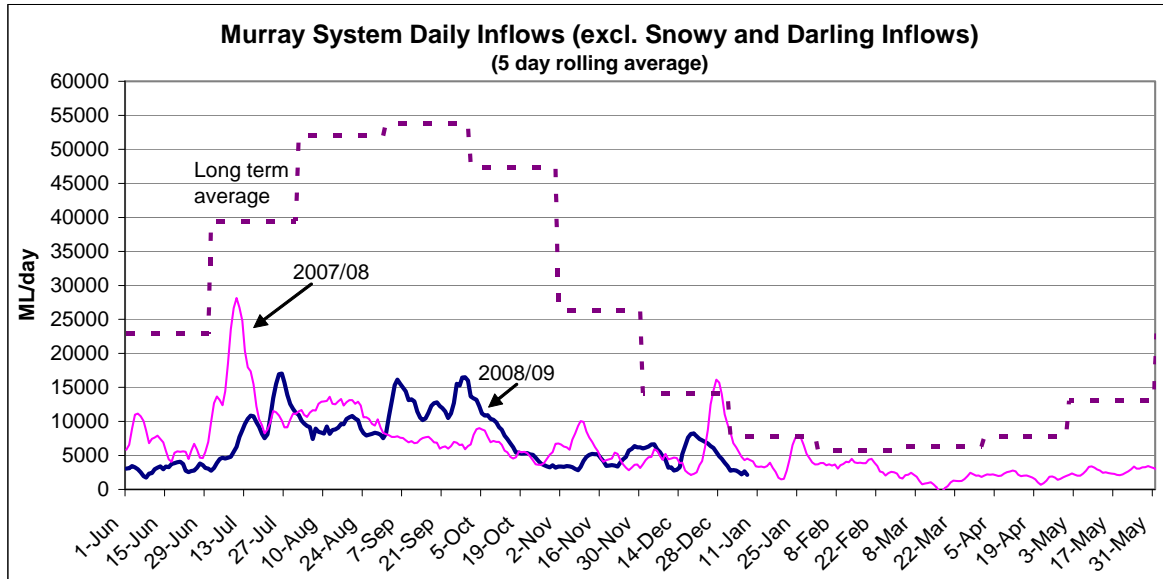
Fishways @ Barrages

	Openings	Level (m AHD)	Status	Rock Ramp	Vertical Slot
Goolwa	128 openings	-0.69	All closed	-	Closed
Mundoo	26 openings	-0.48	All closed	-	-
Boundary Creek	6 openings	-	All closed	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwichee	322 gates	-	All closed	Closed	Closed

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



Week ending Wednesday 7th January 2009



**State Allocations (as at 7th January 2009)**

**NSW - Murray Valley**

High security	95%
General security	4%

**NSW - Murrumbidgee Valley**

High security	95%
General security	12% (& extra 2% Feb 09)

**NSW - Lower Darling**

High security	100%
General security	50%

**Victoria - Murray Valley**

high reliability	33%
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**Victoria - Goulburn Valley**

high reliability	28%
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**South Australia - Murray Valley**

High security	15%
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NSW : [http://www.naturalresources.nsw.gov.au/mediarelnr/mr\\_toc\\_currnr.html](http://www.naturalresources.nsw.gov.au/mediarelnr/mr_toc_currnr.html)

VIC : <http://www.g-mwater.com.au/water-resources/allocations/current.asp>

SA : <http://www.dwlbc.sa.gov.au/media.html>