



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 05 OCTOBER 2011

Trim Ref: D11/29294

Rainfall and Inflows

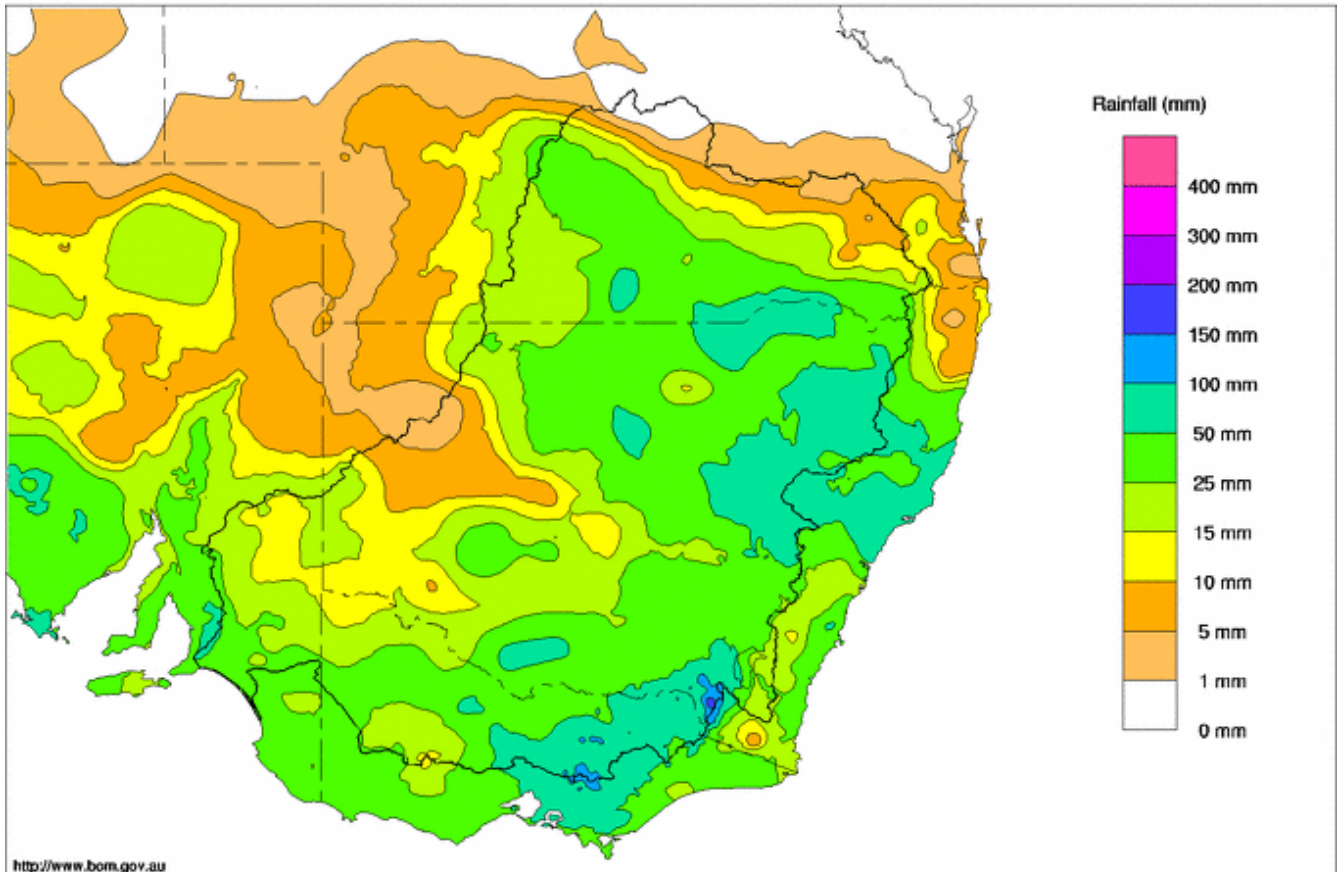
Widespread rainfall returned to the Murray-Darling Basin this week bringing to an end the multi-week recession of system inflows that began in late August. Precipitation fell mainly in the early part of the week as elevated moisture levels across south-eastern Australia fed into a large low pressure trough creating thunderstorms and areas of intense rainfall across much of NSW and Victoria. Further cold fronts followed the initial system bringing further showers to the south-east ranges.

There was considerable precipitation across many catchments in the Basin, with the highest totals recorded in catchments upstream of Hume Reservoir including the Tooma River catchment and across the upper western slopes of the Snowy Mountains where there were weekly totals in excess of 150 mm. High totals were also recorded in the upper Goulburn, Broken and Campaspe River catchments as well as along the north-west slopes and northern ranges of NSW (Map 1).

Some of the most intense rain fell through central Victoria including 61 mm at Lake Eppalock and higher totals across the Macedon Ranges. In the Broken River catchment, there was 136 mm at Mt Tabletop, while in the upper Goulburn catchment, Woods Point recorded 103 mm. High totals in the Victorian Alps included 115 mm at Rocky Valley and 112 mm at Mt Buffalo, while in the NSW Snowy Mountains, Tooma recorded 108 mm, and at Perisher Valley, which is located just a short distance beyond the Basin divide, there was 155 mm recorded for the week.

Murray Darling Rainfall Totals (mm) Week Ending 5th October 2011

Product of the National Climate Centre



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

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Issued: 05/10/2011

Map 1 - Murray-Darling Basin rainfall for the week ending 05 October 2011 (Source: Bureau of Meteorology).



As expected from the rain, stream flows have increased considerably in many tributaries. Some of the best responses were in the upper Murray catchment. For example, the Tooma River at Pinegrove jumped from around 800 ML/day to a peak of over 13,000 ML/day, while at Jingellic, the River Murray rose from around 6,000 ML/day to a peak of around 35,000 ML/day, but has since receded to around 13,000 ML/day. On the Ovens River, the flow at Wangaratta increased from 2,300 ML/day to a peak of almost 10,000 ML/day.

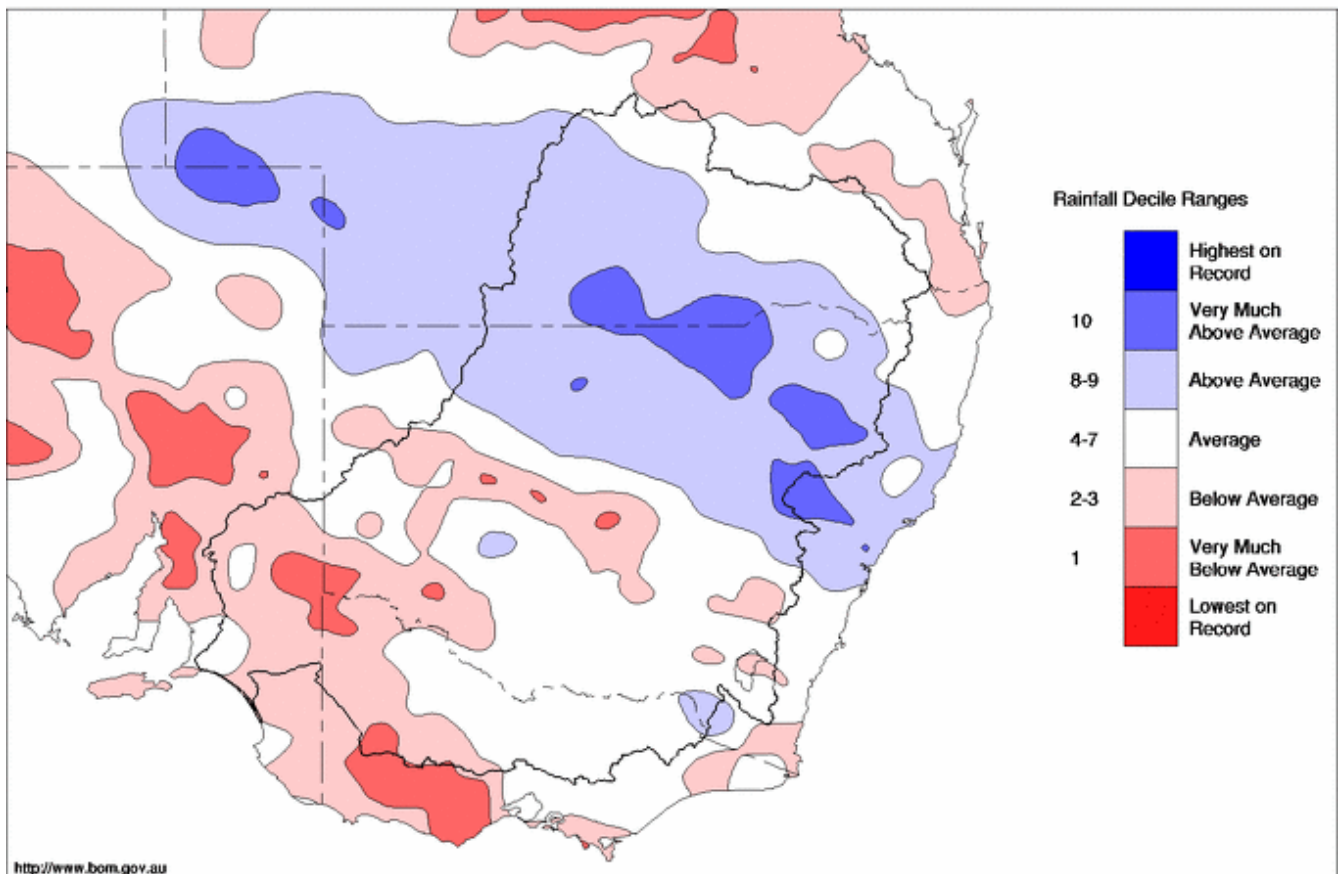
September 2011 Summary

Rainfall for September averaged 35.7 mm across the Murray-Darling Basin (71st driest out of 112 years of record). Broadly speaking, there was above average rainfall through much of the northern Basin, and below average to average rainfall across the south (Map 2). It should be noted, however, that much of the rain fell over the last two days of the month, meaning for the majority of September, conditions were quite dry. This also means that the rainfall late in the month will mostly contribute to inflows during early October.

Murray system inflows (excluding Snowy releases and Menindee inflows) for September were about 850 GL. This is much lower than September last year (2,920 GL) - when major flooding was taking place in several tributaries – and also less than the long term average for September (1,600 GL).

Murray Darling Rainfall Deciles September 2011

Distribution Based on Gridded Data
Product of the National Climate Centre



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

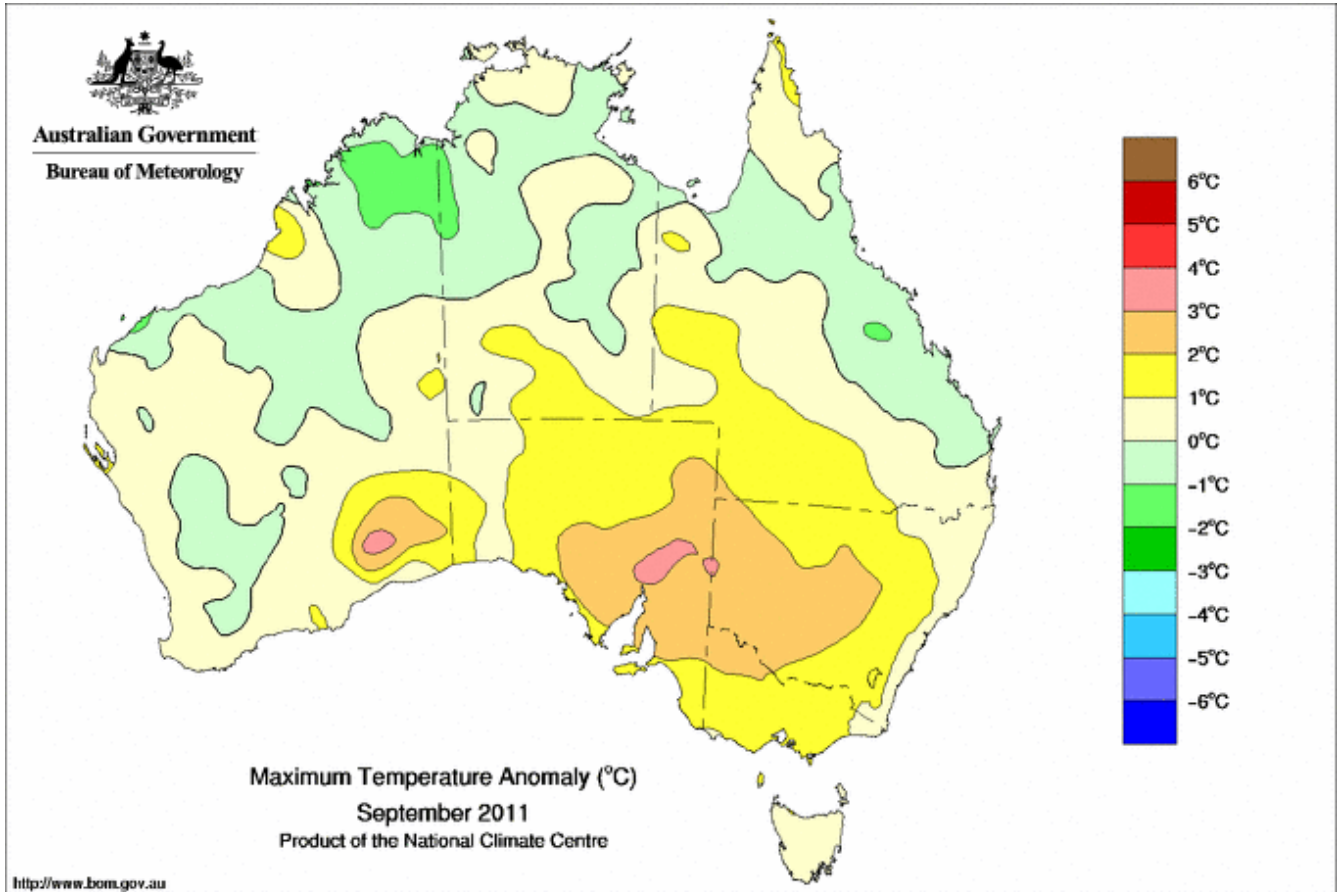
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Issued: 30/09/2011

Map 2 - Murray-Darling Basin rainfall for September 2011 (Source: Bureau of Meteorology).



September also continued the warm trend observed during August in the Basin. In particular, temperatures were above the average over most areas. Across western NSW, north-western Victoria and the South Australian Riverland, maximum temperatures were more than two degrees Celsius above the long-term average (Map 3).



Map 3 - Maximum mean temperature anomaly for Australia during September 2011 (Source: Bureau of Meteorology).

River Operations

MDBA active storage increased by 59 GL during the week to 7,547 GL (88% capacity). At Dartmouth Reservoir, the total storage increased by 27 GL to 2,804 GL (73% capacity) and the release remained at the normal minimum of 200 ML/day.

At Hume Reservoir, the total storage increased by 50 GL to 2,976 GL (99% capacity) as inflows from the upper Murray and Mitta Mitta Rivers peaked at around 40,000 ML/day. Release was increased prior to the rain event to about 15,000 ML/day and increased again to 25,000 ML/day as inflows to the storage rose. As at Wednesday 5 October, inflows to Hume Reservoir had receded to around 15,000 ML/day and in order to regain some 'airspace', release had only been eased back to 21,000 ML/day. It is expected that around 50 GL of 'airspace' will have been gained by the middle of the weekend. At this stage, the release is expected to be reduced further over the coming days, however MDBA is keeping a continual watch on the rain forecast and release may change in response to changes in rain forecasts.

Downstream at Yarrawonga Weir, the release peaked on Wednesday 5 October at 28,000 ML/day as inflows, primarily from the Murray, peaked at just over 30,000 ML/day; the release will now be slowly decreased during the coming week. Due to the rise in release, all regulators in the Barmah-Millewa Forest, upstream of the Edward Offtake have now been opened.



In the Edward-Wakool system, the flow downstream of Stevens Weir has increased from 1,000 to 2,000 ML/day this week and will continue to rise as the increased release from Yarrawonga Weir arrives. Further downstream, in the Wakool at Stoney Crossing, flows are now at around 1,400 ML/day and slowly falling. It is expected that these flows will remain above 1,000 ML/day in the coming weeks before beginning to rise again.

In the Goulburn River at McCoy's Bridge, flow increased this week from 1,000 ML/day to a peak of around 10,000 ML/day and is now receding. It is expected that the Goulburn flow will join higher flows in the Murray to create a peak at Torrumbarry Weir, currently around 13,000 ML/day, of about 19,000 ML/day around Monday 10 October. Goulburn-Murray Water indicated this week that storages in the Goulburn catchment are close to capacity and hence higher flows may be expected if further significant rainfall occurs in the coming weeks (see attached [G-MW media release](#)).

On the River Murray at Euston Weir, the flow has continued to fall this week and is now at 16,000 ML/day. The flow at Euston is expected to remain around this level in the coming days before rising again as increased flows from upstream arrive.

On the Darling River at Menindee Lakes, the total storage has decreased by 16 GL to 1,895 GL (109% capacity). The release, measured at Weir 32, continues to be pulsed around an average of 500 ML/day to create variability in flows downstream of the lakes.

At Lake Victoria, the inflows and outflows are currently being managed to keep the level of the lake steady at around 26.1 m AHD, hence the storage is largely unchanged with a decrease during the week of 2 GL to 573 GL (85% capacity). The flow to South Australia averaged around 25,700 ML/day this week, down from 33,000 ML/day last week.

Inflow to the Lower Lakes is now estimated at around 30,000 ML/day and releases from the Barrages to the Murray Mouth are being managed to target a level of around 0.8 m AHD. Currently the level of the lakes is 0.84 m AHD.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Murray

Water in Storage

Week ending Wednesday 05 Oct 2011

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	468.37	2 804	73%	71	2 733	+27
Hume Reservoir	192.00	3 005	191.85	2 976	99%	23	2 953	+50
Lake Victoria	27.00	677	-9.00	573	85%	100	473	-2
Menindee Lakes		1 731*		1 895	109%	(480 #)	1 415	-16
Total		9 269		8 248	89%	--	7 574	+59
Total Active MDBA Storage							88% ^	

Major State Storages

Burrinjuck Reservoir	1 026	1 021	99%	3	1 018	+6
Blowering Reservoir	1 631	1 519	93%	24	1 495	+13
Eildon Reservoir	3 334	3 283	98%	100	3 183	+63

* 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 04 Oct 2011

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2011
Lake Eucumbene - Total	1 728	n/a	Snowy-Murray	-0	274
Snowy-Murray Component	551	n/a	Tooma-Tumut	+12	163
Target Storage	1 400		Net Diversion	-12	111
			Murray 1 Release	+15	467

Major Diversions from Murray and Lower Darling (GL) *

New South Wales	This Week	From 1 July 2011	Victoria	This Week	From 1 July 2011
Murray Irrig. Ltd (Net)	17.8	181	Yarrowonga Main Channel (net)	0.5	47
Wakool Sys Allowance	0.0	0	Torrumbarry System + Nyah (net)	0.8	113
Western Murray Irrigation	0.2	2	Sunraysia Pumped Districts	0.6	11
Licensed Pumps	2.6	33	Licensed pumps - GMW (Nyah+u/s)	0.2	4
Lower Darling	0.3	5	Licensed pumps - LMW	6.2	32
TOTAL	20.9	221	TOTAL	8.3	207

* 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 entitlement for October due to Additional Dilution Flow and Unregulated Flows.

Entitlement this month	170.0 *	
Flow this week	179.6	(25 700 ML/day)
Flow so far this month	117.0	
Flow last month	910.4	

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

	Current	Average over the last week	Average since 1 August 2011
Swan Hill	130	160	140
Euston	150	140	120
Red Cliffs	120	120	110
Merbein	110	110	100
Burtundy (Darling)	370	350	350
Lock 9	130	130	120
Lake Victoria	160	170	200
Berri	200	190	180
Waikerie	-	-	-
Morgan	210	200	220
Mannum	200	200	220
Murray Bridge	180	180	220
Milang (Lake Alex.)	510	510	550
Poltalloch (Lake Alex.)	250	280	270
Meningie (Lake Alb.)	5 620	5 640	5 590
Goolwa Barrages	720	2 000	1 880

River Levels and Flows

Week ending Wednesday 05 Oct 2011

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	-	-	-	5 370	F	5 660	3 490
Jingellic	4.0	2.63	209.15	13 140	F	20 380	6 860
Tallandoo (Mitta Mitta River)	4.2	1.71	218.60	1 240	F	1 510	1 030
Heywoods	5.5	3.45	157.08	21 000	F	19 190	10 590
Doctors Point	5.5	3.72	152.19	22 410	F	21 860	12 020
Albury	4.3	2.84	150.28	-	-	-	-
Corowa	3.8	4.42	130.44	24 910	R	17 850	13 730
Yarrowonga Weir (d/s)	6.4	3.60	118.64	28 140	R	21 020	12 870
Tocumwal	6.4	4.02	107.86	25 810	R	18 210	13 410
Torrumbarry Weir (d/s)	7.3	3.87	82.42	12 770	R	10 860	7 740
Swan Hill	4.5	2.03	64.95	11 230	R	9 710	8 770
Wakool Junction	8.8	4.50	53.62	16 160	R	16 110	23 440
Euston Weir (d/s)	8.8	2.78	44.62	16 020	F	17 830	29 460
Mildura Weir (d/s)	-	-	-	17 090	F	17 090	-
Wentworth Weir (d/s)	7.3	3.79	28.55	16 310	F	21 690	39 710
Rufus Junction	-	4.99	21.92	17 540	F	24 660	33 550
Blanchetown (Lock 1 d/s)	-	2.16	-	30 400	F	30 400	29 400
Tributaries							
Kiewa at Bandiana	2.7	2.15	155.38	2 370	F	3 100	1 630
Ovens at Wangaratta	11.9	9.26	146.94	4 140	F	6 650	2 730
Goulburn at McCoys Bridge	9.0	5.09	96.51	9 700	R	3 590	960
Edward at Stevens Weir (d/s)	-	1.97	81.74	1 940	F	1 760	1 840
Edward at Liewah	-	2.75	58.13	2 220	F	2 570	3 780
Wakool at Stoney Crossing	-	1.82	55.31	1 490	F	2 110	5 290
Murrumbidgee at Balranald	5.0	2.83	58.79	2 660	R	2 480	3 260
Barwon at Mungindi	-	3.39	-	520	R	590	1 020
Darling at Bourke	-	4.25	-	1 080	F	1 200	940
Darling at Burtundy Rocks	-	0.81	-	300	S	450	590

Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme)	29 930	11 940
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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	-0.17	-	No. 7 Rufus River	22.10	+0.42	+2.67
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	-0.24	+1.18
No. 15 Euston	47.60	-0.02	-	No. 5 Renmark	16.30	-0.08	+1.09
No. 11 Mildura	34.40	+0.04	+0.86	No. 4 Bookpurnong	13.20	-0.14	+2.25
No. 10 Wentworth	30.80	+0.04	+1.15	No. 3 Overland Corner	9.80	+0.07	+1.94
No. 9 Kulnine	27.40	-0.03	+0.40	No. 2 Waikerie	6.10	+0.22	+2.21
No. 8 Wangumma	24.60	-0.25	+1.13	No. 1 Blanchetown	3.20	+0.11	+1.41

Lower Lakes FSL = 0.75 m AHD

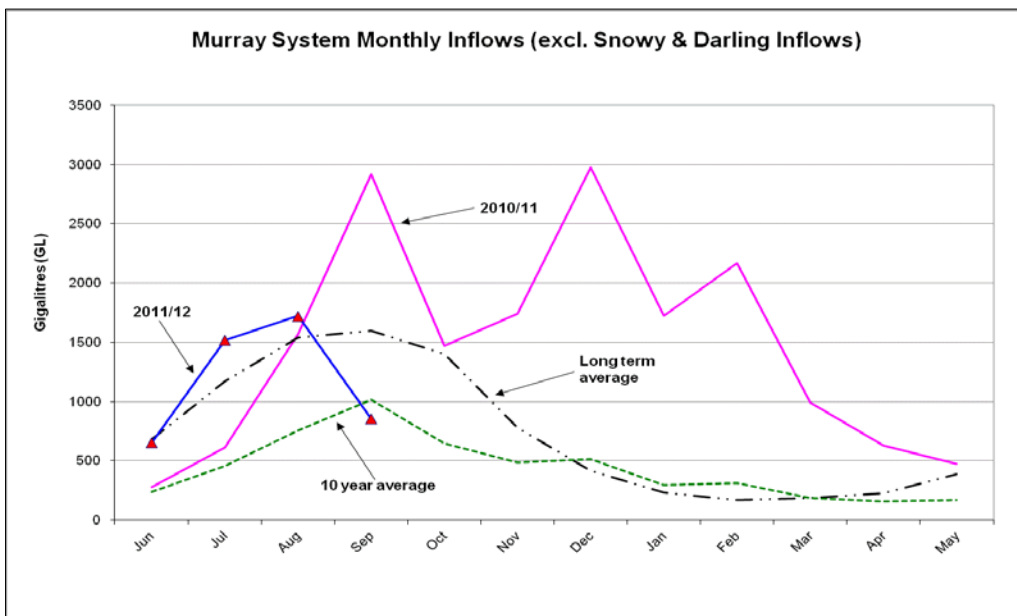
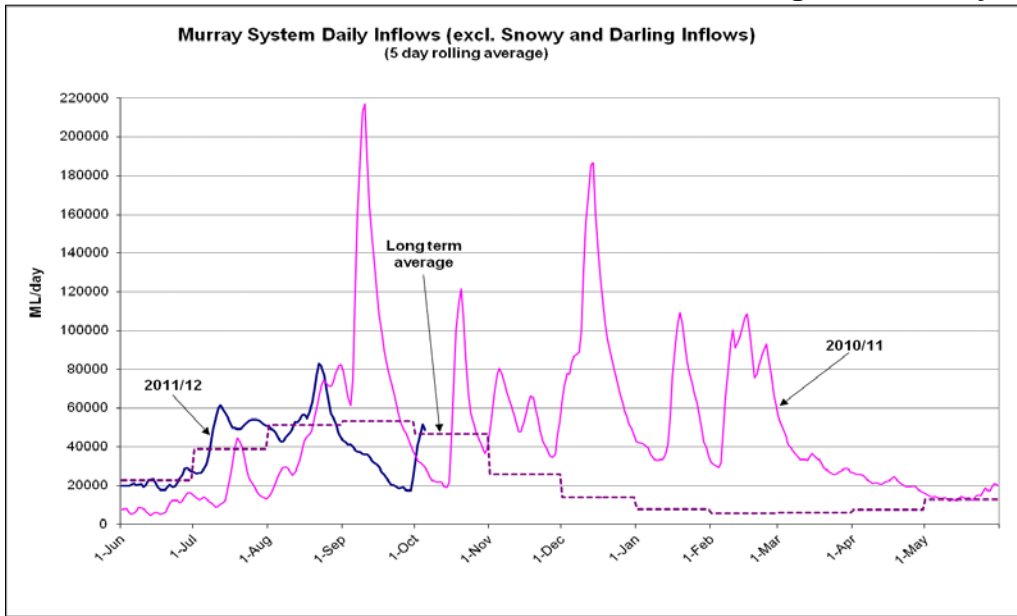
Lake Alexandrina average level for the past 5 days (m AHD)	0.84
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Barrages

Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.83	20	-	Open
Mundoo	26 openings	0.84	6	-	-
Boundary Creek	6 openings	-	1	-	-
Ewe Island	111 gates	-	6	-	-
Tauwichee	322 gates	0.90	30	Open	Open

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



State Allocations (as at 05 Oct 2011)

NSW - Murray Valley

High security	97%
General security	21%

Victorian - Murray Valley

High reliability	71%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	63%

Victorian - Goulburn Valley

High reliability	100%
Low reliability	0%

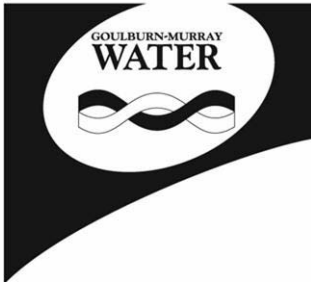
NSW - Lower Darling

High security	100%
General security	100%

South Australia - Murray Valley

High security	100%
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NSW : <http://www.water.nsw.gov.au/About-us/Media-releases/media/default.aspx>
 VIC : <http://www.g-mwater.com.au/water-resources/allocations/current.asp>
 SA : <http://www.waterforgood.sa.gov.au/category/news/>



Media Release

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Release Date: 5 October 2011

Expect higher flows downstream as G-MW water storages near capacity

Rainfall across the region has boosted water storage supplies with many Goulburn-Murray Water (G-MW) storages at capacity or likely to fill within days.

G-MW Manager Water Resources Dr Mark Bailey said that Lake Eildon and Lake Hume were expected to reach capacity this weekend and customers and communities should be aware of the increased potential for higher releases to occur, especially in the Goulburn River downstream of Lake Eildon.

“The combination of warm weather conditions until last week, recent rainfall rejuvenating inflows and reducing irrigation demand has led to full storages at the start of October, a position that we haven’t been in for more than a decade,” Dr Bailey said.

“G-MW does not issue flood alerts or provide rainfall forecasts, but there is the potential for higher releases of water downstream from G-MW water storages to occur over the next fortnight,” Dr Bailey said.

“While we are still in the peak inflow period with less airspace available in water storages, we are keeping a close watch on Bureau of Meteorology forecasts and the operation of water storages, that are monitored 24 hours a day, 7 days a week,” Dr Bailey said.

G-MW can pre-release at some water storages to minimise flood impacts, but it is balanced with G-MW’s role as managing these dams as water supply storages.

“There’s a balance between storing customer’s water held in these storages and anticipating potential rainfall and the impact that this can have on storage volume,” said Dr Bailey.

“Pre-releasing water where we have the infrastructure capable of doing so is normal practice and is within the operating rules that G-MW as the water storage manager must adhere to,” Dr Bailey said.

Next week G-MW is also planning to undertake the final testing of the Lake Eildon spillway flood gates following upgrading of the gates operating gear by the Eildon Alliance in 2006. Water released for this testing will be contained within the Lake Eildon pondage and have no impact on the Goulburn River below Eildon or downstream communities.

For information about:

River levels, rainfall forecasts and flood warnings contact the Bureau of Meteorology www.bom.gov.au

Emergency assistance contact VicSES on www.ses.vic.gov.au

For the latest update on G-MW water storages, the role of water storages in flood mitigation and even how a water storage works, visit www.g-mwater.com.au and click on the photograph “Managing Water Storages”. Information about pre-releases is updated regularly.

- ENDS -

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