



# RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 18 APRIL 2012

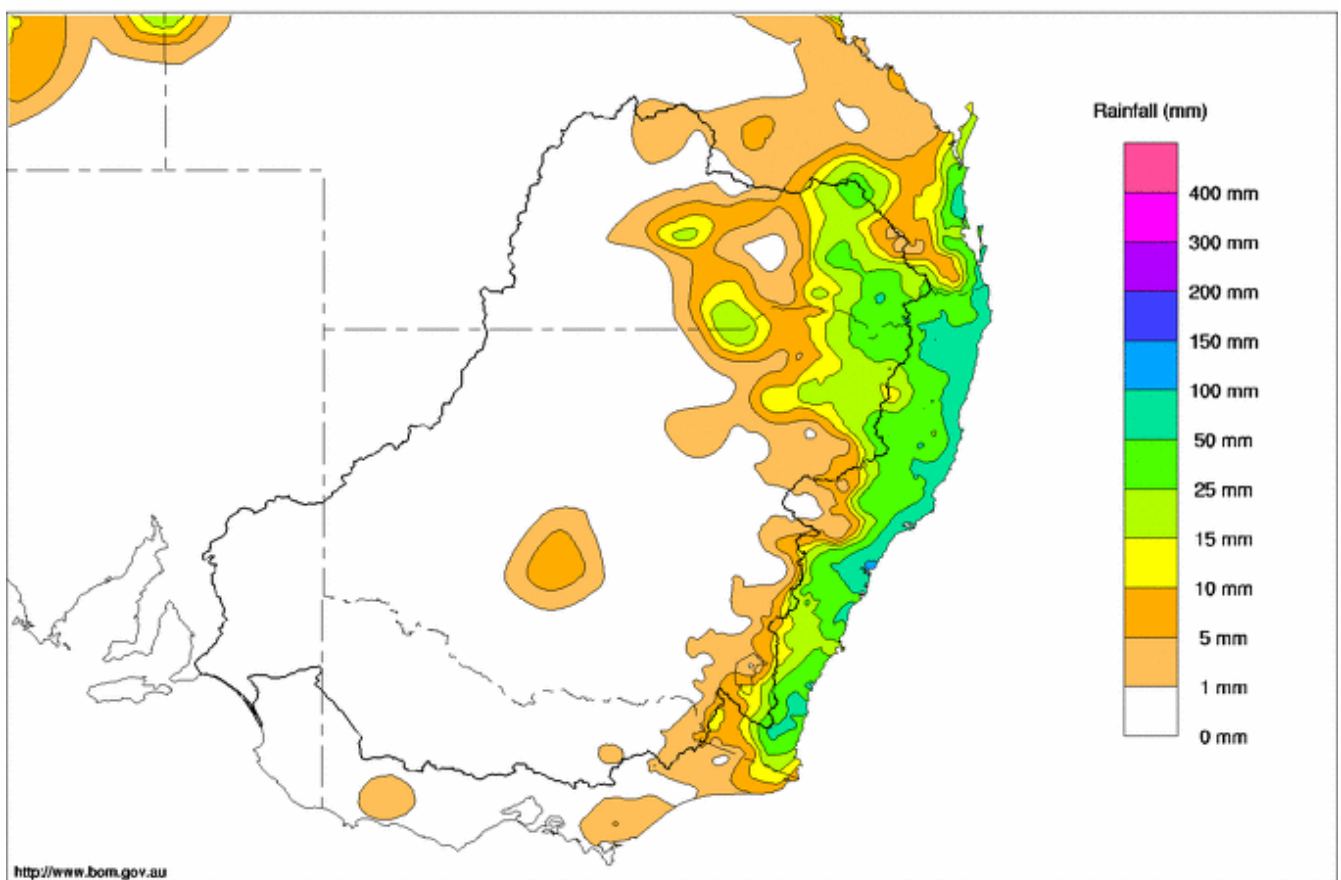
Trim Ref: D12/14539

## Rainfall and Inflows

There was fine and dry weather across the Murray-Darling Basin for most of the week under the influence of a broad high pressure system that brought stable autumnal conditions to south-eastern Australia. However, moist easterly winds and a trough that has developed over the last few days have caused rainfall to increase along the east coast, with some activity pushing across of the Great Divide. As a result, precipitation was confined to eastern and north-eastern parts of the Basin, with almost no rainfall recorded over most remaining districts (Map 1).

Highest rain totals were recorded over the Queensland Darling Downs and north-eastern NSW, including 57 mm at Beruna in the upper Condamine catchment and 58 mm at Stanthorpe, 51 mm at Applethorpe and 30 mm at Tenterfield in the upper Dumaresq catchment. Further west, there was 19 mm at Mungindi, while across the NSW Southern Tablelands falls were generally lighter, with totals up to around 20 mm reported at several localities south-east of the ACT.

Murray Darling Rainfall Totals (mm) Week Ending 18th April 2012  
Product of the National Climate Centre



Map 1 - Murray-Darling Basin rainfall for the week ending 18 April 2012 (Source: Bureau of Meteorology).



The continuing run of mostly dry weather across the upper Murray catchments has resulted in a further reduction to flows along most tributaries. On the upper River Murray, the flow at Biggara receded from around 1,400 to 1,200 ML/day; while on the Ovens River, the flow at Wangaratta decreased from 1,800 to 1,600 ML/day. Inflow from the Murrumbidgee River has continued to increase during the week with the flow at Balranald reaching 25,000 ML/day and forecast to peak over the coming days. High inflows to the mid-Murray from the lower Murrumbidgee - generated from the early March floods - are expected to continue for several weeks.

## River Operations

MDBA active storage increased by 49 GL during the week and is currently 7,080 GL (82% capacity) – mainly due to an increase in volume at the Menindee Lakes. At Dartmouth Reservoir, the storage volume increased by 5 GL and is now 3,189 GL (83% capacity). The release from Dartmouth, measured at Colemans, remained at 200 ML/day. At Hume Reservoir, the storage volume decreased by 39 GL during the week and is now 2,617 GL (87% capacity). The release from Hume was increased early in the week to meet downstream demands, but has been cut back slightly in the last few days and is currently targeting a flow downstream at Doctors Point of 11,000 ML/day. The release may be reduced slightly further during the coming days.

At Yarrawonga Weir, the pool level is currently 124.73 m AHD, which is close to the normal operating level. It is expected to remain relatively steady over the coming days. Diversion from Lake Mulwala has averaged around 4,500 ML/day at the Mulwala Canal and around 1,300 ML/day into the Yarrawonga Main Channel. The release from Yarrawonga Weir is currently 7,500 ML/day, and now includes some Commonwealth environmental water to add an additional in-channel dilution flow along the River Murray and Edward-Wakool system. This additional flow will assist in managing blackwater with low dissolved oxygen levels that continues to flow into the river system from several tributaries following the recent over-bank flooding. More information is provided in the attached water quality bulletin.

On the Edward-Wakool system, diversion into the Edward River has decreased only slightly and is currently 1,500 ML/day through the Edward River offtake and 340 ML/day through the Gulpa Creek Offtake. Downstream at the escapes, there continues to be 2,100 ML/day released via the Edward escape and 300 ML/day through the Wakool escape; while diversion through the Wakool River, Yallakool Creek and Colligen Creek regulators has been decreased. At Stevens Weir, the release has averaged around 2,400 ML/day during the week, which is slightly up from the previous week. On the Billabong Creek, high flows at Darlot have now peaked and subsequently dropped below 5,000 ML/day in the last few days. Downstream on the Edward River, the flow at Moulamein has also peaked, but is now receding only slowly with the current flow just under 9,000 ML/day. Downstream on the Wakool River at Kyalite, the flow continued to fall away, decreasing from 15,800 to 12,800 ML/day during the week.

On the Goulburn River, the flow at McCoys Bridge increased slightly as expected, reaching a flow of 3,900 ML/day. At Torrumbarry Weir, diversion into the National Channel has been increased from around 2,000 to 2,700 ML/day, while the flow downstream of the weir decreased to 8,300 after remaining fairly steady for much of the week. The flow is expected to decrease only slightly over the coming days. At Swan Hill, the river continued to recede and is now flowing at 7,800 ML/day.

On the Murrumbidgee River, the flow at Balranald increased considerably over the last few days as the main flood peak approached. The flow is now around 25,000 ML/day and the Bureau of Meteorology is forecasting a peak close to 6.8 m on 20 April with minor to moderate flooding. For information regarding flood warnings please refer to the Bureau of Meteorology website at [www.bom.gov.au](http://www.bom.gov.au).

At Euston, the flow eased back from the previous week's peak, but has now re-commenced rising as Murrumbidgee inflows increase. The flow is currently 32,000 ML/day and is expected to slowly



increase over the coming days, and although it is not expected to exceed the recent peak, the river at Euston should continue to flow at rates above 30,000 ML/day into early May.

Downstream at Mildura, the weir has now been re-instated following the period of higher flows and the pool level has been raised over the last few days. The level is now at 34.35 m AHD or 5 cm below the normal operating level.

On the Darling River, the flow at Wilcannia peaked at 10.63 m over the weekend with major flooding, and has dropped only slightly since then. The peak is expected to be broad, and combined with flow from the Talyawalka Creek, will maintain high inflows to the Menindee Lakes for several weeks. At Menindee Lakes, the storage volume has increased by 106 GL to 1,538 GL (89%). The lakes will continue to rise over the coming weeks. Release from the Lakes (measured at Weir 32) has been reduced from 35,000 to 30,500 ML/day during the past week and is expected to decrease to 25,000 ML/day in the coming days. Further reductions to the release will then be undertaken over the coming weeks resulting in more water pushing into the lakes, enabling them to refill while managing the recession along the lower Darling River. Downstream at Burtundy the flow continues to rise slowly but steadily, and has now reached 19,400 ML/day. For further information on the flood operations at Menindee Lakes, please refer to the NSW Office of Water website ([www.water.nsw.gov.au](http://www.water.nsw.gov.au)) with details available at <http://www.water.nsw.gov.au/Water-management/Water-availability/Flood-management/>.

At Wentworth, the river peaked at 58,400 ML/day then dropped slightly over the last week to the current flow of 56,400 ML/day. Although the level remains 7 cm above the normal pool height, the weir has now been re-instated and normal pool level will now be targeted.

At Lake Victoria, the storage volume decreased by 24 GL and is currently 410 GL (61% capacity). The flow to South Australia has averaged 59,300 ML/day over the past week and is expected to remain close to this value during the coming week.

At the Lower Lakes, additional Barrage gates were opened during the week as favourable weather conditions returned. Flow to the sea increased as a result and the average level in the lakes dropped by 8 cm to 0.66 m AHD (9 cm below full supply level). Higher tides over the coming weeks may result in further gate closures, and with the current high inflows, the Lower Lakes are expected to rise again.

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

DAVID DREVERMAN  
Executive Director, River Management



**Water in Storage**

**Week ending Wednesday 18 Apr 2012**

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	475.23	3 189	83%	71	3 118	+5
Hume Reservoir	192.00	3 005	189.99	2 617	87%	23	2 594	-39
Lake Victoria	27.00	677	24.66	410	61%	100	310	-24
Menindee Lakes		1 731*		1 538	89%	(480 #)	1 058	+106
<b>Total</b>		<b>9 269</b>		<b>7 754</b>	<b>84%</b>	<b>--</b>	<b>7 080</b>	<b>+49</b>
Total Active MDBA Storage							82% ^	

**Major State Storages**

Burrinjuck Reservoir	1 026	949	92%	3	946	+2
Blowering Reservoir	1 631	1 526	94%	24	1 502	-4
Eildon Reservoir	3 334	2 931	88%	100	2 831	-55

\* 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 17 Apr 2012

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2011
Lake Eucumbene - Total	2 509	n/a	Snowy-Murray	+6	315
Snowy-Murray Component	909	n/a	Tooma-Tumut	+4	351
Target Storage	1 340		Net Diversion	2	-36
			Murray 1 Release	+8	727

**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)	18.7	1011	Yarrowonga Main Channel (net)	6.4	197
Wakool Sys Allowance	-1.2	25	Torrumbarry System + Nyah (net)	13.3	494
Western Murray Irrigation	0.5	21	Sunraysia Pumped Districts	1.4	86
Licensed Pumps	3.8	173	Licensed pumps - GMW (Nyah+u/s)	1.7	51
Lower Darling	7.5	258	Licensed pumps - LMW	3.3	256
<b>TOTAL</b>	<b>29.3</b>	<b>1488</b>	<b>TOTAL</b>	<b>26.1</b>	<b>1084</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 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 April due to Unregulated Flows and Additional Dilution Flow.

Entitlement this month	135.0 *	
Flow this week	415.3	(59 300 ML/day)
Flow so far this month	1,067.4	
Flow last month	1,024.8	

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

	Current	Average over the last week	Average since 1 August 2011
Swan Hill	150	140	130
Euston	190	170	130
Red Cliffs	160	140	150
Merbein	140	130	140
Burtundy (Darling)	270	260	350
Lock 9	180	180	190
Lake Victoria	240	230	220
Berri	220	230	250
Waikerie	-	-	-
Morgan	270	290	280
Mannum	260	260	420
Murray Bridge	330	330	350
Milang (Lake Alex.)	730	750	540
Poltalloch (Lake Alex.)	330	330	360
Meningie (Lake Alb.)	4 530	4 700	5 030
Goolwa Barrages	460	520	1 520



**River Levels and Flows**

**Week ending Wednesday 18 Apr 2012**

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	-	-	-	3 120	F	1 610	1 350
Jingellic	4.0	1.77	208.29	5 030	R	3 750	4 330
Tallandoon ( Mitta Mitta River )	4.2	1.53	218.42	720	F	750	840
Heywoods	5.5	2.62	156.25	10 330	F	10 170	9 530
Doctors Point	5.5	2.70	151.17	11 100	F	11 270	10 960
Albury	4.3	1.66	149.10	-	-	-	-
Corowa	3.8	2.73	128.75	11 640	R	10 340	10 870
Yarrawonga Weir (d/s)	6.4	1.33	116.37	7 510	S	7 320	8 070
Tocumwal	6.4	1.97	105.81	7 550	F	7 520	8 440
Torrumbarry Weir (d/s)	7.3	2.63	81.18	8 340	F	9 150	11 410
Swan Hill	4.5	1.66	64.58	7 830	F	8 690	15 450
Wakool Junction	8.8	5.83	54.95	21 650	F	24 030	31 750
Euston Weir (d/s)	8.8	4.44	46.28	32 390	F	33 600	37 110
Mildura Weir (d/s)	-	-	-	-	-	-	-
Wentworth Weir (d/s)	7.3	6.01	30.77	56 400	S	57 260	57 370
Rufus Junction	-	7.24	24.17	59 090	F	59 320	59 410
Blanchetown (Lock 1 d/s)	-	3.14	-	49 200	S	48 300	43 170
<b>Tributaries</b>							
Kiewa at Bandiana	2.7	1.40	154.63	1 130	F	1 170	1 310
Ovens at Wangaratta	11.9	8.39	146.07	1 630	R	1 670	1 920
Goulburn at McCoys Bridge	9.0	3.13	94.55	3 880	S	3 630	3 200
Edward at Stevens Weir (d/s)	-	2.27	82.04	2 400	F	2 420	1 970
Edward at Liewah	-	5.27	60.65	7 830	S	7 820	7 610
Wakool at Stoney Crossing	-	3.03	56.52	4 530	F	5 550	8 780
Murrumbidgee at Balranald	5.0	6.68	62.64	24 940	R	20 120	10 230
Barwon at Mungindi	-	3.24	-	140	F	70	170
Darling at Bourke	-	5.30	-	9 960	F	10 390	14 420
Darling at Burtundy Rocks	-	7.32	-	19 440	S	19 260	18 840

Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme)	4 820	6 580
---	-------	-------

**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
Yarrawonga	124.90	-0.17	-	No. 7 Rufus River	22.10	+2.14	+4.94
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.16	+3.09
No. 15 Euston	47.60	+0.08	-	No. 5 Renmark	16.30	+0.00	+2.79
No. 11 Mildura	34.40	-0.05	+2.00	No. 4 Bookpurnong	13.20	+0.66	+3.99
No. 10 Wentworth	30.80	+0.07	+3.37	No. 3 Overland Corner	9.80	+0.06	+3.40
No. 9 Kulnine	27.40	+0.10	+2.82	No. 2 Waikerie	6.10	+0.79	+3.47
No. 8 Wangumma	24.60	+1.08	+3.55	No. 1 Blanchetown	3.20	+0.15	+2.39

**Lower Lakes FSL = 0.75 m AHD**

Lake Alexandrina average level for the past 5 days (m AHD)	0.66
--	------

**Barrages**

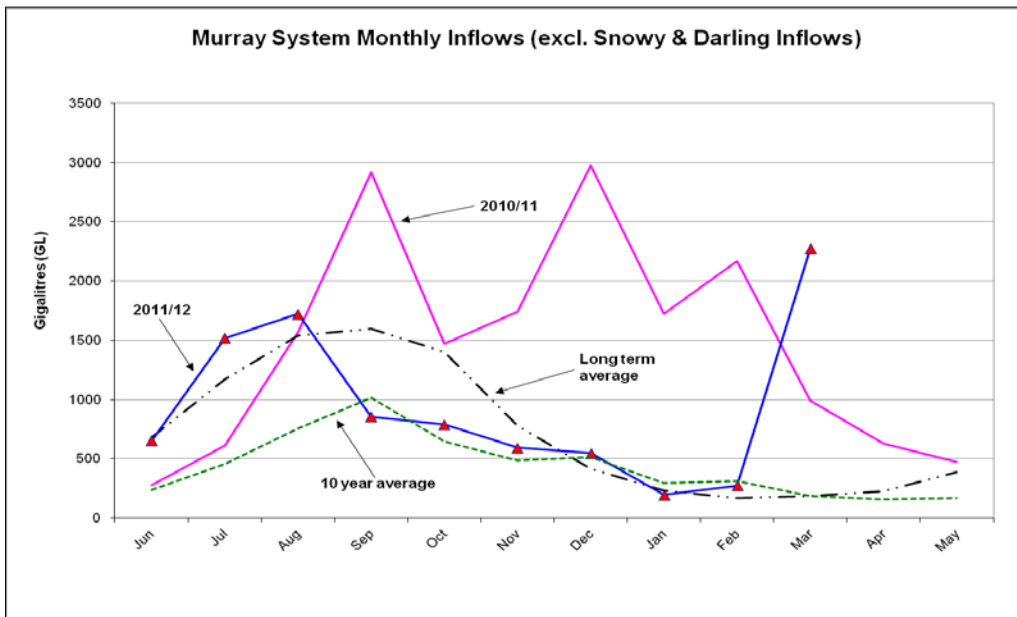
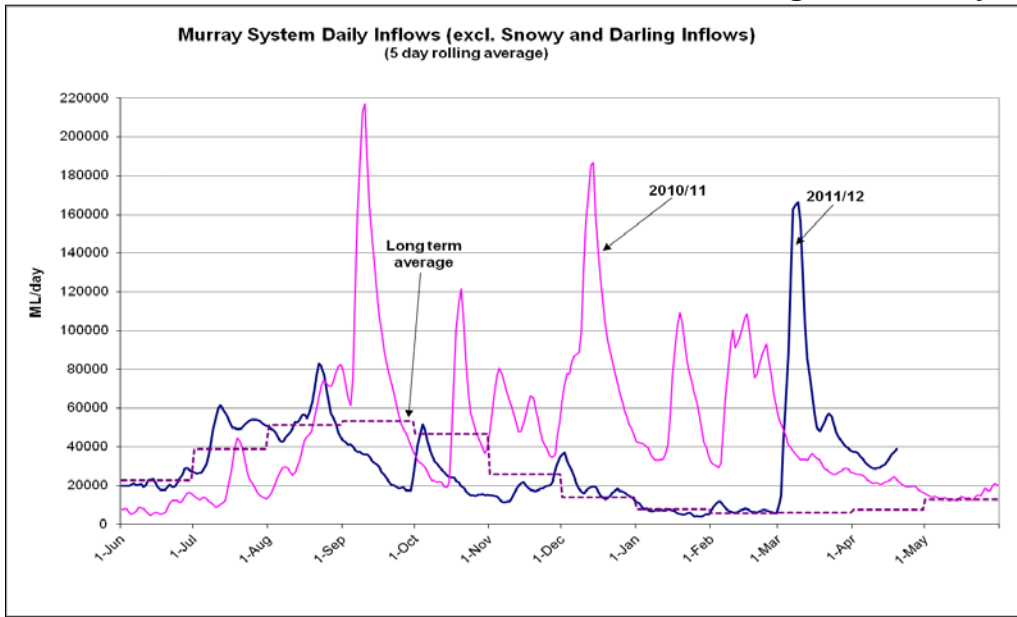
**Fishways at Barrages**

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.52	80	-	Open
Mundoo	26 openings	0.58	6	-	-
Boundary Creek	6 openings	-	1	-	-
Ewe Island	111 gates	-	52	-	-
Tauwichee	322 gates	0.65	85	Open	Open

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



Week ending Wednesday 18 Apr 2012



### State Allocations (as at 18 Apr 2012)

#### NSW - Murray Valley

High security	100%
General security	100%

#### Victorian - Murray Valley

High reliability	100%
Low reliability	0%

#### NSW - Murrumbidgee Valley

High security	100%
General security	100%

#### 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%
---------------	------

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/>

# Water Quality Bulletin



19 April 2012

---

## Update on blackwater in the River Murray system

Following the recent flooding, blackwater has occurred in the River Murray downstream of the Edward–Wakool and Murrumbidgee River confluences.

Water that is rich in organic matter has drained from the floodplains and entered the river channels, lowering the amount of dissolved oxygen in the river.

Blackwater events are a natural part of the ecology of lowland river systems during flooding. When accumulations of organic matter such as eucalypt leaves and twigs decay in wetlands or waterways, the decay process darkens the water, turning it black. This can result in a temporary low level of dissolved oxygen that may cause stress to fish, crayfish and other aquatic animals. When the dissolved oxygen reaches a very low level it can result in fish deaths.

The Murray–Darling Basin Authority has convened the Blackwater Monitoring Group - consisting of all relevant state agencies – to provide advice on real-time responses to this blackwater event.

To date, the MDBA's use of unregulated flows to help dilute the blackwater have been successful in limiting the severity of the event in the Murray and Edward-Wakool System.

Before the blackwater reaches the South Australian border it will be further diluted from Darling River floodwaters, which have a relatively high level of dissolved oxygen.

Commonwealth environmental water is also being made available for use in the mid-Murray River system, during autumn 2012. Commonwealth environmental water will be released from Hume Dam into the Murray River, targeting flows of 7,500 megalitres per day downstream of [Yarrowonga Weir](#). This action together with releases of environmental water from the [Goulburn River](#), in the [Edward-Wakool River](#) system and additional releases in the [Murrumbidgee](#) aim to improve in-stream water quality. The total volume of environmental water used will depend on the recovery of dissolved oxygen levels in the rivers as well as constraints on actual delivery of the water including channel capacity. Given the severity of the blackwater issues and the system constraints it is not expected that all water quality issues will be able to be addressed.

---

## **To report fish deaths**

In Victoria contact the Environment Protection Authority on 1800 444 004

In NSW contact Fisheries, Department of Industry and Investment on 1300 550 474

In SA contact Fishwatch on 1800 065 522

## **For media information**

Contact the MDBA media office on (02) 6279 0141 or email [media@mdba.gov.au](mailto:media@mdba.gov.au)

For NSW contact Office of Water media on 0407 403 234

For Victoria contact the Department of Sustainability and Environment on 0400 983 471

**For further information on blackwater please visit the MDBA website**

**[www.mdba.gov.au](http://www.mdba.gov.au).**

**Information on Commonwealth environmental water use is available at**

**<http://www.environment.gov.au/ewater/index.html>**