



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 16 DECEMBER 2015

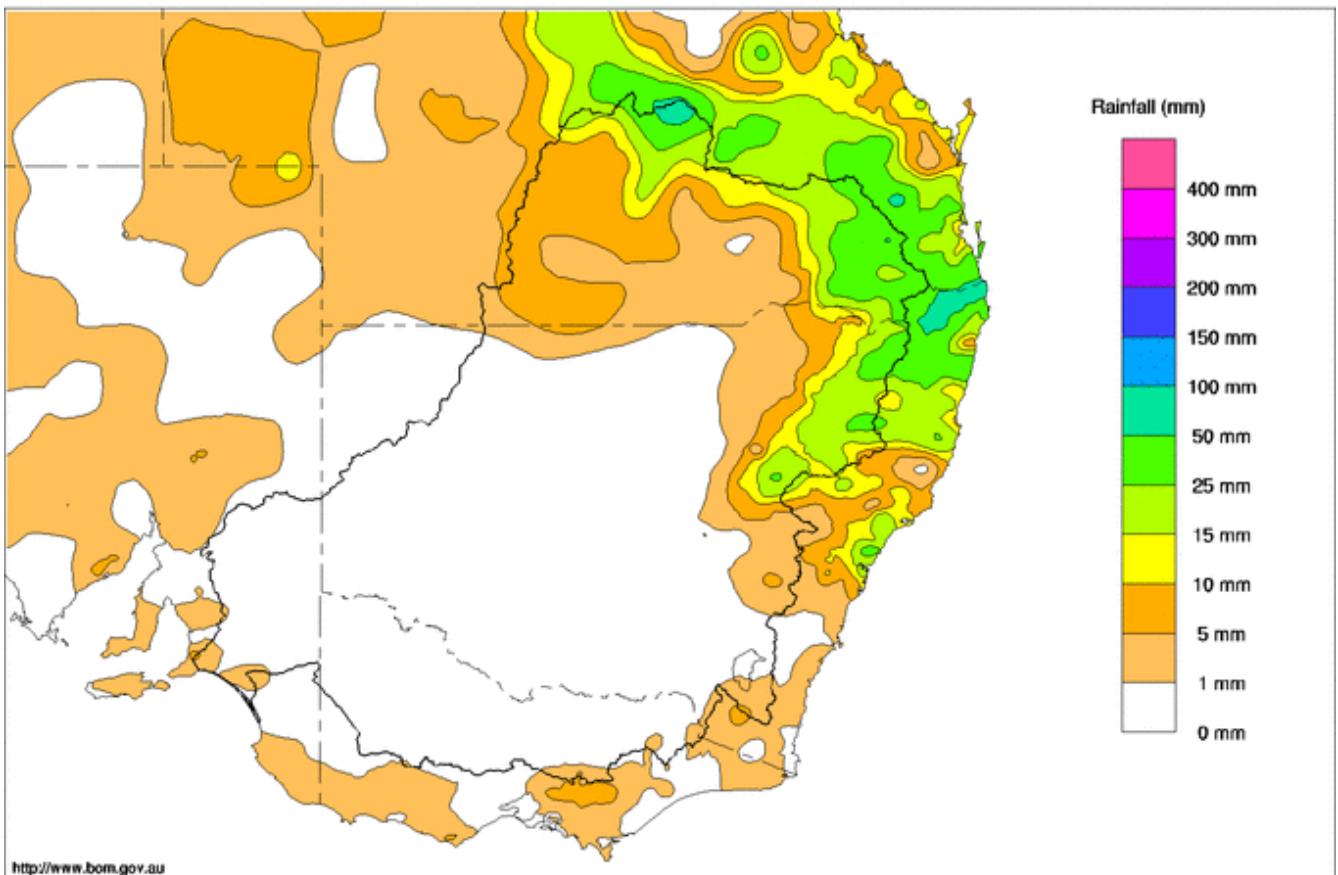
Trim Ref: D15/88915

Rainfall and Inflows

There was limited rainfall across the Murray-Darling Basin this week, with the only significant falls recorded along the Great Dividing Range in south-east Queensland and north-east NSW.

The highest totals in Queensland included 66 mm at Carnarvon Station in the upper Warrego catchment, 39 mm at Toowoomba in the upper Condamine-Balonne catchment, and 42 mm at Coolmunda Dam, which is located on Macintyre Brook, a tributary of the Dumaresq River. In NSW, 27 mm was recorded at Glen Innes in the Northern Tablelands, 34 mm at Gunnedah in the upper Namoi catchment and 26 mm at Dunedoo in the upper Macquarie catchment.

Murray-Darling Rainfall Totals (mm) Week Ending 16th December 2015
Australian Bureau of Meteorology



© Commonwealth of Australia 2015, Australian Bureau of Meteorology

Issued: 16/12/2015

Map 1- Murray-Darling Basin rainfall week ending 16th December 2015 (Source: Bureau of Meteorology)

Streamflows in the upper Murray tributaries have steadily receded following the brief storm activity in the Victorian ranges late last week. On the Mitta Mitta River, the flow at Hinnomunjie bridge reduced from 440 to 275 ML/day; whilst on the upper Murray, the flow at Biggara reduced from 650 to 400 ML/day. The Ovens River at Wangaratta briefly peaked at 2,200 ML/day early in the week, and has now fallen to 350 ML/day.



River Operations

- Brief halt to releases from Hume Dam planned for Monday, 21 December, and also Tuesday, 22 December if required;
- Menindee releases cease; blue-green algae alert active for several sites at Menindee Lakes and lower Darling River.

MDBA total storage decreased by 106 GL this week, with the active storage now 3,723 GL (44% capacity). At **Dartmouth** Reservoir, the storage volume has decreased by 43 GL to 2,091 GL (54% capacity). The release, measured at Colemans gauge, is currently 7,700 ML/day and planned to be held between 7,000 to 8,000 ML/day over the coming fortnight.

At **Hume** Reservoir, the storage volume decreased by 37 GL to 1,272 GL (42% capacity). Releases have averaged 13,100 ML/day over the past week, with the current release targeting a flow of 14,500 ML/day at Doctors Point. The release of water from Hume Dam will be stopped temporarily on Monday, 21 December between 12 midday and 4 pm at the request of Victoria Police (see attached media release). Landholders and river users immediately downstream of the dam may notice a drop in the river level at this time of up to one metre. However, at locations further downstream the drop in the river level will be less noticeable and will occur later in the afternoon. Releases may also be shut off between 10 am and 2 pm on Tuesday, 22 December depending on Victoria Police operational requirements. If this is the case, a further media release will be issued on Monday.

At **Yarrowonga** Weir, diversions from the major irrigation offtakes increased slightly over the course of the week, with Mulwala Canal increasing from 2,700 to 3,000 ML/day and Yarrowonga Main Channel increasing from 1,100 to 1,300 ML/day. The pool level is currently 124.81 m AHD. The downstream release was increased from 10,000 ML/day to 10,250 ML/day throughout the week and is planned to be varied between 9,800 ML/day and 10,300 ML/day over the coming fortnight. These minor variations in release are expected to only result in small fluctuations in the water level downstream of Yarrowonga Weir within the range of +/- 4 cm (compared to local gauge height of 1.63 m for a release of 10,000 ML/day). Periods of variable releases are implemented at Yarrowonga Weir and other River Murray assets where possible in order to break up prolonged periods of stable releases.

On the **Edward** River system, the flows through the Edward River and Gulpa Creek offtakes are 1,560 ML/day and 510 ML/day respectively. Diversions to Wakool Main Canal remain steady at 200 ML/day, whilst the flow downstream of Stevens Weir has increased from 2,400 ML/day to 2,600 ML/day.

On the **Goulburn** River, the flow at McCoys Bridge is 540 ML/day. At **Torrumbarry** Weir, diversions at National Channel are steady at 2,400 ML/day, and the downstream release is 5,900 ML/day. On the lower **Murrumbidgee** River, the flow at Balranald increased from 1,300 ML/day to around 1,480 ML/day and is planned to remain around this rate over the coming week with the delivery of Inter-Valley Trade (IVT) water.

On the River Murray at **Euston** Weir, the downstream flow has increased from 6,700 to 8,000 ML/day. This increase in flow is partly due to greater releases from the weir as the weir pool was lowered 10 cm over the course of the week. The pool is currently 47.80 m AHD, and will continue being gradually lowered towards its Full Supply Level (FSL) of 47.60 m AHD over the coming week. All along the **Sunraysia** region, temperatures are forecast to remain relatively hot in the lead-up to Christmas, with several days over 40 degrees Celsius expected over coming days. The holiday period is typically associated with an influx of tourists to the region, with heightened levels of boat traffic through the lock chambers on the weirs of the River Murray, such as Lock 11 at Mildura (see Figure 1).

At **Menindee** Lakes, the total storage volume has decreased 3 GL to the current volume of 75 GL (4% capacity). Releases from Lake Wetherell into the **lower Darling** River were ceased by NSW Department of Primary Industries' on Tuesday 15 December, as the [nominated trigger \(the recession of water back from the Wetherell floodplain into the river channel\)](#) was met. For more information regarding the management of Menindee Lakes in 2015-16 see the NSW Department of Primary Industries' latest [community information communique](#). Water users in this region are also advised to note this week's red alert warning for blue green algae at several sites at Menindee Lakes and along the lower Darling (see attached media release).



Figure 1 – Local tourism vessel the *P.S. Melbourne* enters the lock chamber heading upstream at Lock 11, Mildura (Photo: Tom Zouch, MDBA).

At the confluence of the Darling and Murray Rivers at **Wentworth**, the flow has risen from 4,400 ML/day to 5,600 ML/day, and is expected to remain above 5,000 ML/day over the coming week. Further downstream, **Locks 9 and 8** are being held around 10 cm and 50 cm below FSL respectively. **Lock 7** is currently at FSL and is planned to be gradually lowered over the coming fortnight to target 50 cm below FSL.

At **Lake Victoria**, the storage volume decreased by 23 GL to 554 GL (82% capacity). The target flow to South Australia is steady at 6,500 ML/day. At the **Lower Lakes**, the 5-day average level for Lake Alexandrina reduced this week by 4 cm to 0.73 m AHD due primarily to evaporation.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Management



Water in Storage

Week ending Wednesday 16 Dec 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	453.99	2 091	54%	71	2 020	-43
Hume Reservoir	192.00	3 005	181.17	1 272	42%	23	1 249	-37
Lake Victoria	27.00	677	25.96	554	82%	100	454	-23
Menindee Lakes		1 731*		75	4%	(- -) #	0	-3
Total		9 269		3 992	43%	--	3 723	-106
Total Active MDBA Storage							44% ^	

Major State Storages

Burrinjuck Reservoir	1 026	660	64%	3	657	-25
Blowering Reservoir	1 631	564	35%	24	540	-40
Eildon Reservoir	3 334	1 647	49%	100	1 547	-33

* 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 15 Dec 2015

Storage	Active Storage (GL)	Weekly Change (GL)	Diversion (GL)	This Week	From 1 May 2015
Lake Eucumbene - Total	2 302	n/a	Snowy-Murray	+7	279
Snowy-Murray Component	1 127	n/a	Tooma-Tumut	+0	138
Target Storage	1 510		Net Diversion	7	140
			Murray 1 Release	+12	457

Major Diversions from Murray and Lower Darling (GL) *

New South Wales	This Week	From 1 July 2015	Victoria	This Week	From 1 July 2015
Murray Irrig. Ltd (Net)	8.2	218	Yarrowonga Main Channel (net)	6	123
Wakool Sys Allowance	3.2	34	Torrumbarry System + Nyah (net)	12	239
Western Murray Irrigation	1.1	6	Sunraysia Pumped Districts	4.3	48
Licensed Pumps	5.0	83	Licensed pumps - GMW (Nyah+u/s)	0.7	17
Lower Darling	0.4	5	Licensed pumps - LMW	6	114
TOTAL	17.9	346	TOTAL	29	541

* 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)

Entitlement this month	217.0	
Flow this week	46.0	(6 600 ML/day)
Flow so far this month	103.7	
Flow last month	210.5	

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

	Current	Average over the last week	Average since 1 August 2015
Swan Hill	70	70	80
Euston	90	90	110
Red Cliffs	120	120	130
Merbein	130	120	130
Burtundy (Darling)	1 260	1 250	1 010
Lock 9	130	130	140
Lake Victoria	160	170	220
Berri	210	210	220
Waikerie	290	290	280
Morgan	250	260	290
Mannum	290	290	310
Murray Bridge	290	290	330
Milang (Lake Alex.)	780	760	750
Poltalloch (Lake Alex.)	690	680	580
Meningie (Lake Alb.)	2 030	2 060	2 030
Goolwa Barrages	1 270	1 240	1 040



River Levels and Flows

Week ending Wednesday 16 Dec 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	-	-	-	2 240	F	1 660	990
Jingellic	4.0	1.46	207.98	2 570	R	2 170	1 740
Tallandoon (Mitta Mitta River)	4.2	3.01	219.90	7 250	R	6 810	7 490
Heywoods	5.5	3.15	156.78	13 870	R	13 110	13 910
Doctors Point	5.5	2.97	151.44	14 460	R	13 640	14 300
Albury	4.3	1.99	149.43	-	-	-	-
Corowa	4.6	2.91	128.93	13 520	F	13 280	13 990
Yarrowonga Weir (d/s)	6.4	1.66	116.70	10 250	R	9 990	9 990
Tocumwal	6.4	2.23	106.07	10 060	S	10 120	10 140
Torrumbarry Weir (d/s)	7.3	1.98	80.53	5 880	F	5 900	5 610
Swan Hill	4.5	1.19	64.11	5 910	R	5 840	5 670
Wakool Junction	8.8	3.09	52.21	8 250	S	8 200	8 080
Euston Weir (d/s)	9.1	1.60	43.44	8 050	R	7 630	6 960
Mildura Weir (d/s)	-	-	-	6 690	F	6 210	6 270
Wentworth Weir (d/s)	7.3	2.80	27.56	5 670	R	4 700	4 830
Rufus Junction	-	3.44	20.37	6 160	F	6 310	6 050
Blanchetown (Lock 1 d/s)	-	0.70	-	3 890	R	3 200	3 180
Tributaries							
Kiewa at Bandiana	2.8	0.87	154.10	360	R	490	530
Ovens at Wangaratta	11.9	7.87	145.55	350	F	860	320
Goulburn at McCoys Bridge	9.0	1.26	92.68	550	R	540	480
Edward at Stevens Weir (d/s)	5.5	2.38	82.16	2 600	F	2 450	2 440
Edward at Liewah	-	2.89	58.27	2 420	S	2 450	2 550
Wakool at Stoney Crossing	-	1.55	55.04	740	S	710	710
Murrumbidgee at Balranald	5.0	1.87	57.83	1 480	R	1 410	900
Barwon at Mungindi	6.1	3.21	-	80	F	60	40
Darling at Bourke	9.0	3.96	-	20	S	20	40
Darling at Burtundy Rocks	-	0.62	-	0	F	0	0

Natural Inflow to Hume	1 780	2 850
------------------------	-------	-------

(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	-0.09	-	No. 7 Rufus River	22.10	+0.01	+1.11
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.04	+0.18
No. 15 Euston	47.60	+0.20	-	No. 5 Renmark	16.30	+0.12	+0.19
No. 11 Mildura	34.40	+0.07	+0.19	No. 4 Bookpurnong	13.20	+0.03	+0.62
No. 10 Wentworth	30.80	+0.13	+0.16	No. 3 Overland Corner	9.80	+0.03	+0.16
No. 9 Kulnine	27.40	-0.06	-0.44	No. 2 Waikerie	6.10	+0.02	+0.04
No. 8 Wangumma	24.60	-0.48	+0.10	No. 1 Blanchetown	3.20	-0.04	-0.05

Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.73
--	------

Barrages

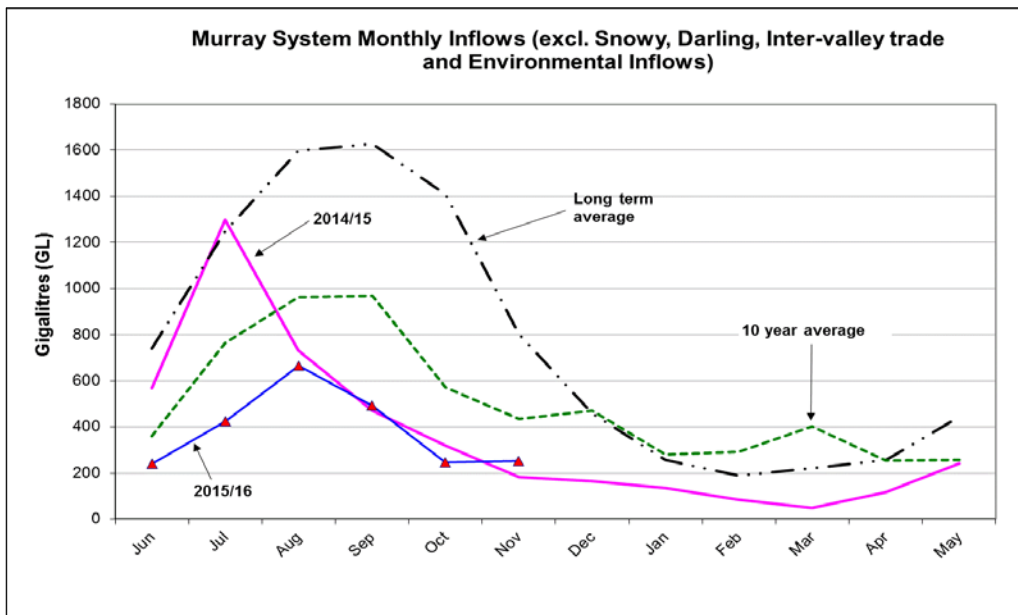
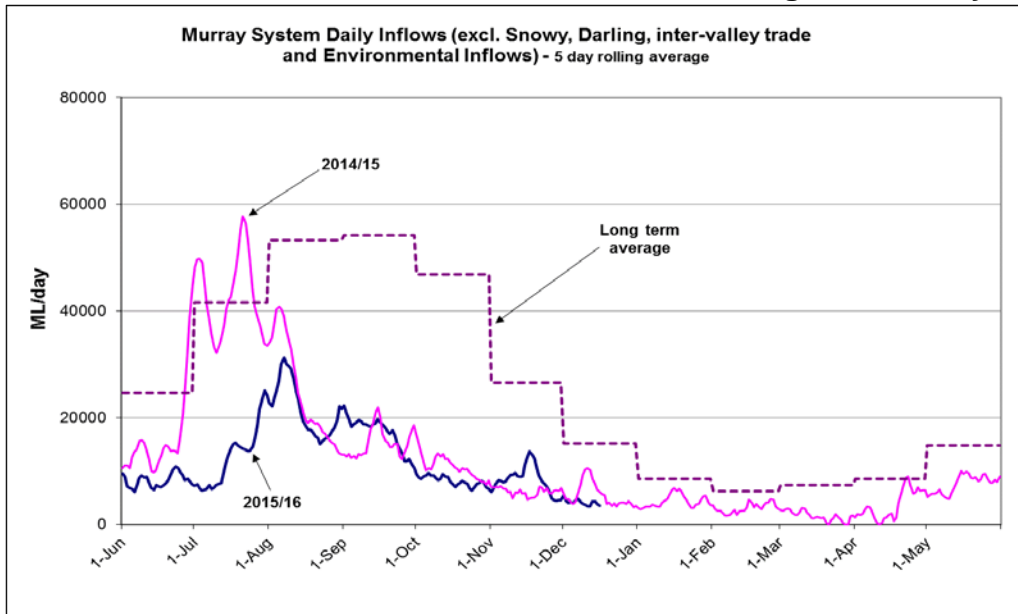
Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.73	All closed	-	Open
Mundoo	26 openings	0.80	All closed	-	-
Boundary Creek	6 openings	-	All closed	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwichee	322 gates	0.73	All closed	Open	Open

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



Week ending Wednesday 16 Dec 2015



State Allocations (as at 16 Dec 2015)

NSW - Murray Valley

High security	97%
General security	19%

Victorian - Murray Valley

High reliability	94%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	32%

Victorian - Goulburn Valley

High reliability	82%
Low reliability	0%

NSW - Lower Darling

High security	50%
General security	0%

South Australia - Murray Valley

High security	100%
---------------	------

NSW : <http://www.water.nsw.gov.au/Water-management/Water-availability/Water-allocations/Water-allocations-summary/water-allocations-summary/default.aspx>
 VIC : <http://www.nvrn.net.au/allocations/current.aspx>
 SA : <http://www.environment.sa.gov.au/managing-natural-resources/river-murray>

MEDIA RELEASE



Wednesday, 16 December 2015

Brief halt to flows from Hume Dam

The release of water from Hume Dam will be stopped temporarily on Monday, 21 December 2015 between 12 midday and 4 pm at the request of Victoria Police.

Landholders and river users immediately downstream of the dam may notice a drop in the river level at this time of up to one metre. However, at locations further downstream the drop in the river level will be less noticeable and will occur later in the afternoon.

At Albury, the drop in river level will be closer to 40 cm. Those affected by the change should make any necessary adjustment to their river activities accordingly.

The river level is expected to return to normal once flows start again in the afternoon.

Please note releases may also be shut off between 10.00 in the morning and 2.00 in the afternoon on Tuesday, 22 December 2015, depending on Victoria Police operational requirements. If this is the case, we will provide a further update on Monday.

For any enquiries about police operations, please contact Victoria Police.

ENDS

For more information, contact the MDBA Media office at media@mdba.gov.au or 02 6279 0141

Follow us on Twitter [@MD_Basin_Auth](https://twitter.com/MD_Basin_Auth) or Facebook [@Murray-DarlingBasinAuthority](https://www.facebook.com/Murray-DarlingBasinAuthority)

Check out live river data: <http://livedata.mdba.gov.au>



ALGAL ALERT BULLETIN

Sunraysia Regional Algal Coordinating Committee

16 December 2015

Red alert for blue green algae at Weir 32 and Menindee township

The Sunraysia Regional Algal Coordinating Committee today issued a red alert warning for blue green algae at three additional sites in the Menindee Lakes system.

Very high levels of Blue green algae have been detected at Weir 32, and in Menindee Township at the pumping and gauging stations on the Darling River.

Lake Wetherell and Lake Tandure also remain on red alert.

Water users are reminded that a red alert level warning indicates that waters are unsuitable for recreational use or primary contact by domestic users and may also pose a threat to livestock and domestic animals.

The reticulated town water supply to Broken Hill and Menindee is safe to use; however raw water drawn from these areas should be avoided for all purposes.

The species of blue-green algae identified are potentially toxic and may cause gastroenteritis in humans if consumed and skin and eye irritations after contact.

Boiling the water does not inactivate algal toxins.

People are advised not to enter the water, and are further advised not to drink untreated water or bathe in water drawn from the river whilst a Red alert warning is in place.

Livestock owners are reminded to continue to check stock water supplies for blue-green algae and to remove stock from foreshores where surface scums are visible or blue-green algae are suspected.

There is some evidence that small quantities of algal toxins may enter fish flesh when a bloom produces toxins. Any fish caught in water affected by a bloom should be cleaned and washed thoroughly in uncontaminated water and any internal organs disposed of before consumption.

People should not eat mussels, crayfish or the internal organs of fish from red alert areas. Toxins might also taint fish flesh and when a bloom is toxic common sense indicates finfish should not be eaten.

Information updates about blue-green algae blooms and Red Alert areas can be obtained from the Regional Algal Coordinating Committee freecall Algal Information Hotline on **1800 999 457** or visit www.water.nsw.gov.au

For further advice on;

- Stock watering – DPI Western, Senior Veterinary Officer Phone (08) 8088 9336
- Domestic Water carting in Menindee – Rural Transaction Centre - Phone: (08) 8091 4392

Ends

Media Contact: Bunty Driver M 0407 403234

Algal Alert Bulletin
Sunraysia Regional Algal Coordinating Committee