



**Friday, 24 February 2023**

## **Murray River**

**Red** alerts are current for the following sites in Lake Hume: Lake Hume at Ebden, Heywoods Bay, Hume Dam Resort, at the Dam wall and at Bowna. A **Red** alert for blue-green algae is current for the Murray River at Murray Downs (Swan Hill).

Yarrowonga Weir outlet, Mulwalla Canal offtake, the Murray River Cobram water treatment plant, Tocumwal, Picnic Point, Barmah WTP raw water, Moama (Echuca), Tooleybuck (Piangil), Euston (Robinvale), Mount Dispersion, Buronga, Merbein and Curlwaa are on **Amber** alert.

## **BILLBONG CREEK, EDWARD & WAKOOL RIVERS**

The Wakool River at the Wakool-Barham Road is on **Red** alert.

The Billabong Creek at Jerilderie, Gulpa Creek at Mathoura, Edward River at Deniliquin, Old Morago and Moulamein as well as the Wakool River at Stoney Crossing and Kyalite are on **Amber** alert.

## **Darling River, Menindee Lakes and Darling Anabranch**

The Darling River at Pooncarie, Burtundy and Ellerslie as well as the Great Darling Anabranch at the Silver City Highway crossing are on **Red** alert for blue-green algae.

**Amber** alerts for blue-green algae are current for the Darling River at Wilcannia, Lake Wetherell sites 1, 2, 3 and 4, Lake Tandure, Lake Pamamaroo inlet and outlet, Darling River at bhwb pump as well as at Tapio.

## **Menindee, weather forecast (7 days)**

Most days will be sunny. Some cloud cover can be expected from Saturday to Tuesday. Day temperatures are expected to reach maximums of 31 to 37 °C, while minimum temperatures are forecast to be between 15 and 17 °C. Source of information [BOM Menindee Weather Forecast](#)  
The forecast weather conditions are good for promoting algal growth.

## **Other links**

Link to the Snowy Valleys Council-

<https://www.snowyvalleys.nsw.gov.au/Services/Environmental-Controls/Environmental-Monitoring/Mannus-Lake/Mannus-Lake-Blue-green-Algae-Monitoring>

Link to Goulburn-Murray Water blue-green algal alerts - <https://www.g-mwater.com.au/news/bga>

Link to Goulburn Valley blue-green algal information - <https://www.gvwater.vic.gov.au/water/water-quality/blue-green-algae>

Link to Lower Murray Water blue-green algal alerts - <https://www.lmw.vic.gov.au/blue-green-algae/>

**Some satellite images are shown on page 7 of this report.**

Table 1 Combined Murray and Sunraysia Alerts

Site	Description	Latest Sample Date	Cyanobacteria Total Count (cells/mL)	Cyanobacteria Biovolume (mm <sup>3</sup> /L)	Potentially Toxic Cyanobacterial Count (cells/mL)	Potentially Toxic Cyanobacterial Biovolume (mm <sup>3</sup> /L)	Current Status (based on Latest Sample)	Previous Status	Cyanobacteria dominant potentially toxic taxa	Cyanobacteria Comments
<b>MURRAY RIVER SYSTEM</b>										
	Manus Lake (SVC) Lake pontoon	30/01/2023	0	0.000	0	0.000	Green	AMBER		
DLH003	Lake Hume, Ebden	6/02/2023	48,967	0.209	4,473	0.119	RED	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
DLH001	Lake Hume, Heywoods Bay nr Bethanga	6/02/2023	55,547	1.384	13,560	0.495	RED	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
DLH002	Lake Hume, Hume Dam Resort	6/02/2023	43,355	0.934	7,877	0.419	RED	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
DLH004	Lake Hume, Dam Wall	6/02/2023	27,855	0.537	10,847	0.323	RED	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
DLH010	Lake Hume, Bowna	6/02/2023	70,131	1.841	48,062	1.328	RED	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
N1000	Murray R. Union Bridge Albury	7/02/2023	10,799	0.018	0	0.000	No Alert	No Alert		
N1001	Murray R. Corowa	7/02/2023	6,683	0.037	0	0.000	No Alert	No Alert		
	Yarrowonga Weir (outlet) GMW	20/02/2023	25,830	0.600	0.000	0.000	AMBER	AMBER		
N1008	Mulwala Canal Offtake	7/02/2023	79,730	1.840	6,981	0.371	AMBER	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
N1007	Murray R. @ below Yarrowonga	7/02/2023	15,289	0.111	2,983	0.092	GREEN	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
N1051	Murray R. Cobram (Barooga)	7/02/2023	17,760	0.062	1,313	0.039	GREEN	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
	Cobram WTP, raw water (GVW)	30/01/2023	7,763	2.670	2709	0.200	AMBER	AMBER	<i>Microcystis sp</i>	Potentially toxic
N1013	Murray R. Tocumwal	7/02/2023	12,805	1.921	4,994	0.157	AMBER	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
N1052	Murray R. Picnic Point	6/02/2023	46,555	1.469	10,854	0.328	AMBER	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
	Barmah WTP raw water (GVW)	30/01/2023	63,111	7.024	1908	0.133	AMBER	AMBER	<i>Aphanizomenonaceae family – straight</i>	Potentially toxic
N1050	Murray R. Moama (Echuca)	6/02/2023	109,712	4.217	3,225	0.097	AMBER	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
	Torrumbarry Weir GMW	6/02/2023	1,990	0.020	0.000	0.000	No alert	Green		
N1003	Murray R. Barham (Koondrook)	7/02/2023	88,443	0.152	553	0.013	GREEN	AMBER	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1054	Murray R. Murray Downs (Swan Hill)	7/02/2023	187,402	12.661	6,741	0.153	RED	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
N1055	Murray R. Tooleybuc (Piangil)	7/02/2023	132,729	4.105	17,786	0.592	AMBER	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
N1064	Lake Benanee Rec Area	31/01/2023	49,154	0.065	1,258	0.032	GREEN	GREEN	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
N1028	Murray R. Euston (Robinvale)	31/01/2023	160,446	1.277	6,787	0.553	AMBER	AMBER	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1065	Murray R. Mount Dispersion	31/01/2023	60,265	0.620	7,673	0.281	AMBER	AMBER	<i>Phormidium Unknown</i>	Potentially toxic, taste & odour
N1062	Murray R. Buronga	31/01/2023	63,015	0.722	3,923	0.150	AMBER	GREEN	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
	Merbein (LMW)	24/01/2023		3.680			AMBER		<i>Microcystis unknown</i>	Potentially toxic taste and odour
N1063	Murray R. Curlwaa	31/01/2023	67,504	0.588	3,806	0.201	AMBER	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour

BILLBONG CREEK, EDWARD & WAKOOL RIVERS										
N1020	Billabong Ck. Walbundrie	7/02/2023	7,682	0.101	0	0.000	GREEN	GREEN		
N1015	Billabong Ck. Jerilderie	6/02/2023	70,833	0.888	19,121	0.832	AMBER	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
N1006	Gulpa Ck. Mathoura	6/02/2023	36,198	0.625	69	0.002	AMBER	AMBER	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1002	Edward R Deniliquin	6/02/2023	67,452	1.514	19,026	0.549	AMBER	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
N1053	Edward R. Old Morago	6/02/2023	425,536	2.216	13,826	0.430	AMBER	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
N1005	Edward R. Moulamein	7/02/2023	199,149	0.939	18,334	0.415	AMBER	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
N1010	Wakool R. Wakool-Barham Road	7/02/2023	468,691	6.896	199,326	6.363	RED	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
N1004	Wakool R. @ Stoney Crossing	7/02/2023	274,726	1.684	12,664	0.371	AMBER	AMBER	<i>Radiocystis sp.</i>	Potentially toxic
N1009	Wakool R. Kyalite	7/02/2023	490,971	2.114	21,581	0.996	AMBER	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
MENINDEE LAKE SYSTEM & LOWER DARLING RIVER										
N1042	Darling River at Wilcannia	9/02/2023	71,142	2.676	8,056	0.997	AMBER	AMBER	<i>Raphidiopsis raciborskii</i>	Potentially toxic, taste & odour
N1087	Lake Wetherell Site 1	16/01/2023	812,832	2.392	10,294	0.732	AMBER	AMBER	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour
N1088	Lake Wetherell Site 2	16/01/2023	540,983	2.474	18,690	1.360	AMBER	AMBER	<i>Dolichospermum circinale</i>	Potentially toxic, taste & odour
N1089	Lake Wetherell Site 3	16/01/2023	377,212	1.543	5,965	0.331	AMBER	GREEN	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour
N1090	Lake Wetherell Site 4	16/01/2023	889,091	3.244	14,189	1.286	AMBER	AMBER	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour
N1091	Lake Tandure Site 8	16/01/2023	924,838	2.404	10,822	0.627	AMBER	GREEN	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour
N1092	Lake Pamamaroo Site 9	16/01/2023	631,159	3.749	17,984	1.088	AMBER	GREEN	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour
N1093	Lake Pamamaroo Site 10	16/01/2023	418,725	1.202	6,736	0.313	AMBER	GREEN	<i>Geitlerinema splendidum</i>	Potentially toxigenic
N1094	Menindee Lakes, Copi Hollow	16/01/2023	75,766	0.138	2,255	0.046	GREEN	No Alert	<i>Phormidium Unknown</i>	Potentially toxic, taste & odour
N1130	Lake Menindee Site 19	16/01/2023	15,804	0.023	0	0.000	No Alert	No Alert		
N1128	Lake Cawndilla Site 34 Outlet	16/01/2023	77,851	0.107	0	0.000	GREEN	GREEN		
N1095	Darling R. Menindee bhwb pump	16/01/2023	332,482	2.994	10,198	0.765	AMBER	GREEN	<i>Geitlerinema splendidum</i>	Potentially toxigenic
N1040	Darling R. Pooncarie	30/01/2023	361,614	5.610	26,174	4.487	RED	AMBER	<i>Phormidium Unknown</i>	Potentially toxic, taste & odour
N1041	Darling R. Burtundy	31/01/2023	450,477	5.759	34,617	4.351	RED	GREEN	<i>Phormidium Unknown</i>	Potentially toxic, taste & odour
N1074	Darling R. Ellerslie	31/01/2023	390,643	11.401	45,518	5.552	RED	AMBER	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour
N1075	Darling R. Tapio	31/01/2023	132,629	5.867	31,466	3.528	AMBER	AMBER	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour

GREAT DARLING ANABRANCH										
N1351	Popiltah Lake	1/02/2023	1,312,993	7.076	41,878	3.662	AMBER	GREEN	<i>Dolichospermum circinale</i>	Potentially toxic, taste & odour
N1352	Nialia Lake	1/02/2023	737,983	5.321	55,438	2.605	AMBER	GREEN	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour
N1349	Top Dam 183	1/02/2023	754,856	5.324	22,608	1.680	AMBER	GREEN	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour
N1350	Silver City Hwy	1/02/2023	1,631,537	9.629	45,158	5.035	RED	GREEN	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour

## Alert Definitions for Recreational Waters

Alert Definitions as specified in The National Health and Medical Research Council (NHMRC) *Guidelines for Managing Risks in Recreational Water* 2008. The use of these guidelines is endorsed by the Scientific Subcommittee of the NSW Algal Advisory Group.

### RED ALERT

These alert levels represent 'bloom' conditions. Water will appear green or discoloured and clumps or scums could be visible. It can also give off a strong musty or organic odour. Algae may be toxic to humans and animals. Contact with or use of water from red alert areas should be avoided due to the risk of eye and skin irritation. Drinking untreated or boiled water from these supplies can cause stomach upsets. Alternative water supplies should be sought or activated carbon treatment employed to remove toxins. People should not fish when an algal scum is present. Owners should keep dogs away from high alert areas and provide alternative watering points for stock.

### AMBER ALERT

Blue-green algae may be multiplying, and the water may have a green tinge and musty or organic taste and odour. The water should be considered as unsuitable for potable use and alternative supplies or prior treatment of raw water for domestic purposes should be considered. The water may also be unsuitable for stock watering. Generally suitable for water sports, however people are advised to exercise caution in these areas, as blue-green algal concentrations can rise to red alert levels quickly under warm, calm weather conditions.

### GREEN ALERT

Blue-green algae occur naturally at low numbers. At these concentrations, algae would not normally be visible, however some species may affect taste and odour of water even at low numbers and does not pose any problems for recreational, stock or household use.