



9 March 2023

Murray River

Lower Murray Water has advised that Lock 9 is on **Red** alert for blue-green algae.

Lake Hume has **Amber** blue-green algal alerts at Ebden, Heywoods Bay, Hume Dam Resort, at the Dam Wall and at Bownd.

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

BILLBONG CREEK, EDWARD & WAKOOL RIVERS

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

Darling River, Menindee Lakes and Darling Anabranh

The Darling River at Pooncarie as well as the Great Darling Anabranh 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, Copi Hollow, Darling River at bhwb pump, Weir 32 as well as at Tolarno, Burtundy, Ellerslie and Tapio.

Menindee, weather forecast (7 days)

Most days will be sunny. Some cloud cover can be expected on Tuesday and Wednesday. Day temperatures are expected to reach maximums of 25 to 36 °C, while minimum temperatures are forecast to be between 11 and 19 °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 6 of this report.

Table 1 Combined Murray and Sunraysia Alerts

Site	Description	Latest Sample Date	Cyanobacteria Total Count (cells/mL)	Cyanobacteria Biovolume (mm3/L)	Potentially Toxic Cyanobacterial Count (cells/mL)	Potentially Toxic Cyanobacterial Biovolume (mm3/L)	Current Status (based on Latest Sample)	Previous Status	Cyanobacteria dominant potentially toxic taxa	Cyanobacteria Comments
MURRAY RIVER SYSTEM										
	Manus Lake (SVC) Lake pontoon	20/02/2023					Green	Green		
DLH003	Lake Hume, Ebden	27/02/2023	74,575	1.447	27,915	1.122	AMBER	GREEN	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
DLH001	Lake Hume, Heywoods Bay nr Bethanga	27/02/2023	104,956	2.195	19,100	0.710	AMBER	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
DLH002	Lake Hume, Hume Dam Resort	27/02/2023	49,183	0.554	11,110	0.356	AMBER	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
DLH004	Lake Hume, Dam Wall	27/02/2023	45,866	1.268	16,581	0.497	AMBER	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
DLH010	Lake Hume, Bowna	27/02/2023	73,030	2.176	21,719	0.698	AMBER	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
N1000	Murray R. Union Bridge Albury	7/02/2023	10,799	0.018		0.000	No Alert	No Alert		
N1001	Murray R. Corowa	7/02/2023	6,683	0.037		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)	27/02/2023	83,911	1.446	1,348	0.030	AMBER	RED	<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 & 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
	Lock 9 (LMW)	6/03/2023	0	15.240	0.000	0.560	Red	0.000	<i>Microcystis sp</i>	Potentially toxic

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	27/02/2023	1,164,099	2.241	6,106	0.174	AMBER	RED	<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	21/02/2023	245,761	2.446	42,212	1.817	AMBER	AMBER	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1087	Lake Wetherell Site 1	20/02/2023	760,195	2.817	9,529	0.386	AMBER	AMBER	<i>Phormidium Unknown</i>	Potentially toxic, taste & odour
N1088	Lake Wetherell Site 2	20/02/2023	783,504	5.265	46,755	1.485	AMBER	AMBER	<i>Phormidium Unknown</i>	Potentially toxic, taste & odour
N1089	Lake Wetherell Site 3	20/02/2023	1,016,014	4.412	10,989	0.606	AMBER	AMBER	<i>Microcystis Unknown 2</i>	Potentially toxic, taste & odour
N1090	Lake Wetherell Site 4	21/02/2023	1,506,609	5.950	52,846	1.551	AMBER	AMBER	<i>Microcystis Unknown</i>	Potentially toxic, taste & odour
N1091	Lake Tandure Site 8	21/02/2023	868,653	4.910	20,470	1.972	AMBER	AMBER	<i>Aphanizomenonaceae Unknown</i>	Potentially toxic, taste & odour
N1092	Lake Pamamaroo Site 9	20/02/2023	400,545	5.215	20,317	3.462	AMBER	AMBER	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1093	Lake Pamamaroo Site 10	20/02/2023	809,400	1.853	5,231	0.380	AMBER	AMBER	<i>Microcystis Unknown 2</i>	Potentially toxic, taste & odour
N1094	Menindee Lakes, Copi Hollow	21/02/2023	444,150	0.750	2,157	0.055	AMBER	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1130	Lake Menindee Site 19	22/02/2023	33,902	0.094	1,866	0.053	GREEN	No Alert	<i>Radiocystis sp.</i>	Potentially toxic
N1128	Lake Cawndilla Site 34 Outlet	21/02/2023	242,595	0.338	0	0.000	GREEN	GREEN		
N1095	Darling R. Menindee bhwb pump	22/02/2023	198,235	1.196	2,966	0.107	AMBER	AMBER	<i>Phormidium Unknown</i>	Potentially toxic, taste & odour
N1086	Darling R u/s Weir 32	22/02/2023	155,452	1.872	25,887	1.355	AMBER	AMBER	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1043	Darling R. Tolarno	17/02/2023	345,333	6.802	34,741	2.974	AMBER	AMBER	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour
N1040	Darling R. Pooncarie	1/03/2023	181,985	5.463	32,104	4.249	RED	RED	<i>Sphaerospermopsis aphanizomenoides</i>	Potentially toxic, taste & odour
N1041	Darling R. Burtundy	1/03/2023	471,128	4.247	17,788	1.472	AMBER	RED	<i>Dolichospermum circinale</i>	Potentially toxic, taste & odour
N1074	Darling R. Eilerslie	1/03/2023	527,928	3.770	17,362	1.642	AMBER	RED	<i>Dolichospermum circinale</i>	Potentially toxic, taste & odour
N1075	Darling R. Tapio	1/03/2023	445,931	2.867	13,970	1.305	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	22/02/2023	882,511	13.084	115,522	9.922	RED	GREEN	<i>Dolichospermum sp.</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.