Murray and Sunraysia – Algae Alert Status

22 August 2025

This Blue-green algal (BGA) alert report is based on routine monitoring at sites in the Murray & Sunraysia Algae Reporting Area. The sites are monitored by WaterNSW and local water authorities. Satellite imagery may be used to supplement the monitoring data.

Table 1 shows the following red and amber, blue-green algal alerts:

Murray River
The Hume Dam at Ebden is on **Red** alert for blue-green algae.

The Hume Dam at Heywoods Bay, the Hume Dam Resort and at the dam wall are on **Amber** alert for blue-green algae.

The Murray River at Euston, Mount Dispersion, Buronga, Merbein, Curlwaa, Fort Courage and Lock 8 are on **Amber** alert for blue-green algae.

Billabong Creek, Edward River & Wakool River
There are no red or amber, blue-green algal alerts for this area.

Menindee Lakes and lower Darling River
The Great Darling Anabranch at the Silver City Highway crossing is on **Red** alert for blue-green algae.

Blue-green algal outlook over the next seven days
In the upper reaches of the catchment near Albury, a mix of cloudy, partly cloudy and sunny conditions can be expected. Some showers are likely to occur from Tuesday to Thursday. Maximum day air temperatures will be between 13 °C and 20 °C with minimum temperatures ranging from 1 °C to 8 °C (Source -BOM 7-day weather forecast). These weather conditions are likely to create less favourable circumstances for blue-green algal growth.

At Menindee, days should be partly cloudy while Saturday and Sunday are likely to be sunny. Some showers can be expected on Tuesday and Wednesday. Maximum day air temperatures are expected to be between 19 °C and 29 °C with minimum temperatures ranging from 6 °C to 13 °C. These environmental conditions are likely to create somewhat favourable circumstances for blue-green algal growth.

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	28/07/2025	7,750	0.010	0	0.000	No Alert	GREEN		
DLH003	Lake Hume, Ebden	18/08/2025	172,384	4.571	163,311	4.566	RED	AMBER	*Microcystis sp.*	Potentially toxic, taste & odour
DLH001	Lake Hume, Heywoods Bay nr Bethanga	18/08/2025	67,357	0.944	32,009	0.895	AMBER	AMBER	*Microcystis sp.*	Potentially toxic, taste & odour
DLH002	Lake Hume, Hume Dam Resort	18/08/2025	33,057	0.258	8,084	0.226	AMBER	AMBER	*Microcystis sp.*	Potentially toxic, taste & odour
DLH004	Lake Hume, Dam Wall	18/08/2025	32,526	0.533	18,781	0.525	AMBER	AMBER	*Microcystis sp.*	Potentially toxic, taste & odour
N1000	Murray R. Union Bridge Albury	4/08/2025	544	0.000	0	0.000	No Alert	No Alert		
N1001	Murray R. Corowa	4/08/2025	3,947	0.003	0	0.000	No Alert	GREEN		
	Yarrawonga Weir (outlet) GMW	5/08/2025	4,450	0.073	0	0.000	GREEN	GREEN		
N1008	Mulwala Canal Offtake	4/08/2025	13,026	0.269	136	0.003	GREEN	GREEN	*Microcystis sp.*	Potentially toxic, taste & odour
N1007	Murray R. @ below Yarrawonga	4/08/2025	11,296	0.038	136	0.003	No Alert	GREEN	*Microcystis sp.*	Potentially toxic, taste & odour
N1051	Murray R. Cobram (Barooga)	4/08/2025	9,384	0.064	1,096	0.026	GREEN	AMBER	*Microcystis sp.*	Potentially toxic, taste & odour
	Cobram WTP, raw water (GVW)	5/08/2025	9,724	0.092	24	0.007	GREEN	GREEN	*Dolichospermum - coiled (≥6µm)*	
N1013	Murray R. Tocumwal	4/08/2025	28,725	0.108	408	0.009	GREEN	GREEN	*Microcystis sp.*	Potentially toxic, taste & odour
N1052	Murray R. Picnic Point	4/08/2025	35,248	0.080	136	0.003	GREEN	AMBER	*Microcystis sp.*	Potentially toxic, taste & odour
	Barmah WTP raw water (GVW)	4/08/2025	24,418	0.228	80	0.005	GREEN	GREEN	*Aphanizomenonaceae family – straight*	
N1050	Murray R. Moama (Echuca)	4/08/2025	6,247	0.024	204	0.004	No Alert	GREEN	*Microcystis sp.*	Potentially toxic, taste & odour
	Torrumbarry Weir GMW	4/08/2025	22,254	0.244	0.000	0.000	GREEN	AMBER		
N1003	Murray R. Barham (Koondrook)	5/08/2025	7,417	0.023	68	0.001	No Alert	No Alert	*Microcystis sp.*	Potentially toxic, taste & odour
N1054	Murray R. Murray Downs (Swan Hill)	5/08/2025	6,736	0.023	68	0.001	No Alert	AMBER	*Microcystis sp.*	Potentially toxic, taste & odour
N1055	Murray R. Tooleybuc (Piangil)	5/08/2025	6,049	0.023	0	0.000	No Alert	AMBER		
N1064	Lake Benanee Rec Area	6/08/2025	21,244	0.071	0	0.000	GREEN	GREEN		
N1028	Murray R. Euston (Robinvale)	5/08/2025	40,311	1.860	0	0.000	AMBER	AMBER		
N1065	Murray R. Mount Dispersion	6/08/2025	28,256	1.552	0	0.000	AMBER	AMBER		
N1062	Murray R. Buronga	4/08/2025	51,537	3.661	340	0.026	AMBER	AMBER	*Dolichospermum sp.*	Potentially toxic, taste & odour
N1027	414206 - Murray River at Merbein	5/08/2025	59,609	7.852	136	0.003	AMBER	AMBER	*Microcystis sp.*	Potentially toxic, taste & odour
N1063	Murray R. Curlwaa	5/08/2025	408,240	1.858	3,024	0.244	AMBER	AMBER	*Umezakia ovalisporum*	Potentially toxic, taste & odour
N1066	Murray R. Fort Courage	4/08/2025	288,568	2.024	918	0.108	AMBER	AMBER	*Aphanizomenonaceae sp.*	Potentially toxic, taste & odour
N1077	Murray R. Lock 8	4/08/2025	48,515	0.363	0	0.000	AMBER	AMBER		
N1078	Lake Victoria Outlet Regulator	4/08/2025	6,491	0.019	0	0.000	No Alert	AMBER		

Table 1: Continued

BILLBONG CREEK, EDWARD & WAKOOL RIVERS										
N1020	Billabong Ck. Walbundrie	4/08/2025	0	0.000	0	0.000	No Alert	No Alert		
N1015	Billabong Ck. Jerilderie	4/08/2025	646	0.005	0	0.000	No Alert	No Alert		
N1006	Gulpa Ck. Mathoura	4/08/2025	25,578	0.109	265	0.006	GREEN	GREEN	*Microcystis sp.*	Potentially toxic, taste & odour
N1002	Edward R Deniliquin	4/08/2025	29,266	0.075	136	0.003	GREEN	No Alert	*Microcystis sp.*	Potentially toxic, taste & odour
N1053	Edward R. Old Morago	5/08/2025	9,397	0.034	0	0.000	No Alert	AMBER		
N1005	Edward R. Moulamein	5/08/2025	13,677	0.065	0	0.000	GREEN	No Alert		
N1010	Wakool R. Wakool-Barham Road	5/08/2025	39,105	0.178	136	0.003	GREEN	AMBER	*Microcystis sp.*	Potentially toxic, taste & odour
N1004	Wakool R. @ Stoney Crossing	6/08/2025	799	0.068	0	0.000	GREEN	No Alert		
N1009	Wakool R. Kyalite	6/08/2025	10,566	0.195	1,019	0.120	GREEN	AMBER	*Aphanizomenonaceae sp.*	Potentially toxic, taste & odour
MENINDEE LAKE SYSTEM & LOWER DARLING RIVER										
N1042	Darling River at Wilcannia	6/08/2025	17,692	0.017	0	0.000	No Alert	No Alert		
N1087	Lake Wetherell Site 1	28/07/2025	1,361	0.010	0	0.000	No Alert	No Alert		
N1088	Lake Wetherell Site 2	28/07/2025	3,266	0.001	0	0.000	No Alert	No Alert		
N1089	Lake Wetherell Site 3	28/07/2025	1,089	0.000	0	0.000	No Alert	No Alert		
N1090	Lake Wetherell Site 4	28/07/2025	2,177	0.003	0	0.000	No Alert	No Alert		
N1091	Lake Tandure Site 8	28/07/2025	0	0.000	0	0.000	No Alert	AMBER		
N1092	Lake Pamamaroo Inlet (Site 9)	28/07/2025	7,621	0.016	0	0.000	No Alert	No Alert		
N1129	42510013 Centre Pamamaroo (Site 13)	28/07/2025	5,988	0.003	0	0.000	No Alert	AMBER		
N1093	Lake Pamamaroo Outlet (Site 10)	28/07/2025	8,166	0.011	0	0.000	No Alert	No Alert		
N1094	Menindee Lakes, Copi Hollow	28/07/2025	2,177	0.003	0	0.000	No Alert	No Alert		
N1130	Lake Menindee Site 19	29/07/2025	2,041	0.001	0	0.000	No Alert	RED		
N1339	Lake Menindee outlet regulator	28/07/2025	57,159	0.198	0	0.000	No Alert	AMBER		
N1128	Lake Cawndilla Site 34 Outlet	28/07/2025	22,863	0.045	0	0.000	GREEN	AMBER		
N1095	Darling R. Menindee bhwb pump	29/07/2025	3,266	0.003	0	0.000	No Alert	No Alert		
N1085	Darling River at Menindee Town									
N1086	Darling R u/s Weir 32	29/07/2025	21,312	0.025	0	0.000	No Alert	No Alert		
N1043	Darling R. Tolarno	6/08/2025	13,636	0.020	0	0.000	No Alert	GREEN		
N1040	Darling R. Pooncarie	6/08/2025	1,633	0.001	0	0.000	No Alert	No Alert		
N1041	Darling R. Burtundy	5/08/2025	7,212	0.010	0	0.000	No Alert	No Alert		
N1074	Darling R. Ellerslie	5/08/2025	53,566	0.062	0	0.000	GREEN	GREEN		
N1075	Darling R. Tapio	5/08/2025	12,873	0.015	0	0.000	No Alert	No Alert		
GREAT DARLING ANABRANCH										
N1350	Silver City Hwy	17/06/2025	59,112,365	86.986	0	0.000	RED	AMBER		

Satellite imagery

The key to the approximate total algae (blue green and non-blue green) concentrations using the Custom Algae Script can be found in Table 3. The actual values can potentially vary by a significant margin due to the geology of the waterbody, species of algae, turbidity, aquatic plants, time of day of the image capture, aerosols in the atmosphere, etc. This variability is a result of the nature of satellite imagery being a large-scale remote sensing format and is not function of the technology or the script itself. For this reason, these colours and descriptors are not the official ***"Algae Alert Level"*** *but rather provides information on the* ***potential risk on algae formation.***

Table 3: Observed risk levels based on the estimated photosynthetic activity for Custom Algae Script

Map Colour	Risk Level -	Starting concentration guide range	RACC recreational alert values approx. equivalence
Blue	Very low	<0.05 mm3/L	No Alert
Green	Low	0.05 to 0.5 mm3/L	Green
Yellow	Medium	0.5 to 5.0 mm3/L	Amber
Red	High	5.0 to 20.0 mm3/L	Red
Dark red	Extreme	> 20 mm3/L	Red

Observations about the satellite images

Figure 1 indicates that Hume Dam had mostly very low-level phytoplankton activity on 19/08/2025. However, a patch of water with elevated algal activity was present in the area indicated with the yellow arrow.

The satellite image of the Menindee Lakes on 20/08/2025 (Figure 2) indicates that Lakes Tandure, Pamamaroo, Copi Hollow, Menindee and Cawndilla had very low phytoplankton activity. Very low phytoplankton activity was noted at lake Wetherell sites 4 and 3 as well as the Weir 32 weir pool.

Figure 3 indicates that the Murray River near Wentworth had very low phytoplankton activity on 20/08/2025. The anabranch had low to medium phytoplankton activity, while the Darling River branch had very low phytoplankton activity.

Lake Victoria had mostly very low phytoplankton activity on 20/08/2025 (Figure 4).

Figure 1: Hume Dam 19/08/2025 SentinelHub [CC BY-NC 4.0] NSW-Custom Algae Script - TF, WaterNSW.

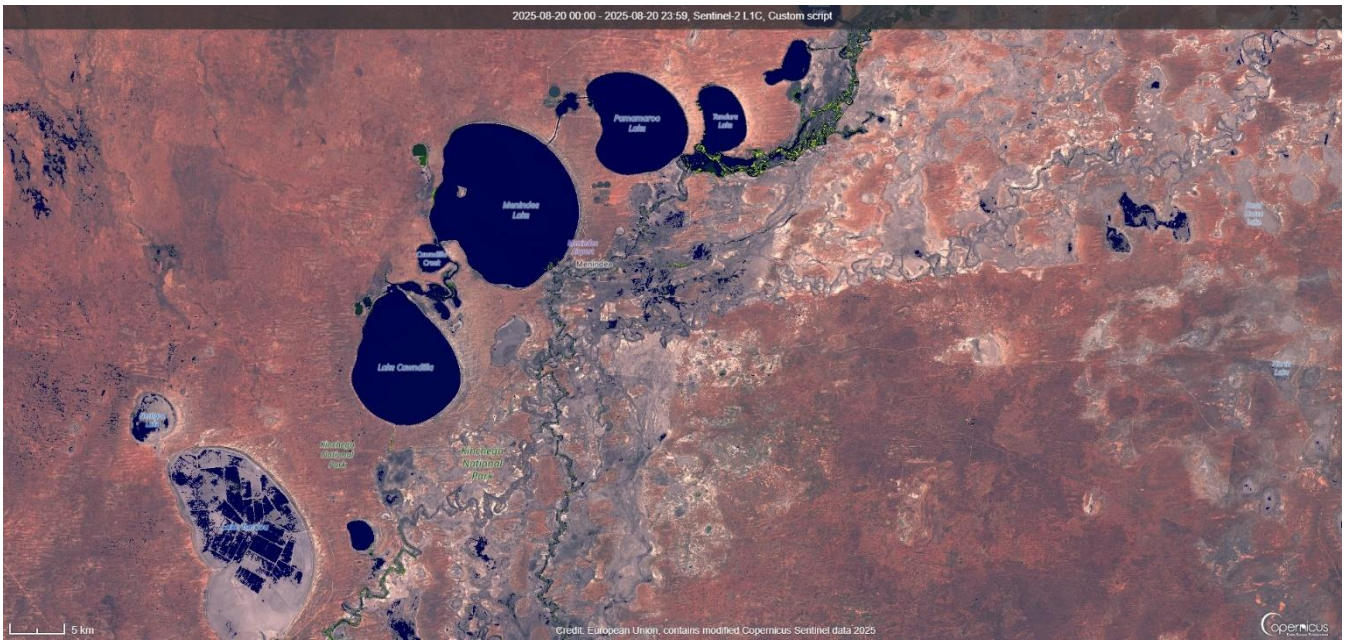

Figure 2: Menindee Lakes 20/08/2025 SentinelHub [CC BY-NC 4.0] NSW-Custom Algae Script - TF, WaterNSW.

Figure 3: Murray River near Wentworth, Lower Darling River and Great Darling Anabranch 20/08/2025 SentinelHub [CC BY-NC 4.0] NSW-Custom Algae Script - TF, WaterNSW.

Figure 4: Lake Victoria 20/08/2025 SentinelHub [CC BY-NC 4.0] NSW-Custom Algae Script - TF, WaterNSW.

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 interim 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.

Key to Alerts for Recreational Waters

RED Alert ≥ 50 000 cells/mL toxic *M. aeruginosa* OR biovolume equivalent of ≥4 mm^3/L for the combined total of all cyanobacteria where a known toxin producer is dominant in the total biovolume OR The total biovolume of all cyanobacteria ≥10 mm^3/L OR Cyanobacterial scums are consistently present	• High levels of Blue Green Algae detected • Indicates "bloom" conditions • Toxicity should be presumed • Water will appear green or brownish and may have a strong musty taste and odour • Surface scums could occur • **Extreme care should be exercised, and contact with the water should be avoided** **Action** • Issue Media Release • Water supply authorities to increase filtering with activated carbon as appropriate • Local authority and health authorities to warn the public that the water body is unsuitable for primary contact recreation
AMBER Alert ≥5 000 to <50 000 cells/mL *M. aeruginosa* OR biovolume equivalent of ≥ 0.4 to < 4 mm^3/L for the combined total of all cyanobacteria where known toxin producers are dominant in the total biovolume OR ≥ 0.4 to < 10mm^3/L combined total for all blue-green algae where known toxin producers are not dominant	• Indicates blue-green algae are multiplying • Water may have a green tinge and musty taste and odour **Action** • Water supply authorities to consider filtering with activated carbon • Investigations into the causes of the elevated levels and increased sampling to enable the risks to recreational users to be more accurately assessed.
GREEN Alert > 500 to < 5 000 cells/mL *M. aeruginosa* OR biovolume equivalent of > 0.04 to < 0.4 mm^3/L for the combined total of all cyanobacteria	• Low levels of potentially toxic species detected – suggesting base crop of blue green algae may be on the increase **Action** • Continue/increase routine sampling to measure cyanobacterial levels

Livestock Drinking Water Guidelines Based on ARMCANZ (2000), Orr and Schneider (2006) and WQRA (2010)

This guideline should be used when water is used for livestock drinking water purposes.

- If visual scums are present, then a High alert should be declared. This would be applicable for both farm dams and publicly managed water bodies (streams, rivers, etc). Such advice should also be given to farmers who phone the department seeking information on managing blooms in their dams.
- Where blooms dominated by ***Microcystis aeruginosa*** are present, then the ANZECC/ARMCANZ (2000) guideline of 11,500 cells/mL should be used. Excess of this cell count will constitute a High alert.
- Where blooms dominated by ***Dolichospermum circinale*** are present, then the Orr and Schneider (2006) guideline of 25,000 cells/mL should be used. Excess of this cell count will constitute a High alert.
- **Blooms of blue-green algae other** than *M. aeruginosa* and *D. circinale* are also common in NSW. These can be of either known potentially toxic species, or of species not considered to be toxin producers. When these blooms are present, a total blue-green algal biovolume in excess of 6 mm^3/L will constitute a High alert. (These are based on Very High alert recommendations for raw water sourced for potable human supply published by WQRA (2010), in lieu of there being nothing else available).

Further Information and Contacts

Links to websites of VIC and other agencies

Link to Snowy Valleys Council
Link to North East Water
Link to Goulburn-Murray Water blue-green algal alerts
Link to Goulburn Valley Water blue-green algal information
Link to Lower Murray Water blue-green algal alerts

NSW DPI blue-green-algae information for landholders

Go to the WaterNSW Algal Website

www.waternsw.com.au/algae **or at WaterInsights (links below):**
Murray regulated river - https://waterinsights.waternsw.com.au/11904-new-south-wales-murray-regulated-river/updates
Lower-Darling regulated river - https://waterinsights.waternsw.com.au/12104-lower-darling-regulated-river/updates

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