

# Murray and Sunraysia – Algae Alert Status

16 October 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 Heywoods Bay and Hume Dam Resort are on **Amber** alert for blue-green algae.

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

## **Billabong Creek, Edward River & Wakool River**

No Amber or Red alerts.

## **Menindee Lakes and lower Darling River**

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

**Some satellite images are shown on page 4 of this report.**

## **Blue-green algal outlook over the next seven days**

In the upper reaches of the catchment near Albury, mostly partly cloudy days with some showers can be expected. Maximum day air temperatures are forecast between 20 °C and 31 °C with minimum temperatures ranging from 5 °C to 14 °C (Source - [BOM 7 - Day weather forecast](#)). These weather conditions are likely to create favourable circumstances for blue-green algal growth.

At Menindee, mostly partly cloudy days with a couple showers are forecast. Maximum day air temperatures are expected to be between 25 °C and 41 °C with minimum temperatures ranging from 13 °C to 23 °C. These environmental conditions are likely to create very favourable circumstances for blue-green algal growth.

## **Climate Outlooks**

For November, maximum and minimum temperatures in the central and eastern regions of the Murray are very likely to exceed the average. Across the Sunraysia region, maximum temperatures are likely to be above average, while minimum temperatures very likely to exceed the average.

Rainfall is expected to exceed the average across most of the Murray and Sunraysia region for November, with a weak signal indicated near Menindee. This means there is a roughly equal chance of rainfall being above or below average for the Menindee Lakes area. (Source: [Bureau of Meteorology \(BoM\)](#))

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>										
DLH003	Lake Hume, Ebden	7/10/2025	18,107	0.213	7,349	0.205	GREEN	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
DLH001	Lake Hume, Heywoods Bay nr Bethanga	7/10/2025	26,920	0.165	5,553	0.155	AMBER	AMBER	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
DLH002	Lake Hume, Hume Dam Resort	7/10/2025	16,814	0.128	4,382	0.122	AMBER	AMBER	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
DLH004	Lake Hume, Dam Wall	7/10/2025	21,707	0.201	6,941	0.194	GREEN	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
	Tallangatta Supply - Mitta Mitta River at P/S (NE Water)	13/10/2025	2,450	0.522	1,850	0.518	AMBER	No Alert	<i>Dolichospermum - coiled (≥6µm)</i>	
N1000	Murray R. Union Bridge Albury	1/10/2025	0	0.000	0	0.000	No Alert	GREEN		
N1001	Murray R. Corowa	1/10/2025	5,511	0.010	0	0.000	No Alert	No Alert		
	Yarrowonga Weir (outlet) GMW	7/10/2025	6,129	0.038	0	0.000	No Alert	GREEN		
N1008	Mulwala Canal Offtake	1/10/2025	18,597	0.043	0	0.000	GREEN	GREEN		
N1007	Murray R. @ below Yarrowonga	1/10/2025	3,963	0.009	136	0.003	No Alert	No Alert	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1051	Murray R. Cobram (Barooga)	1/10/2025	8,274	0.010	0	0.000	No Alert	GREEN		
	Cobram WTP, raw water (GVW)	29/09/2025	4,450	0.032	0	0.000	No Alert	GREEN		
N1013	Murray R. Tocumwal	1/10/2025	50,708	0.075	136	0.003	GREEN	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1052	Murray R. Picnic Point	6/10/2025	26,061	0.051	544	0.013	GREEN	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
	Barmah WTP raw water (GVW)	29/09/2025	6,590	0.053	40	0.000	GREEN	GREEN	<i>Limnothrix</i>	
N1050	Murray R. Moama (Echuca)	6/10/2025	4,225	0.004	0	0.000	No Alert	GREEN		
	Torrumbarry Weir GMW	6/10/2025	7,800	0.064	0.000	0.000	GREEN	GREEN		
N1003	Murray R. Barham (Koondrook)	7/10/2025	15,538	0.077	425	0.050	GREEN	GREEN	<i>Aphanizomenonaceae sp.</i>	Potentially toxic, taste & odour
N1054	Murray R. Murray Downs (Swan Hill)	7/10/2025	18,338	0.074	408	0.048	GREEN	No Alert	<i>Aphanizomenonaceae sp.</i>	Potentially toxic, taste & odour
N1055	Murray R. Tooleybuc (Piangil)	7/10/2025	3,725	0.013	0	0.000	No Alert	GREEN		
N1064	Lake Benanee Rec Area	3/09/2025	0	0.000	0	0.000	No Alert	GREEN		
N1028	Murray R. Euston (Robinvale)	3/09/2025	12,126	0.644	306	0.036	AMBER	AMBER	<i>Aphanizomenonaceae sp.</i>	Potentially toxic, taste & odour
N1065	Murray R. Mount Dispersion	3/09/2025	40,075	0.496	0	0.000	AMBER	AMBER		
N1062	Murray R. Buronga	29/09/2025	21,109	0.210	68	0.001	GREEN	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1027	414206 - Murray River at Merbein	30/09/2025	14,750	1.436	833	0.098	AMBER	GREEN	<i>Aphanizomenonaceae sp.</i>	Potentially toxic, taste & odour
N1063	Murray R. Curlwaa	30/09/2025	35,885	1.203	0	0.000	AMBER	GREEN		
N1066	Murray R. Fort Courage	29/09/2025	6,292	0.539	0	0.000	AMBER	No Alert		
N1077	Murray R. Lock 8	29/09/2025	3,606	0.076	0	0.000	GREEN	GREEN		
N1078	Lake Victoria Outlet Regulator	29/09/2025	1,361	0.001	0	0.000	No Alert	GREEN		

Table 1: Continued

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>BILLBONG CREEK, EDWARD &amp; WAKOOL RIVERS</b>										
N1020	Billabong Ck. Waibundrie	30/09/2025	4,695	0.017	544	0.013	No Alert	No Alert	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1015	Billabong Ck. Jerilderie	6/10/2025	204	0.001	0	0.000	No Alert	No Alert		
N1006	Gulpa Ck. Mathoura	6/10/2025	24,679	0.048	408	0.009	GREEN	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1002	Edward R Deniliquin	6/10/2025	26,142	0.044	272	0.006	GREEN	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1053	Edward R. Old Morago	7/10/2025	19,669	0.035	136	0.003	No Alert	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1005	Edward R. Moulamein	7/10/2025	48,816	0.129	204	0.004	GREEN	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1010	Wakool R. Wakool-Barham Road	7/10/2025	26,492	0.139	0	0.000	GREEN	AMBER		
N1004	Wakool R. @ Stoney Crossing	7/10/2025	4,916	0.088	0	0.000	GREEN	AMBER		
N1009	Wakool R. Kyalite	7/10/2025	7,773	0.149	265	0.006	GREEN	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
<b>MENINDEE LAKE SYSTEM &amp; LOWER DARLING RIVER</b>										
N1042	Darling River at Wilcannia	1/10/2025	2,722	0.002	0	0.000	No Alert	No Alert		
N1087	Lake Wetherell Site 1	29/09/2025	0	0.000	0	0.000	No Alert	No Alert		
N1088	Lake Wetherell Site 2	29/09/2025	817	0.000	0	0.000	No Alert	No Alert		
N1089	Lake Wetherell Site 3	29/09/2025	2,177	0.013	0	0.000	No Alert	No Alert		
N1090	Lake Wetherell Site 4	29/09/2025	1,225	0.004	0	0.000	No Alert	No Alert		
N1092	Lake Pamamaroo Inlet (Site 9)	29/09/2025	4,696	0.010	0	0.000	No Alert	No Alert		
N1129	42510013 Centre Pamamaroo (Site 13)	30/09/2025	3,538	0.001	0	0.000	No Alert	No Alert		
N1093	Lake Pamamaroo Outlet (Site 10)	29/09/2025	9,798	0.010	0	0.000	No Alert	No Alert		
N1094	Menindee Lakes, Copi Hollow	30/09/2025	4,369	0.006	0	0.000	No Alert	No Alert		
N1130	Lake Menindee Site 19	30/09/2025	0	0.000	0	0.000	No Alert	RED		
N1339	Lake Menindee outlet regulator	30/09/2025	40,283	0.051	0	0.000	GREEN	No Alert		
N1128	Lake Cawndilla Site 34 Outlet	30/09/2025	22,447	0.042	0	0.000	GREEN	No Alert		
N1095	Darling R. Menindee bhwb pump	30/09/2025	0	0.000	0	0.000	No Alert	No Alert		
N1086	Darling R u/s Weir 32	30/09/2025	6,478	0.006	0	0.000	No Alert	No Alert		
N1043	Darling R. Tolarno	1/10/2025	1,770	0.006	0	0.000	No Alert	No Alert		
N1040	Darling R. Pooncarie	1/10/2025	1,565	0.008	0	0.000	No Alert	No Alert		
N1041	Darling R. Burtundy	30/09/2025	0	0.000	0	0.000	No Alert	No Alert		
N1074	Darling R. Ellerslie	30/09/2025	1,905	0.001	0	0.000	No Alert	GREEN		
N1075	Darling R. Tapio	30/09/2025	6,805	0.165	6,805	0.165	GREEN	No Alert	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
<b>GREAT DARLING ANABRANCH</b>										
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 mm <sup>3</sup> /L	No Alert
Green	Low	0.05 to 0.5 mm <sup>3</sup> /L	Green
Yellow	Medium	0.5 to 5.0 mm <sup>3</sup> /L	Amber
Red	High	5.0 to 20.0 mm <sup>3</sup> /L	Red
Dark red	Extreme	> 20 mm <sup>3</sup> /L	Red

## Observations about the satellite images

Figure 1 indicates that Hume Dam had mostly very low-level phytoplankton activity on 15/10/2025.

The satellite image of the Menindee Lakes on 14/10/2025 (Figure 2) indicates that Lakes Tandure, Pamamaroo, Copi Hollow, Menindee and Cawndilla had mostly very low phytoplankton activity. Cawndilla Creek between Lakes Menindee and Cawndilla indicated mostly low to very low levels of algal activity. Low to very low levels continue to be noted at Lake Wetherell sites 4 and 3 as well as the Weir 32 weir pool.

Figure 3 indicates that the Murray and Darling Rivers near Wentworth had mostly very low levels of phytoplankton activity on 14/10/2025. The Great Darling Anabranch continues to indicate low to medium levels.

Lake Victoria had mostly very low phytoplankton activity on 14/10/2025 (Figure 4).

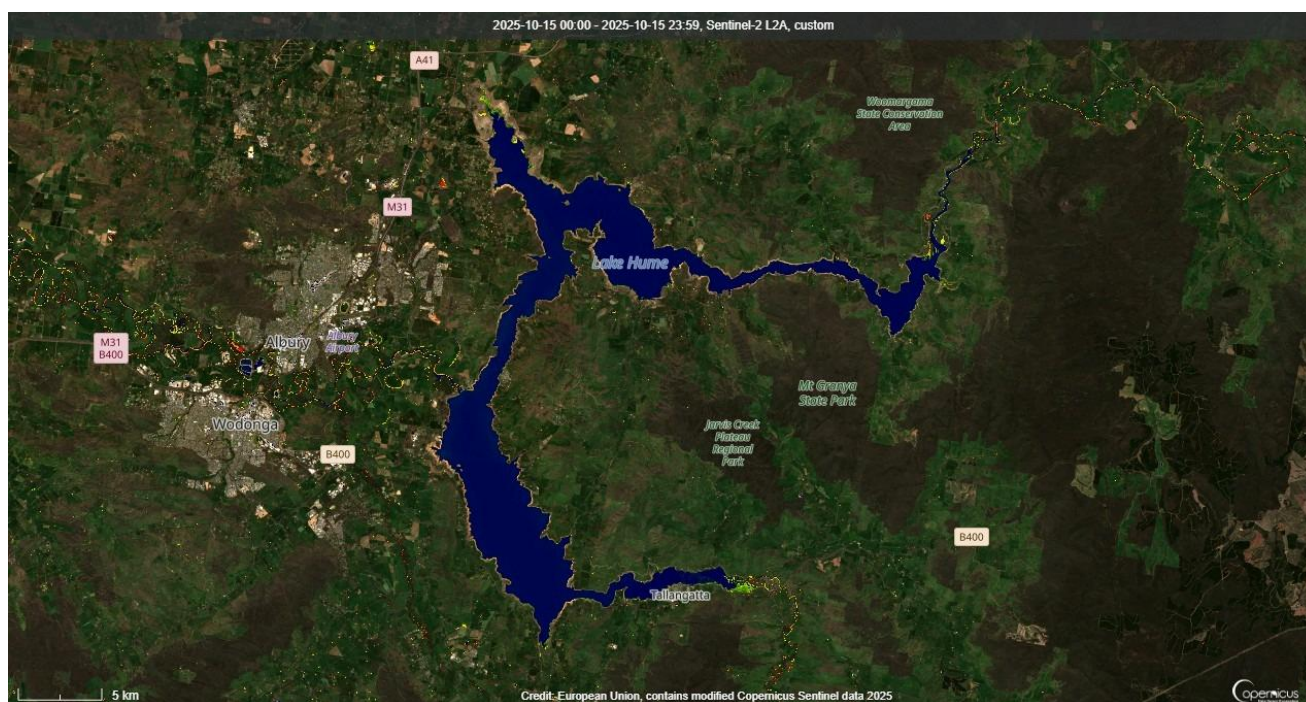


Figure 1: Hume Dam 15/10/2025 SentinelHub [CC BY-NC 4.0] NSW- RACC Custom Algae Script - TF, WaterNSW.

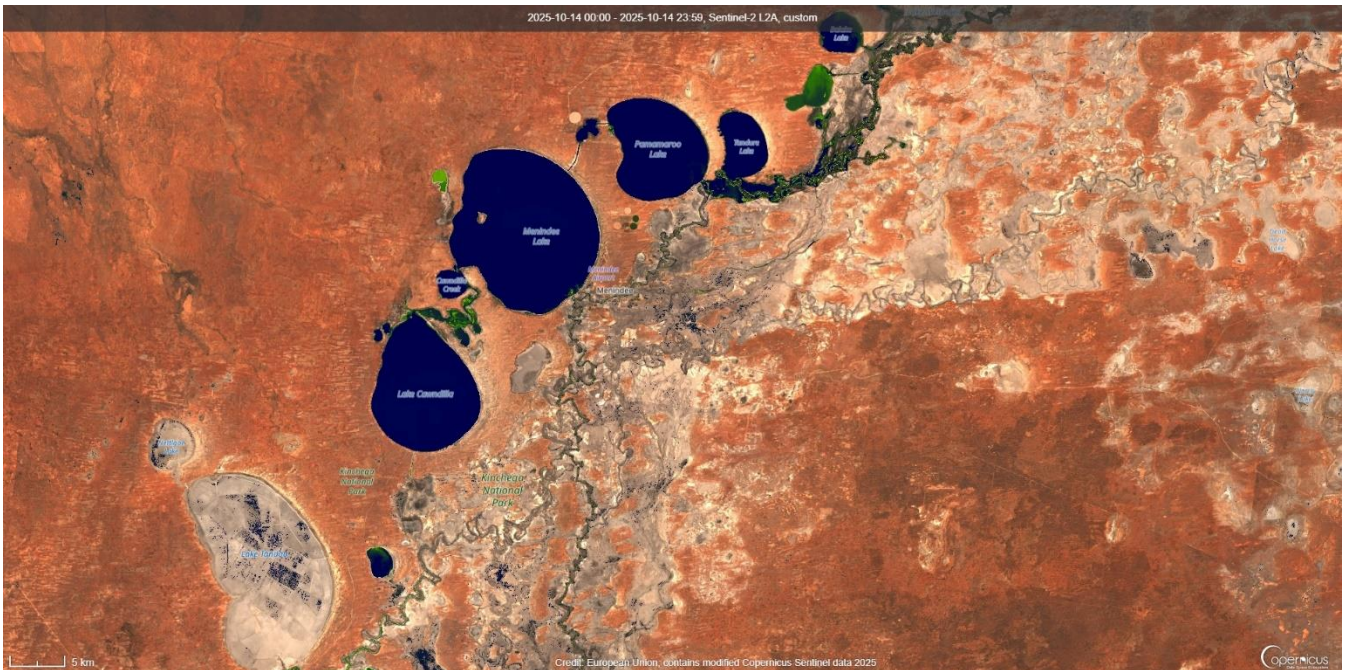


Figure 2: Menindee Lakes 14/10/2025 SentinelHub [CC BY-NC 4.0] NSW-RACC Custom Algae Script - TF, WaterNSW.



Figure 3: Murray River near Wentworth, Lower Darling River and Great Darling Anabranch 14/10/2025 SentinelHub [CC BY-NC 4.0] NSW- RACC Custom Algae Script - TF, WaterNSW.

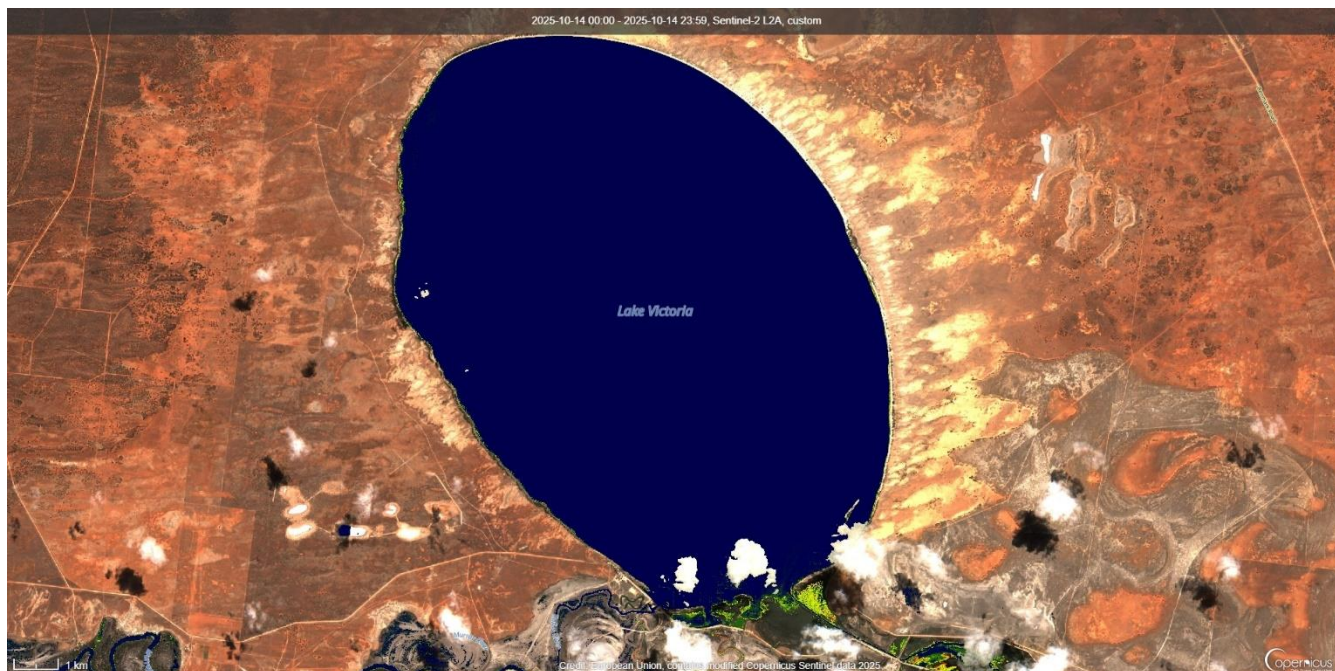


Figure 4: Lake Victoria 14/10/2025 SentinelHub [CC BY-NC 4.0] NSW- RACC Custom Algae Script - TF, WaterNSW.

## 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

<p><b>RED Alert</b>  <math>\geq 50\ 000</math> cells/mL toxic <i>M. aeruginosa</i>  OR  biovolume equivalent of <math>\geq 4</math> mm<sup>3</sup>/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 <math>\geq 10</math> mm<sup>3</sup>/L  OR  Cyanobacterial scums are consistently present</p>	<ul style="list-style-type: none"> <li>• High levels of Blue Green Algae detected</li> <li>• Indicates "bloom" conditions</li> <li>• Toxicity should be presumed</li> <li>• Water will appear green or brownish and may have a strong musty taste and odour</li> <li>• Surface scums could occur</li> <li>• <b>Extreme care should be exercised, and contact with the water should be avoided</b></li> </ul> <p><b>Action</b></p> <ul style="list-style-type: none"> <li>• Issue Media Release</li> <li>• Water supply authorities to increase filtering with activated carbon as appropriate</li> <li>• Local authority and health authorities to warn the public that the water body is unsuitable for primary contact recreation</li> </ul>
<p><b>AMBER Alert</b>  <math>\geq 5\ 000</math> to <math>&lt; 50\ 000</math> cells/mL <i>M. aeruginosa</i>  OR  biovolume equivalent of <math>\geq 0.4</math> to <math>&lt; 4</math> mm<sup>3</sup>/L for the combined total of all cyanobacteria where known toxin producers are dominant in the total biovolume  OR  <math>\geq 0.4</math> to <math>&lt; 10</math>mm<sup>3</sup>/L combined total for all blue-green algae where known toxin producers are not dominant</p>	<ul style="list-style-type: none"> <li>• Indicates blue-green algae are multiplying</li> <li>• Water may have a green tinge and musty taste and odour</li> </ul> <p><b>Action</b></p> <ul style="list-style-type: none"> <li>• Water supply authorities to consider filtering with activated carbon</li> <li>• Investigations into the causes of the elevated levels and increased sampling to enable the risks to recreational users to be more accurately assessed.</li> </ul>
<p><b>GREEN Alert</b>  <math>&gt; 500</math> to <math>&lt; 5\ 000</math> cells/mL <i>M. aeruginosa</i>  OR  biovolume equivalent of <math>&gt; 0.04</math> to <math>&lt; 0.4</math> mm<sup>3</sup>/L for the combined total of all cyanobacteria</p>	<ul style="list-style-type: none"> <li>• Low levels of potentially toxic species detected – suggesting base crop of blue green algae may be on the increase</li> </ul> <p><b>Action</b></p> <ul style="list-style-type: none"> <li>• Continue/increase routine sampling to measure cyanobacterial levels</li> </ul>

## 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<sup>3</sup>/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](http://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>

## Contacts

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