

Murray and Sunraysia – Algae Alert Status

05 December 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.

Please see Table 1 for all red, amber and green alerts.

Red Alerts

- Great Darling Anabranch at the Silver City Highway

Amber Alerts

- | | |
|------------------------------------|--------------------------------------|
| • Murray River at Tooleybuc | • Murray River at Fort Courage |
| • Murray River at Euston | • Edward River at Moulamein |
| • Murray River at Mount Dispersion | • Wakool River at Wakool-Barham Road |
| • Murray River at Buronga | • Wakool River at Kyalite |
| • Murray River at Curlwaa | |

Climate Outlooks

For December, rainfall across most of the regions is likely to be below average with recent forecasts indicating a drier month ahead.

Maximum temperatures are likely to exceed the average across all regions. Minimum temperatures are likely to exceed the average in the central and eastern Murray region, with a weak signal indicated across the Lower Darling and western Murray region. This weak signal means there is a roughly equal chance of above or below minimum temperatures. (Source: [Bureau of Meteorology \(BoM\)](#))

Algal Outlook

The risk for algal growth is moderate to high, with conditions becoming increasingly favourable for blue-green algal growth as we move into summer and temperatures increase. Increased algal activity is very likely where waters are shallow or stagnant.

Satellite image observations start on page 4 of this report.

Table 1: Combined Murray and Sunraysia Alerts

| Site | Description | Latest Sample Date | Cyanobacteria Total Count (cells/mL) | Cyanobacteria Biovolume (mm ³ /L) | Potentially Toxic Cyanobacterial Count (cells/mL) | Potentially Toxic Cyanobacterial Biovolume (mm ³ /L) | Current Status (based on Latest Sample) | Previous Status | Cyanobacteria dominant potentially toxic taxa | Cyanobacteria Comments |
|----------------------------|--|--------------------|--------------------------------------|--|---|---|---|-----------------|--|----------------------------------|
| MURRAY RIVER SYSTEM | | | | | | | | | | |
| | Manus Lake (SVC) Lake pontoon | 11/10/2025 | 13,438 | 3.753 | 11375 | 3.750 | AMBER | AMBER | <i>Dolichospermum</i> | |
| DLH003 | Lake Hume, Ebdon | 10/11/2025 | 36,533 | 0.169 | 5,042 | 0.140 | GREEN | GREEN | <i>Microcystis</i> sp. | Potentially toxic, taste & odour |
| DLH001 | Lake Hume, Heywoods Bay nr Bethanga | 10/11/2025 | 30,145 | 0.278 | 9,731 | 0.272 | GREEN | AMBER | <i>Microcystis</i> sp. | Potentially toxic, taste & odour |
| DLH002 | Lake Hume, Hume Dam Resort | 10/11/2025 | 11,928 | 0.104 | 3,715 | 0.103 | GREEN | AMBER | <i>Microcystis</i> sp. | Potentially toxic, taste & odour |
| DLH004 | Lake Hume, Dam Wall | 10/11/2025 | 59,282 | 0.175 | 5,389 | 0.150 | GREEN | GREEN | <i>Microcystis</i> sp. | Potentially toxic, taste & odour |
| | Tallangatta Supply - Mitta Mitta River at P/S (NE Water) | 17/11/2025 | 1,100 | 0.006 | 0 | 0.000 | No Alert | GREEN | | |
| N1000 | Murray R. Union Bridge Albury | 4/11/2025 | 12,657 | 0.019 | 0 | 0.000 | No Alert | No Alert | | |
| N1001 | Murray R. Corowa | 3/11/2025 | 33,335 | 0.058 | 619 | 0.015 | GREEN | No Alert | <i>Microcystis</i> sp. | Potentially toxic, taste & odour |
| | Yarrawonga Weir (outlet) GMW | 3/12/2025 | 12,000 | 0.192 | 0 | 0.000 | GREEN | GREEN | | |
| N1008 | Mulwala Canal Offtake | 3/11/2025 | 38,031 | 0.047 | 0 | 0.000 | GREEN | GREEN | | |
| N1007 | Murray R. @ below Yarrawonga | 3/11/2025 | 83,166 | 0.126 | 0 | 0.000 | GREEN | No Alert | | |
| N1051 | Murray R. Cobram (Barooga) | 3/11/2025 | 85,697 | 0.181 | 1,190 | 0.092 | GREEN | No Alert | <i>Dolichospermum circinale</i> | Potentially toxic, taste & odour |
| | Cobram WTP, raw water (GVW) | 25/11/2025 | 15,614 | 0.197 | 0 | 0.000 | GREEN | GREEN | | |
| N1013 | Murray R. Tocumwal | 3/11/2025 | 62,561 | 0.099 | 272 | 0.006 | GREEN | GREEN | <i>Microcystis</i> sp. | Potentially toxic, taste & odour |
| N1052 | Murray R. Picnic Point | 3/11/2025 | 62,213 | 0.330 | 136 | 0.003 | GREEN | GREEN | <i>Microcystis</i> sp. | Potentially toxic, taste & odour |
| | Barmah WTP raw water (GVW) | 24/11/2025 | 40,498 | 0.318 | 184 | 0.043 | GREEN | AMBER | <i>Dolichospermum - coiled (≥6µm)</i> | |
| N1050 | Murray R. Moama (Echuca) | 3/11/2025 | 33,567 | 0.044 | 0 | 0.000 | GREEN | No Alert | | |
| | Torrumbarry Weir GMW | 1/12/2025 | 30,646 | 1.138 | 124 | 0.002 | AMBER | AMBER | <i>Limnothrix/Geitlerinema/Anagnostis dinema</i> | |
| N1003 | Murray R. Barham (Koondrook) | 4/11/2025 | 12,197 | 0.029 | 0 | 0.000 | No Alert | GREEN | | |
| N1054 | Murray R. Murray Downs (Swan Hill) | 4/11/2025 | 11,593 | 0.321 | 0 | 0.000 | GREEN | GREEN | | |
| | Murray River U/S Woorinen pumps GMW | 1/12/2025 | 40,398 | 5.030 | 6050 | 1.222 | AMBER | AMBER | <i>Dolichospermum - coiled (≥6µm)</i> | |
| N1055 | Murray R. Tooleybuc (Piangil) | 4/11/2025 | 13,647 | 0.637 | 0 | 0.000 | AMBER | No Alert | | |
| N1064 | Lake Benanee Rec Area | 5/11/2025 | 0 | 0.000 | 0 | 0.000 | No Alert | No Alert | | |
| N1028 | Murray R. Euston (Robinvale) | 4/11/2025 | 4,605 | 1.116 | 0 | 0.000 | AMBER | GREEN | | |
| N1065 | Murray R. Mount Dispersion | 5/11/2025 | 2,922 | 0.752 | 0 | 0.000 | AMBER | No Alert | | |
| N1062 | Murray R. Buronga | 4/11/2025 | 76,616 | 1.180 | 0 | 0.000 | AMBER | GREEN | | |
| | Merbein (LMW) | 17/11/2025 | 47,524 | 0.800 | 208 | 0.051 | AMBER | AMBER | <i>Dolichospermum - coiled (≈6µm)</i> | |
| N1027 | 414206 - Murray River at Merbein | 4/11/2025 | 34,374 | 0.342 | 0 | 0.000 | GREEN | AMBER | | |
| N1063 | Murray R. Curlwaa | 3/11/2025 | 167,936 | 0.897 | 0 | 0.000 | AMBER | AMBER | | |
| N1066 | Murray R. Fort Courage | 3/11/2025 | 104,481 | 0.523 | 0 | 0.000 | AMBER | AMBER | | |
| | Lock 9 (LMW) | 17/11/2025 | 18,672 | 0.259 | 0 | 0.000 | GREEN | AMBER | | |
| N1077 | Murray R. Lock 8 | 3/11/2025 | 57,077 | 0.056 | 0 | 0.000 | GREEN | GREEN | | |
| N1078 | Lake Victoria Outlet Regulator | 3/11/2025 | 26,408 | 0.037 | 136 | 0.003 | No Alert | No Alert | <i>Microcystis</i> sp. | Potentially toxic, taste & odour |

Table 1: Continued

| Site | Description | Latest Sample Date | Cyanobacteria Total Count (cells/mL) | Cyanobacteria Biovolume (mm ³ /L) | Potentially Toxic Cyanobacterial Count (cells/mL) | Potentially Toxic Cyanobacterial Biovolume (mm ³ /L) | Current Status (based on Latest Sample) | Previous Status | Cyanobacteria dominant potentially toxic taxa | Cyanobacteria Comments |
|---|-------------------------------------|--------------------|--------------------------------------|--|---|---|---|-----------------|---|----------------------------------|
| BILLBONG CREEK, EDWARD & WAKOOL RIVERS | | | | | | | | | | |
| N1020 | Billabong Ck. Walbundrie | 3/11/2025 | 0 | 0.000 | 0 | 0.000 | No Alert | No Alert | | |
| N1015 | Billabong Ck. Jerilderie | 3/11/2025 | 680 | 0.001 | 0 | 0.000 | No Alert | No Alert | | |
| N1006 | Gulpa Ck. Mathoura | 3/11/2025 | 36,622 | 0.194 | 265 | 0.006 | GREEN | GREEN | <i>Microcystis</i> sp. | Potentially toxic, taste & odour |
| N1002 | Edward R Deniliquin | 3/11/2025 | 16,624 | 0.153 | 0 | 0.000 | GREEN | GREEN | | |
| N1053 | Edward R. Old Morago | 4/11/2025 | 33,791 | 0.048 | 0 | 0.000 | GREEN | No Alert | | |
| N1005 | Edward R. Moulamein | 5/11/2025 | 23,476 | 1.418 | 0 | 0.000 | AMBER | GREEN | | |
| N1010 | Wakool R. Wakool-Barham Road | 4/11/2025 | 11,320 | 1.886 | 0 | 0.000 | AMBER | GREEN | | |
| N1004 | Wakool R. @ Stoney Crossing | 4/11/2025 | 272 | 0.001 | 0 | 0.000 | No Alert | GREEN | | |
| N1009 | Wakool R. Kyalite | 4/11/2025 | 14,862 | 0.557 | 0 | 0.000 | AMBER | GREEN | | |
| MENINDEE LAKE SYSTEM & LOWER DARLING RIVER | | | | | | | | | | |
| N1042 | Darling River at Wilcannia | 4/11/2025 | 3,763 | 0.003 | 0 | 0.000 | No Alert | No Alert | | |
| N1087 | Lake Wetherell Site 1 | 27/10/2025 | 19,870 | 0.021 | 0 | 0.000 | No Alert | No Alert | | |
| N1088 | Lake Wetherell Site 2 | 27/10/2025 | 2,041 | 0.000 | 0 | 0.000 | No Alert | No Alert | | |
| N1089 | Lake Wetherell Site 3 | 27/10/2025 | 0 | 0.000 | 0 | 0.000 | No Alert | No Alert | | |
| N1090 | Lake Wetherell Site 4 | 27/10/2025 | 43,986 | 0.063 | 0 | 0.000 | GREEN | No Alert | | |
| N1091 | Lake Tandure Site 8 | 27/10/2025 | 817 | 0.001 | 0 | 0.000 | No Alert | AMBER | | |
| N1092 | Lake Pamamaroo Inlet (Site 9) | 27/10/2025 | 0 | 0.000 | 0 | 0.000 | No Alert | No Alert | | |
| N1129 | 42510013 Centre Pamamaroo (Site 13) | 28/10/2025 | 0 | 0.000 | 0 | 0.000 | No Alert | No Alert | | |
| N1093 | Lake Pamamaroo Outlet (Site 10) | 27/10/2025 | 32,444 | 0.040 | 0 | 0.000 | GREEN | No Alert | | |
| N1094 | Menindee Lakes, Copi Hollow | 27/10/2025 | 2,177 | 0.003 | 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 | 28/10/2025 | 54,614 | 0.223 | 0 | 0.000 | GREEN | GREEN | | |
| N1128 | Lake Cawndilla Site 34 Outlet | 28/10/2025 | 212,004 | 0.313 | 0 | 0.000 | GREEN | GREEN | | |
| N1095 | Darling R. Menindee bhwb pump | 28/10/2025 | 40,828 | 0.040 | 0 | 0.000 | GREEN | No Alert | | |
| N1086 | Darling R u/s Weir 32 | 28/10/2025 | 12,928 | 0.021 | 0 | 0.000 | No Alert | No Alert | | |
| N1043 | Darling R. Tolarno | 4/11/2025 | 54,845 | 0.085 | 0 | 0.000 | GREEN | No Alert | | |
| N1040 | Darling R. Poocarie | 4/11/2025 | 26,184 | 0.031 | 0 | 0.000 | No Alert | No Alert | | |
| N1041 | Darling R. Burtundy | 4/11/2025 | 272,620 | 0.272 | 0 | 0.000 | GREEN | No Alert | | |
| N1074 | Darling R. Ellerslie | 4/11/2025 | 101,199 | 0.107 | 0 | 0.000 | GREEN | No Alert | | |
| N1075 | Darling R. Tapio | 4/11/2025 | 85,364 | 0.109 | 0 | 0.000 | GREEN | GREEN | | |
| 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 mm ³ /L | No Alert |
| Green | Low | 0.05 to 0.5 mm ³ /L | Green |
| Yellow | Medium | 0.5 to 5.0 mm ³ /L | Amber |
| Red | High | 5.0 to 20.0 mm ³ /L | Red |
| Dark red | Extreme | > 20 mm ³ /L | Red |

Observations about the satellite images

Figure 1: The latest satellite image from December was obscured by cloud cover. The image from 24/11/2025 indicates that Hume Dam had mostly very low-level phytoplankton activity. Light cloud cover has interfered with some areas of the image.

The satellite image from 03/12/2025 (Figure 2) shows mostly low to very low levels of algal activity at Lakes Copi Hollow, Cawndilla, Menindee, Wetherell and Cawndilla Creek. Mostly, very low levels of algal activity were indicated at Lakes Tandure and Pamamaroo.

On 03/12/2025, the Murray River near Wentworth increased to low-medium levels of algal activity upstream of Wentworth Weir, and mostly low levels downstream of the weir. The Darling River continues to indicate mostly very low levels of algal activity (Figure 3).

Lake Victoria showed mostly very low phytoplankton activity on 03/12/2025 (Figure 4).

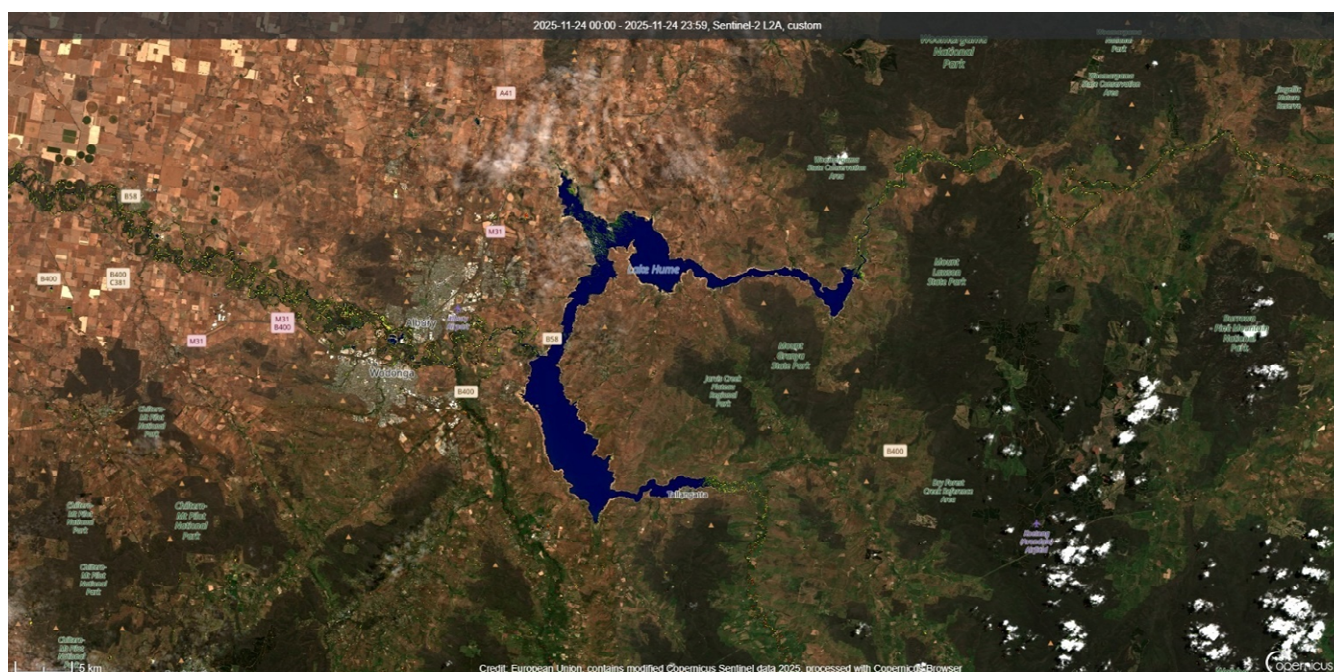


Figure 1: Hume Dam 24/11/2025 SentinelHub [CC BY-NC 4.0] NSW- RACC Custom Algae Script - TF, WaterNSW.

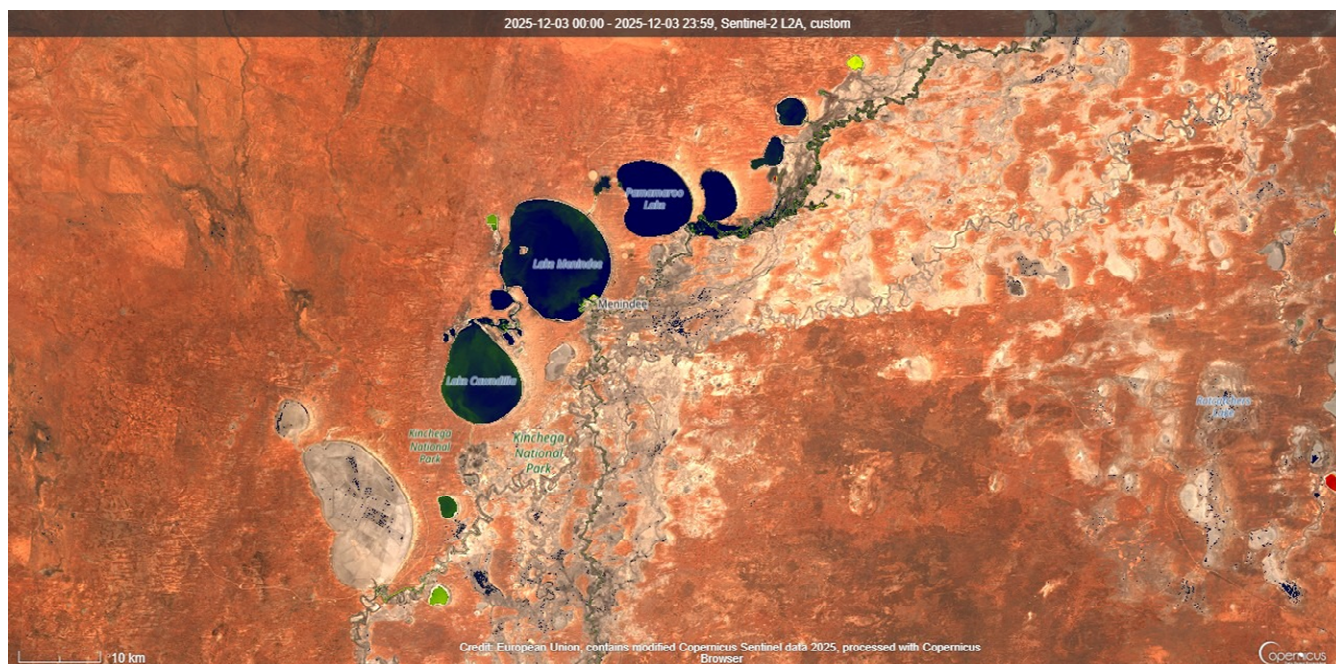


Figure 2: Menindee Lakes 03/12/2025 SentinelHub [CC BY-NC 4.0] NSW-RACC Custom Algae Script - TF, WaterNSW.



Figure 3: Murray River near Wentworth, Lower Darling River and Great Darling Anabranch 03/12/2025 SentinelHub [CC BY-NC 4.0] NSW- RACC Custom Algae Script - TF, WaterNSW.

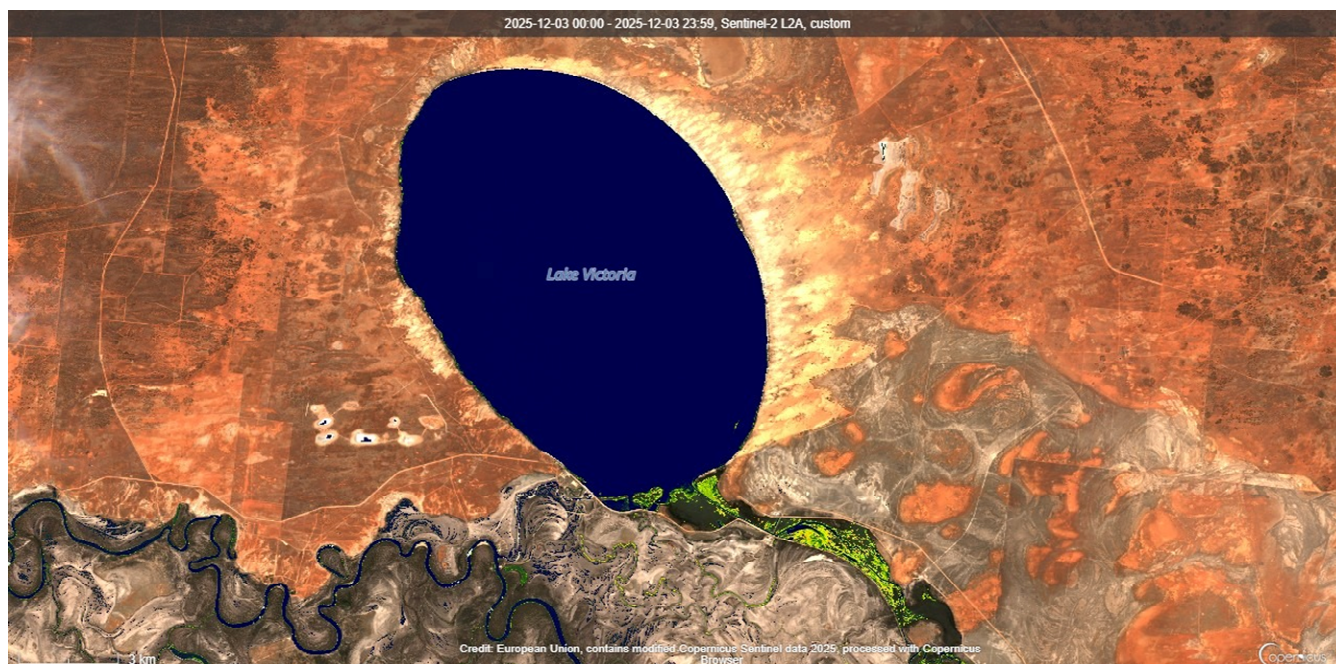


Figure 4: Lake Victoria 03/12/2025 SentinelHub [CC BY-NC 4.0] NSW- RACC Custom Algae Script - TF, WaterNSW.

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>RED Alert</p> <p>≥ 50 000 cells/mL toxic <i>M. aeruginosa</i> OR biovolume equivalent of ≥4 mm³/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 mm³/L OR Cyanobacterial scums are consistently present</p> | <ul style="list-style-type: none"> • 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 <p>Action</p> <ul style="list-style-type: none"> • 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 |
| <p>AMBER Alert</p> <p>≥5 000 to <50 000 cells/mL <i>M. aeruginosa</i> OR biovolume equivalent of ≥ 0.4 to < 4 mm³/L for the combined total of all cyanobacteria where known toxin producers are dominant in the total biovolume OR ≥ 0.4 to < 10mm³/L combined total for all blue-green algae where known toxin producers are not dominant</p> | <ul style="list-style-type: none"> • Indicates blue-green algae are multiplying • Water may have a green tinge and musty taste and odour <p>Action</p> <ul style="list-style-type: none"> • 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. |
| <p>GREEN Alert</p> <p>> 500 to < 5 000 cells/mL <i>M. aeruginosa</i> OR biovolume equivalent of > 0.04 to < 0.4 mm³/L for the combined total of all cyanobacteria</p> | <ul style="list-style-type: none"> • Low levels of potentially toxic species detected – suggesting base crop of blue green algae may be on the increase <p>Action</p> <ul style="list-style-type: none"> • 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 mm³/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>

Contacts

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