

# Lachlan Region - Algae Alert Status

08 May, 2026

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

## Red Alerts

- Lake Brewster Regulator C

## Amber Alerts

- Lake Brewster Outlet Channel
- Lake Cargelligo Boatshed
- Lake Cargelligo Town Water Supply
- Lake Cargelligo outlet @ Lake Creek
- Lachlan River at Willandra Weir
- Lachlan River at Coorong
- Lachlan River at Hillston
- Lachlan River at Booligal

## Green Alerts

- Lake Brewster Inflow
- Lake Cargelligo intake d/s of Curlew Waters
- Wyangala Abercrombie River

**Comments:** Weekly seasonal algal monitoring has ended for Lake Brewster and Lake Cargelligo systems for this algal season. Monthly sampling will continue until September. Increased monitoring will be implemented as required in response to alerts.

**Weather Forecast:** The 3 monthly outlook from the Bureau is as follows:

- **Rainfall** is 65 to 75% chance of **below** the long term median rainfall across most of the Lachlan catchment.
- **Daytime temperatures** are >80% likely to be **above** the long-term median temperature across most of the Lachlan catchment.
- **Overnight temperatures** are 50% - 80 % likely to be above the long-term median temperature across most of the Lachlan catchment.

(Source: [Bureau of Meteorology \(BoM\)](#))

**Algae Outlook:** Algal risk is declining with seasonal cooling where water is flowing. Algal assemblages in the Lachlan system are dominated by growth of non-potentially toxic taxa suggesting the potential for growth is high. Changes in environmental conditions may lead to a shift in taxa to more problematic species.

**Satellite image observations start on page 3 of this report.**

# Results Table

Table 1: Current blue-green algal alerts in the catchment of the Lachlan River.

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	Comments on Dominant Potentially Toxic Cyanobacteria Taxa
<b>Wyangala Dam</b>										
DWYA01	Wyangala Junction Lachlan & Abercrombie	29/04/2026	17311	0.018	0	0.000	No Alert	GREEN		
DWYA02	Wyangala Junction Lachlan & Sandy Ck	29/04/2026	7886	0.007	0	0.000	No Alert	GREEN		
DWYA05	Wyangala Abercrombie R	29/04/2026	15630	0.092	980	0.023	GREEN	AMBER	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
DWYA06	Wyangala Inland Waters Park	29/04/2026	17379	0.014	0	0.000	No Alert	GREEN		
DWYA08	Wyangala Dam Wall Station 1	29/04/2026	30948	0.029	68	0.001	No Alert	GREEN	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
DWYA04	Wyangala Dam Downstream	29/04/2026	1276	0.022	119	0.014	No Alert	No Alert	<i>Aphanizomenonaceae sp.</i>	Potentially toxic,
N1168	Lachlan River at Cowra	9/04/2026	884	0.002	0	0.000	No Alert	No Alert		
<b>Carcoar Dam</b>										
DCAR01	Carcoar Dam Station 1 (Dam Wall)	28/04/2026	612	0.000	0	0.000	No Alert	GREEN		
DCAR02	Carcoar Downstream (Belubula River)	28/04/2026	2143	0.006	102	0.002	No Alert	No Alert	<i>Microcystis sp.</i>	Potentially toxic, taste & odour
N1022	Lachlan River at Cottons Weir (Forbes)	7/04/2026	680	0.000	0	0.000	No Alert	No Alert		
N1024	Lachlan River @ Condobolin Bridge	7/04/2026	7730	0.010	0	0.000	No Alert	No Alert		
<b>Lake Cargelligo</b>										
DCRG04	Lake Cargelligo Weir	28/04/2026	0	0.000	0	0.000	No Alert	No Alert		
DCRG06	Lachlan River downstream of Lake Cargelligo Weir	28/04/2026	11736	0.020	0	0.000	No Alert	No Alert		
DCRG05	Lake Cargelligo intake downstream of Curlew Waters	28/04/2026	345878	0.368	136	0.017	GREEN	GREEN	<i>Anabaenopsis sp.</i>	Potentially toxic
DCRG02	Lake Cargelligo Town Water Supply 41210042	28/04/2026	1480331	2.353	1494	0.092	AMBER	AMBER	<i>Raphidiopsis raciborskii</i>	Potentially toxic, taste & odour
DCRG03	Lake Cargelligo Boatshed	28/04/2026	1662864	2.810	1835	0.113	AMBER	AMBER	<i>Raphidiopsis raciborskii</i>	Potentially toxic, taste & odour
DCRG01	Lake Cargelligo Outlet @ Lake Creek	28/04/2026	781170	0.999	1359	0.067	AMBER	AMBER	<i>Raphidiopsis raciborskii</i>	Potentially toxic, taste & odour
<b>Lake Brewster</b>										
DBRW01	Lake Brewster Inflow 412102	28/04/2026	76076	0.075	0	0.000	GREEN	GREEN		
DBRW02	Lake Brewster Inf wetland u/s eastern spillway									
DBRW03	Lake Brewster Regulator C	28/04/2026	641514	27.812	95464	1.954	RED	AMBER	<i>Oscillatoriaceae/Microcoleaceae sp.</i>	Potentially toxic, taste & odour
DBRW04	Lake Brewster Outlet Channel 412108	28/04/2026	107083	1.021	3738	0.149	AMBER	AMBER	<i>Oscillatoriaceae/Microcoleaceae sp.</i>	Potentially toxic, taste & odour
DL0S06	Lachlan River @ Willandra Weir	28/04/2026	63267	0.416	765	0.020	AMBER	AMBER	<i>Oscillatoriaceae/Microcoleaceae sp.</i>	Potentially toxic, taste & odour
N1025	Lachlan River at Hillston	14/04/2026	90100	3.460	15250	0.417	AMBER	No Alert	<i>Phormidiaceae sp.</i>	Potentially toxic, taste & odour
N1023	Lachlan River at Booligal	14/04/2026	399600	0.418	0	0.000	AMBER	GREEN		
N1026	Lachlan River at Corrong	14/04/2026	98320	0.112	0	0.000	AMBER*	AMBER		

\*Indicates that sampling results show algal numbers have reduced, however another low sampling result is required to reduce the alert to a lower level.

## Satellite Imagery

The key to the algae approximate concentrations using the Custom Algae (CA) Script is to provide a starting reference only (Table 2). 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. Therefore, these colours and descriptors are not the official “Algae Alert Level” but rather provides information on the potential risk on algae formation.

Table 2: Observed risk levels based on probable chlorophyll-a concentration 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

**Note:** Satellite images are usually more recent than the sampling data and therefore may contribute to not agreeing with sampled algae results. So please check dates when comparing.

## Satellite Image Observations (Figures 1 through 4)

**Wyangala Dam:** Low levels of photosynthetic activity were indicated by the satellite imagery on the 1<sup>st</sup> of May (Figure 1). Some artifacts are present in the imagery which are not reflective of photosynthetic activity.

**Carcoar Dam:** Low but increasing levels of photosynthetic activity were indicated by the satellite imagery on the 1<sup>st</sup> of May (Figure 2).

**Lake Cargelligo:** Low levels of photosynthetic activity were indicated by the satellite imagery on the 1<sup>st</sup> of May (Figure 3) in the main lake.

**Lake Brewster:** Elevated photosynthetic activity is visible in the western auxiliary cell, increasing activity can be seen in the eastern cell as indicated by the satellite imagery on the 4<sup>th</sup> May. Exposure of the lake bed due to planned drawdown is visible in the imagery (Figure 4).

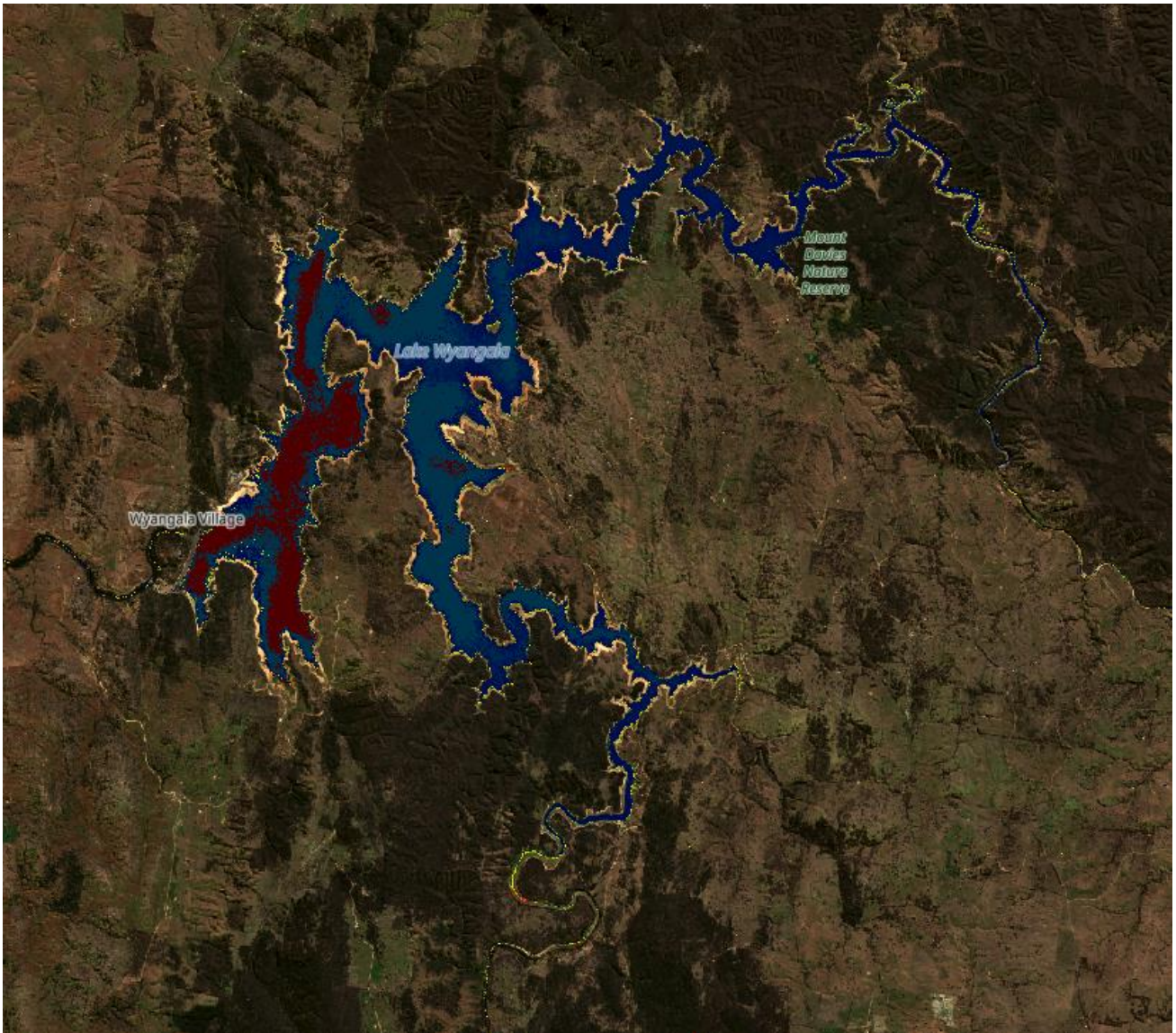


Figure 1. Wyangala Dam 01/05/2026 Sentinel Hub [CC BY-NC 4.0] NSW-Custom Algae Script - TF, WaterNSW

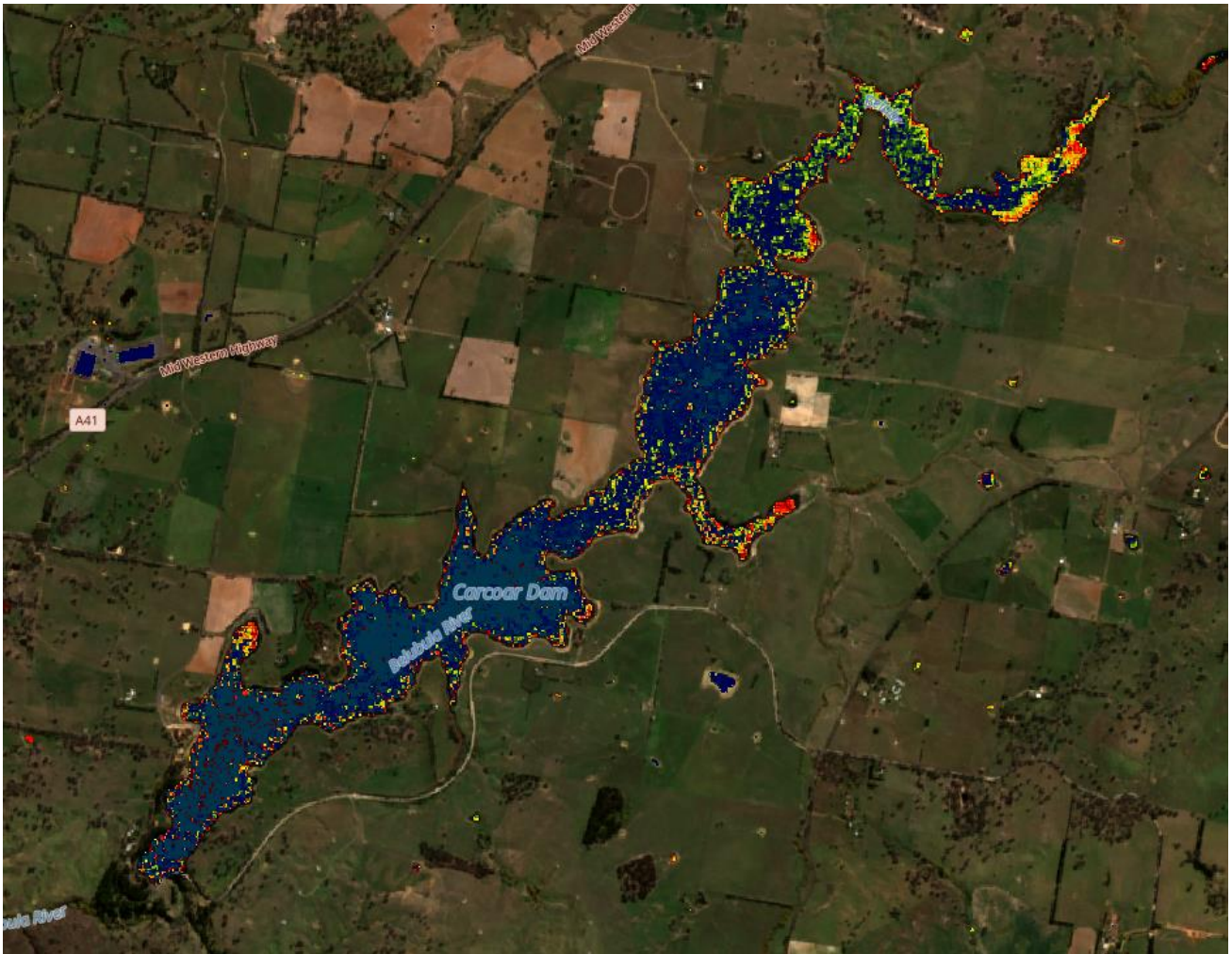


Figure 2. Carcoar Dam 01/05/2026 Sentinel Hub [CC BY-NC 4.0] NSW-Custom Algae Script - TF, WaterNSW



Figure 3. Lake Cargelligo 01/05/2026 Sentinel Hub [CC BY-NC 4.0] NSW-Custom Algae Script - TF, WaterNSW

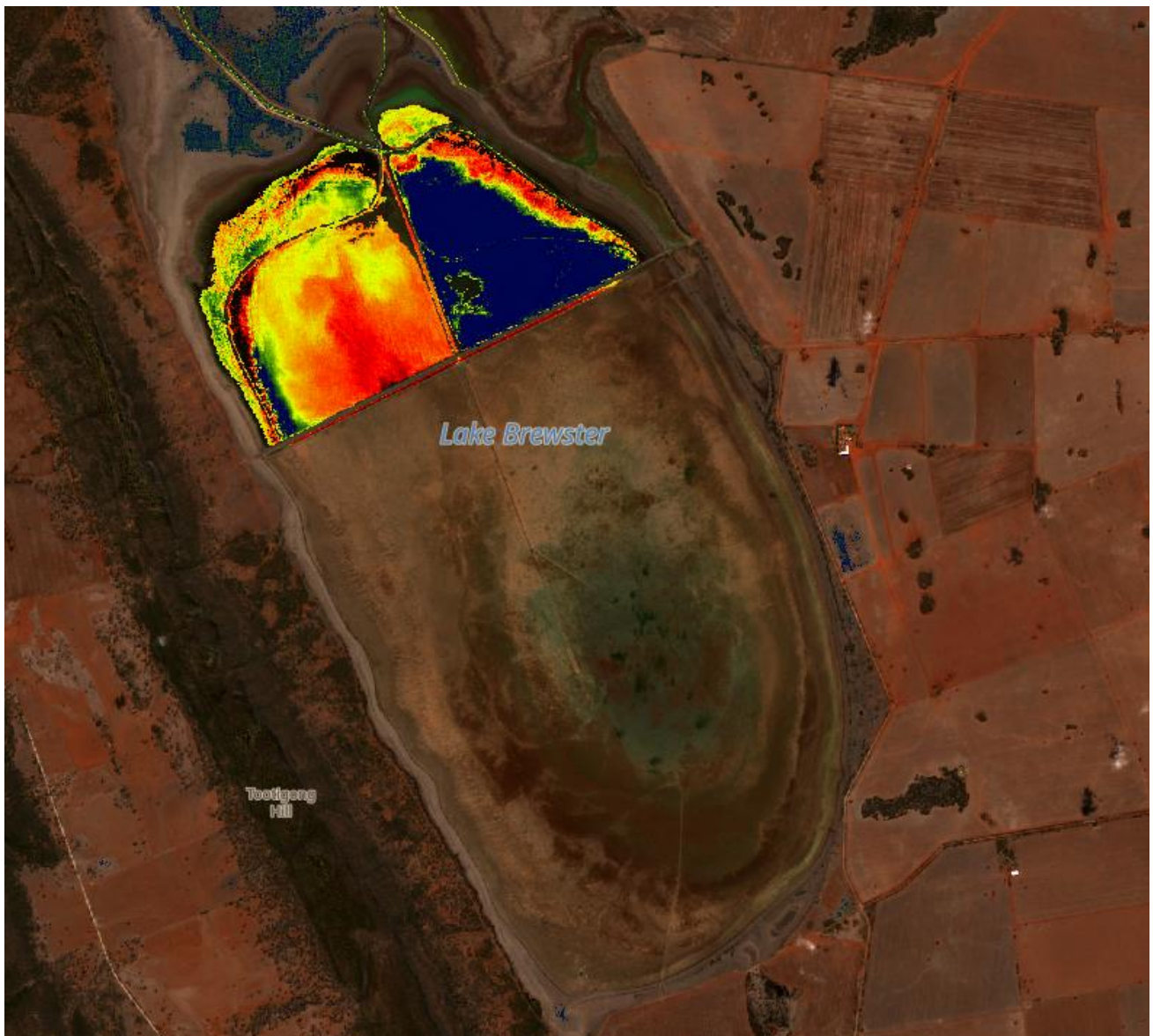


Figure 4. Lake Brewster 04/05/2026 Sentinel Hub [CC BY-NC 4.0] NSW-Custom Algae Script - TF, WaterNSW.

## 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

<p><b>RED Alert</b></p> <p>≥10 µg/L total Microcystins</p> <p>OR</p> <p>≥50 000 cells/mL toxic <i>M. aeruginosa</i></p> <p>OR</p> <p>biovolume equivalent of ≥4 mm<sup>3</sup>/L for the combined total of all cyanobacteria where a known toxin producer is dominant in the total biovolume.</p> <p>OR</p> <p>≥10 mm<sup>3</sup>/L for total biovolume of all cyanobacterial material where known toxins are not present.</p> <p>OR</p> <p>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></p> <p>≥5000 to &lt;50 000 cells/mL <i>M. aeruginosa</i></p> <p>OR</p> <p>biovolume equivalent of ≥0.4 to &lt;4 mm<sup>3</sup>/L for the combined total of all cyanobacteria where a known toxin producer is dominant in the total biovolume</p> <p>OR</p> <p>≥0.4 to &lt;10 mm<sup>3</sup>/L for the combined total of all cyanobacteria where known toxin producers are not present.</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></p> <p>≥500 to &lt;5000 cells/mL <i>M. aeruginosa</i></p> <p>OR</p> <p>biovolume equivalent of &gt;0.04 to &lt;0.4 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>

\*The definition of ‘dominant’ is where the known toxin producer comprises 75% or more of the total biovolume of cyanobacteria in a representative sample.

# 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

### Water NSW Algal Websites

Algal Information: <http://www.waternsw.com.au/algae>

Water Insights (Lachlan Catchment): <https://waterinsights.waternsw.com.au/>

Algae Alerts NSW Map: <https://www.waternsw.com.au/water-services/water-quality/algae-alerts>

### Department of Primary Industries Algal Websites

<https://www.dpi.nsw.gov.au/agriculture/water/quality/pubs-and-info/blue-green-algae>

### BOM Websites

7 Day Forecasts: <http://www.bom.gov.au/nsw/forecasts/map7day.shtml>

BOM: <http://www.bom.gov.au/>

### Contacts

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