

Fact sheet Blue green algae



What is blue-green algae?

Blue-green algae (cyanobacteria) are naturally occurring organisms that live in rivers, lakes and waterways as a result of the surrounding environment.

Blue-green algae can exist in both salt and fresh water, and are an important part of a healthy ecosystem. Most of the time, the algae exist in low numbers in waterways with no detriment to the environment. However, under certain conditions the algae can grow rapidly.

This is called an 'algal bloom' and it can become a dominating, and sometimes toxic, nuisance in our waterways.

What causes an algal bloom?

The growth of blue-green algae can be caused by:

Nutrient availability - phosphorus and nitrogen are the main nutrients that contribute to the formation of blue-green algae.

Temperature and light - blooms generally occur in the warmer months due to increased water temperature and optimal light conditions. Water changes temperature at different depths ('thermal stratification') and this can help keep an algae bloom near the surface of the water.

Turbidity is the presence of suspended solids and organic matter in the water. Low turbidity can occur when slow moving water enables the solids to settle. Blue-green algae prefer low turbidity as it allows more light to penetrate the water.

The presence of sufficient nutrients, warm temperatures and high levels of sunlight, together with calm waters, provide optimal growing conditions for blue-green algae.

Why is on-water recreation restricted during blue-green algal blooms?

Blue-green algae generally live near the water surface and accumulate in areas as a result of the wind and currents.

Sometimes blue-green algae accumulates in visible 'slicks', with a distinctive green colour. Blue-green algae levels can be high without a visible slick on the water.

Various toxins released by some species of blue-green algae can present a potential health risk to people and livestock, birds, fish and dogs. Blue-green algae can also impact our aquatic ecosystems.

How can blue-green algae affect people?

Exposure to high levels of blue-green algae can result in headaches, nausea, muscular pains, diarrhoea and gastroenteritis.

When our regular testing shows algae levels are high, we consider the National Health and Medical Research Council guidelines and the Department of Environment and Heritage Protection blue-green algae guidelines in determining whether to restrict access to water-based activities.

When restrictions are in place, we closely monitor algae levels and re-open the lake to water-based activities when levels fall to within acceptable limits.

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What can be done about blue-green algae?

As a community, we can help prevent blue-green algal blooms by limiting the amount of nutrients in the water and promoting ecological health.

Detergents and fertilisers contain a high concentration of nitrogen and phosphorus, so we can all play our part by:

- preventing nutrients from washing into roadside drains that flow into local waterways. For example, by washing the car on the lawn rather than on the road
- using detergents which do not contain phosphorus
- reducing the use of fertilisers where possible
- contributing to the rehabilitation of streams
- preventing land erosion, where possible, to stop soil washing into waterways.

What is Seqwater doing?

We don't directly treat blue-green algal blooms, as this is only a short-term solution, can be detrimental to other aquatic life, and has the potential to make the situation worse.

Instead, we work to improve the health of the lake and catchment by reducing nutrient and sediment input from the surrounding land and improving the function of the ecosystem.

We closely monitor our lakes for algal blooms and close lakes to water-based recreation activities when algal levels are high. It may be necessary to close lakes to on-water recreation for weeks or some months until algal levels return to an acceptable level.

Signage is erected to advise of the closure and presence of blue-green algae.



We keep the community informed through website updates, Facebook and Twitter posts and re-open lakes to on-water recreation as soon as it is possible to do so.

For more information

If you have further questions, please contact us:

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