



Blue-Green Algae

What is blue-green algae?

Blue-green algae are tiny micro-organisms that belong to the 'cyanobacteria' family. The algae are found in aquatic habitats such as rivers, lakes and watercourses where conditions permit.

Blue-green algae can exist in salt and fresh water. They are an important part of a healthy ecosystem. Unlike the name suggests, they are not an algae, but a photosynthetic bacteria. Its 'nickname' comes from the organism's colour, structure and aquatic-dwelling nature.

The algae exist in low numbers in waterways at no detriment to the environment in normal conditions. However, the thick, dense algal colonies can grow very rapidly under favourable conditions. This is known as an algal bloom. In large numbers this can choke waterways and impact upon aquatic plants and animals. Although quite rare, some species have the potential to produce toxins.

What causes an algal bloom?

Algal blooms can rapidly occur under the right conditions. These conditions include:

- Warm water temperatures
- An increase in nutrient levels (for example, nitrogen and phosphorous)
- High sunlight
- Stagnant and drought conditions

Problems with blue-green algae

The algae normally live near the surface of the water and accumulate in certain areas of waterways due to wind and currents. This can cause the algae to clump together near the water edge. Various toxins are released by certain species of blue-green algae, especially when they are dying. These toxins produce a potential health risk to animals, such as livestock, bird life, fish, dogs and humans.

In bloom situations the algae uses the sunlight, nutrients and dissolved oxygen in the water to bloom. This can impact upon aquatic ecosystems. Algal blooms also discolour the water and create an unsightly and sometimes smelly scum on the surface near the shoreline.

Can blue-green algae affect people?

The toxins that some algae produce can affect humans. If ingested, symptoms include nausea, headache, vomiting, abdominal pain, diarrhoea, gastroenteritis, muscle weakness and, in extreme cases, pneumonia and paralysis. Contact with the body has been found to cause skin, ear, throat and eye irritations. Boiling of affected water will kill the algae but won't destroy the toxins.

What can be done?

It is extremely unlikely that Blue-green algae blooms can ever be stopped in Australia. Sometimes these blooms occur naturally. However, residents can assist in the prevention of blooms by limiting the amount of nutrients in the water. Detergents and fertilisers have a high concentration of nitrogen and phosphorus, so employing a few responsible habits can help reduce the frequency and intensity of the blooms. The proper disposal and use of fertilisers in both domestic and commercial applications will limit nutrient levels in waterways. Washing your car on the lawn rather than the road or driveway can also help minimise nutrient levels in local waterways.

Trying to reduce erosion of your land and taking care to prevent soil washing into the waterway during construction work around the home or garden are also other ways to help.

What is Council doing?

Council's catchment management program aims to reduce nutrient runoff and soil erosion from catchment areas. In areas which are experiencing severe blooms, Council monitors the algal levels and will erect signage to warn the community. Responsible stormwater management in developing areas is an effective way to reduce nutrients from these areas.

What to do if you suspect blue-green algae in your water source?

If you suspect that your water source or waterway is contaminated, immediate action must be taken to ensure that the water is not used in any way. Alternative water sources should be used until a trained government officer has inspected the area. The bloom needs to be reported to the Council or State Government agency.

How can you contact us?



(07) 4970 0700

STD CALLS: 1300 733 343

For those residents who currently incur STD call rates when contacting their local customer service centre



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