

## What to do if you are close to Lyngbya

- Avoid contact with *Lyngbya* in the water or on the beach. If contact with *Lyngbya* occurs, rinse the area with fresh water as soon as possible.
- If you experience stinging, burning or itching sensations or respiratory discomfort after contact, seek medical attention.

## What is being done about Lyngbya?

*Lyngbya* will always exist to some extent as it is a natural component of our estuarine and coastal marine systems. State and local governments regularly monitor blooms and have contingency response plans to minimise the impact of *Lyngbya* blooms on public health and the community.

To reduce *Lyngbya* outbreaks and minimise their effects in South East Queensland, the Coastal Algal Blooms Action Plan within the SEQ Healthy Waterways Strategy 2007–2012 outlines a cooperative approach involving the SEQ Healthy Waterways Partnership Office, researchers, all levels of government, industry and the wider community. Legislative strategies to minimise the movement of nutrients from the land into coastal waters (where they can stimulate blooms) are addressed in the South East Queensland Regional Coastal Management Plan and South East Queensland Regional Plan 2009-2031. However, it will take time before implementation of these management strategies lead to a reduction in the frequency or severity of bloom outbreaks.



Scientific research, the basis for Management Strategy development

## How can we all help?

- Know how to identify *Lyngbya* and report sightings to your local council or the Department of Environment & Resource Management.
- Report nuisance algal blooms on [www.health-e-waterways.org](http://www.health-e-waterways.org) (available from July 2010).
- Reduce fertiliser use. This will reduce nutrients entering waterways.
- Keep streets and stormwater drains free of green wastes.
- Help restore riparian (riverbank) vegetation as it will improve the quality of water entering waterways.

## To find out more

Contact your Local Council or Healthy Waterways:



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This brochure has been produced by the SEQ Healthy Waterways Partnership with Moreton Bay Regional Council, Sunshine Coast Regional Council, Brisbane City Council, Redland City Council and Department of Environment & Resource Management.  
**DERM Pollution Hotline 1300 130 372 Website [www.derm.qld.gov.au](http://www.derm.qld.gov.au)**

INFORMATION FOR RESIDENTS AND VISITORS



## What is Lyngbya?

Commonly known as 'mermaid's hair', *Lyngbya majuscula* is a naturally occurring toxic marine cyanobacteria, or blue-green algae.

## What does it look like?

*Lyngbya* forms thread-like chains 10 to 30 centimetres long. These develop into dense clumps resembling mats of fine dark brown-black hair, which can change to a greenish white colour as it decays /dies.



*Lyngbya* washed onto beach

**HEALTHY WATERWAYS**  
Because we're all in the same boat



## Where does it occur?

*Lyngbya* exists in warm tropical and subtropical estuarine and coastal marine waters around the world. *Lyngbya* blooms have been reported in such areas as Hawaii, Mozambique, Philippines and Curacao. In Australia *Lyngbya* occurs in South Western Australia and in Queensland on the Great Barrier Reef, in Hervey Bay and South East Queensland. In the last few years *Lyngbya* bloom sites have included Deception Bay, Pumicestone Passage, Amity Banks (Eastern Moreton Bay), Horseshoe Bay (Peel Island), Thompson's Beach (Victoria Point) and Wellington Point.

## What are *Lyngbya* 'blooms'?

Given the right conditions, *Lyngbya* can grow excessively or 'bloom', with some blooms known to stretch over kilometres. *Lyngbya* blooms are normally found growing attached to seagrass, seaweed and other aquatic surfaces like coral and rocks. *Lyngbya* can also be found floating in the water and washed up on beaches.



*Lyngbya* bloom washed on a beach in Deception Bay.

## Why does *Lyngbya* 'bloom'?

The cause of *Lyngbya* blooms in South East Queensland is complex and it is likely that no one factor alone triggers bloom events.

Increased nutrients (phosphorus, nitrogen and iron) and dissolved organic matter have been shown to provide optimal growth conditions for *Lyngbya* especially during summer when light conditions and water temperatures (about 24°C) are favourable.

## When does *Lyngbya* 'bloom'?

In Moreton Bay, *Lyngbya* blooms tend to occur in October lasting through to mid-February and decreasing in extent from April to May. In Deception Bay, blooms commonly start in November and extend through to February and March.



Removal of *Lyngbya* from mangroves using a vacuum pump.

## What are the effects?

When *Lyngbya* is in bloom, it can cause problems for the natural environment as well as human health. The effects of these blooms include:

### Environmental

- Seagrass die-back, due to shading and smothering of seagrass by the *Lyngbya* bloom.
- Smothering of mangrove aerial roots and seedlings.
- Disturbance to animal populations, including dugongs, turtles, fish and macroinvertebrates such as crabs and shellfish.
- A decline in water quality, including lowered levels of dissolved oxygen and increased sediment nitrogen levels.



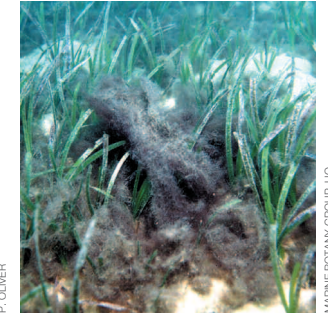
*Lyngbya* affects aquatic animals.

## Human health

- Skin irritations such as dermatitis and / or respiratory disorders and eye irritations brought about through physical contact with *Lyngbya* or breathing in airborne toxins produced by *Lyngbya* in its dry state.
- Pungent smells from the degradation of the *Lyngbya* when decomposition occurs on the beaches.



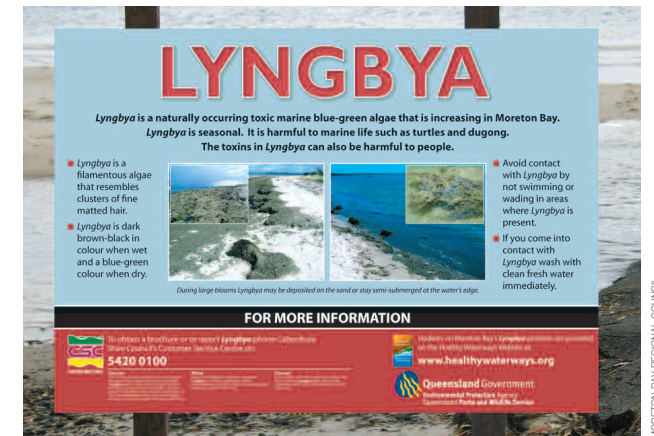
Contact dermatitis.



*Lyngbya* smothering seagrass.

## Economic

- Temporary beach closures affecting the tourism industry.
- Large clean-up bills for local councils.
- Dramatic effects on the commercial fishing industry.



*Lyngbya* information sign

Visit [www.healthywaterways.org](http://www.healthywaterways.org) to find out more about *Lyngbya*

