

Toxic cyanobacteria blooms of *Lyngbya Majuscula* are a threat to some coastal environments and communities.

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The increasing frequency and size of blooms of the toxic cyanobacteria *Lyngbya Majuscula* in coastal Queensland poses threats to coastal environments, human health, tourism and the economy of some communities. Data is presented showing that *Lyngbya* blooms are likely to get many times larger if the trend to increasing export of nutrients to our waterways continues. The main nutrients of concern are iron, phosphorus, nitrogen and some organics. Maps showing changes in biomass density and areal extent of *Lyngbya* through different growth phases are presented for two successive years for Deception Bay north of Brisbane. In 2005, the area impacted grew from 49 ha on 29 October to 529 ha on 10 December 2005, with the corresponding biomass increasing from 40 to 5,057 tonnes. In 2006, the bloom was even larger and lasted longer. The area impacted expanded from 48 ha on 19 September to 797 ha on 30 December 2006, with the corresponding biomass increasing from <1 tonne to >10,000 tonnes. At the peak of the bloom on 28 December 2006, the mean biomass density was 1.7 kg m⁻². During the nine days 21–30 December 2006, the bloom expanded at a massive rate of 562 tonnes per day.