

From: [REDACTED]
To: [Innovation, Tourism Development and Environment Committee](#)
Subject: Better water quality laws, NOW!
Date: Wednesday, 13 March 2019 10:02:08 PM

Dear Elected Representatives,

I support the new laws the Queensland Government has recently proposed (Environmental Protection (Great Barrier Reef Protection Measures) and Other Legislation Amendment Bill 2019 to ensure that the quality of water reaching the Reef is improved. The voluntary programs that have been in place for decades have been ineffective in reducing runoff. The new rules aren't about punishing farmers, they are about ensuring farmers know how much fertiliser is optimal for their land and applying no more than is necessary. That is going to be good for the Reef and it's also likely to save a lot of money for sugar farmers.

The Great Barrier Reef is an icon for Australians and people around the world. It is also a place of great beauty and biodiversity. However Reefs are in trouble, partly because sediment, fertilisers and pesticides are flowing into the Reef waters.

Tropical waters are, naturally, oligotrophic, meaning that they are naturally poor of nutrients and therefore of algae. Hence, their crystal clear appearance. When nitrogen and phosphorus fertilisers enter rivers and end up on the Reef, they alter the natural balance of the marine environment. Algae love nitrogen and phosphorus. In a high nutrient environment algae can then become so dense that the sunlight that normally reaches the sea floor can no longer do so. That means seagrass and other light dependent bottom-dwelling organisms such as photosynthetic corals have trouble growing and reproducing. Crown of Thorns starfish larvae thrive on the increased densities of these unicellular algae, leading to increased numbers of surviving juveniles and adults of such starfish. These adult COTS eat corals with impressive efficiency and when in pest proportions they destroy hard corals.

The scientific community has recognised the need to reduce fertilisers and sediment runoff to the Great Barrier Reef for decades. Many plans have been made with the noble aim of reducing runoff but they have not resulted in much change. In 2003 the Reef Water Quality Protection Plan set a goal of reversing the decline in water quality to the reef within ten years. By 2009 another plan called for nitrogen loads to be halved by 2018, the result was a 17 per cent reduction.

A couple of years ago UNESCO considered putting the Great Barrier Reef on the "in danger" list because we were doing such a poor job of managing it. That would have been an embarrassment for Australians as well as threatening our tourism economy. Millions of people visit Australia from overseas each year and their main destination is the Great Barrier Reef. Without them Queensland's economy would be in serious trouble.

Yours sincerely,

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