

\$60 million to save the Great Barrier Reef is a drop in the ocean, but we have to try

January 24 2018, by David Suggett



Close up of polyps are arrayed on a coral, waving their tentacles. There can be thousands of polyps on a single coral branch. Credit: Wikipedia

The Great Barrier Reef has never faced such a dire future. Amid increasingly doom-laden headlines, the federal government this week unveiled a [recovery package](#) aimed at securing the reef's prospects. The question is whether this is indeed a rescue, or just a smokescreen of false

hope.

The A\$60 million package will be split between various projects:

- A\$36.6 million will be spent on reducing the runoff of land-based agricultural fertilisers and pesticides onto the [reef](#)
- A\$10.4 million will go towards an "all-out assault" on the coral-eating crown-of-thorns starfish
- A\$4.9 million will fund improved monitoring and early warning of issues such as mass bleaching
- A\$6 million will be spent on a new national [Reef Restoration and Adaptation program](#).

But what return can we expect for this A\$60 million investment, which is only 0.1% of the [A\\$56 billion estimated economic value](#) of the Great Barrier Reef?

Value for money

At face value, splitting the funding across several priority areas seems logical. Many local stressors, from pollution to overfishing, affect the Great Barrier Reef in different ways and in different places, so tackling them locally seems like a nice direct way to intervene.

But here's the problem: these stressors interact and amplify each others' effects. This means that spreading the money so thinly is a risky move, because successfully tackling any one problem rests on successfully tackling all the others.

Crown-of-thorns starfish is a great example. Even if we can remove or destroy them in sufficient numbers to make a difference, their populations will simply bounce back unless we also reduce the agricultural pollution that feeds their larvae. Alongside this, we need to

ensure that their natural predators such as the [giant triton mollusc](#) also thrive.

Local impacts on the Great Barrier Reef are also amplified by [global climate](#) factors, such as the warming and increased ocean acidity caused by rising atmospheric carbon dioxide levels.

Focusing purely on local issues risks diverting attention from this wider problem. The unprecedented back-to-back mass bleaching that [catastrophically damaged the Great Barrier Reef in 2016 and 2017](#) was a direct result of global [climate change](#).

Preventing this from accelerating further requires global and collective action on greenhouse gas emission reductions. As custodian of the Great Barrier Reef, as well as a major coal exporter and a signatory to the Paris Climate Agreement, Australia has a responsibility to lead from the front to find alternatives to fossil fuels.

For this reason, the new funding package has unsurprisingly been [criticised](#) for not attempting to "cure" the ultimate problem that ails the Great Barrier Reef. Local interventions such as the ones being funded are often called out for being band-aid solutions. But the reality is that we need band-aids more than ever – although perhaps "tourniquets" would be more apt.

Cutting emissions and curbing climate change must remain our absolute priority. However, even [relatively optimistic emissions reduction scenarios](#) will leave us with warmer and acidic reefs for the coming decades. This means we will have to think well outside the box if we are to ensure that the Barrier Reef stays great. We cannot deny treatment while we attempt to find the cure.

Read more: [The Great Barrier Reef can repair itself, with a little help](#)

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The problem is that most current local reef interventions are considered too risky or too expensive, and are therefore dismissed without trying them. But unless we try alternatives, and are prepared to learn by trial and error, how can we find the solutions that work? What the government's new package ultimately therefore provides is the incentive to innovate.

In this sense it follows parallel calls from the Queensland government to find [new ways to boost coral abundance](#). As such, the federal funding may only be successful if we ensure that the proposed investment focuses on tackling the priority areas in new ways, rather than simply scaling up the current efforts.

As the stress builds on the Great Barrier Reef, one thing is certain: its future will depend on maximising its resilience. This necessarily calls for a range of efforts, focusing on biology, ecosystems, and changing human behaviour – not just defaulting to a single solution. Intensifying efforts to harness corals that are [already adapted to extreme conditions](#) will likely be crucial.

And of course, all of this will count for nothing unless we also take parallel action to tackle the underlying problem: climate change.

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