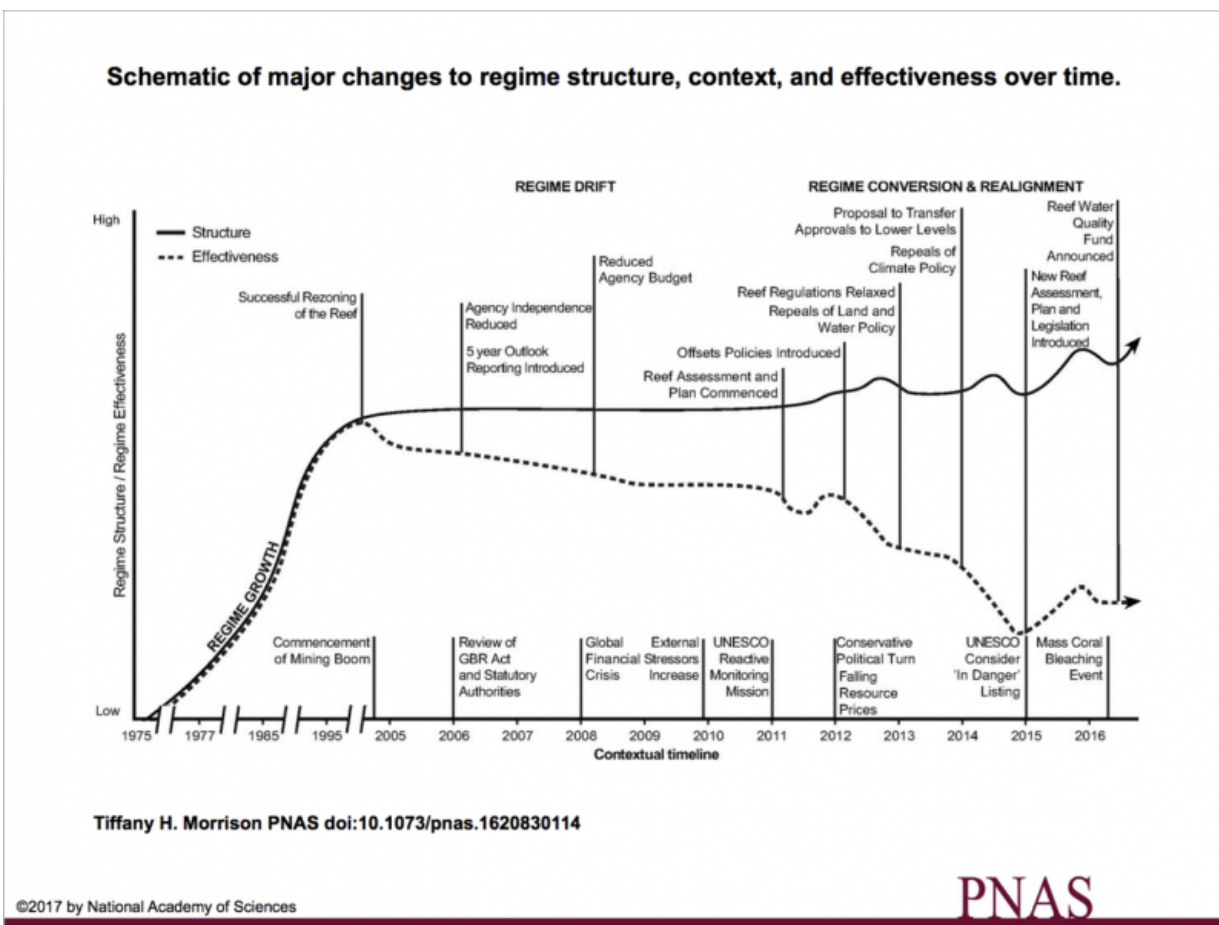


The Great Barrier Reef's safety net is becoming more complex but less effective

April 6 2017, by Tiffany Morrison



Schematic of major changes to regime structure, context, and effectiveness over time. Different types of change influence the structure and effectiveness of the regime in different ways. Credit: PNAS

The Great Barrier Reef is under serious threat, as the coral-bleaching crisis continues to unfold. These problems are caused by global climate change, but our ability to react to them – or prevent more harm – is clouded by a tangled web of bureaucracy.

Published this week, my [latest research](#) shows the increasingly complex systems for governing the Reef are becoming less effective.

Earlier this month, the Great Barrier Reef Marine Park Authority and the National Coral Reef Taskforce confirmed that a [second wave of mass bleaching](#) is now unfolding on the Reef. The same week, the Australian government quietly announced an unexpected [review of the governance of the Great Barrier Reef Marine Park Authority](#).

This most recent coral bleaching crisis brings the governance of the [reef](#) into stark relief.

How did we get here?

Yet this problem didn't always exist. In 2011, a state-of-the-art system governed the complete range of marine, terrestrial, and global threats to the reef. The management of the Great Barrier Reef Marine Park was (and still is) the responsibility of the Australian government, primarily through the statutory [Great Barrier Reef Marine Park Authority](#).

A highly collaborative working relationship, dating back to 1979, existed with the State of Queensland. Complementary marine, land, water, and coastal arrangements were established over four decades. The [United Nations Educational, Scientific and Cultural Organization](#) (UNESCO) provided important international oversight as a consequence of the 1981 World Heritage listing.

By 2011, the management of the reef had received international acclaim,

with the 2004 rezoning process (which divides the reef into eight zones for different activities) receiving [19 international, national, and local awards](#).

Yet despite the attention of federal lawmakers and considerable acclaim, in 2014 [UNESCO was considering the Great Barrier Reef for an "In Danger" listing](#). Appearing on this list is a strong signal to the international community that a World Heritage area is threatened and corrective action needs to be taken.

What went wrong?

So what went wrong? [My study](#) examined the structure and context of the systems for protecting the reef, which offers insight into how well they're working.

It's worth noting that complex systems aren't inherently bad. A polycentric approach – which literally means "multiple centres", instead of a single governing body – can be both stable and effective. But I found that in the case of the Great Barrier Reef, it masks serious problems.

A number of stresses, like climate change, economic crises, resource industry pressure and local political backlashes against conservation, have all combined to impact effective management of the reef.

Furthermore, successive governments keep making new announcements (new laws, programs, funds, and plans) while at the same time chipping away at the pre-existing laws, departments and funding.

Low visibility examples include the 2012 introduction of a policy that requires developers who want to build on or near the reef to [make an offset payment into the Reef Trust](#), which funds activity to improve

water quality. However, this has also made getting consent for development easier.

It's also concerning that, while there is no evidence of actual corruption, there is no mechanism to minimise the potential for undue industry influence under this policy. The Department of Environment grants approval for developments, and also oversees the offset fund into which the developers pay. Most people would regard this as a conflict of interest.

More visible examples include the dismantling of complementary policies and institutions, including the repeals of [Queensland coasts and catchments legislation](#) in 2013, and [Australian climate law and policy](#) in 2014.

A [2015 study of OECD countries](#) singled out the Australian Department of Environment for unusually frequent changes of both name and composition. The same study also showed that Australia has one of the sharpest declines in staff at national environment authorities since the 1990s, relative to other OECD countries.

The Great Barrier Reef Marine Park Authority itself has seen its resources plateau, and an increasing politicisation of decisions. Its independence has also been reduced through a series of small, incremental actions. Since 2005, there has been at least ten "regime changes", ranging from small tweaks to large restructurings.

Core funding across all relevant agencies has failed to keep pace with costs, at the same time as demands on them rose in response to the Queensland resources and population boom, not to mention [global climate change](#).

On top of that, reef stakeholders must increasingly focus their attention

on how all of this fits together as a streamlined system or as a network, rather than how to actually make it effective.

If we are to save the Great Barrier Reef from climate change, then we need to fix its governance.

What needs to come next

In 2015, after the government released their Reef 2050 Plan, UNESCO decided not to list the Reef as in danger, pending a 2016 assessment of progress. UNESCO is yet to make a recommendation, although the fact that the plan has very little mention of human-induced [climate change](#) may prove to be an issue.

Despite scientific outcry, the Australian government successfully lobbied UNESCO to remove the Great Barrier Reef and other Australian sites from its [draft report on World Heritage and Tourism in a Changing Climate](#) in 2016.

In response to public concern, the National Climate Change Adaptation Research Facility and the ARC Centre of Excellence for Coral Reef Studies held a [policy consultation workshop](#) with stakeholders and experts from all levels of government, industry representatives, environmental NGOs and peak scientific bodies like the Australian Institute of Marine Science. Participants made various recommendations for reform, including:

- meeting the national climate mitigation challenge that Australia supported at COP21 in Paris (first and foremost)
- strengthening independent oversight of environmental decision-making (for example, reinstating the formal joint ministerial council)
- reinstating the independence and diversity of the Great Barrier

Reef Management Authority, by improving the role and composition of the board and executive management

- properly costing and funding the protection of the Great Barrier Reef.

Yes, the Great Barrier Reef is in [crisis](#), but the coral-bleaching problem is also [a governance disaster](#). Regressive change, both large and small, has been masked by the complexity of the governance regime. Clear analysis of the minor and major transformations required to update the regime will be critical. If there's no real reform, a UNESCO "in danger" listing seems inevitable.

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