



Fishing camps in western Australia's Houtman Abrolhos Islands. Controversial new marine reserve plan seeks to balance habitat protection with sustainable fishing.

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Australian government to roll back marine protections

By April Reese Jul. 24, 2017, 5:00 PM

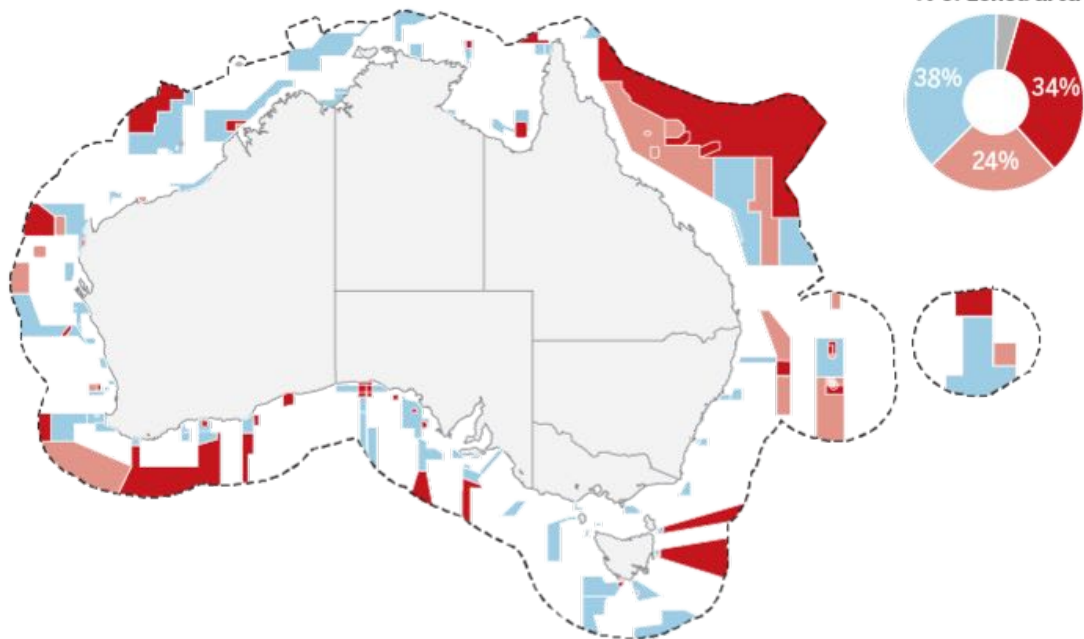
TOWNSVILLE, AUSTRALIA—Five years after the Australian government created one of the world's largest networks of marine reserves, it has unveiled a heavily revised **management blueprint** that would curtail conservation. Some scientists are assailing the plan as deeply flawed. "I suppose you could say it's an insult to the science community. It's not evidence-based," says David Booth, a marine ecologist at the University of Technology in Sydney, Australia.

Australia is fringed by some of the richest marine ecosystems in the world. Recognizing the need to protect those resources, in 2012, after years of input from scientists and the public, the Australian government strung together a necklace of marine reserves encircling the continent. But following elections a few months later, the new conservative government commissioned an independent review to gather more public input. The draft plan, released on Friday, retains the 2012 plan's boundaries but scales back protections in some areas to allow for more fishing.

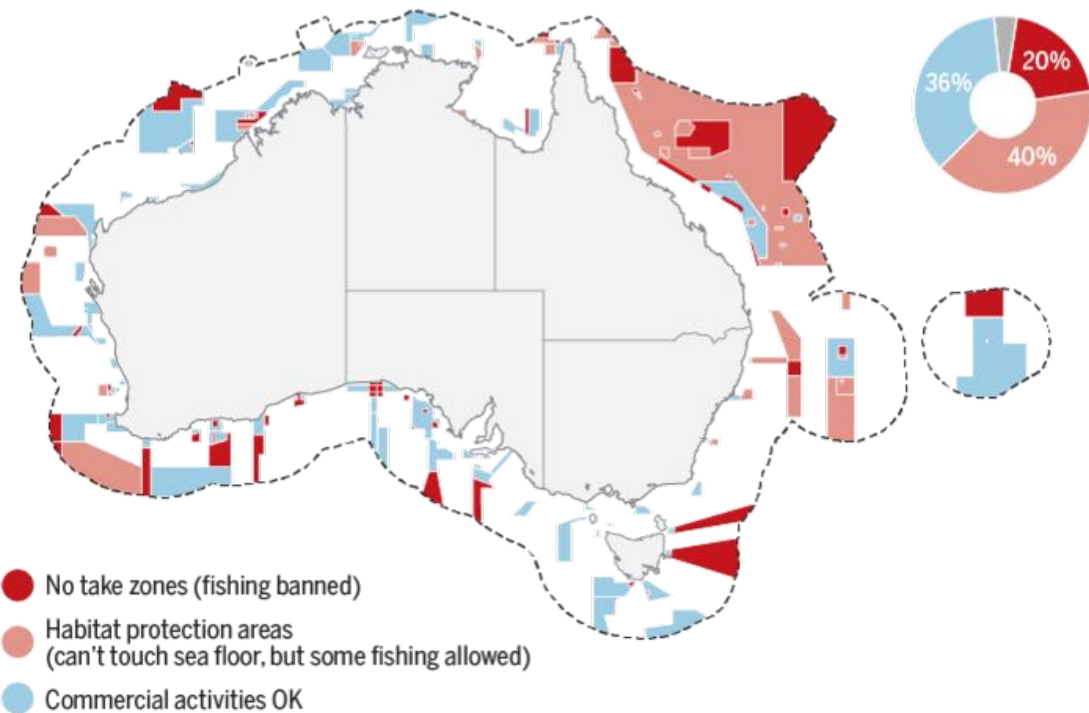
The proposal, which will undergo a 60-day public review period before heading to Parliament, which is expected to approve the plan, covers 44 marine reserves encompassing 36% of Australia's exclusive economic zone—the wide ring of ocean from about 5 kilometers offshore to 370 kilometers out. In maps showing which activities will be allowed where in the reserves, large swaths of no-take "green" zones designated in 2012—areas in which no fishing or mining would be allowed—have been converted to "habitat protection zones," where sea floor-ravaging activities such as trawling are barred but other types of fishing are permitted. Under the new plan, only 20% of the reserves would be green zones and more permissive "yellow" habitat protection zones would increase from 24% to 43%.

"These draft plans balance our commitment to protect the marine environment, while supporting a sustainable fishing industry, promoting tourism, and providing cultural, recreational, and economic benefits for coastal communities," National Parks Director Sally Barnes in Canberra said in a statement.

2012 zoning under draft plans



2017 zoning under draft plans



G. Grullón/Science

Many marine scientists are dismayed. "They've nearly halved the level of protection," says marine ecologist Jessica Meeuwig, director of the University of Western Australia's Centre for Marine Futures in Perth. "It's very demoralizing to the scientists who've done so much hard work," Booth adds. "You would not believe the amount of work that's been put into establishing these places. Then suddenly it all comes off the table."

The massive Coral Sea marine reserve, which buffers the Great Barrier Reef along Australia's northeast coast, faces the biggest conservation rollback under the plan. About 76% of its sprawling 98-million-hectare expanse would be open to fishing, up from 46%. That would aid the tuna industry, according to the environment department. "They've saved the tuna fishery \$4 million a year," Meeuwig says. "So in order to save .03% of fishing revenue, we've scuppered what could be the single most important marine

protected area in the Pacific.”

Posted in: [OceanographyPolicy](#)
DOI: 10.1126/science.aan7145

Australia cuts conservation protections in marine parks

Conservationists accuse government of ignoring science-based recommendations.

Nicky Phillips

25 July 2017

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Pete Atkinson/Getty

Dwarf minke whales in Australia's Great Barrier Reef.

When Australia established a vast network of marine reserves in 2012, it was hailed as a major win for conservation. But management plans for the sea havens were suspended a year later.

Now, scientists are angry at the Australian government's release last week of a draft proposal to significantly erode the size of protected areas in the reserves, opening up large stretches to commercial and recreational fishing.

“Australia has been one of the leaders in marine conservation,” says Callum Roberts, a biologist who studies marine reserves at the University of York, UK. “The government is dressing it up as progress, but this is a giant leap backwards for conservation.”

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Roberts says that dismantling protected areas will make species less able to cope with increasing threats such as climate change and plastic pollution. “Australia will find its seas considerably less resilient than they would have been if they hadn't rolled back this protection,” he says.

Almost 2.4 million square kilometres, about 36% of Australia's oceans, were designated marine parks in 2012. Close to one-third of the area in the reserves was given the highest level of protection, which bans activities such as fishing, mining and drilling for oil or gas. Although [scientists found some shortcomings in the reserve network](#) — many of the highly protected areas were in deep water, for instance, whereas the most vulnerable ecosystems are usually closer to shore — it was largely ambitious an effective plan for protecting biodiversity.

Little more than a year after the system was established, the country's newly elected conservative prime minister, Tony Abbott, suspended the park's management plans and ordered an independent review. Scientists accused the

government of bowing to pressure from the fishing and mining industries.

The independent review, released in September 2016, recommended that protected sections in some parks should be increased, but it reduced protected areas in others. “The independent review already eroded the overall protections from 2012, but the new draft plans have seriously gutted it,” says Jessica Meeuwig, a marine scientist at the University of Western Australia in Perth.

Contradictions

The latest proposals, released on 21 July, leave park boundaries unchanged, but will reduce the total area protected from fishing to 20% down from 33% in the review’s recommendations. In the largest marine park in the Coral Sea off Australia’s northeast coast, the proposal reduces the fully protected areas from 41% to 24% of the park. This would allow various types of commercial fishing in most of the park, including the use of long lines to catch tuna. A 2010 independent assessment of fishing in marine parks along the east coast had concluded that this practice posed an “unacceptable risk” to seabirds, whales, sharks and turtles.

In a 21 July statement, the government’s environment minister, Josh Frydenberg, said that the proposals represent a “much more balanced, scientific approach than those previously undertaken for marine parks. These plans protect what needs to be protected, without negatively impacting communities and our country’s economy.”

But Meeuwig says that the government is ignoring recommendations from its own review, and that research contradicts the government’s claim that the plans are based on science. “It’s saying partially protected areas can achieve conservation outcomes. We know that’s not true.”

One study, for example, published in 2014¹, showed that fully protected areas, often called no-take zones, were essential for adequate conservation of marine ecosystems. The expert scientific panel convened by the government’s review also acknowledged “the significant body of scientific literature that demonstrates the effectiveness of ... no take zones ... in achieving conservation outcomes”.

But Sally Barnes, director of the National Parks agency, which wrote the draft plans, told *Nature* that they achieve the right balance between conservation and use. The plans are open for public comment until September.

Nature doi:10.1038/nature.2017.22369

References

1. Edgar, G. J. *et al.* *Nature* **506**, 216–220 (2014).
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