

WRI FACT SHEET

Reefs at Risk Revisited: Australia

The World Resources Institute (WRI) spearheaded a broad collaboration of leading conservation organizations and research institutes to conduct a global, map-based analysis of threats to the world's coral reefs called Reefs at Risk Revisited. This report provides detailed examination of human pressures on coral reefs, implications for reef condition, and projections of associated socioeconomic impacts in coastal communities.

REGIONAL KEY POINTS

- Australia is home to more coral reefs than any other single nation approximately 42,000 sq km (17 percent of global total). Most of Australia's reefs are found within the Great Barrier Reef.
- Australia has the lowest coastal population density of any region, with only about 3.5 million people living on the coast within 30 km of a coral reef.
- About 15 percent of reefs here are affected by local threats (coastal development, marine-based pollution and damage, overfishing and destructive fishing, or watershed-based pollution), with only about 2 percent at high or very high threat--- making them the least threatened of any region.
- About 75 percent of Australia's reefs are within Marine Protected Areas (MPAs). This includes 30,000 sq km (12 percent of the world's coral reefs) within the Great Barrier Reef Marine Park.



1

REGION

Joining the Indian and Pacific Oceans, and with extensive northern coastlines adjacent to Southeast Asia, Australia is home to more coral reefs than any other single nation – 42,000 sq km or 17 percent of the global total. Numerically, most of Australia's reefs form part of the vast Great Barrier Reef, which stretches over 2,300 km in length, and alone covers nearly 37,000 sq km of coral reef area. Spanning two oceans, Australia's reefs embrace considerable diversity, with characteristics of Indian Ocean species in the west and Pacific species in the east. Also spanning significant latitudes means that these reefs offer excellent examples of the natural gradients in the diversity of corals and other species, with diversity decreasing as one moves towards higher latitudes, away from the tropics.

PEOPLE

Most of Australia's reefs lie far from large human populations. Even where there are population centers, notably along parts of the coast of Queensland, the reefs generally lie more than 30 km offshore. The exception is in the Cairns region where fringing reefs line much of the coast and platform reefs lie as little as 20 km offshore. Australia has the lowest coastal population densities of any region in this study with only about 3.5 million people living on the coast within 30 km of a coral reef. Despite this, the reefs are an important resource. Tourism on the Great Barrier Reef is a critical part of the region's economy generating US\$5.2 billion in 2006. Recreational fishing is a popular activity for locals and visitors alike, while important commercial fisheries target fish, sharks, lobsters, crabs, and prawns using a range of fishing gear including lines, nets, pots, and trawls.

STATUS

The reefs of Australia are the least affected by local threats of any region. About 15 percent are threatened by local stressors, with only about 2 percent at high or very high threat. This threat percentage is much lower than in the 1998 analysis, largely due to a more precise and conservative threat analysis method. Broad-scale, long-term trends appear to show stable coral cover, with upward trends in some areas. The re-zoning of the Great Barrier Reef Marine Park in 2004 led to a significant expansion of strictly protected areas from 4 percent to 33 percent of the entire marine park. This expansion already appears to be having a significant positive influence, both on fish communities and on overall ecological resilience of biodiversity.

Thermal stress on Australia's reefs has had a dramatic impact during the last ten years and when this is incorporated into the model, more than 40 percent of reefs are rated as threatened. Furthermore, the projections of future impacts, from both warming and acidification suggest even more dramatic changes, with combined local and climate change impacts raising overall threat levels to nearly 90 percent by 2030, with 40 percent of reefs rated at high threat. Some of the most highly threatened reefs are in the northern Great Barrier Reef, but by 2050 more than 95 percent of Australian reefs are rated as threatened.



REEF CONSERVATION

About three-quarters of Australia's coral reefs fall within marine protected areas. This includes 30,000 sq km (12 percent of the world's coral reefs) in the Great Barrier Reef Marine Park. There is a high level of active management within many of these sites, including specific plans to control tourism and regulations governing commercial and recreational fishing. Recent re-zoning of the Great Barrier Reef and Ningaloo Marine Parks has classified one third of each site as strict, no-take zones. Such changes were made only after long periods of consultation with all relevant stakeholders.

FOR MORE, SEE PAGES 56-59 OF REEFS AT RISK REVISITED

ABOUT WRI

The World Resources Institute is a global environmental think tank that goes beyond research to put ideas into action. We work with governments, companies, and civil society to build solutions to urgent environmental challenges. For more information on our coral reefs work, visit **www.wri.org/reefs**.

ABOUT REEFS AT RISK REVISITED

The groundbreaking report, Reefs at Risk Revisited, is the most detailed assessment of threats to coral reefs ever undertaken. The report was led by the World Resources Institute, along with the Nature Conservancy, the WorldFish Center, ICRAN, UNEP-WCMC, and GCRMN.

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