Case study

Reef Resilience Framework

Great Barrier Reef.
Image by Gary Cranitch,
Queensland Museum.

The Great Barrier Reef Foundation, with support from BHP Billiton, is convening experts in reef science and management to develop a globally applicable Reef Resilience Framework.

The resilience of the Great Barrier Reef to a changing climate is predicted to vary greatly across the thousands of individual reefs that make up the World Heritage site. Resilience-based management allows responsive adaptation to this challenge. Understanding the capacity of the reef to resist and recover from a broad range of threats and disturbances is crucial for long-term protection.

The approach in developing the framework is integrative, collaborative and practical – it recognises the complexity of the ecosystem, is underpinned by the adaptive management principle and is cognisant of the need for communities as well as the ecosystems to adapt to climate change.

The Great Barrier Reef Foundation hosted a workshop at the International Coral Reef Symposium in CY2016 to identify the most important niche for the Reef Resilience Framework. A global network of resilience practitioners in research and management met to discuss the framework. Attendees at the workshop included representatives from The Nature Conservancy, International Union for the Conservation of Nature, Great Barrier Reef Marine Park Authority, Australian Institute of Marine Science, National Ocean and Atmospheric Administration, University of Hawaii, and BHP Billiton's Ningaloo Outlook Project.

It was agreed that the Reef Resilience Framework will be developed to address a key international knowledge gap, by developing guidelines for how to operationalise resilience-based management, towards building reef resilience and supporting resilience planning.

The framework will be developed using the Great Barrier Reef as a case study and is then planned to be tested for transferability at Australia's Ningaloo Reef (in partnership with BHP Billiton's Ningaloo Outlook Project). An international coral reef jurisdiction will also be selected to field-test the global transferability of the framework.