

RESILIENT REEFS

Partnering with coral reef communities to respond to local and global threats



Resilient Reefs Partners

BHP | Foundation

In cooperation with

United Nations
Educational, Scientific and
Cultural Organization

The Nature
Conservancy


Reef
Resilience
Network

COLUMBIA | Center for
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RESILIENT CITIES CATALYST

AECOM

Great Barrier
Reef Foundation



Resilient Reefs Initiative

Resilient Reefs is a global initiative to support coral reefs and the communities that depend on them to adapt to climate change and local threats.

Coral reefs are critically important ecosystems for the planet. Occupying less than one percent of the ocean floor, they support 25% of all marine life and the livelihoods and wellbeing of almost one billion people across 101 countries. But, right now, 75% of the planet's coral reefs are under threat from local stresses and climate change.

Healthy reefs contribute an estimated \$10 trillion in ecosystem services through local tourism opportunities, crucial fish habitats, food, recreation and protection from storms. As such, the loss of reef ecosystems will have major consequences for communities around the world.

Business-as-usual approaches to coral reef management are no longer enough. The impacts of a changing climate mean we are rapidly running out of time, and the scale and urgency of the challenges need new approaches, now.

What is reef resilience?

The capacity of reef ecosystems and the individuals, businesses and communities that depend upon them to survive, adapt and recover from the stresses and shocks that they experience.

By building resilience, we are strengthening the ability of reef communities to prepare for and recover quickly from disturbances, adapt to changing circumstances and plan for an uncertain future.



“ All World Heritage Marine sites urgently require a comprehensive and sustained program of action aimed at building resilience to give them their best chance to survive in the long-term.”

UNESCO World Heritage Marine Centre, September 2016.



What is Resilient Reefs?

The Resilient Reefs Initiative directly responds to the call to action from those charged with managing the world's most treasured coral reefs, and acknowledges that the communities that depend on those reefs are threatened and need to be a part of the solution.

By bringing together local communities, reef managers and resilience experts across five World Heritage reef sites, this bold new approach puts people at the centre of decision making, drawing on a global resilience practice to innovate, build capacity and drive a whole-of-community approach to the challenges facing our treasured reefs.

Resilient Reefs is piloting this work with five sites around the world: Belize Barrier Reef, Belize; Great Barrier Reef, Australia; Lagoons of New Caledonia, France; Ningaloo Coast, Australia; and Rock Island South Lagoon, Palau. These five World Heritage-listed reefs are home to unmatched natural ecosystems, containing the most significant habitats for conservation of biological diversity. They are also at great risk; recent research projects that 25 of the 29 World Heritage reefs will severely bleach twice-per-decade by 2040 under a business-as-usual CO₂ emissions scenario.

The initiative provides these sites with a wide range of resources, connections, and technical expertise, all focused on building concrete solutions:



Support in the creation and funding of a new Chief Resilience Officer (CRO) position

The CRO is a new role dedicated to driving the resilience agenda, connecting reef management authorities with diverse local stakeholders, and leading the development of the Resilience Strategy for the site.



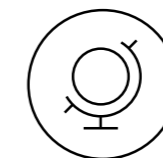
Support for the development of a holistic Resilience Strategy

The Resilience Strategy is an evidence-based and community driven process that takes a holistic view of the threats facing the reef and the community, and generates new solutions with local stakeholders and global experts. Resilient Reefs' Delivery Partner AECOM provides direct support to CROs and sites throughout the strategy development.



Capacity building for local reef managers and stakeholders

The initiative provides ample opportunity to support CROs and reef managers, including training from Knowledge Network partners, an exchange program to foster collaboration and co-design solutions, and attendance at international meetings.



Connection to a global Knowledge Network including reef sites and world experts

The initiative's Knowledge Network supports sites on their work and helps share and scale learnings to other communities around the world. The Knowledge Network includes UNESCO World Heritage Marine Programme, The Nature Conservancy's Reef Resilience Network and the Resilience Accelerator Program.



Initial funding to implement Resilience Actions identified in the Resilience Strategy

The initiative has an AUS\$5M Implementation Fund to support sites moving from planning to action.



Resilience Strategy: the development process

The Resilience Strategy is an evidence-based and community-driven process that identifies actions that will help reefs and their communities adapt to a changing climate and other local threats.

The Resilient Reefs Initiative works with each site to develop a Resilience Strategy that directly responds to their core challenges and integrates resilience into the site’s management processes. While each site’s Resilience Strategy will look different, they will all share a set of common principles:

- Reflect holistic reef resilience for the site’s unique context, inclusive of community, governance and the coral reef ecosystem
- Draw on broad, diverse and representative stakeholder engagement
- Provide an accessible platform for reef resilience advocacy and education by community and stakeholders
- Demonstrate commitment from reef management leadership and relevant stakeholders
- Include a clear implementation plan for priority Resilience Actions

Unlike many reef resilience assessments which evaluate just the health and resilience of the corals themselves, this strategy process explores strengths and weaknesses in the community and local governance systems as well, exploring the interconnected threats to the reef and community.

The Resilience Strategy will set a bold vision for the future, identifying innovative solutions to address the reef and reef community’s vulnerabilities.



5 Steps to a Resilience Strategy

Following the appointment of a Chief Resilience Officer, the Resilient Reefs Initiative works with sites to develop their Resilience Strategy. This is a 9-month process with five primary steps that move directly into implementation.

STEP 1. Plan strategy process and establish local governance

Establish a robust and inclusive site steering committee for oversight and decision-making.

STEP 2. Engage broadly

Engage with a diverse and representative group of stakeholders to ensure the Resilience Strategy reflects the experiences and knowledge of the local community.

STEP 3. Assess resilience

Conduct a holistic resilience assessment. Consider current vulnerabilities, assess performance during times of shock or stress, identify future threats, and prioritise resilience challenges.

STEP 4. Develop actions

Work with local stakeholders and global partners to shape the resilience agenda for the site and identify and develop new solutions.

STEP 5. Develop the Resilience Strategy

Deliver an inspiring and actionable Resilience Strategy that details short and long-term solutions to address the reef and reef community’s vulnerabilities.

To help sites in this process, the initiative provides significant technical support, tools and resources including new assessment tools, case studies, project design support, and access to global thought partners and experts.



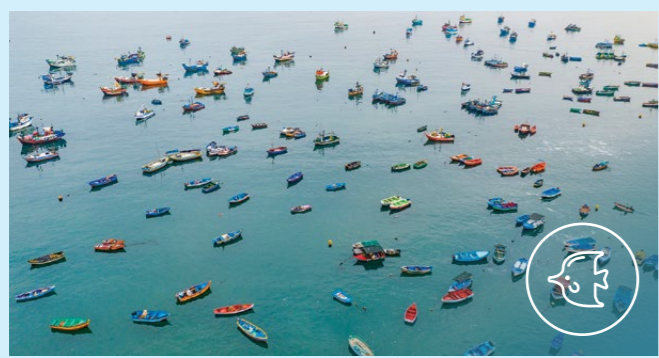
Status of reef resilience

(Sample output from the Resilience Assessment Tool)

Dimension	Attribute	Status	
Ecosystem	Habitat condition	Poor	✗
	Biodiversity	Threatened	!
	Recovery processes	Average	~
	Seascape diversity	Good	✓
Community	Knowledge and stewardship	Good	✓
	Resources and livelihoods	Threatened	!
	Networks and relationships	Poor	✗
	Health and culture	Average	~
Governance	Rules and regulation	Threatened	!
	Representation and inclusion	Average	~
	Leadership and management	Poor	✗
	Accountability and equity	Good	✓

What topics will Resilience Strategies tackle?

Sites will prioritise and tackle the challenges that most affect them. It is essential that this is driven by the local community based on a holistic assessment. Priorities will look different from place to place, but may include some of the below examples.



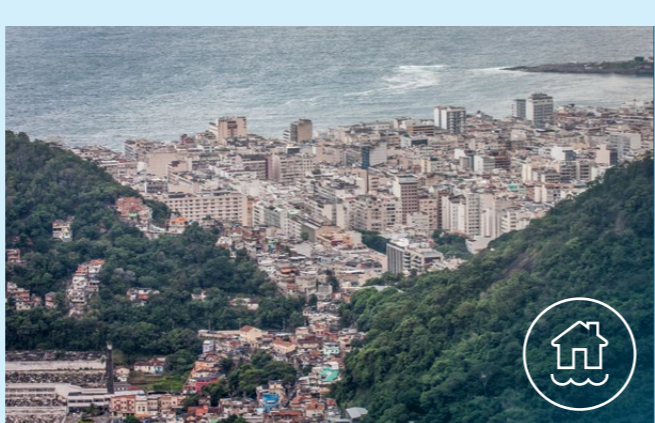
Fishing regulations are not complied with due to competition for limited resources and community members are being fined. Fish stocks are being depleted in no take zones. There is opportunity to review zone planning to ensure that community members and Traditional Owners are involved in decision making.



Coral bleaching events are recurring, causing significant damage. Advance warning of bleaching events and coordinated messaging to the public is limited, causing conflict between scientific bodies, reef managers and the tourism industry. Stakeholders feel overwhelmed by the scale of the challenge and are looking for opportunities to better collaborate and take action locally.



The local population is growing and ageing, with many people moving from inland areas to the coast. Warning systems regarding cyclone and tsunamis are unreliable and responses to past evacuation events have been slow. Local community cohesion is declining, resulting in more vulnerable parts of the community being excluded from disaster preparedness and planning. There is opportunity for greater inclusivity and integration in disaster preparedness and decision making to better reflect community needs.



Increased coastal development is disrupting the adjacent coastal and reef ecosystem. Greater regulation is needed to manage and prevent impacts such as algal blooms and pollution. The tourism industry and community livelihoods are reliant on a resilient reef ecosystem. There is distrust amongst the community, tourism operators and reef managers. Greater self-regulation and more inclusive and integrated decision making needs to be pursued.



Taking action

Each site will identify and design a set of solutions, based on their assessment of local threats, deep community engagement, and insights from global experts. In many cases, these solutions will require new kinds of partnerships and coordination with agencies and community groups; they will not be implemented solely by the reef management authority.

Resilience Actions will look different site to site but may include some of the following:

- Connecting and strengthening the role of community in reef protection, monitoring and decision making
- New livelihood options for local communities
- New partnerships that foster enduring outcomes for the community and the reef
- Innovative financing models that bring new resources to reef management
- New climate resilient infrastructure for the community and/or the reef
- Integrated disaster planning to help the reef and community better survive cyclones
- Policy changes in how the community manages tourism and recreation opportunities or addresses pollution
- Community outreach programs to encourage more responsible recreation
- More in-depth co-design and co-management with Traditional Owners
- Innovations in land management within catchment areas
- Other innovative ideas we haven't yet imagined

Going global



Resilient Reefs expects these innovations to spark interest and partnership with other sites globally. The novel frameworks and tools piloted through this initiative will help reef managers around the globe implement resilience-based management solutions to address the world's greatest reef challenges.

Funding opportunity



The Resilient Reefs Initiative has set aside AUD\$5 million in seed funding to help sites move rapidly from planning to implementing these solutions. Sites are eligible to apply for funding once their Resilience Strategy has been finalised.



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