



Torres Strait Climate Change Strategy 2014-2018

On behalf of the Torres Strait Regional Authority, Torres Strait Island Regional Council and the Torres Shire Council, I am pleased to provide you with a copy of the Torres Strait Climate Change Strategy 2014-2018

Evidence that the world's climate is changing due to human activity continues to grow. These changes have very significant implications for humanity and natural systems everywhere. The extent of the predicted effects of climate change in the Torres Strait region, along with the geographic, ecological, economic and social characteristics make Torres Strait communities amongst the most vulnerable in Australia.

The revised Torres Strait Climate Change Strategy 2014-2018 (the Strategy) highlights current climate trends and recent updates to climate change predictions for the region. The need to properly and thoroughly consider the potential impacts of climate change, the associated risks to communities and ways of adapting to this change is fundamental to the intent of this Strategy.

Through constructive collaboration between local, state and federal governments, communities and research partners, the Torres Strait now has a much clearer understanding of local climate change projections, sea level rise and associated inundation and erosion risks. An increasing body of research is informing our understanding of fisheries, turtle and dugong, coral reefs, mangroves and other key environments, allowing us to better predict how they might respond to climate change. Beyond sea level rise, changes in air and sea temperatures, shifts in intensity and timing of rainfall and increased acidity of the ocean have various implications for the region's health and wellbeing, economies, culture and natural environments.

The Strategy identifies a number of priority responses through an Action Plan. The Action Plan incorporates and builds on existing efforts from the 2010–2013 Strategy, focused on how the region can best adapt to inevitable changes as well as how it shows moral leadership to reduce greenhouse gas emissions. Actions have been grouped into five key themes of culture and traditional knowledge; environment and ecosystems; settlements and infrastructure; people and communities; and communication and capacity building. It also highlights specific monitoring needed to track changes in these areas.

The Strategy recognises the complex and multifaceted nature of climate change and the needs for a systems approach to adaptation. Risk, vulnerability, adaptive capacity and building resilience are now the core focus of implementation. The Strategy is intended to guide whole-of-government efforts to address climate risks and support grass-roots, community-based planning so communities can respond to these challenges in the most culturally appropriate, locally specific, and sustainable way. A Torres Strait Adaptation and Resilience Plan is currently under development.

Kind regards, Joseph Elu
Chair, Torres Strait Regional Authority





Achievements and Progress since 2010

The focus since the Torres Strait Climate Change Strategy was launched in 2010 has been on procuring critical research and modelling to inform coastal works prioritisation and to progress urgent coastal works. Progress has been made on completing key research required to identify climate risks and to inform adaptation options.

- Funding secured for Torres Strait Major Coastal Works program to build defences for low-lying communities.
- Down-scaled climate change modelling for the Torres Strait region.
- Torres Strait Extreme Sea Level Study that provides detailed information on extreme sea levels in the region, factoring in storm surge and climate change.
- An assessment of renewable energy options and the carbon footprint of the Torres Strait region.
- Coastal erosion and inundation research on all islands in the Torres Strait, including flood hazard mapping.
- Establishment of a regional sea surface temperature monitoring program and coral reef monitoring program (funded through the Australian Government's National Environmental Research Program).
- Coastal hazard mapping completed for all communities and inhabited islands.
- Sand nourishment works at Warraber and Masig Islands.
- Installation of three real-time meteorological and marine monitoring stations with real-time data available remotely (Australian Institute of Marine Science).
- Detailed coastal engineering studies for key communities identified by the coastal works program.
- Assessment of the vulnerability of key fisheries to future climate change.
- Research projects investigating climate change impacts on green turtles and seagrass (JCU).
- Adaptation and resilience workshops held in Cairns, Masig and Erub (funded through the Australian Government's National Environmental Research Program).
- Torres Strait ocean circulation model developed.
- Mapping and assessment of cumulative impacts on marine and coastal habitats.
- A study into the limits to climate change adaptation for two low-lying island communities.

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