

INSURING NATURE TO ENSURE A RESILIENT FUTURE: COASTAL ZONE MANAGEMENT TRUST



BEACH AND REEF TO BE INSURED

- USA
- Mexico
- Cancun
- Puerto Morelos
- Beach
- Reef

This new fund is designed to bring new private capital to coral reef and beach protection and restoration—and demonstrate a replicable way to monetize the protective services of the reef and beaches to the tourism and hotel sectors of Cancún and Puerto Morelos, Mexico—through a public-private collaboration.

The fund features the first-ever insurance policy on nature—a stretch of the Mesoamerican coral reef and beach based on its protective service—that will pay out to repair and restore the reef in the event of a major storm. Building capacity to implement projects is a key component: partners developed an immediate response protocol, formed brigades to respond after a storm, created reef restoration and beach erosion management guidelines.

PARTNERSHIP WITH THE INSURANCE INDUSTRY NOW ALLOWS US TO MEASURE HOW MUCH RISK A REEF CAN REDUCE.

An estimated 840 million people around the world live with the risk of coastal flooding, and the health of their economies is directly related to the health of their coastal ecosystems.

HOW THE FUND WORKS

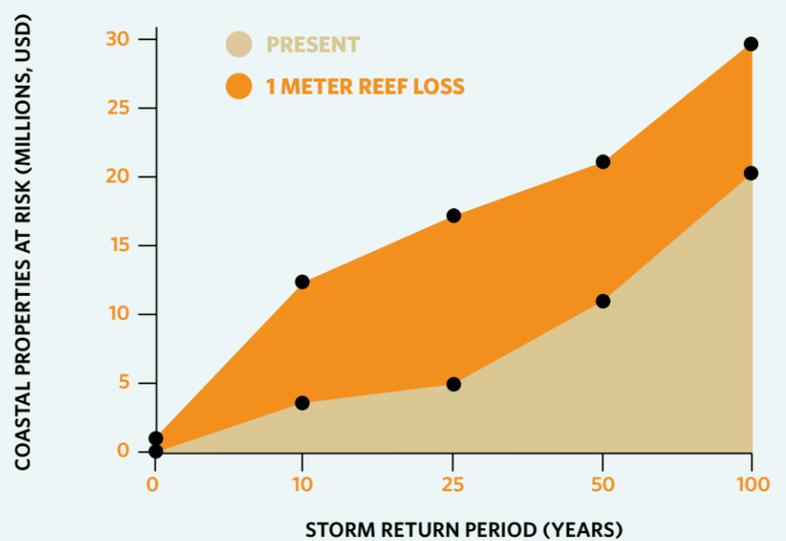
- Pay for the science-based restoration and maintenance that ensures the health of the reef and the beach.
- Pay the premium to buy a parametric insurance policy on a designated stretch of reef and beach.
- Act as “self-insurance” when the beach and reef are damaged by a storm but the policy trigger is not met and there is no payout.

KEY PLAYERS



FLOODING IMPACTS ON COASTAL PROPERTIES

Preliminary studies show that a loss of 1 meter of reef crest height would increase damages to built capital up to 300% in Puerto Morelos.



CORAL REEFS ARE LIKE NATURAL SEAWALLS

Reefs reduce wave energy that causes coastal destruction and erosion. Reefs measurably protect people and coastal infrastructure from storm surge.

HEALTHY REEFS can reduce wave energy and storm surge effectively.

DEGRADED REEFS lose their capacity to provide protection to the coast.

97%

Percentage of a wave's energy that is reduced before it hits the shore, placing the reef's protective services on par with typically more expensive and less resilient built infrastructure, such as breakwaters or seawalls.

PROJECT TIMELINE

- 1988** The Nature Conservancy begins work in Mexico. Hurricane Gilbert hits, killing 202 people and causing \$2 billion USD in damages.
- 2005** Hurricanes Wilma and Emily hit with combined damages of over \$17 billion USD.
- 2007** Hurricane Dean nearly destroys the coastal town of Majahual in Quintana Roo, Mexico.
- 2009** TNC begins coastal resilience science and implementation on the Mesoamerican Reef.
- 2012** TNC establishes Global Climate Risk & Resilience Team and begins exploring innovative policy and financial mechanisms.
- 2015** The insurance industry is invited by the UN Secretary General to COP21 in Paris.
- 2016** TNC coastal scientists complete risk analysis of the Mesoamerican reef's protective service, finding that storm damages to built capital could triple with the loss of reef.
- 2016** Yucatan, Campeche and Quintana Roo Governments sign the Sustainability Agreement 2030 committing to restore 20% of reefs and 30% of dune to build resilience.
- 2018** The Quintana Roo State Government, in collaboration with TNC, commits to developing a multi-sectoral trust fund to build coastal resilience.