

PRESENTATION

Quintana Roo Case Study

KEY LESSONS FROM PARAMETRIC INSURANCE DESIGN
AND IMPLEMENTATION



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Building Resilience

POST-STORM RESPONSE
CAPACITY IN THE MEXICAN
CARIBBEAN



What? An insurance for reefs? What for?

2015

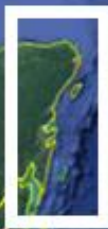
The Nature
Conservancy 

GUIDE ON HOW TO INSURE A NATURAL ASSET

MSC FERNANDO ESCABA, KATHY BAUGHMAN MCGLOD AND BESS TAGOOLAK



BASED ON THE JOINT EFFORTS OF THE COASTAL RISK & RESILIENCE TEAM: MARK WATY, SALVADOR PEREZ, JIM CRUZ AND MARÍA MACÍAS, ALEX KARLAV, RUBEN HÖRIGER.



Tourism in the Mexican Caribbean

- 33 million tourists in 2025 that generate USD 22 billion
- 30% Income tax and 16% sales tax, cruise ship fee, lodging fees, **coastal zone use fee.**
- 80% of the Quintana Roo State economy comes from tourism.



Risks to tourism

- Loss of beaches due to coastal erosion
- Sargassum deposits
- Narco violence and delinquency
- Hurricanes affecting infrastructure
- Degradation of reefs
- Income inequality



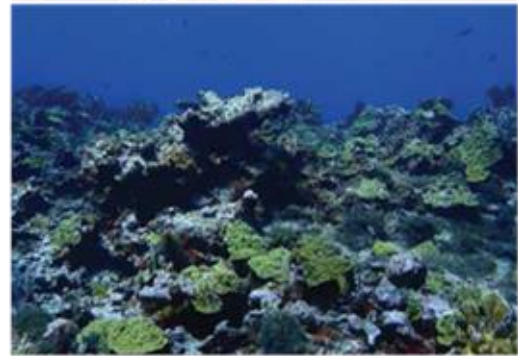
Risks to reefs in the Caribbean

REEF IS IN DANGER.
WE ALREADY LOST

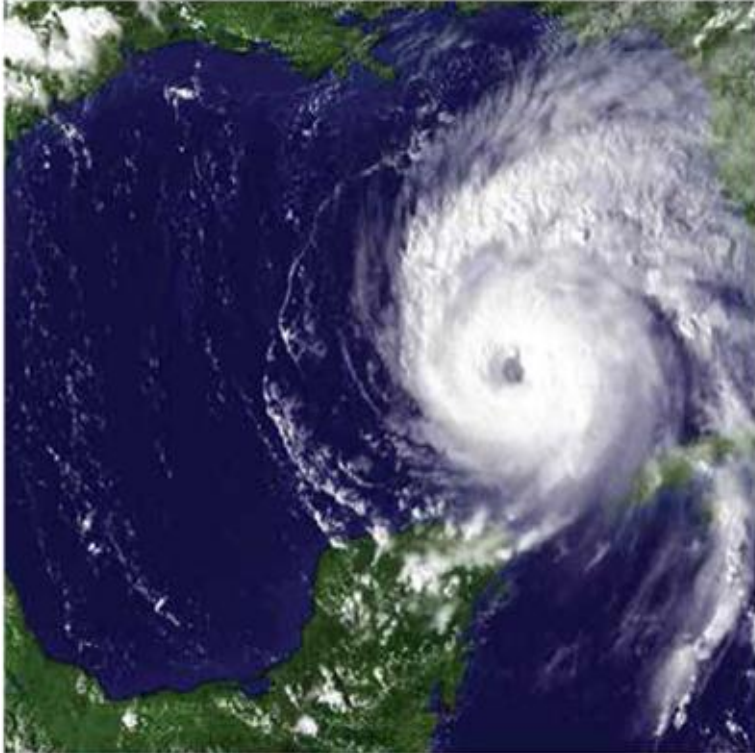


Causes of
degradation:

- Water pollution
- Bleaching
- Diseases
- **Hurricanes**



Hurricanes were a major driver of degradation in the Caribbean Sea (2012)



- 17% to 50% of live coral cover can be lost in one event.
- After 8 years, no recovery.
- Degradation caused by other stressors increases 3 times in sites affected by hurricanes

A comprehensive program to address hurricane damage was decided

2016 - 2017

- Coastal zone use fee paid by hoteliers beach owners generate USD 12 million per year to local governments.
- USD 4 million should go to a Trust Fund.

GOVERNANCE



BRIGADES

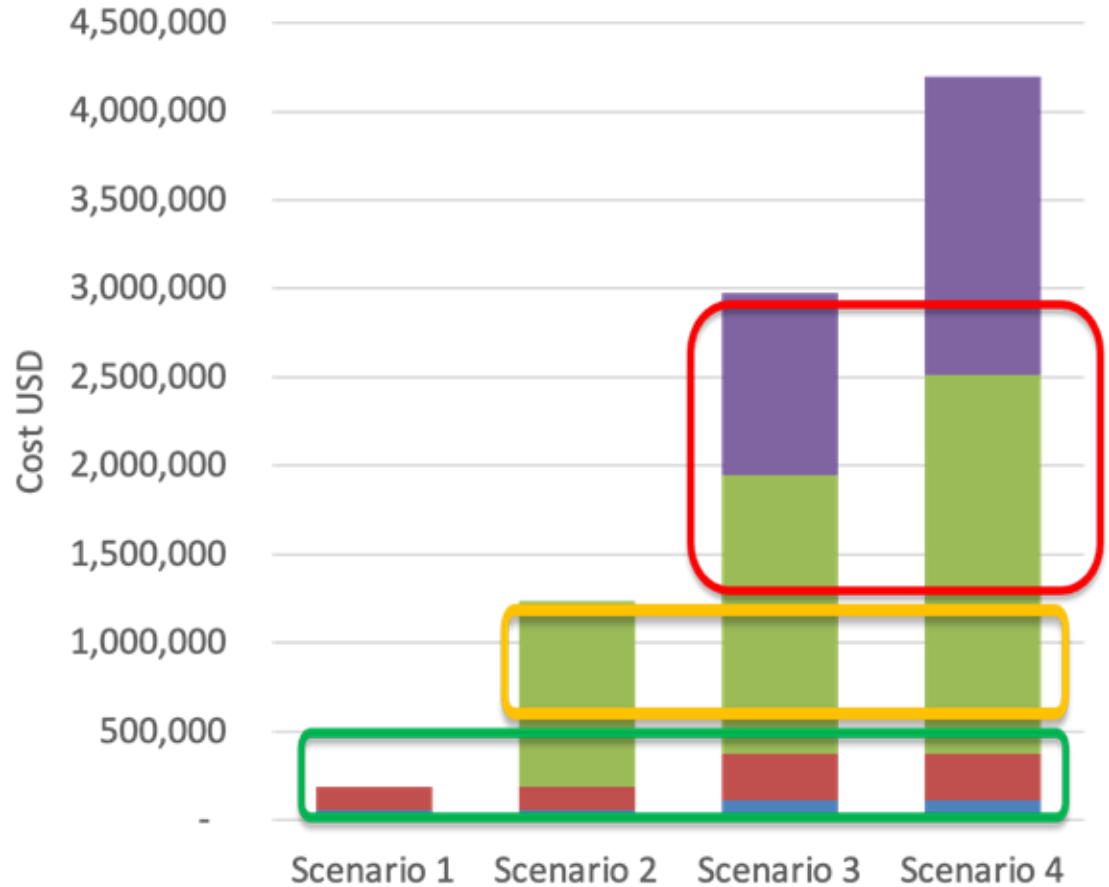


RESPONSE
PROTOCOL



FINANCIAL
INSTRUMENTS

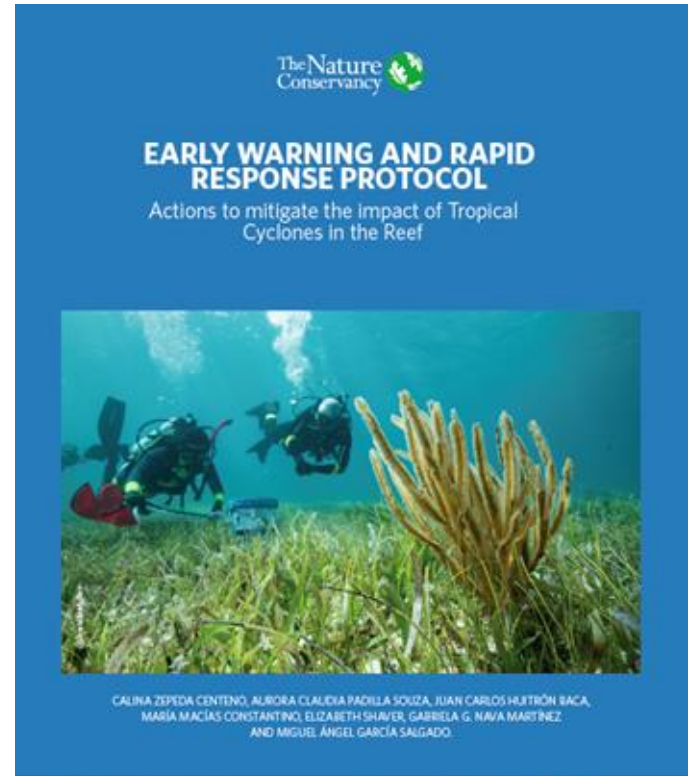
Layers of risk and financial instruments



Implementation of the Program

2018

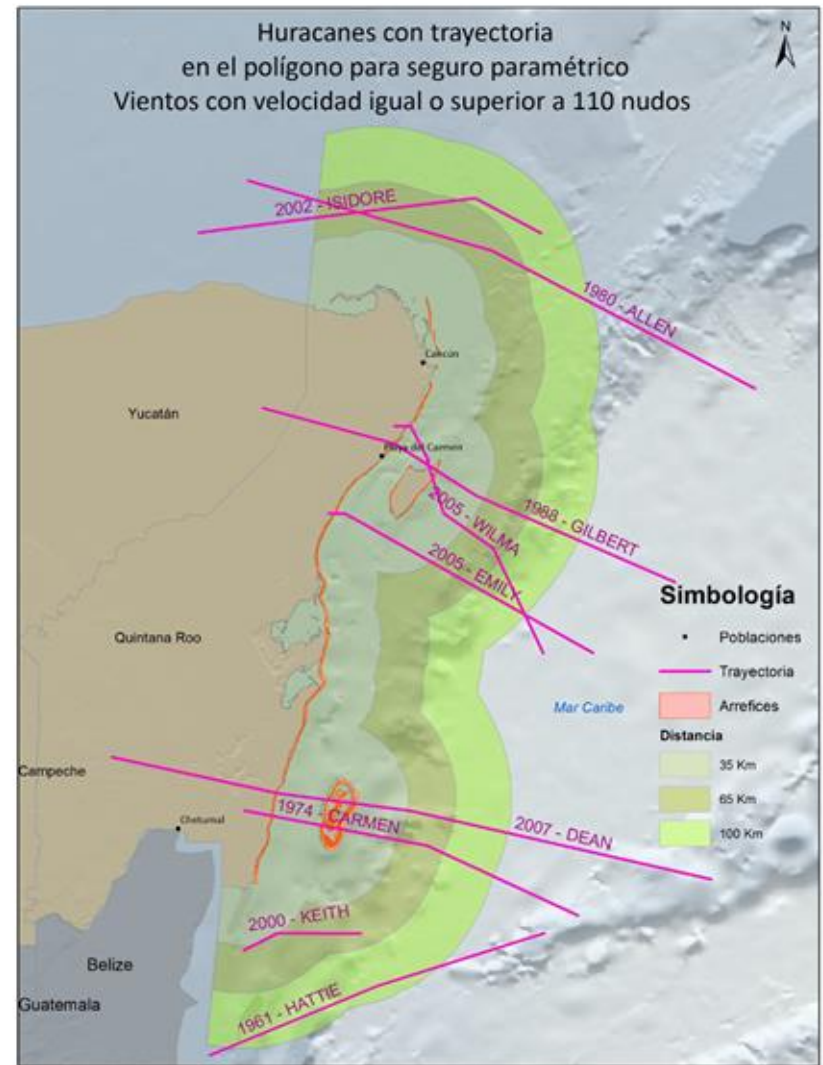
- National Protected Areas Commission.
 - Brigades
 - Protocol
 - Governance
- Quintana Roo Government set up a Coastal Zone Management Trust.
- MAR Fund already had set up an Emergency Fund



Implementation of the Program

2019

- Quintana Roo Government purchased the parametric reef and beaches insurance.
- Coastal zone use fee was not used, but the State allowed local governments to keep it.



Running the Operation

2020 - 2025



QR Government has payed from USD 250,000 to USD 400,000 each year to buy the insurance.



100 divers trained in 4 protected areas in Mexico in partnership with MAR Fund and other institutions.



Brigades have been convened and deployed every year.

How it has worked out with major storms?

2020 Hurricane Delta - USD 850,000 payout

- 15,000 fragments and colonies were rescued funded by MAR Fund and others.

2021 Hurricane Grace, no payout.

- 15,000 fragments. Funding from local contributions.

2024 Hurricane Beryl - USD 400,000 payout.



What has worked well?

- ✔ Reef brigades and CONANP leadership.
- ✔ QR Government commitment to buy insurance since 2019.
- ✔ Response techniques and organization have become more efficient.
- ✔ Insurance companies have paid quickly.
- ✔ Local contributions and MAR Fund emergency fund have worked well and financed rapid responses.



What are the challenges we have faced?



Quick transfer of funds from the Trust to the brigades has not been possible.



Trust has funded long-term restoration, not rapid response.



Split between implementors (brigades) and Trust Fund



Not all reef brigades are fully functional.

Take aways – The Program



The program must be comprehensive

- Reefs´ brigades and proper leadership
- Efficient governance
- Financial instruments



Governance should be comprehensive.

Financial management and response cannot be separated.

Challenges: Insurance and Financing



Choose the financial tools for your need.

- Emergency funds, endowments and local contributions as well as insurance.
- A suite of tools is the most appropriate.



Parametric insurance is straightforward.

The size of the policy is not.

- How much funds are needed depends on the scope of the program and capacity to implement.
- QR insurance could be reduced substantially and increase emergency fund.