



THE MESOAMERICAN REEF FUND

MAR Fund General Presentation

María José González

The Mesoamerican Reef: A local treasure, a global resource

- Largest reef in the Atlantic Ocean
- Over 1000 km of coastline
- Four countries
- Biologically diverse
- Important for the economy of local communities and the development plans of the four countries



Core Concept

Four environmental funds coming together in a powerful coalition dedicated to “putting the reef first” by planning and implementing a singular set of strategic priorities for the entire MAR ecoregion.

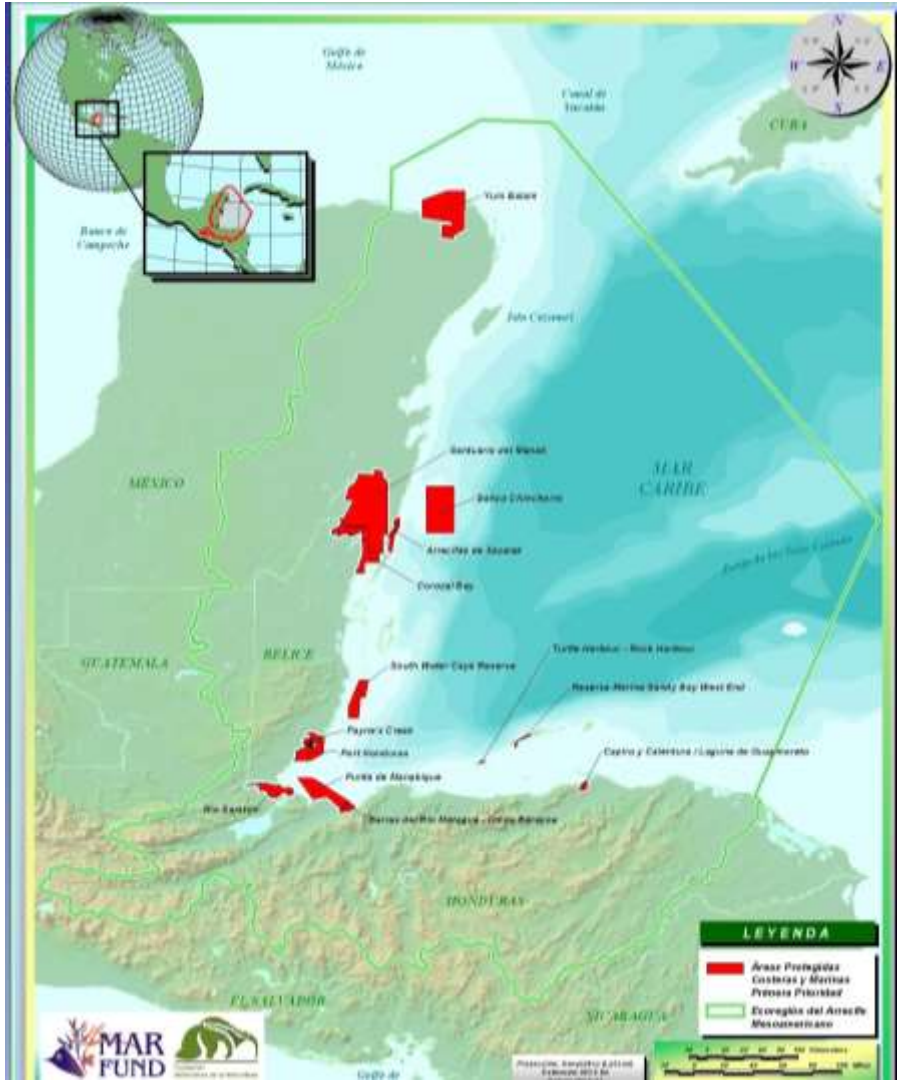
Member Funds

- Fondo Mexicano para la Conservación de la Naturaleza A.C.
 - Protected Areas Conservation Trust
 - Fundación para la Conservación en Guatemala
 - Fundación Biosfera
-
- Different in scope, size and experience
 - Have made the initiative operational.



A long-term financial mechanism

- Designed to raise and distribute funds at a regional scale
 - Complementary funds
 - Additional to national funds
 - Endowment and sinking funds
- Effective regional funding mechanism
- Responds to the needs of the region



Strategy

- To strengthen network of priority coastal and marine protected areas:
 - Initial network of 14 MPAs
 - In 2015 revision and update. Result: 14 additional sites
- Also addresses issues affecting the integrity and health of the network, e.g. overfishing - Community Fisheries Program – fish recovery sites
- Vision of a Blue Economy

Financial resources for the region

Sinking funds (as of December 2015):

- \$ 10,740,988 operation and programs
 - Start-up and planning US\$ 552,658
 - Operation US\$ 2,041,966
 - Programs US\$ 8,146,364
- €10 M for Project “Conservation of Marine Resources in Central America, Phases I and II.
- Phase III, for an additional €5 M, is in the pipeline for 2017.



Endowment Fund

- €10 M German Cooperation-KfW
- € 1 M FFEM
- € 7 M German Cooperation-KfW for Reef Rescue Initiative (joint MAR Fund –CCAD)
- Capital to date: US\$ 23.2 M

- Capital campaign goal: \$50 M
 - To integrate scientific knowledge, sound leadership, human capital and conservation finance at a regional scale.



New opportunities in the Mesoamerican Reef that require long-term support:

- Regional networks
- Generation of critical scientific knowledge
- Strengthening of human capital
- Conservation/recovery of regional ecological assets and services
- Strengthening of local conservation groups
- Innovative conservation finance schemes - private sector
- Project Finance for Permanence type large scale conservation deals



Programmatic Activities

- Protected Areas Program
- Community Fisheries Program
- Designing Adaptation to Climate Change Program
- Reef Rescue Initiative

Operation mechanisms

- Small Grants
- Special Grants
- “Conservation of Marine Resources” Project
- Endowment Fund



Numeralia...

Small Grants

- 52 projects
- US\$ 1,547,108 in grants
- US\$ 2,671,269 leveraged
- 14 eligible MPAs
- 1,107,552 ha
- 25 NGOs supported
- 24 communities
- 3 academic institutions
- 4 governmental organizations



After more than 10 years of uninterrupted conservation work, we have

- Consolidated a professional working team + external consultant
- Established effective coordination with member funds
- Established strategic alliances
- Convened key conservation efforts in the region
- Become a learning community for conservation
- Mobilized resources successfully

Now, a relevant stakeholder for conservation finance solutions in the MAR

It has been a learning curve towards:

- A smarter, mature organization
- Steady sustainable growth
- Respected track record
- Clear program direction and priorities
- Network of collaborators
- Committed Board of Directors
- Established, credible institution

We strive for continuous improvement





EXECUTIVE SUMMARY

Practice Standards for CONSERVATION TRUST FUNDS

Prepared by: Barry Spergel & Kathleen Mikitin



Funded by:



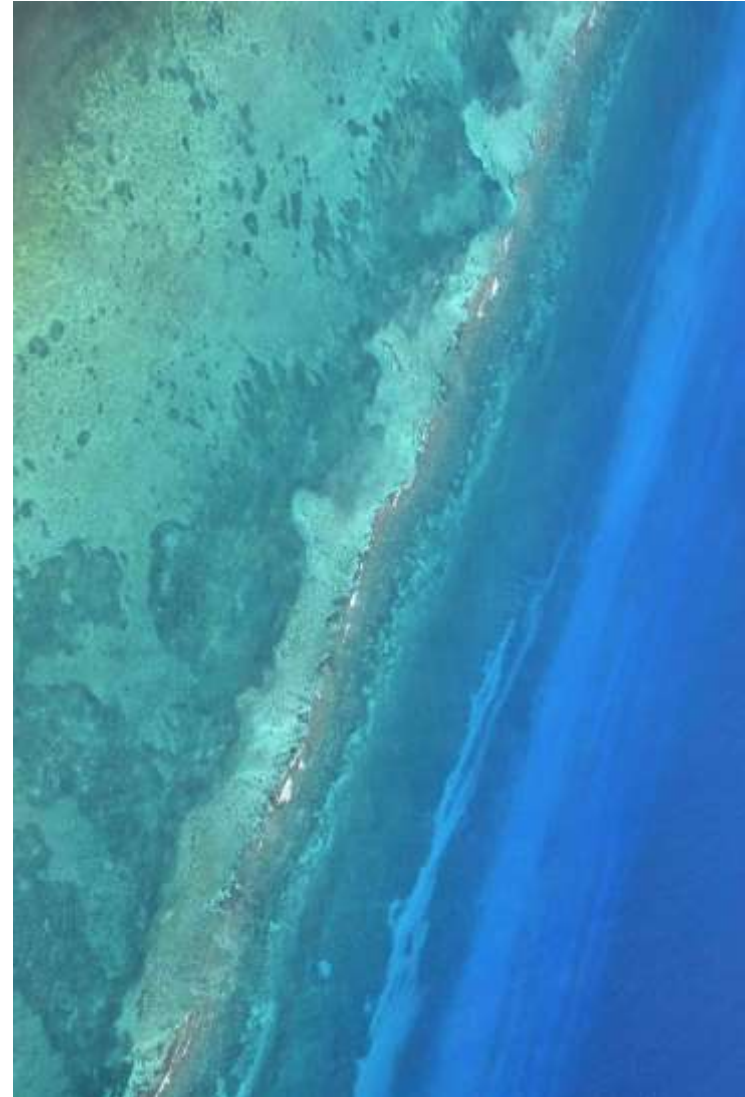
Current challenges

- Governance revision and improvement
 - Revised bylaws
 - *Pro bono* support by Shearman & Sterling
- Improvement of asset management capabilities
 - New custodian
 - Rotation of independent asset manager
 - Support from experts (e.g. Oak Fdn)
- Fundraising for programmatic and operation costs – ongoing



Great opportunities

- Capital campaign
 - Oak Foundation grant: *Belize Conservation Fund*
 - Conversation with KfW for match in 1-2 years.
- Other sub-account
 - *Conservation and management of the Bay Islands Marine Park*

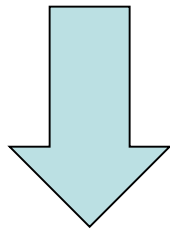


Reef Rescue Initiative

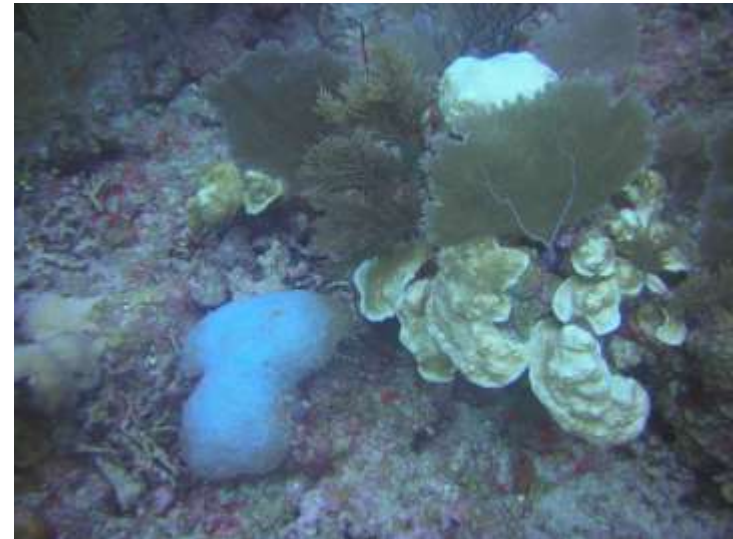
María José González

Threats to the Mesoamerican Reef

- Contamination
- Sedimentation
- Changes in land use
- Over fishing
- Direct physical damages
- Climate change:
 - Increase in frequency and intensity of storms
 - Ocean acidification
 - Abnormally high temperatures - bleaching



Loss of Coral Reefs



Consequences of reef degradation

Reduction of ability to sustain human uses

- Loss of biodiversity
- Loss of tourism income
- Erosion of beaches and coast
- Reduction of protection against storms and hurricanes
- Decline in catches, stock, size, and diversity of fish





Mesoamerican Reef Rescue Initiative

Objective

To increase the resilience and ability to recover of the MAR and the environmental and cultural services it provides.

How?

Through capacity building, regulations, economic incentives and financial sustainability required for the effective and timely restoration of the coral reefs.

How will it work?

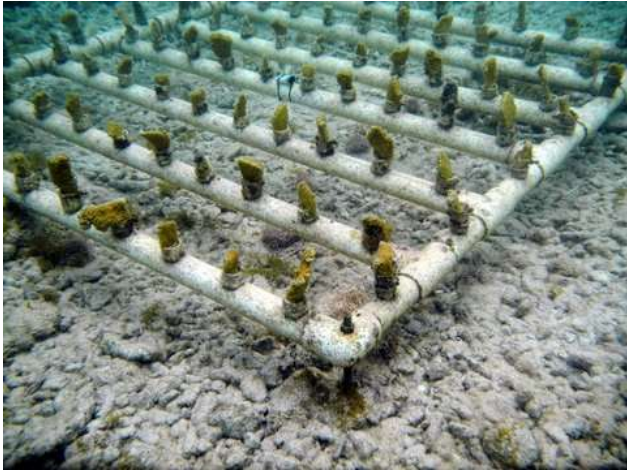
- It is a 5-year project
- It involves the four countries
- Includes a revolving fund for financial sustainability and emergency response (hurricanes, groundings)



Reef restoration

- **Continuous Restoration.** Based on coral nursery techniques, cultivating coral fragments to be transferred to reef areas that have been degraded or damaged.
- **Emergency Response.** Response to hurricanes or ship groundings.





Strategies

1. To ensure sustainable long-term funding for continuous and emergency restoration through the establishment of an Emergency Fund and other innovative mechanisms.
2. To support and develop reef restoration and rehabilitation in the region.
3. To develop alternative sources of income and new employment opportunities for local communities, based on resource conservation.
4. To promote the commitment of governments from all four countries in the region through the development of policies and regulations aimed at facilitating the restoration of the reefs



Benefits

- Accelerating the natural processes of recovery after a serious weather event
- Generation of alternative employment
- Improving restoration scientific and methodological knowledge
- Potentially replicable model in other areas



Initiative structure

- MAR Fund will be responsible of the development of the project, through three mechanisms:
 - a. MAR Fund Investment Committee
 - b. Project Technical Committee - CTP
 - c. Executing Unit - EU
- PTC – maximum authority
 - 1 rep. from CCAD
 - 4 technical reps of the protected areas and biodiversity national authorities
 - 1 rep. from MAR Fund



- PTC responsibilities:
 - Prepare the GOP
 - Prepare AWP
 - Follow up on project advances and expected results
 - Decide, when appropriate, about hiring personnel
- EU responsibilities:
 - Located at MAR Fund
 - Implementation of the GOP and AWPs
 - Coordination of activities
 - At YR 2, when it is estimated revenues will allow it, the EU will have at least a Coordinator and an administrative assistant
- A facilitator will be hired to support the PTC in the preparation of the GOP and the first AWP and required budgets

Clinton Global Initiative

- Established in 2005 by Bill Clinton
- It gathers global leaders to create and implement innovative solutions for the world's greater challenges.
- Does not implement projects directly.
- It facilitates action and connection between its members to develop their "Commitments to Action"
 - 3,400 Commitments
 - 430 millions of people
 - 180 countries

More Fish – A better Future for Mesoamerican Reef Fishers

- To expand the Fisheries Community Program
- To support the participation of organized groups of fishermen in the management and recovery of fisheries with an integrated ecosystem management vision
- Creation of fish refuges

Expected result:

- Protect and restore local ecosystems and fisheries (increased abundance and size)

By the end of year 2: \$521,636 / \$567,030

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Tulum + 20 Vision

- MAR Fund recognizes the importance and quality of the achievements since the signing of the Tulum Agreement in 1997.
- Important to build on them and to attend the new and persisting challenges :
 - Effluent and pollutant discharge by human activity
 - Unsustainable coastal development
 - Overfishing and its effects on ecosystems functions
 - Climate change impacts on the reef
- Proposal: Blue economy approach
 - To guarantee the effective protection and sustainable use of natural coastal and marine resources as pillars of rural and urban development and thus enable businesses and communities to achieve sustainable returns on their investments



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Towards the Creation of a Strategy for the Control of Lion Fish in the Mesoamerican Reef

Claudio González

Lionfish: a regional threat



Antonio Busiello

First Mesoamerican Reef Lionfish Workshop

Guatemala City, 22-23 May 2014



- **First Mesoamerican Reef workshop**
 - Guatemala, May 22 and 23
 - 42 participants of the four countries of the MAR region
 - Experts
 - Protected areas managers
 - Environment and Fisheries authorities

Objectives:

- To begin the development of a Mesoamerican Reef Strategy for the control of lionfish based on the Caribbean Strategy.
- To have an exchange of experiences between the Caribbean and the MAR regions
- To define concrete management and control actions for this invasive exotic species

Regional Strategy for the Control of Lionfish in the MAR



Regional Strategy for the Control of Lionfish in the Mesoamerican Reef (MAR)

Vision

Reduce the impacts and effects of lionfish on **ecosystem services** provided by the Mesoamerican Barrier Reef System through management and control of the species, and the **coordination** of multiple actors at regional, national and local levels.

Mission

Establish a **platform of regional, national and local coordination** and cooperation in order to manage and control invasive lionfish, with the objective to implement and **consolidate national and local action plans** that contribute towards minimising the negative impacts of lionfish on marine and coastal ecosystems in the Mesoamerican Reef region.

Five themes: adapted from the Regional Strategy for the Control of Invasive Lionfish in the Wider Caribbean

1. Facilitate **collaboration**, providing mechanisms to coordinate **across political & geographical boundaries**.
2. Encourage a **coordinated research** effort and management-oriented **monitoring**.
3. Influence governments, **review legislation** and, if necessary, **develop new regulations**.
4. **Control** lionfish population through effective and **coordinated** regional methods.
5. **Education** and communication for the control and management of lionfish in the Mesoamerican Reef.
 - Key messages
 - Best practices

Results:

- Integration of the Regional Committee and contact persons in each country for the development of the strategy
- Defined strategic lines and actions addressing the five key themes



CONANP
COMISIÓN NACIONAL
DE ÁREAS NATURALES
PROTEGIDAS

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blue ventures
beyond conservation



blue ventures
beyond conservation



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OCEANA
blue ventures
beyond conservation



ReefCI

blue ventures
beyond conservation



Fundación
Mundo Azul

Photo credit: Fundación Mundo Azul

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Regional Strategy presented during the 2015 Gulf and Caribbean Fisheries Institute annual meeting, November, 2015



Next steps:

- To establish the national committees
- To develop a work plan of the national committees
- MAR Fund will hire a consultant to provide follow-up and support o these first actions
- To implement the work plan of the national committees in each country



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Manatee Regional Monitoring in the Mesoamerican Reef Region

Claudio González

- **Manatee: emblematic regional key species**



- **First Manatee Regional Monitoring in the MAR Region Workshop, 22 – 23 October, 2015**



Objectives

- To present the Initiative Regional Monitoring and Management of Manatees in the MAR region
- To understand the needs of protected areas managers regarding manatee monitoring and management, and to provide responses and recommendations
- To establish collaboration among partners to create a regional and participatory monitoring plan
- Develop long-term vision: to conduct the survey every two years and share the information with decision-making entities
- To coordinate and plan the next regional survey

Conclusions

- There is good information on distribution of manatees in Mexico, Belize and Guatemala, but not in Honduras
- Findings of regional monitoring surveys carried on in 2014 regarding distribution matches findings from local and national surveys previously conducted
- There is a need to estimate abundance of manatees in the region, and to monitor regional population over time
- It is recommended to conduct a distribution survey in 2016 in Honduras, prior to next regional survey
- Next regional survey needs to be designed to help estimate population size



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Connectivity Network

Partners



Background

- First workshop, 2010, ECOSUR (42 participants)
 - Four regional objectives identified:
 - Invasive species
 - Commercially important species
 - Ecologically important species
 - Migration and productivity
- Second workshop, 2012, ECOSUR (38 participants)
 - Evaluate and improve the capacities of the MPAs for biophysical monitoring
 - Field training for: fish larvae recruitment, oceanographic gear handling and collection of data, and lionfish data collection
 - Conclusion: Simultaneous and standardized monitoring exercise of reef fish
- Methodology
 - Water column collectors

ECOME1

1-9 September 2013

1. Parque Nacional Isla Contoy
2. Parque Nacional Arrecifes de Xcalak
3. Reserva de la Biosfera Sian Ka'an
 1. Punta Allen
 2. Punta Herrero
4. Reserva Marina Port Honduras
5. Área de Uso Múltiple Río Sarstún
6. Refugio de Vida Silvestre Punta de Manabique
7. Zona Marina de Protección Especial Sandy Bay West End
8. Zona Marina de Protección Especial Turtle Harbor/Rock Harbor

Number of participants: 34

ECOME2

February 27 to March 6, 2014

1. Parque Nacional Arrecifes de Xcalak
2. Reserva de la Biosfera Sian Ka'an
 1. Punta Allen
 2. Punta Herrero
3. Reserva Marina Port Honduras
4. Atolón Turneffe
5. Área de Uso Múltiple Río Sarstún
6. Zona Marina de Protección Especial Sandy Bay West End
7. Zona Marina de Protección Especial Turtle Harbor/Rock Harbor

Number of participants: 28

ECOME3

22 – 28 August, 2014

1. Área de Protección de Flora y Fauna Yum Balam
2. Parque Nacional Isla Contoy
3. Parque Nacional Arrecifes de Xcalak
4. Reserva de la Biosfera Sian Ka'an
 1. Punta Allen
5. Reserva Marina Port Honduras
6. Atolón Turneffe
7. Área de Uso Múltiple Río Sarstún
8. Refugio de Vida Silvestre Punta de Manabique
9. Zona Marina de Protección Especial Sandy Bay West End

Number of participants: 33

ECOME4

9 – 17 September, 2015

1. Área de Protección de Flora y Fauna Yum Balam
2. Parque Nacional Isla Contoy
3. Parque Nacional Arrecifes de Xcalak
4. Reserva de la Biosfera Sian Ka'an
 1. Espíritu Santo
5. Reserva Marina Bacalar Chico
6. Reserva Marina Port Honduras
7. Área de Uso Múltiple Río Sarstún
8. Refugio de Vida Silvestre Punta de Manabique
9. Zona Marina de Protección Especial Sandy Bay West End

Number of participants: 37

Results

- Creation of the MAR Connectivity Network
- Protocols developed for:
 - Post larvae collect
 - Temperature sensors installation
- First Post larvae and juvenile fish catalogue developed

Conclusions

- Areas have improved, empowerment due to importance
- Yum Balam: key area for spawning
- Parrot fish and snappers populations decreased
 - Giezi thesis vs. ECOMEs: value of monitoring, it detects changes in time
- Important to continue with the ECOMEs and to include budgeting for gear in the MPAs
- Importance of the biophysical monitoring to understand changes in the biologic monitoring



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Global Giving

- U.S. on-line fundraising platform, based in Washington D.C.
- MAR Fund has two projects posted:
 1. Empowering fishing communities in the MAR (Rank# 2,037)
 2. Control of lionfish in the Mesoamerican Reef (Rank# 2,028)
- Update report every three months
 - 34 reports for Empowering.....
 - 21 reports for Lionfish.....
 - Last reports approved on December 25, 2015

- Reward status
 - Leader (4th)
 - Benefits
- Funds raised
 - Empowering: US\$2,699.29
 - Lionfish: US\$4,269.36
- Added value
 - Webinars
 - Campaigns
 - Site visits
 - Dissemination
 - Stories