

**HIGHLIGHTS**  
**2021**

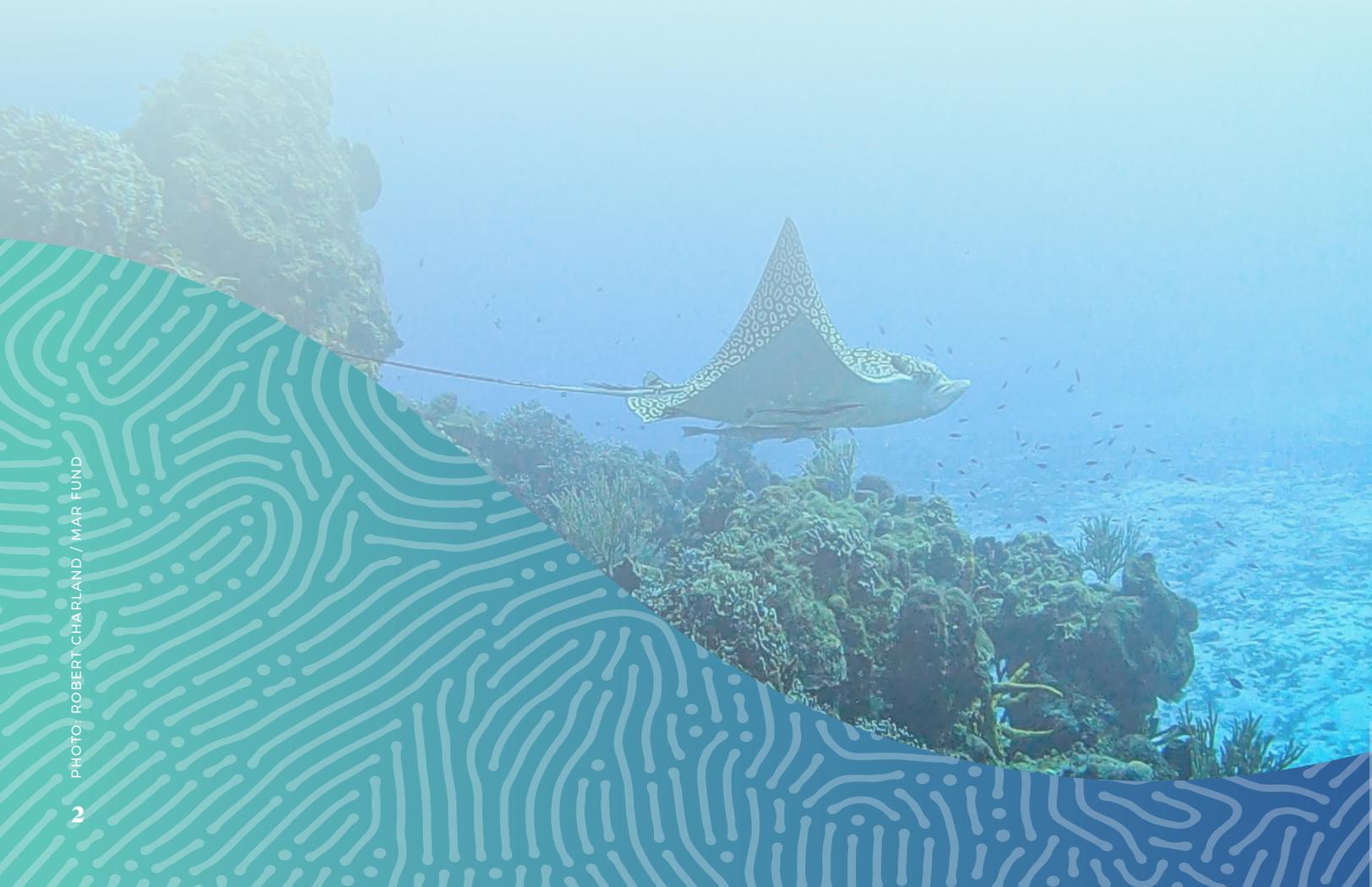


# Introduction

**A**s 2022 advances, we reflect on the challenges the Mesoamerican Reef region has faced the past two years. Without a doubt, the COVID-19 pandemic brought many social and economic hurdles, which also affected the conservation of the region's natural resources, but looking back, it is encouraging to see what we have collectively accomplished.

The MAR Fund team has continued to operate from home, but has slowly started to return to in-person meetings and workshops. Our partners have done an exceptional job at adapting to circumstances and maintaining their activities and projects, and our donors have continued to be generous, understanding, and flexible amidst the situation.

With some countries lifting some social restrictions, part of the work postponed since 2020 began to move forward. We are excited to share some of our major progress of 2021.





# Saving our protected areas: a legacy of caring

ONE OF THE BIGGEST ACHIEVEMENTS OF 2021 was the approval of the Project *Protection of Maritime Resources in Central America Phase III*, generously funded by the German Cooperation through the KfW, for €13 million. Several meetings and a virtual mission with KfW took place during the first half of the year to prepare the ground for its implementation. The financial contract and separate agreement were signed on December 8. This new phase of the project will support the conservation and sustainable use of natural resources in and between selected coastal and marine protected areas in the MAR.

It will operate through two calls for proposals targeting coastal and marine protected areas. The first call is expected to be launched by the end of 2022 or early 2023.





## Fishing for the future: sustainable fisheries for a thriving reef

THE MAR FISH INITIATIVE CONTINUED TO strengthen the regional network of fish spawning aggregations (FSA) with financial support from the French Global Environment Facility (FFEM), The Summit Foundation, Oceans 5 and Marisla Foundation.

Expeditions to Cayman Crown were carried out to characterize the FSA. Preliminary results indicate the presence of an FSA for Horse Eye Jack, Bar Jack, Ocean Triggerfish, Atlantic Spade, and for commercial species of fish, such as Schoolmaster and Dog Snappers. Benthic and bathymetric maps were also developed for this important reef shared between Guatemala and Belize.

Getting stakeholder communities involved in the conservation of this site is essential. Fishers from Belize, Guatemala and Honduras participated in workshops carried out in each country to talk about the importance of the site. A tri-national committee of fishers was established to foster

collaborative actions to protect the natural resources provided by this reef. The workshops were virtually led by Comunidad y Biodiversidad (COBI) while Fundación para el Ecodesarrollo y la Conservación (Fundaecco) in Guatemala, and Toledo Institute for Development and Environment (TIDE) in Belize ran the in-person events. Coral Reef Alliance (CORAL) in Honduras ran the workshop virtually.

A webinar titled "[Genetic and oceanographic studies in fish spawning aggregation sites of the Mesoamerican Reef](#)" took place on December 3. Organized jointly by El Colegio de la Frontera Sur (ECOSUR), COBI, Instituto Tecnológico de Chetumal (TecNM) and MAR Fund, the webinar shared information on new technologies being used in the study and monitoring of FSAs in the MAR, such as a DNA Barcode to identify early life stages of fish (ECOSUR) and analysis of environmental DNA to determine presence of fish species in the area (COBI).



# Climate change: the need is now

## REEF RESCUE INITIATIVE

WILLIS TOWERS WATSON HAS BEEN WORKING closely with MAR Fund to explore how the tools and products of the insurance industry can be best deployed to support the conservation of the MAR. Parametric insurance was designed, and coverage was purchased for four critical coral reef areas: Banco Chinchorro, Arrecifes de Xcalak, Hol Chan, and Turneffe Atoll. The launch of the MAR reef insurance program represents a major advance in coastal community and ecosystem resilience. With the inception of parametric insurance to finance the activities of emergency response groups, crucially important reef sites on the MAR will now be far more resilient to hurricane damage. The development of this innovative program was made possible with financing from the InsuResilience Solutions Fund, building on the early support of Global Affairs Canada through the Ocean Risk and Resilience Action Alliance. The insurance policy runs from July 2021 to May 2022 and AXA Climate, on behalf of AXA XL, was selected as the insurance policy provider<sup>1</sup>.

A [brief](#) of the MAR Insurance program was developed, along with a series of [short videos](#) aimed at raising awareness on the importance of the MAR, emergency reef response after hurricanes and how the [parametric insurance](#) for reefs works.

<sup>1</sup> The execution of this policy shall not have any effect with respect to, or in connection with, any sovereignty claims over any territory (land, insular and maritime) claimed by the Republic of Guatemala and/or Belize; nor shall it have any effect over the rights and/or claims of either country over such territory.



Under the framework of the MAR2R project, coral reef restoration is successfully being carried out in Cozumel and Akumal in Mexico, where more than 500 coral colonies have been planted.



MAR Fund, in collaboration with The Nature Conservancy (TNC), conducted a series of courses to create emergency response capacity at key reef sites in the MAR region. The training included a Rapid Response and Emergency Reef Restoration course for members of reef restoration brigades and a Training of Trainers course in Belize and Mexico with participants from Guatemala and Honduras. In Guatemala, a Task Force for post-storm response capacity building was formed. The Task Force is made up of representatives from the National Council of Protected Areas, MAR Fund and TNC.

To address the Stony Coral Tissue Loss Disease (STCLD) the Regional Dialogue Group, under the framework of the project “Integrated ridge to reef management of the Mesoamerican Reef Ecoregion (MAR2R)” of CCAD/WWF/GEF, continued meeting every two months. Consultancies to advance the elaboration or implementation of action plans to address the disease are being carried out in Mexico, Belize, Guatemala and Honduras. An Emergency Declaration Agreement for STCLD in the MAR region was submitted to the Council of Ministers of the Central American Commission for Environment and Development (CCAD), which issued an emergency resolution at its LXVI meeting on July 9. This resolution was distributed to interested partners in the region and will also be

socialized and included in the national plans that each country in the MAR region is developing.

Also, under the framework of the MAR2R project, coral reef restoration is successfully being carried out in Cozumel and Akumal in Mexico, where more than 500 coral colonies have been planted. The MAR Reef Restoration Network (RRN) held its third biennial meeting from October 6 to 8 (virtually, as per social distancing restrictions). To continue strengthening the RRN, the MAR2R project supported the development of the network’s Strategic Plan, a Biennial Operational Plan and Work Plan. Other relevant products still in progress include a Code of Ethics and a Protocol for information sharing.

On November 23 and 24, the Reef Rescue Initiative and CCAD carried out the regional strategic workshop *“Building Resilience and Addressing Risk in the Mesoamerican Reef”*. The primary objective of the workshop was to strengthen the governance of the MAR region through the coordination of actors from different sectors to achieve sustainable results that contribute to the recovery and resilience of the MAR. A total of 105 participants attended the workshop, including representatives from national and regional authorities of the MAR, and non-governmental conservation organizations.

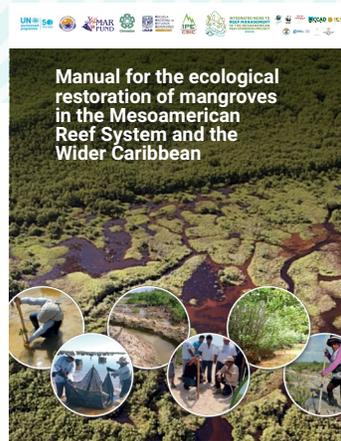




## MANGROVES

On December 1, the [virtual launch](#) of the *Manual for the Ecological Restoration of Mangroves in the Mesoamerican Reef and the Wider Caribbean* took place with the participation of 160 people. The manual will underpin the implementation of the *Regional Strategy for Mangrove Management, Conservation, Restoration and Monitoring in the Mesoamerican Reef 2020-2025*. It was financed by the UNEP-Cartagena Convention, the MAR2R project, and MAR Fund.

Within the framework of the MAR2R project, an updated mangrove cover map for the four countries of the MAR region was developed, and a mangrove restoration project is being implemented by EcoLogic Development Fund (EcoLogic) on the Caribbean coast of Guatemala, in the communities of Barra Sarstún and San Juan.



### ACTIVITIES CARRIED OUT BY ECOLOGIC:

- Workshops with community members on the importance of mangrove conservation.
- Workshops with housewives from Barra Sarstún and San Juan communities on wood-saving stoves.
- Restoration of 0.60 ha of degraded areas with red, black and white mangrove.
- Production of plants for agroforestry project.



# Belize Marine Fund

THE BELIZE MARINE FUND (BMF), OUR ONLY COUNTRY-FOCUSED PROGRAM, CONTINUED supporting projects through targeted and small grants. Main advances on the projects include:

- A total of 19 lionfish control dives at Turneffe Atoll Marine Reserve by Blue Ventures in May and July, with 131 lionfish removed. Additionally, fishers removed 500 lionfish.
- Successful fertilization of sea cucumber eggs, which are now growing in mariculture cages, by University of Belize - Environmental Research Institute.
- Workshops with fisherfolk/stakeholders of the Sapodilla Cayes Marine Reserve for the consultation process for the development of the management plan of the area by TIDE.
- Water quality tests (6 sampling sites in Southern Lagoon and 5 in the Belize River), drone surveys and boat and gill net patrols (no gill nets were found) in Southern Lagoon and the Belize River by Clearwater Marine Aquarium Research Institute.
- Workshop to build stakeholder capacity for science-based management of multispecies by Environmental Defense Fund (EDF) and Belize Fisheries Department. Attendees learned about fundamental principles of climate resilient fisheries and actively participated in dialogue about finfish management decisions. Participants included fishers and co-managers who are members of the Managed Access Committees.



# Clean water for the reef

INADEQUATE AND/OR LACK OF SOLID AND liquid waste management is one of the main threats to the MAR. Through its Small Grants Program, MAR Fund continues supporting projects to address this pressing issue. To scale up the impact of a grant previously awarded, MAR Fund supported a project carried out by Centinelas del Agua (CDA), in Mexico, to improve management of water and solid waste within the Yum Balam Flora and Fauna Protection Area. In Roatan, Polo's Water Association was supported once again to continue improving water treatment processes in West End. In Guatemala, Asociación Multicultural de Mujeres para el Desarrollo Integral y Sostenible (AMMUDIS) is working on best practices for solid waste management in Livingston.



## ADVANCES

### CDA:

- Monitoring of water quality.
- Development of a diagnostic of economic activities in three communities.
- Training of CDA's technical team on water and waste treatment, best practices for hotels and fishing cooperatives.

### POLO'S:

- Baseline study of water quality of the plant, including effluent and affluent water.
- Purchase of fine bubble diffusers and various materials to replace the existing aeration system.

### AMMUDIS:

- Creation of two environmental committees.
- Identification of four illegal dumpsters.



The 14<sup>th</sup> Request for Proposals of the Small Grants Program closed in October 2021. To increase the potential impact of small grants, the MAR Fund Board of Directors approved submission of projects for up to two years duration and for a maximum amount of \$50,000.

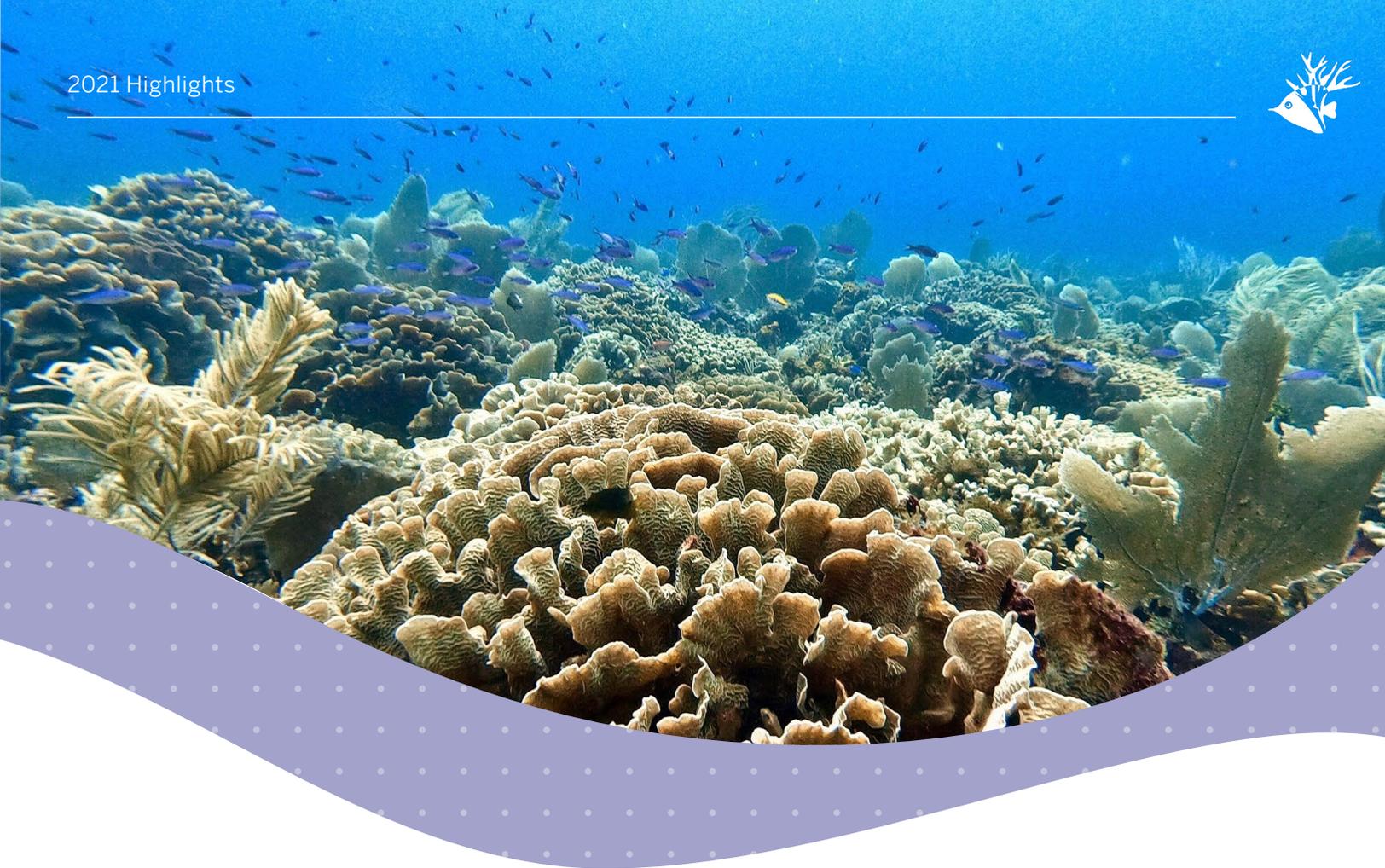
With the financial support from The Summit Foundation, five MPA co-managers in Belize were supported to maintain their operations given the loss of tourism income due to the pandemic. In December 2021, MAR Fund received a donation from an anonymous donor to continue providing support to MPA co-managers in Belize and Honduras in 2022.

**MAR Fund has raised \$48.6 million dollars in project funding since beginning operations, and as of December 2021, administrates an endowment fund of \$32.8 million dollars.**

As part of its institutional evolution, in 2021 MAR Fund began the design and construction of its Environmental and Social Management System (ESMS). The ESMS, while tailored to MAR Fund, will apply internationally recognized environmental and social standards to all its granting activities. MAR Fund will now have a safeguards system to reduce and mitigate potential environmental and social risks.

Significant progress has been accomplished by MAR Fund despite the ever-changing restrictions and measures implemented by governments to keep people safe during the pandemic. We acknowledge and thank our partners and grantees for their continued work and commitment to the conservation of the MAR. It is a privilege to collaborate with them.





# Acknowledgements

MAR Fund would not be able to advance without the valuable support and trust of its donors and partners.

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