





## Your passion for protecting coral reefs was inspiring this year.

Despite being the second year of a global pandemic fraught with economic uncertainties, your immense generosity was a key part of our success this year. Your donation to CORAL supports our global strategy to keep coral reefs healthy so they can adapt to climate change. As you'll read in the next few pages, you kept sewage out of the ocean, supported communities in their efforts to prevent illegal fishing, and provided residents with the information they need to advocate for environmental protections.

By helping us partner with local organizations to tackle human impacts on coral reefs like wastewater pollution and overfishing, you give coral reefs a fighting chance against climate change.

Thank you for your ongoing commitment to protect such a life-sustaining ecosystem. We are so grateful to have you on this journey with us and look forward to our continued partnership in 2022.

Sincerely,

*Kirby Ryan*  
Board Chair



Thanks to the incredible team of researchers that has collaborated with us over the last five years, we now have the science to understand how corals adapt to climate change.

As you'll read in the next few pages, we're now turning that science into action globally, regionally, and locally.

At global levels, we work with partners to build tools that allow communities to manage their reefs with adaptation in mind. Regionally, we design networks of healthy coral reefs so corals can adapt to climate change.

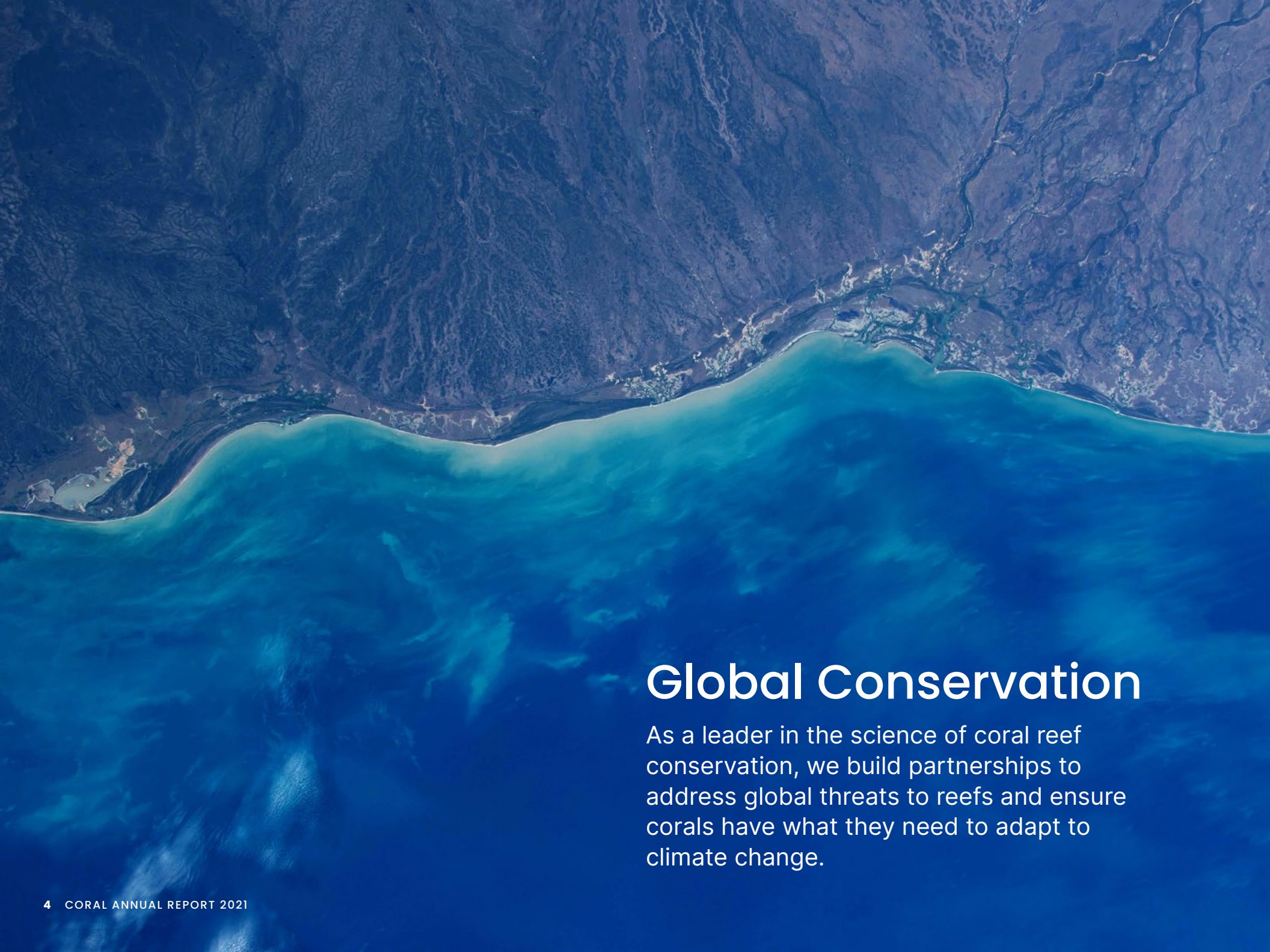
At the local level, we involve communities in science that typically occurs behind closed doors—and we share knowledge so communities are empowered to make more informed and effective decisions to protect their coral reefs.

Thank you for supporting this vision, and for ensuring coral reefs can survive and thrive for generations to come. We couldn't do it without you.

Sincerely,

*Madhavi Cotton, Ph.D.*  
Executive Director





# Global Conservation

As a leader in the science of coral reef conservation, we build partnerships to address global threats to reefs and ensure corals have what they need to adapt to climate change.



By 2050, nearly 90% of coral reefs are expected to experience annual severe bleaching events—but many communities aren't equipped to respond when these bleaching events happen.




*Because of you,* we began to build a worldwide network of coral bleaching researchers and design a pilot program that allows them to monitor global bleaching events that are detected by satellites. This effort is supported by the Allen Coral Atlas's new global coral bleaching detection and early alert system.

- **Researchers swam over 12km to validate habitat and bleaching information that was detected from space**
- **We surveyed over 2,200 coral colonies for coral bleaching and disease with our partners**

### LOOKING FORWARD

Our focus in 2022 is to launch a more robust global bleaching monitoring program to help improve the Atlas's early alert system. This will allow governments and conservation practitioners to take early action to protect corals from bleaching events.



Nutrients from untreated wastewater can cause an overgrowth of algae on coral reefs and lead to coral disease—and of the 108 coral reef geographies with human populations in the world, 104 of them have a wastewater pollution issue.



*Your donation* allowed us to help launch the [Ocean Sewage Alliance](#)—a global partnership of organizations and scientists who are committed to reducing the impact of sewage and other wastewater pollution in our oceans.

- 101 members from around the world are now part of the OSA
- 5 working groups were launched in 2021 to help grow the OSA



### LOOKING FORWARD

With the OSA now fully established, over the coming year we will focus on breaking the taboo around wastewater, and sharing wastewater treatment education, resources, and examples, including those from our work in Hawai'i and the Mesoamerican Region.





# Regional Coordination

What happens on one coral reef can affect another coral reef hundreds of miles away, which means that saving coral reefs requires regional collaboration.

In some parts of the Mesoamerican Region, as little as 1.8% of wastewater is treated properly before it enters the ocean, posing a threat to coral reefs and human health.

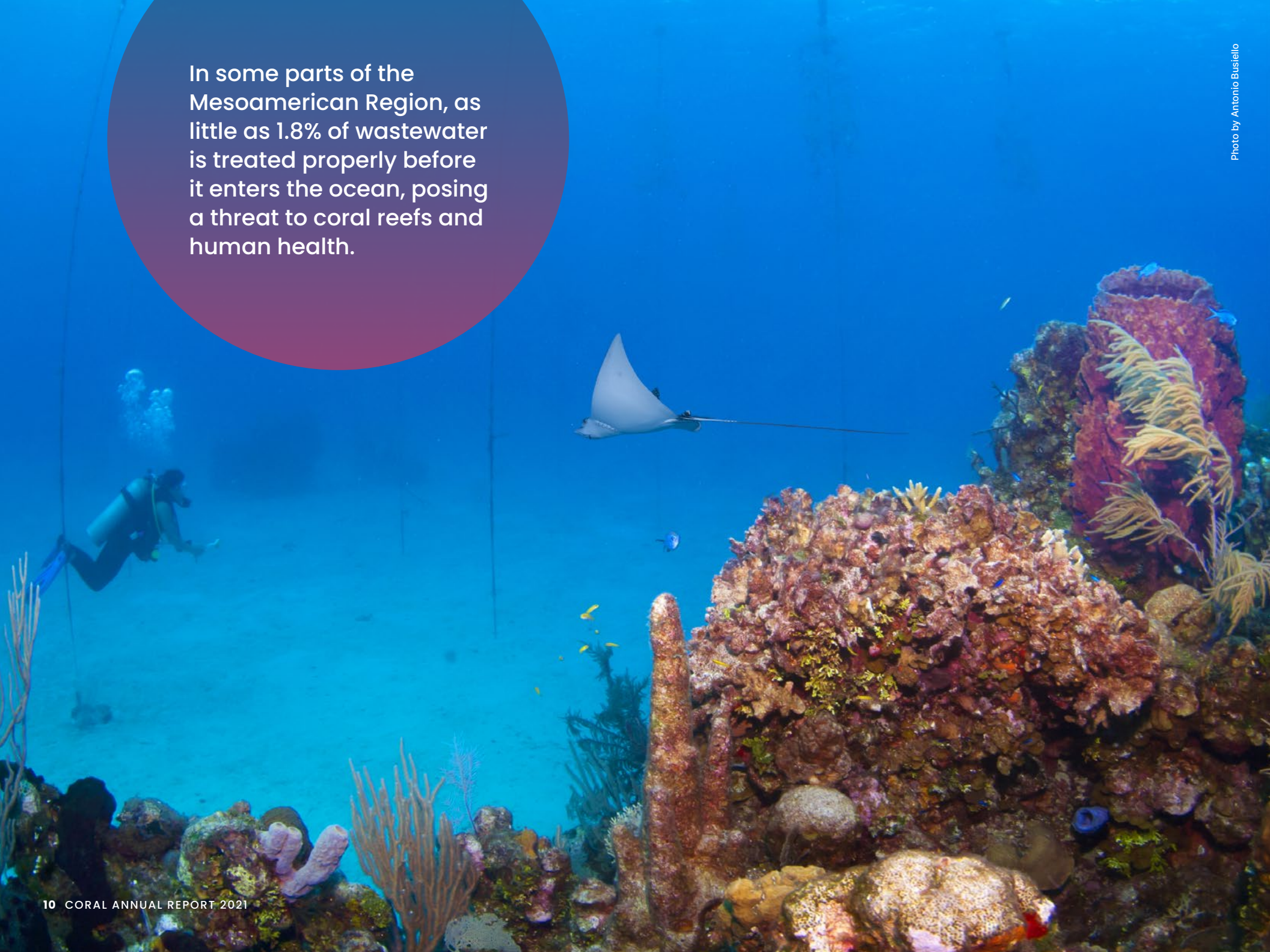




Photo by Antonio Busiello

*With your help*, we galvanized nearly 30 partners to launch regional water quality testing programs in Mexico, Belize, and Honduras this year—the data will bring us one step closer to being able to tackle sewage pollution along the entire Mesoamerican Reef.

- **Roughly 6,000 water quality samples were collected in 2021**
- **Approximately 90 water quality testing sites were studied in 2021, spanning the coastlines of three countries.**

### LOOKING FORWARD

We're helping communities build governance frameworks, called Destination Management Organizations (DMO), so they have a collaborative governing body in place to be able to act on coral reef threats like wastewater pollution. Cozumel, Mexico launched their DMO in 2021.



# Local Engagement

Our science-based conservation strategies help diverse local communities protect coral reefs and chart their own sustainable futures.



An estimated 53 million gallons of raw sewage leaks into the marine environment every day across the main Hawaiian Islands.



*Because of your support,* we were able to not only expand water quality testing to 16 new sites across Hawai'i Island, but also make the **data publicly available** to local communities for the first time. The data collected will help the Hawai'i Department of Health have a more thorough understanding of wastewater pollution so they can take more informed action.

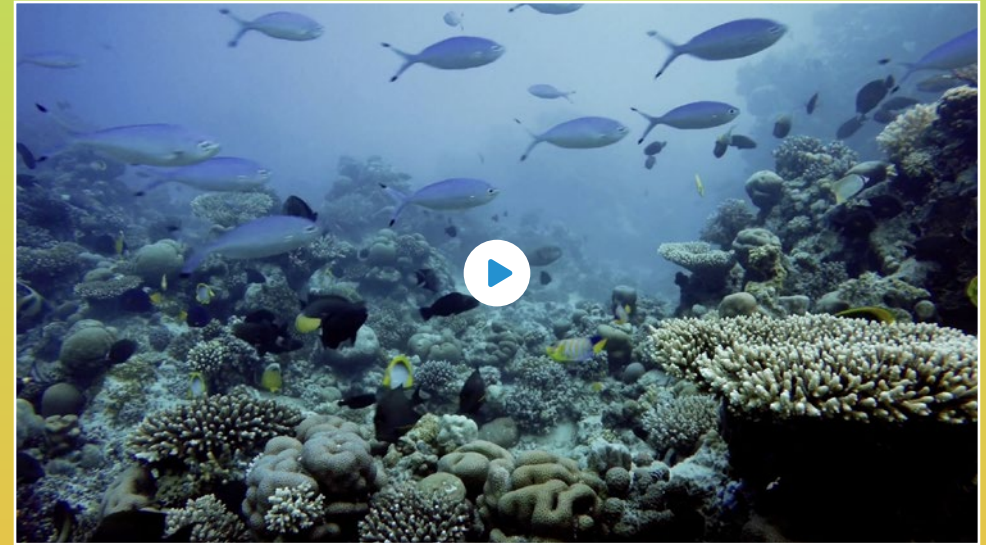
→ **Nearly 180 water quality samples were collected and tested in 2021**

### LOOKING FORWARD

Through our community partnership Hawai'i Wai Ola, we are training community volunteers to continue water quality testing, empowering local residents to have a better understanding of their environments so they can advocate for change.



Tela Bay's coral reefs in Honduras support 16 different communities—but overfishing has left the coral reefs under tremendous stress.



*Your donation* allowed us and our partners to ensure that a highly coveted lagoon and popular fish breeding ground was properly patrolled against illegal fishing. This, along with our previous efforts to set boundaries around fishing rights, led to a **483% increase** in fish biomass in the lagoon.

- **Five community organizations came together to enforce fishing regulations—including local fisher organizations and law enforcement**
- **Over 10km of illegal fishing nets were confiscated in the lagoon during the 2021 closed fishing season**

#### **LOOKING FORWARD**

We're tackling overfishing from all angles. Our new pilot aquaponic systems have identified the proper way to maintain and breed a popular native fish species in captivity, which will help fishers diversify their income and reduce fishing pressure on the lagoon.



Thank you for all that you've done this past year to keep coral reefs healthy. Your continued support has an impact: because of you, corals have cleaner water, healthier populations of wildlife, and communities dedicated to their protection. We are so very grateful.



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