

CTR

*Coulbri Ridge*

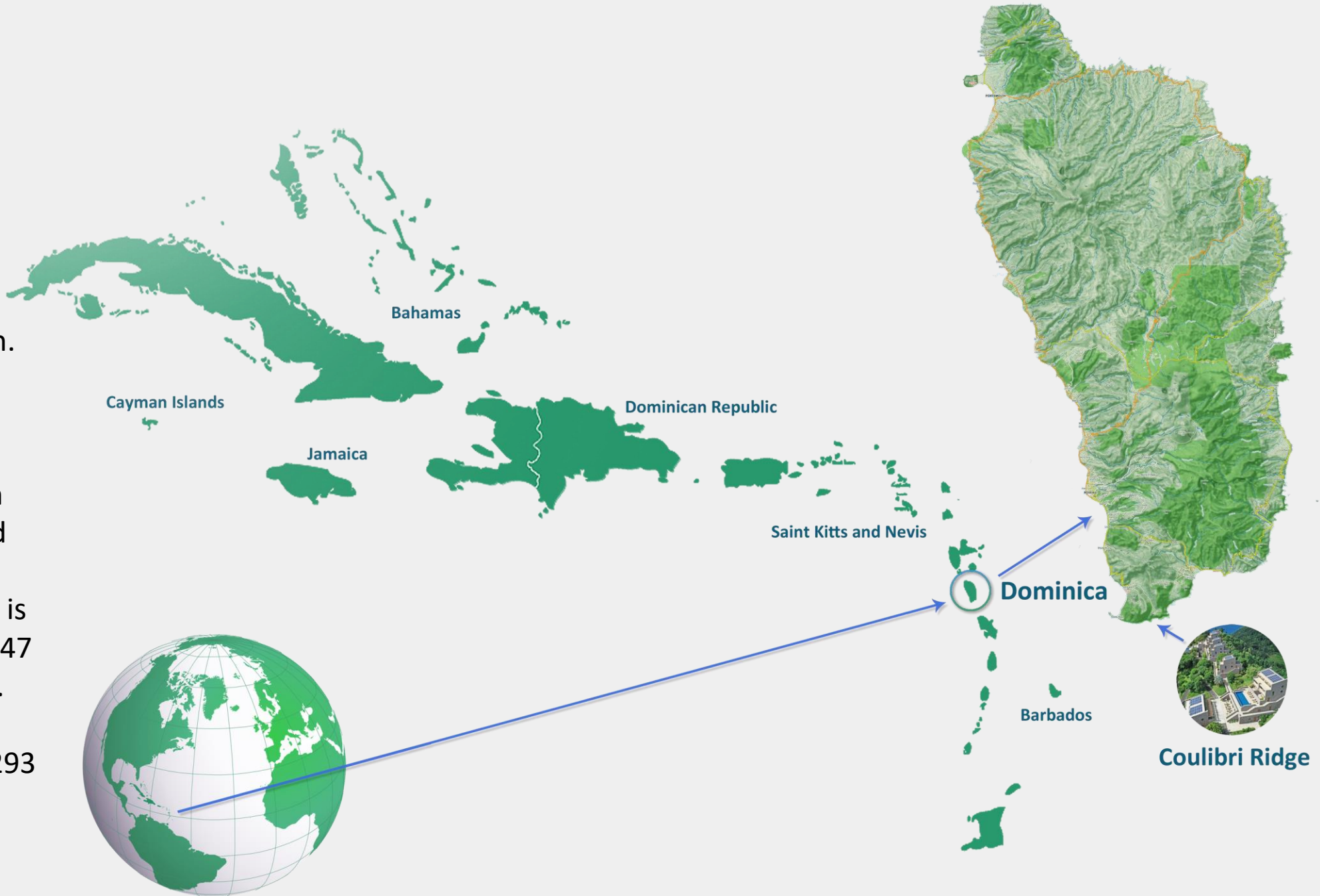


## DOMINICA

Dominica is an island country in the Caribbean.

Part of the Windward Islands in the Lesser Antilles in the Caribbean Sea, Dominica has a land area of 750 km<sup>2</sup> (290 sq mi) and its highest point is Morne Diablotins, at 1,447 m (4,747 ft) in elevation.

The population was 71,293 according to the 2011 census.







## SUSTAINABILITY

Coulibri Ridge was designed from the start as a research project on self sustainability applied to the hospitality sector.

Minimal impact on the environment from the construction phase to the Off-Grid, alternative power technologies selected, to the methods of harvesting rainwater.







## SUSTAINABILITY

Sustainability for us is not only technology, it also involves respecting all aspects of our environment, which includes the people in our local communities as well as the land and the surrounding sea on which our local communities depend for local fishing and tourism.







## COMMUNITY

Most of Coulibri Ridge's employees are hired from the adjacent villages, like the village of Soufriere, shown here, which is a traditional fishing community.

We buy all the fish consumed at Coulibri Ridge from local fisherfolks from these villages.



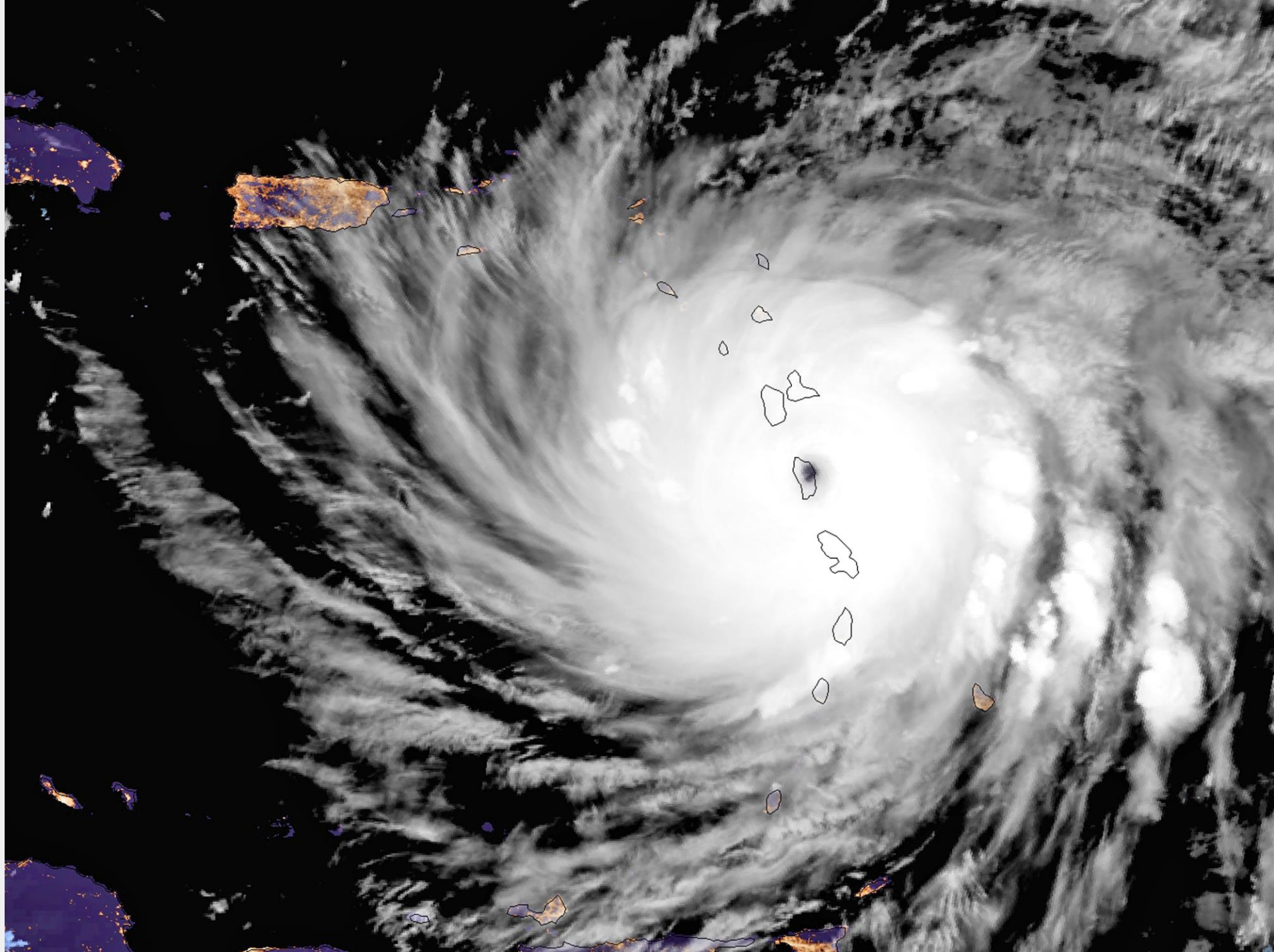




## RESILIENCE

In September 2017, the tropical cyclone Maria, a category 5 hurricane with winds in excess of 150 mph (250 km/h), made landfall in Dominica.

Most of the country was devastated.







## RESILIENCE

Within just a few hours after the hurricane passage, the local inhabitants went from living a normal life doing agriculture and fishing ...







## RESILIENCE

to becoming stranded in the remains of their homes, in most cases without a roof above their heads to protect them from the elements and while experiencing the complete loss of essential services such as running water, electrical power and telecommunications.







## RESILIENCE

Due to the sheer expanse of the storm's damages, the pre-existing normal living conditions of the inhabitants were not reestablished for a period of over one year.

Including electrical power and water supply.







## RESILIENCE

In parallel the buildings and infrastructures of Coulibri Ridge, designed to resist hurricanes, were barely damaged other than the forest and all vegetation being flattened to the bare soil.

The REZDM project was created at that time.







## RESILIENT DOMINICA

REZDM was created to help the community resilience through several ongoing projects.

Each project is a part of the overall objectives of REZDM to make the communities in the south of Dominica more resilient and better equipped to deal with natural disasters.



### Coral Conservation Action Team

With the arrival of Stony Coral Tissue Loss Disease (SCTLD) in the Soufriere Scotts Head Marine Reserve (SSMR) there is an urgent need for a Coral Conservation Action Team to try to preserve as much of the vulnerable species as possible.

[Read more...](#)



### Scotts Head Jetty Project

To increase redundancy capabilities for emergency evacuation of the Soufriere Bay communities in the event of major natural disasters and to enhance overall resiliency the construction of a jetty in Scotts Head village was required.

[Read more...](#)



### Soufriere Primary School Project

During hurricane Maria the main building of the Soufriere Primary school sustained major damage to its roof and subsequently experienced extensive water damage. The grounds also experienced major damage.

[Read more...](#)



### Resilient Alternative Energy Solutions

A core resilience projects of REZDM is the deployment of an affordable alternative energy solution to ensure access to electrical power during and immediately after a hurricane.

[Read more...](#)



### Coastal Plan

In order to approach in a coherent manner both the short term and long term developments in the Southwest of Dominica, it is essential to have in place a coastal plan to be used as a reference framework by the community, stakeholders and the government.

[Read more...](#)



### School Children Nutrition Program

With the loss of many jobs and income in the community we are determined to expand on the previous "School Food Program" to ensure that every child is getting one good nutritious meal every school day.

[Read more...](#)



### Tools Access Service Program

One of the biggest challenges after the hurricane is rebuilding. Lack of materials and many lost tools have made things complex. REZDM is working with Clemson University to address the tool situation.

[Read more...](#)



### Consultation Services

One of the important challenges in a post disaster situation is ensuring that recovery and rebuilding efforts are combined and not duplicated and that available resources are used in the most efficient ways.

[Read more...](#)



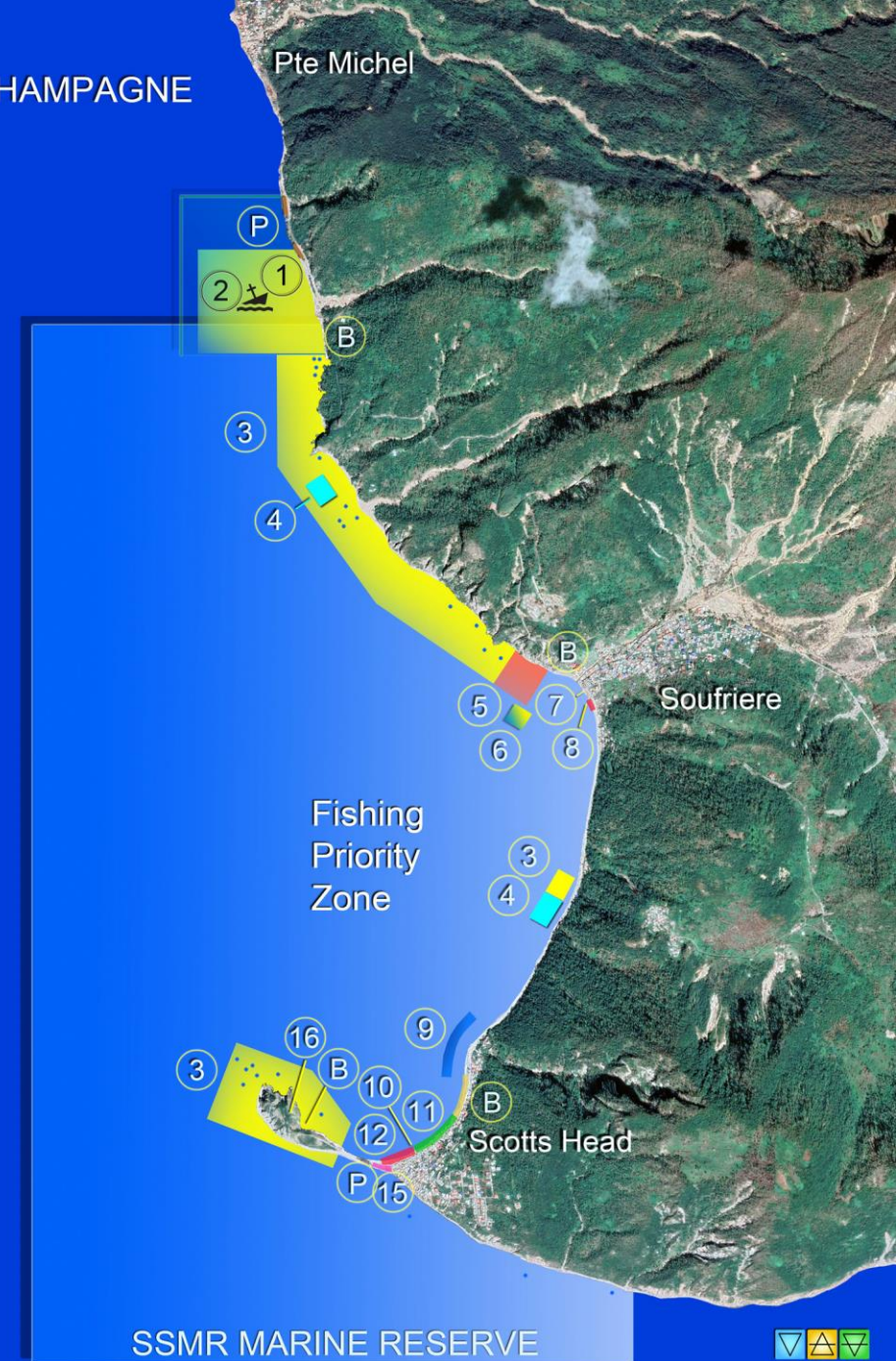


## COSTAL PLAN

The objective of the Costal Plan was to establish or refine specific usage zones that are compatible with the Soufriere Scotts Head Marine Reserve (SSMR) while allowing for a managed and controlled expansion of the touristic activities.

### COASTAL PLAN - SOUFRIERE | SCOTTS HEAD | CHAMPAGNE

- P** Champagne Area Parking
- 1** Underwater Statue Park
- 2** Shipwreck
- 3** Dive and Snorkel Areas
- 4** Coral Reef Restoration Zones
- 5** Soufriere Fish Nursery
- 6** Soufriere Free Diving Zone
- 7** Soufriere Jetty
- 8** Soufriere Vendors-Fishermen Facilities
- 9** Yachts Moorings
- 10** Scotts Head Jetty
- 11** Scotts Head Restaurants and Marine Services
- 12** Scotts Head Fishermen Ramps and Lockers
- 15** Scotts Head Vendors-Fishermen Complex
- 16** Scotts Head Old Fort Lookout
- B** Beach
- P** Scotts Head Area Parking





## COSTAL PLAN

Resilience was a determining factor in the analysis for the location of some of the zones that could be seriously affected by natural disasters.

The Costal Plan is designed to be the foundation for discussions aiming to achieve community consensus.

### COASTAL PLAN - SCOTTS HEAD

- 3** Dive and Snorkel Areas
- 9** Yachts Moorings
- 10** Scotts Head Jetty
- 11** Scotts Head Restaurants and Marine Services
- 12** Scotts Head Fishermen Ramps and Facilities
- 13** Scotts Head Caribantic - Kabay
- 15** Scotts Head Vendors-Fishermen Complex
- 16** Scotts Head Old Fort Lookout
- B** Scotts Head Main Beach & Tousab Beach
- P** Parking







## CORAL PROTECTION

In 2021 **Stony Coral Tissue Loss Disease (“SCTLD”)** arrived in Dominica and the corals in the Soufriere Scott’s Head Marine Reserve (SSMR) were directly affected.

The FDL / REZDM created and funded a project dedicated for the coral preservation.







## CORAL PROTECTION

The project is supporting the local dive operation and the marine wardens by providing them with equipment, training and financial support.

- Coral Treatment (ongoing)
- Coral Trees (ongoing)
- Coral Farm on shore (to be implemented)







## CORAL TREATMENT

### In-Situ

Objective to save existing coral with the use of topic antibiotic (Amoxycillin) on the coral affected which have a better chance to survive.

Very labor intensive because it requires visiting each treated coral regularly to monitor and apply additional treatment.



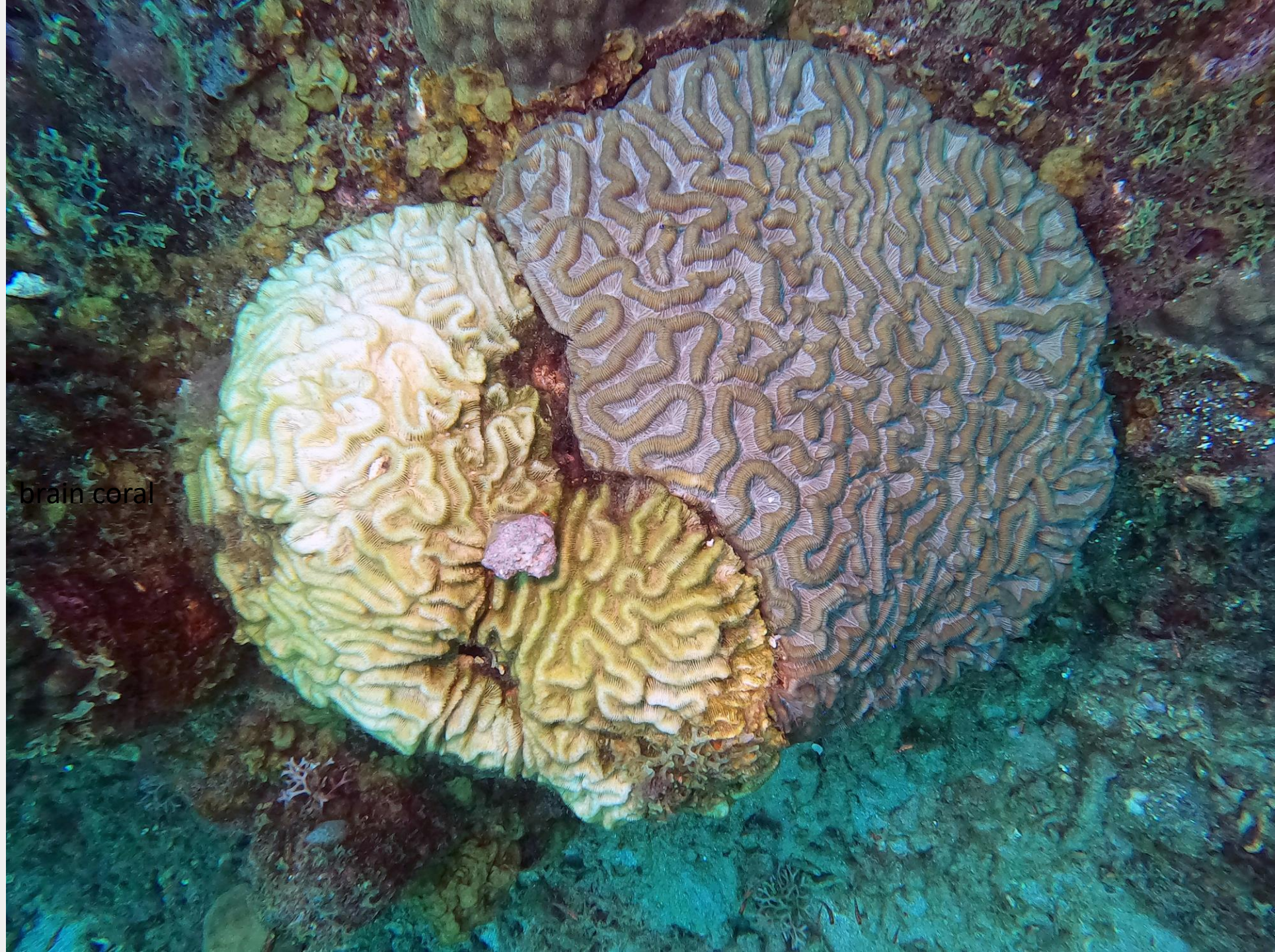




## CORAL TREATMENT

After one year of treatment it has been demonstrated that the treatment is working to control the spread of the disease.

As shown on this photo, the left side of the brain coral is dead because of the disease while on the other side of the treatment boundary the coral is alive and healthy.



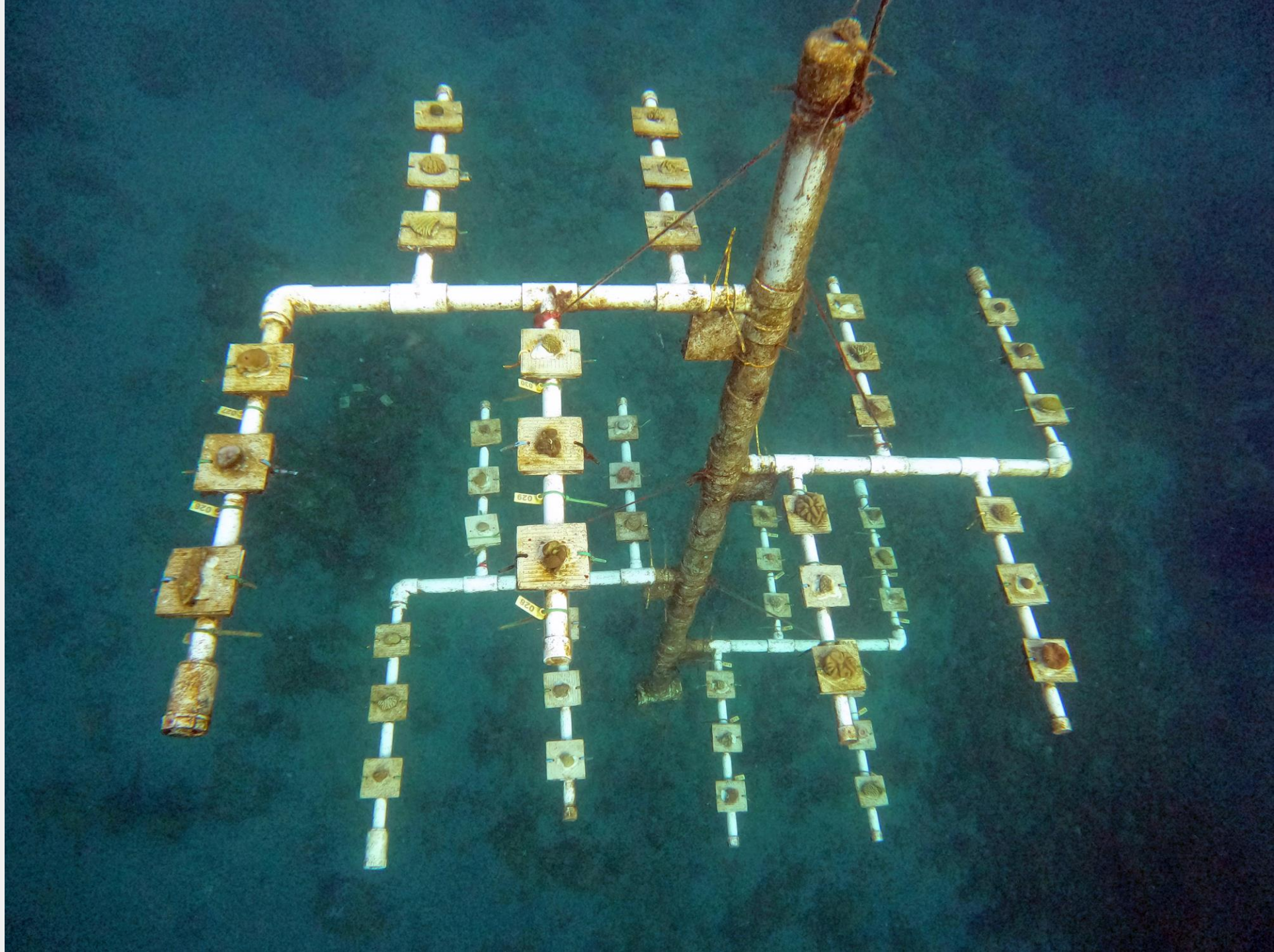




## CORAL TREES

### In-Situ isolation

Objective is to save existing healthy coral by isolating them from the disease while keeping them in their natural environment with the hope that once the disease disappears, the saved coral can be placed back on the natural substrate.

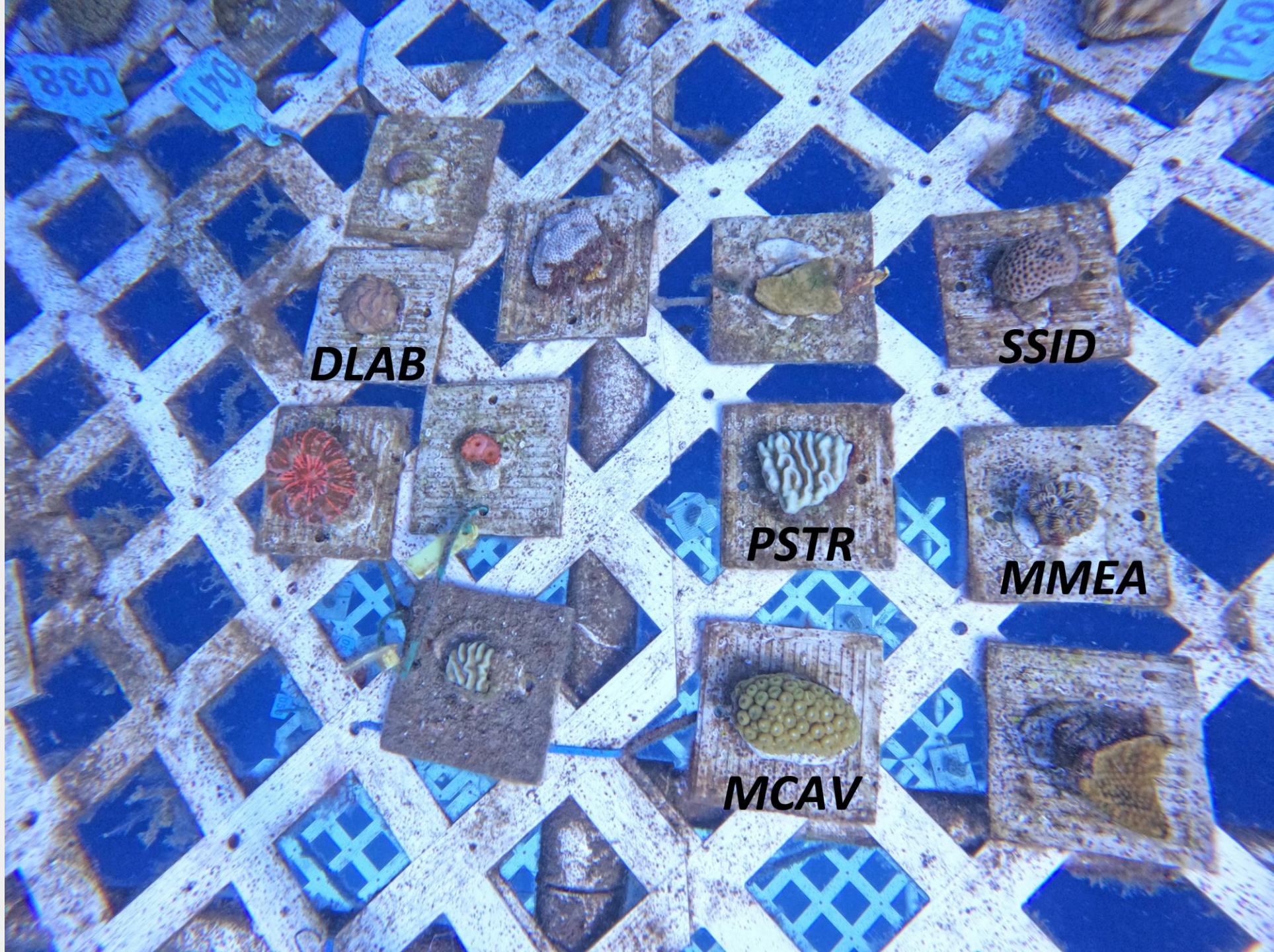






## CORAL TREES

Small sample of each type of stony coral affected by the disease are taken from the sea and placed on tiles to be isolated from the sea bed and afterwards positioned on the coral trees.



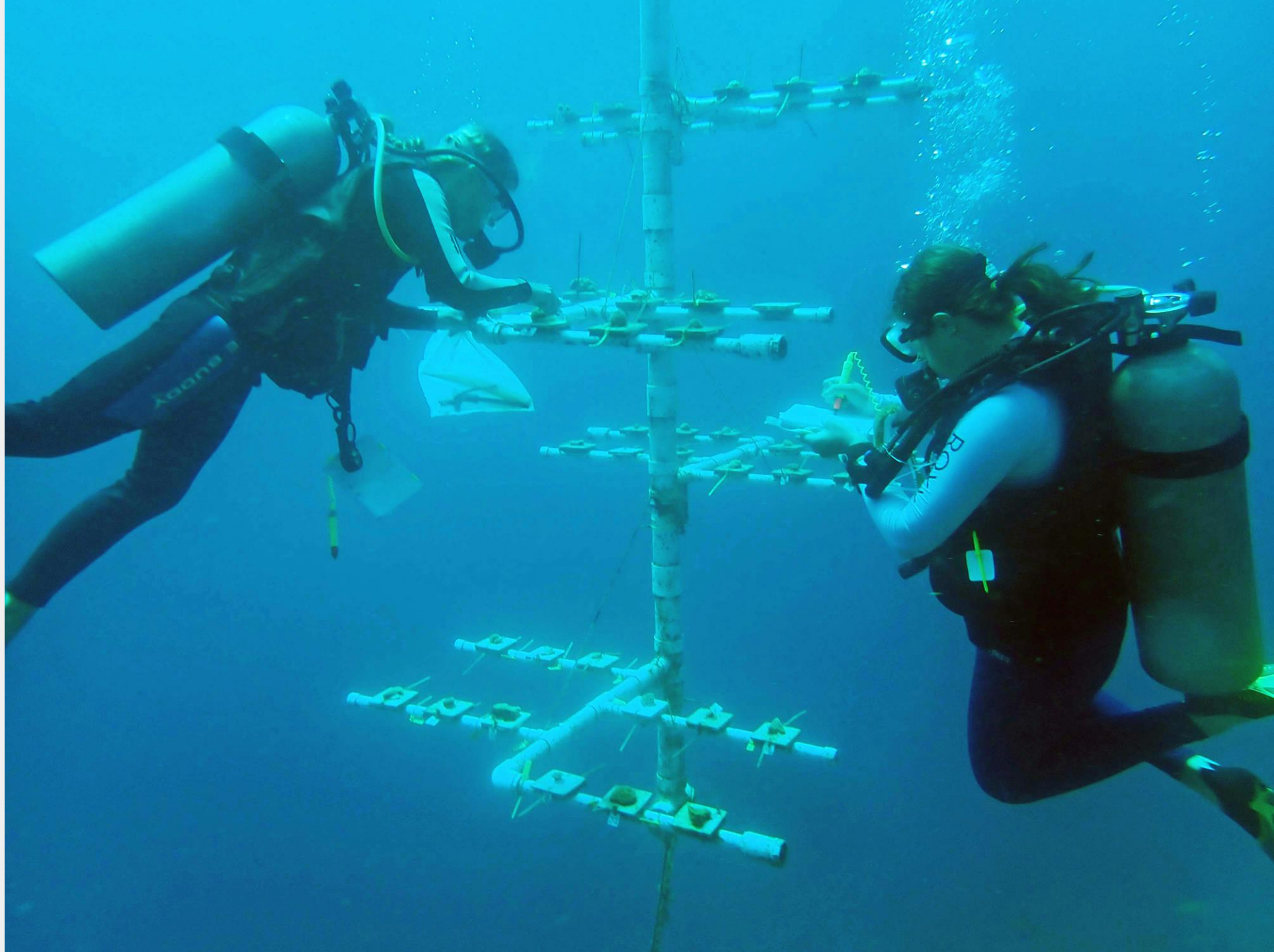




## CORAL TREES

Monitoring and recording of coral health and growth is done on a weekly and sometimes daily basis.

This photo shows two volunteers in action.







## CORAL TREES

Cleaning of algae and other deposits is very important and also done weekly.

In this image, it is one of the volunteers who is performing the task.







## BUILDING JETTY

A small jetty existed previously in Scott's Head, but it was not built to be resilient and was severely damaged by hurricanes, including Hurricane Maria and became unusable.







## BUILDING JETTY

REZDM built a new replacement jetty to increase capabilities for emergency evacuation of the Soufriere Bay communities in the event of major natural disasters and to enhance overall resiliency, as well as to provide a necessary sea access for local fishing activities and tourism.

