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Project: BMPP & Guardianes de Maria Langa y Cayo Caribe 2020-2022
PO#:34892 & 37144

Period of performance May to June, 2022.

Job description and activities:

1. Coral study large scale-Data collection continued at the intake and discharge station for 2022.

2. Coral study small scale-Data collection continued at the intake and discharge station for 2022.

3. Egorov old out-planting site- Images were collected in November 18, 2021 from Egorov reef and an orthophotomosaic was developed (Figure 1). This procedure was repeated in April 29, 2022 as the stony coral tissue lost desease already was stablished at the reef (Figure 2). This is an area of 96 square meters at the shelf edge in Guayanilla. In 2021 there were 622 colonies alive (6.45 col/ m^2) of 13 different species. In 2022 after the desease got to the reef 4 species disappeared from the area. Nine species suffered from the desease and four did not showed any symptoms (*P.astreoides*, *I.sinuosa, M.decactis, S.intercepta*). Only 395 coral colonies survived (4.1 col/m^2), 41% of the colonies died. We are currently calculating the percent cover before the desease and after the desease. We are also treating with antibiotics coral colonies in an effort to save them from this devastating desease.

4. Temperature data from the intake and discharge stations from the months of May to June 2022 were downloaded and has been plotted (Figure 3).

5. Guardianes de María Langa Report- This month we continued with the coral nursery maintenance and monitoring. We visited the outplanting site at Maria Langa to monitor the *Acropora palmata* colonies. All colonies at the nursery and at the ouplanting site were healthy and growing.

6. All the surveys were conducted following the COVID-19 safety protocol guidelines for land and marine operations.

7. Our team went out as support for the monthly water quality monitoring and SONDE removal at the intake and discharge stations (May & June 2020).

Figure 1. Egorov coral reef in 2021.

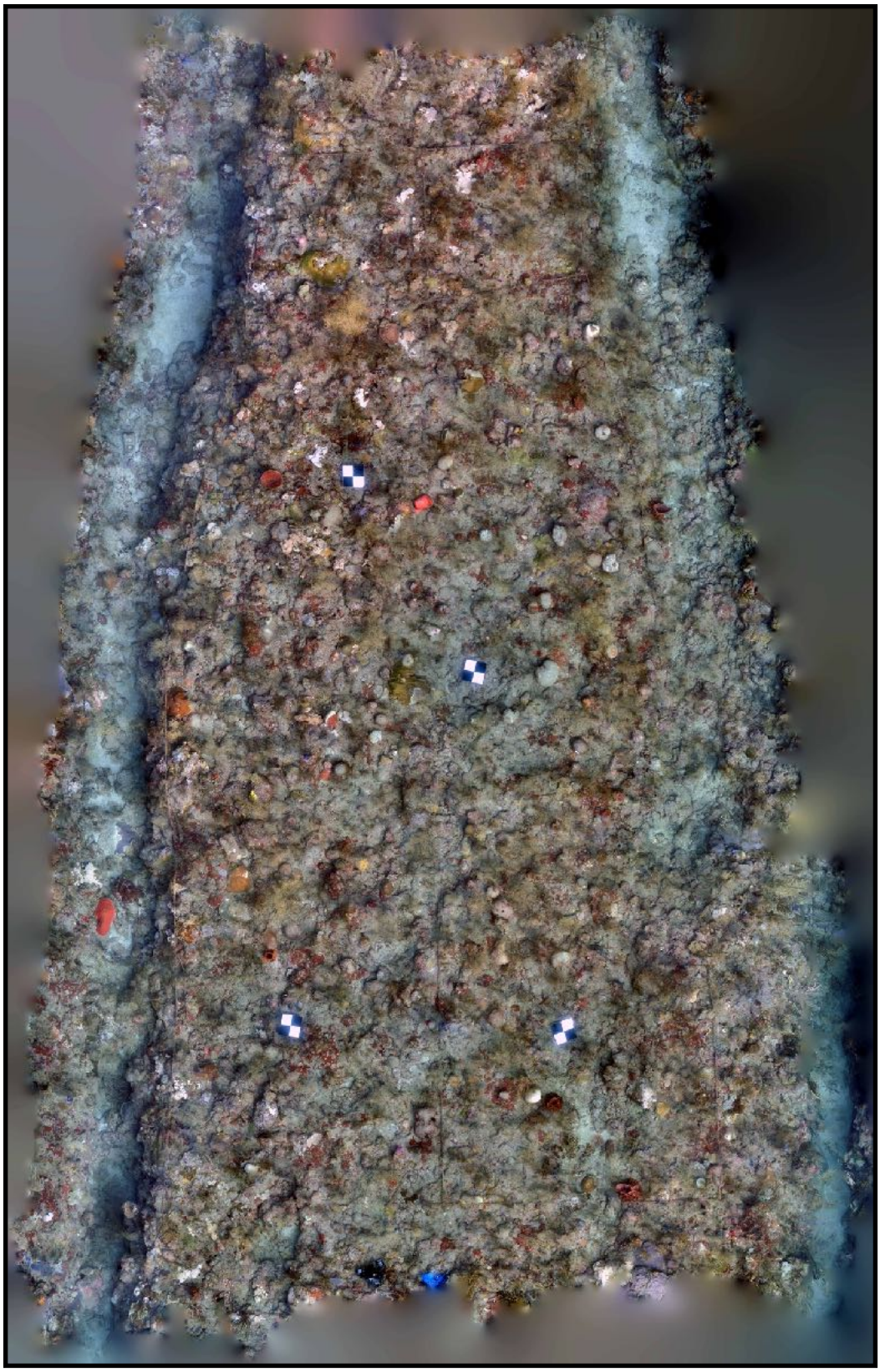

Figure 2. Egorov coral reef in 2022 after affected by SCTLD desease.

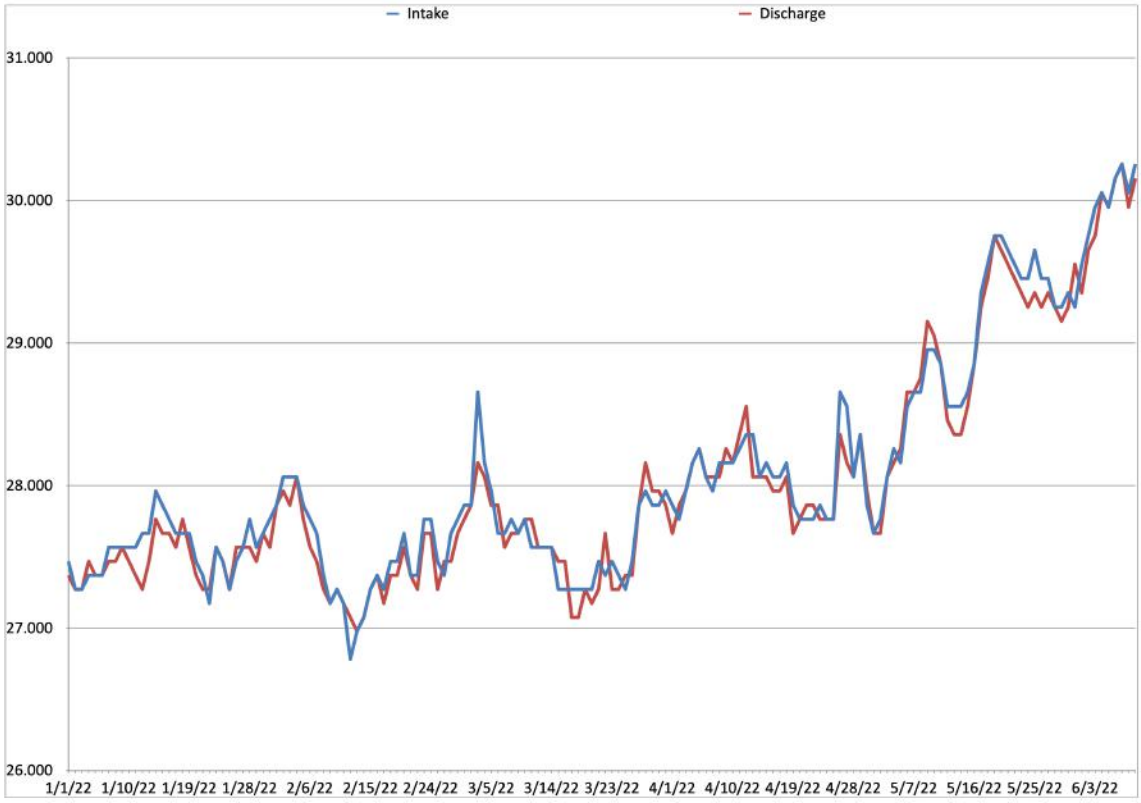

Figure 3. Maximum daily temperature at the intake (blue) and discharge (red) coral reef stations from January to June 2022.