

SEAFAN BleachWatch Program

CURRENT CONDITIONS REPORT #202409/10 SEPTEMBER/OCTOBER 2024



Summary: Based on climate predictions, current conditions and field observations, the ongoing threat for thermal stress that causes coral bleaching, in the Kristin Jacobs Coral Aquatic Preserve (AP), from Miami-Dade to Martin counties, is MODERATE.

ENVIRONMENTAL MONITORING

The National Oceanic and Atmospheric Administration's <u>Coral Reef Conservation Program</u> (NOAA CRCP) administers a comprehensive coral reef monitoring program that spans across U.S. states and territories, known as the <u>National Coral Reef Monitoring Program</u> (NCRMP). Established in 2010, <u>NCRMP</u> aims to provide consistent and standardized monitoring of biological, climatic and socioeconomic indicators across all U.S. shallow, tropical coral reefs. The overarching goal of NCRMP is to gather scientific data necessary for assessing the changing conditions of U.S. coral reef ecosystems.



This monitoring effort stands out for its national scale and unique integration of social science with biophysical science. By combining benthic, fish, climate and socioeconomic data, the program offers a holistic view of the current and future state of the nation's coral reefs. This comprehensive approach not only evaluates the status and trends of environmental conditions and natural resources but also considers the communities and processes that interact with these vital ecosystems.

NCRMP encompasses many partners including DEP's Coral Reef Conservation Program staff, that conduct various surveys, including Reef Visual Census fish surveys, Coral Demographic surveys and Benthic Community Assessment surveys, along the Florida's Coral Reef from late May to December biennially. The resulting data is utilized to create publicly available products, including biological monitoring summaries published as NOAA Technical Memoranda, periodic Status Reports and peer-reviewed publications. Additionally, through the implementation of NCRMP, NOAA CRCP can effectively communicate monitoring results to national, state and territorial policymakers, resource managers and the public. This consistent flow of information is crucial for understanding and preserving the health of coral reef ecosystems and the communities that rely on them.





OBSERVER NETWORK

Since Sept. 1, 2024, BleachWatch has received 34 reports indicating coral colonies are exhibiting signs of paling, partial bleaching or full bleaching. Geographically, there were four reports from Martin County, 11 reports from Palm Beach County, two reports from Broward County and 17 reports from Miami-Dade County. At those sites in the Kristin Jacobs Coral AP where paling, partial, and full bleaching was observed, the overall percentage of coral exhibiting signs of thermal stress was 1% to 75%, with most sites falling between 1% and 10% and only one site above 50%. Coral bleaching was observed primarily on brain, branching and boulder coral colonies, with some reports of bleaching on plate, fleshy and flowering coral colonies.

Coral disease continues to occur along Florida's Coral Reef. BleachWatch has received two reports noting observations of coral disease. More specifically, there was one report from Palm Beach County and one report from Miami-Dade County. At those sites where disease was observed, the overall percentage of coral exhibiting signs of disease was 1% to 10%. One instance of tissue loss and one case of a growth anomaly were observed on brain coral colonies.

The next Current Conditions Report will be issued in **November.** Even though temperatures are decreasing during fall, SEAFAN still encourages the BleachWatch network to <u>submit reports</u> on coral bleaching and disease after every dive on the reef, especially reports of "No Bleaching" and "No Disease." Frequent observer reports will be critical for determining where recovery from coral bleaching is occurring.

For information about NOAA satellite heat stress products, please visit <u>NOAA Coral Reef Watch</u> or email <u>CoralReefWatch@NOAA.gov</u>. For information about <u>SEAFAN BleachWatch</u>, please email <u>Coral@FloridaDEP.gov</u>.



Figure 2. BleachWatch Program Coordinator, Taylor Tucker, identified a healthy maze coral in Palm Beach County.



Figure 3. BleachWatch Observer, Matthew Ringstad, identified a partially bleached symmetrical brain coral in Miami-Dade. County.

Offer your feedback on the BleachWatch Program through our survey.

Learn more about the current conditions on coral reefs in the Florida Keys.

