SEAFAN BleachWatch Program

CURRENT CONDITIONS REPORT #20250730

JULY 30, 2025

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 (Coral AP), from Miami-Dade to Martin counties, is MODERATE.

ENVIRONMENTAL MONITORING

In 2024, the Florida Fish and Wildlife Conservation Commission (FWC) coordinated the annual Disturbance Response Monitoring (DRM) Program in collaboration with a broad network of partners across Florida's Coral Reef. Partner organizations included federal, state and local agencies; academic institutions; and conservation groups such as Biscayne National Park, the Florida Department of Environmental Protection (DEP), Broward County, Miami-Dade County, Mote Marine Laboratory, Florida Keys National Marine Sanctuary (administered by the National Oceanic and Atmospheric Administration [NOAA]), Nova Southeastern University, Palm Beach County, Palm Beach Zoo, Shedd Aquarium and the University of Miami's Rosenstiel School of Marine and Atmospheric Science.

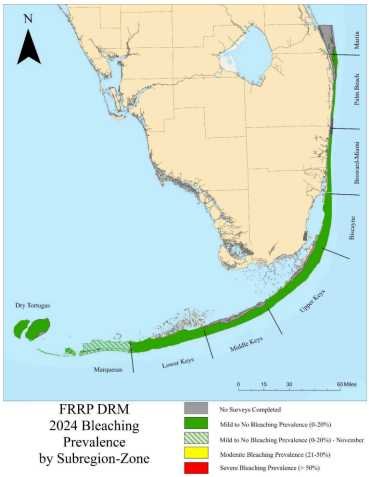

Figure 1. Bleaching prevalence of 2024 surveyed coral colonies by subregion-zone. The Marquesas subregion has hatch symbology because the surveys in the subregion occured in November, outside of the bleaching season (August to October).

Since its inception in 2005, the DRM Program has focused on assessing coral bleaching and disease during the peak thermal stress period from August through October. In 2024, a total of 613 sites were surveyed: 179 in Southeast Florida, 314 in the Florida Keys, 13 in the Marquesas and 107 in the Dry Tortugas.

Monitoring results from 2024 revealed a mild prevalence of coral bleaching across the reef tract, with no sites exhibiting severe bleaching and only 44 sites showing moderate bleaching. This represents a significant improvement from the widespread bleaching observed in 2023 and offers an encouraging outlook for reef resilience. Major reef-building species — including boulder brain, great star, lobed star, mountainous star and boulder star corals — showed only mild bleaching. Similarly, more heat-sensitive, weedy species such as cactus, mustard hill and finger corals also exhibited only mild bleaching prevalence.

Of the seven species listed under the Endangered Species Act, lobed star, mountainous star, boulder star and staghorn corals exhibited mild bleaching. No bleaching was reported in rough cactus coral, and elkhorn and pillar corals were not observed in any of the surveys.

Disease prevalence across the region was also low. Of the 613 sites surveyed, 565 reported no coral disease. Forty sites exhibited low disease prevalence, while four sites showed medium and four showed high prevalence. The disease of greatest concern, stony coral tissue loss disease (SCTLD), was observed in only nine coral colonies throughout the entire reef tract.

Following the widespread stress and coral impacts recorded during the 2023 global bleaching event, the 2024 DRM findings reflect a notably improved year for Florida's Coral Reef. With low levels of bleaching and disease observed across the region, the results indicate a positive shift in conditions and offer hope for continued coral recovery and resilience-building efforts. DEP's Coral Reef Conservation Program continues to partner with the DRM Program and looks forward to participating in the 2025 season, which starts Aug. 1.

Figure 2. Taylor Tucker, DEP BleachWatch Coordinator, performing DRM survey.

Reference: Harrell C., J. Stein, and R. Ruzicka. 2024. Disturbance Response Monitoring 2024 Summer Quick Look Report. Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute, St. Petersburg, FL.

OBSERVER NETWORK

BleachWatch received 11 reports between May 19 and June 25, 2025. All reports indicated coral colonies were exhibiting signs of paling, partial bleaching or full bleaching. Geographically, reports came from Palm Beach County (3), Broward County (4) and Miami-Dade County (3). One report from Monroe County was referred to Mote Marine Laboratory's Florida Keys BleachWatch Program.

At sites within the Coral AP where bleaching was observed, the overall percentage of coral exhibiting signs of thermal stress ranged from 1%-30%. Signs of bleaching were observed on colonies of brain, flowering/cup, leaf/plate/sheet and mound/boulder corals.

Two reports also noted observations of coral disease in Broward and Palm Beach counties. At these sites, the overall percentage of coral exhibiting signs of disease ranged from 1%-10%. Observed conditions included tissue loss and predation on colonies of mound/boulder corals. One colony in Broward County also showed signs of dark spot disease.

Figure 3. BleachWatch Observer, Amy Tune, found a healthy Mountainous Star Coral in Miami-Dade County.

The next Current Conditions Report will be issued in **August**. With summer temperatures continuing to rise, SEAFAN encourages the BleachWatch network to submit reports on coral bleaching and disease after every dive on the reef, including reports of "No Bleaching" and "No Disease". **Frequent observer reports, even of no bleaching, will be critical for tracking conditions on the reef this summer.**

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

Offer your feedback on the BleachWatch Program through our survey.

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

Program Partners